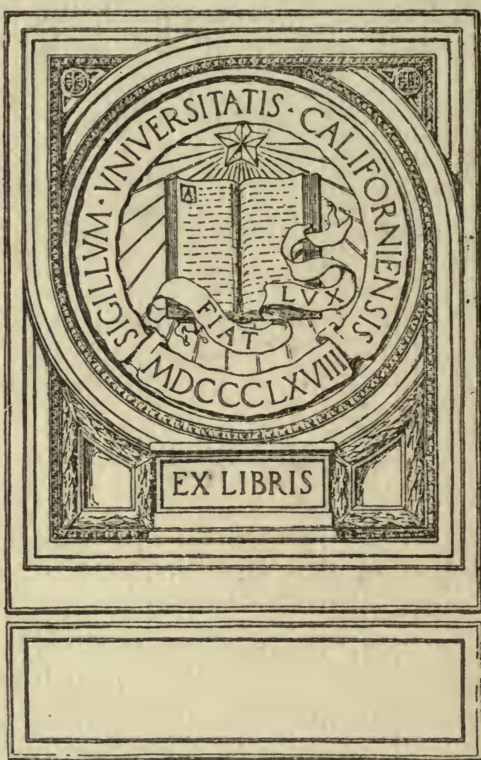
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ADVANCED ACCOUNTING

BY

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his attention directed to the omission. Finally, he would be most grateful for any suggestions for the improvement of the material herein presented in order that students hereafter using this book may derive therefrom the greatest possible practical benefit.

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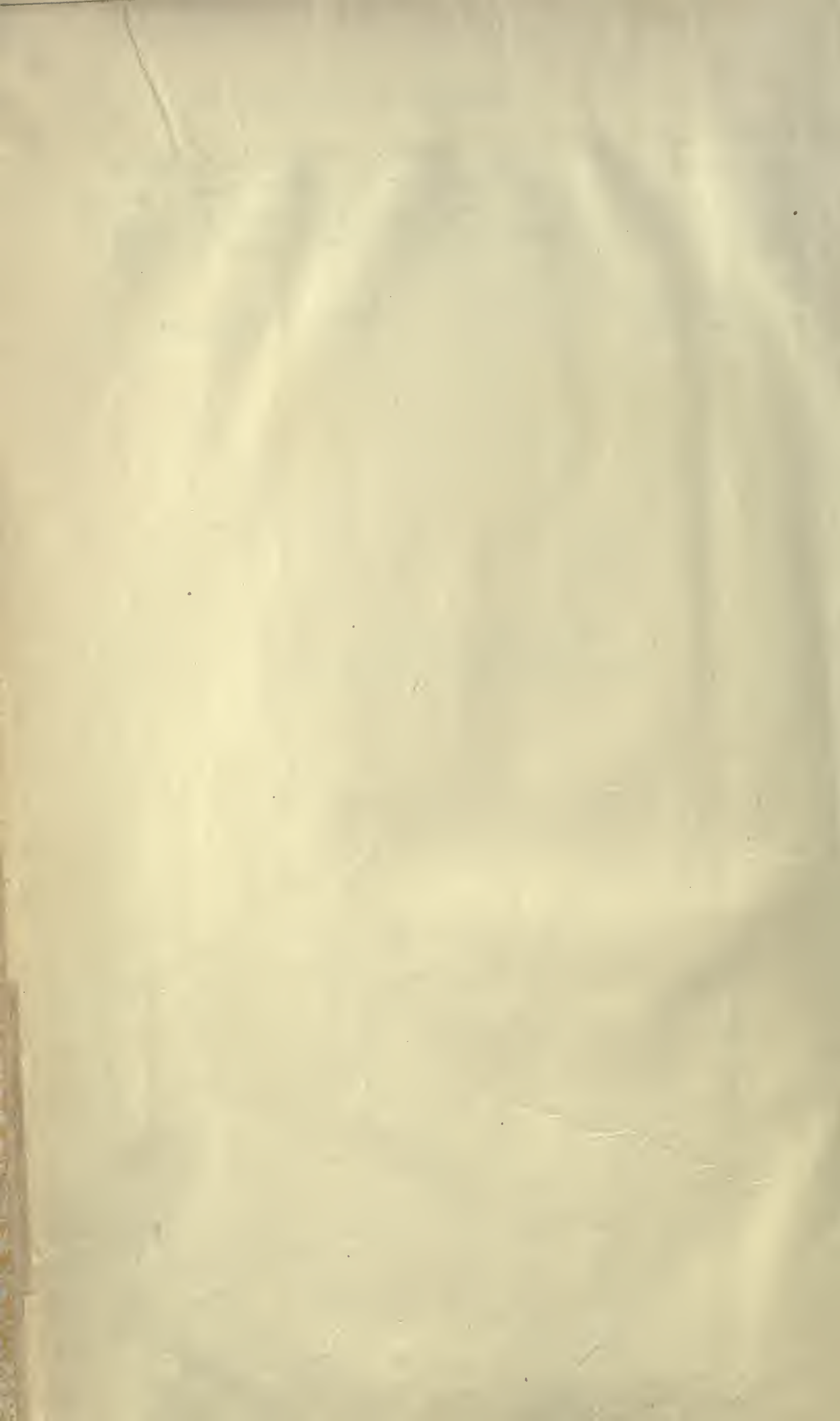

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ADVANCED ACCOUNTING

CHAPTER I

SINGLE AND DOUBLE-ENTRY: PRINCIPLES AND TERMS

Introduction.—The purpose of this chapter is to present a summary review of some of the more important points presumably discussed in the accounting work of the first year. If an elaboration be desired, the student should refer back to his first-year material.

Accountancy Versus Accounting; Auditing.—Accountancy is a profession having to do with the recording, verification and presentation of facts, involving the acquisition, production, conservation and transfer of values. It "comprehends the conduct of audits, examinations, and investigations; devising and installing systems; criticizing organizations and management; and in some cases efficiency work."

Accounting is the science which treats of the systematic record, compilation and presentation in a comprehensive manner of the financial operations of a business.

Auditing is the art of verifying the work done in recording, compiling, and presenting the facts concerned with business transactions, to the end that all possible information concerning the value and potentialities of the reviewed business may be presented correctly in the form of two basic statements, with their accompanying comment:

1. Balance Sheet
2. Profit and Loss Statement.

Single-entry Bookkeeping.—Bookkeeping may be considered as the art of keeping a systematic record of business transactions. Practically, there exist only two systems by means of which this systematic record is compiled; these have been named:

1. Single-entry. Practically, the accountant is more likely to consider single-entry bookkeeping as representing a lack of system rather than as a system. If any system exists, it is due to the fact that double-entry has crept in, to some extent.
2. Double-entry.

Under single-entry, equal charges and credits are not required for every exchange of values:

1. In its simplest form, a record is kept of transactions with persons (customers, creditors, proprietor), and perhaps with cash, merchandise, and certain miscellaneous items of interest to the proprietorship element. Since few, if any, impersonal accounts are used, provision is not made for securing a Trial Balance, or for obtaining a check on the accuracy of the work done upon the accounting records.
2. In its more complicated form, it might be any system of record keeping in which there is a lack of balance between the debit and credit entries; therefore, a single-entry system, if considered as a system, may be more complicated and more highly technical than a double-entry system.

Single-entry may be considered as the first step in account-keeping development after the element of credit was introduced into business dealings. When business transactions were entirely upon a cash basis, account books were unnecessary, even a Cash Book. If an occasional credit transaction occurred, the creditor merely made out a memorandum of some sort which he held until the debtor paid, after which it was destroyed. Likewise, when the creditor above mentioned became a debtor on account, a similar memorandum was used to act as a reminder of such fact.

An increasing number of credit transactions made it difficult for a record of them to be kept upon a mere memorandum basis. Therefore, the first book record came into use in which these memos were entered. Since the entries therein were made daily, this record became known as the Day Book. Cancellation of the entries therein made was effected by writing "Paid" across them. As long as the merchant "carried on" only in a small way, doing everything himself, the Day Book was all-sufficient. But as soon as he found it necessary to have a clerk who handled any money for him, he found it desirable and even necessary to

keep some sort of a cash record; hence, the introduction of the Cash Book, in its crudest form. Some would maintain that such a Cash Book was in its simplest form but, in the light of present existing methods of accounting tending toward efficiency and labor reduction, the opinion is ventured that today this crude form of Cash Book,—containing, say, merely the names of persons from whom money was received and the amounts of the daily cash sales on one side, offset on the other side by entries covering either the various things paid for in cash or persons to whom cash was paid,—is not to be considered as the simplest form but the most complicated form which it is possible to use.

Subsequently, as credit transactions further increased in number, the Day Book became entirely inadequate as a medium from which one could ascertain readily how much each customer owed, when one customer purchased several bills of goods at different times without paying for them. The result was that a new record came to be used, in which each customer was given a page; this was the Ledger. In addition to the customers' accounts, the accounts with creditors were contained therein. Likewise, the proprietor being interested in what he himself had received from his enterprise, either in the way of cash or goods, was likely to keep an account in this Ledger with his drawings. The result was, as indicated already, that these accounts were the only ones essential to single-entry, and were all personal in their nature. Other accounts, kept upon such a Ledger for informational purposes, were only of a memorandum nature, without having any particular connection with the general scheme of accounts.

The only possible advantage a single-entry system could have would be simplicity, and simplicity does not exist in such a complicated form of record. Its disadvantages may be summarized as under:

1. Errors that arise in the work are not detected readily, since there exists no positive check on the journalizing.
2. Since nominal accounts are not kept, profits and losses are not shown.
3. A Trial Balance cannot be secured without rewriting the books, at least upon working papers.
4. A system of internal check is lacking.

Although a single-entry system in its more simple form often is installed on purpose, as, say, in a small retail or commission business, in a professional man's office, in a charitable institution, and for a trusteeship, reasonable doubt exists as to whether such simplicity overshadows the marked advantages of even a simple double-entry system for the same case.

The usual statements prepared under single-entry are:

1. Statement of Assets and Liabilities.
2. Statement of Profit Determination.

The former has the appearance of a Balance Sheet but is not one, since not prepared from double-entry books. The latter is not the double-entry Profit and Loss Statement, since this cannot be prepared, unless the accounts are recast, because single-entry does not maintain nominal accounts. The single-entry method of calculating profits revolves around three classes of items:

1. Comparative net worths.
2. Interim drawings.
3. Interim investments.

In a later chapter, the Statement of Resources and Their Application, ofttimes used in single-entry, will be considered in connection with another topic.

To determine the profit or loss under single-entry for a specified period of time, as a year, it is necessary to ascertain from all sources available all that the proprietor owns and subtract from the total of such ownings the total of all he owes. Since what a person owns is an asset and what he owes a liability, this method of profit determination is known generally as the "asset and liability" method. The difference between the total assets and total liabilities represents net worth. A comparison of the amount of net worth at the end of the year with its amount at the beginning of the year represents either an increase or decrease in net worth during the elapsed period of time. This increase or decrease in net worth does not, necessarily, represent the net profit or net loss for the year. If there has been an increase, such increase is only one element of the net profit. The total profit of the year consists of two elements:

1. Net worth net increase,—the amount of profit left in the business (ending net worth adjusted in the amount of the new capital introduced during the year).

2. Drawings,—the amount of profit taken out of the business. Again, with a net worth net decrease, a profit may have been made. Because of these possibilities, the asset and liability method of profit determination operates about as follows:

1. Determine net worth at the beginning of the year.
2. Determine net worth at the end of the year.
3. Determine difference between (1) and (2), this being either an increase or decrease in net worth.
4. Add to increase in net worth, or deduct from decrease in net worth, the proprietor's drawings during the year.
5. Deduct from increase in net worth or add to decrease in net worth introductions of capital by proprietor during the year.
6. Resultant amount represents either the total profit or total loss for the year.

Since in single-entry it is not possible to set up a Profit and Loss account, and the net worth comparison is the only expedient by means of which the profit or loss may be determined,—no second method existing by means of which evidence may be secured as to the accuracy of the results determined,—as in double-entry (see second section, post),—the greatest of care is necessary in preparing single-entry statements.

In changing from single-entry to double, the steps in summary form would be about as follows:

1. Adjust the capital accounts to take up the profit or loss for the period.
2. If same books are to be used:
   a. Prepare Statement of Assets and Liabilities and journalize; and post to the Ledger only those accounts not at present thereon (in Ledger).
3. If new books are to be used:
   a. Prepare Statement of Assets and Liabilities and journalize; and post to the Ledger all the accounts appearing in such statement.

Internal Check.—It is stated by most accountants that three of the objects of an audit contemplate:

1. Discovering errors of principle.
2. Eliminating mechanical errors.
3. Detecting fraud.

Internal check is a method under which one employee checks

the work of another so that the entire control of a system does not rest upon any one clerk, as to certain elements concerning which the probability of fraud exists. Since under a system of internal check the probability of fraud is reduced, the amount of routine detailed checking that otherwise must be done is lessened. As cash and goods are the two assets most easily appropriated to one's fraudulent use, the system of internal check must cover all angles of each case thoroughly; for example:

1. As to cash:
    a. Incoming mail opened and the cash therein listed upon a Cash Sheet by some one other than the cashier or bookkeeper.
    b. All receipts to be deposited in bank intact.
    c. Cash payments made by check, each supported by a duly authorized voucher.
    d. Small payments made from a petty cash fund operated on the imprest basis.
    e. Cashier should not have access to the customers' Ledgers and to the bills submitted customers.
    f. Payrolls should be carefully provided for. Changes in pay rates must be only upon written authority; the checking of each step in a payroll preparation should be by one not directly in charge of the work; payments should be made in the presence of a witness who, with the paymaster, should sign the payroll.
2. As to goods:
    a. Safeguard purchases by proper records of receipts and filled orders.
    b. Proper checking of purchase invoices as to number and quality of items received, extensions, and prevention of duplicate payments.
    c. Proper checking of sales invoices, plus comparison with customers' orders.
    d. Prepare correct records of all orders received and shipments made.
    e. Prepare correct records of returned goods,—purchases and sales.
    f. Allowances should be granted only upon authority.
    g. Proper inventory records should be maintained.

Other points might be mentioned in connection with the above, say, as to expenses, but the illustrations given seem sufficient.

Double-entry Bookkeeping.—Under this system a complete record of every business transaction is kept showing its effect upon both real and nominal accounts. It is based upon the principle that for each business transaction there must be an equal debit and credit, by means of which a constant equilibrium is maintained. At the inception of a business enterprise, the initial equation is established that Assets = Liabilities plus Capital. This equation is reflected in the set out of the accounts upon the Ledger. Each subsequent business transaction affects both sides of the equation so that, no matter what transactions occur, the equilibrium originally established will not be destroyed.

The advantages of double-entry may be summarized as under:

1. A Trial Balance may be prepared from the Ledger by means of which the accuracy of the postings and the equilibrium of the accounts may be determined.
2. A Profit and Loss Statement may be prepared without re-casting the accounts.
3. Balance Sheet proof exists as to the correctness of the Profit and Loss Statement.
4. Etc., etc.

The asset and liability method of profit determination may be used in connection with double-entry books of account, by comparing one with the other, the Balance Sheets at the beginning of the year and at the end of the year. However, in double-entry, since the Balance Sheet is evidence of the correctness of the Profit and Loss statement, it is unnecessary to resort to the asset and liability method of profit determination thereunder.

Double-entry requires more books than does single-entry, at least to the extent of the Journal, this being the only additional book absolutely essential.

Classification of Accounts.—An account records under a specific heading either similar or dissimilar items relating to the same person or thing. Each account, for convenience, is divided into two portions under each of which similar items are grouped, and each such portion is opposed to the other. Because of this and grounded upon the basic equation, the rules for

journalizing or entering transactions into accounts, may be stated as:

Debit:	Credit:
1. Increase in assets	1. Decrease in assets
2. Decrease in liabilities	2. Increase in liabilities
3. Decrease in proprietorship	3. Increase in proprietorship

Basically, accounts are divided into two general classes:

1. Real—Balance Sheet accounts—assets, liabilities, and vested proprietorship; accounts that represent things which have actual, tangible existence.
2. Nominal—Profit and Loss accounts—income and expenses. These accounts represent increase or decrease of net worth; they are closed into the Revenue account,—Profit and Loss account,—the final result of which sets out in one account either net profit or net loss.

Other classes of accounts often referred to may be set out about as follows:

1. Personal—accounts with persons, as the various people or corporations with whom business dealings are made.
2. Impersonal—accounts other than personal, as those recording profits, losses, receipts, disbursements, and non-personal assets and liabilities.
3. Mixed—accounts containing elements both real and nominal, as Merchandise.
4. Primary (or major)—accounts in which are recorded all transactions of a particular class; the General Ledger, more and more, is becoming a Ledger of primary accounts.
5. Subsidiary—accounts auxiliary to, even though not necessarily dependent upon, a primary account.
6. Summary—accounts in which are summed up the data contained in a number of other accounts of different classes.
7. Controlling—accounts containing the totals of the debits and credits of a number of so-called detail accounts so that the balance of the aggregate of these accounts may be displayed at any time. Controlling accounts are not summary accounts, as the latter collect dissimilar accounts, whereas controlling accounts collect amounts of similar accounts.
8. Collective—See (7).

Suspense Accounts.—Usually, such accounts record items temporarily pending the determination of their final disposition, as:

1. Unlocated Trial Balance errors.
2. Cash received with name of sender not available.
3. Differences existing between a Cash Book and the bank's records.
4. Items, the proper treatment of which is at present questionable.

One such account should be used for each suspense item. Subsequently, if such account cannot be cleared into its proper place, its ultimate destination should be into the Profit and Loss account. However, in the interim, its amount should be carried upon the Balance Sheet; this would be especially true where a C. P. A. problem is encountered that is out of balance. The suspense item should be carried as a deferred charge.

Doubtful accounts and notes receivable may be carried in a Suspense Ledger, so-called. This is perfectly proper, but care should be observed to make certain that the Reserve for Bad Debts account covers this amount.

Ledger Arrangement of Accounts.—Accounts should be arranged upon the Ledger so that the preparation of the financial statements will be facilitated. Ordinarily, such an arrangement might be about as follows:

First arrangement:	Second arrangement:
1. Current assets	1. Capital assets
2. Capital assets	2. Current assets
3. Current liabilities	3. Capital liabilities
4. Capital liabilities	4. Current liabilities
5. Proprietorship	5. Proprietorship
6. Income	6. Income
7. Expenses	7. Expenses

If controlling accounts are not made use of, the customers' and creditors' accounts would be carried at the back of the Ledger. Against, or contrary to either of the above arrangements, the accounts may be grouped alphabetically upon the Ledger.

Again, instead of merely carrying accounts upon a Ledger by name, a large concern, or even a small one, is apt to designate its accounts by numbers as well as by names. In such event, any one of many systems of numbering may be used. However,

it would seem advisable hereunder, although not ordinarily done, to make sure the smaller numbers of a series are used for the accounts to which reference is most made. For example, compare the two arrangements submitted below, each of which follows a simple numbering scheme. The two arrangements cover merely the summary groupings:

First arrangement:	Second arrangement:
1. Assets	1. Expenses
2. Liabilities	2. Income
3. Proprietorship	3. Proprietorship
4. Income	4. Assets
5. Expenses	5. Liabilities

If the advantage of the second arrangement over the first one is not entirely apparent from the above, consider the following numbering scheme in connection with the second grouping:

Nos.	1–199	Expenses
	200–299	Income
	300–399	Proprietorship
	400–499	Assets
	500–599	Liabilities

From the above, it is evident that the expense accounts, used the most frequently, will carry the smaller numbers.

Before passing to a consideration of a subdivision of any general grouping into the more special groupings, the following basic arrangement is presented, this being in accord with the summary form of Balance Sheet arrangement shown in Chap. 9, post:

1. Expenses
2. Income
3. Assets
4. Investments
5. Deferred charges and credits
6. Liabilities
7. Reserves
8. Capital
9. Surplus

The general account groupings, however made, may be subdivided as desired into a number of special groupings.

First example:

1 Expenses
- 11 Operation
  - 111 Manufacturing
  - 112 Selling
  - 113 Administrative
- 12 Non-operation

Second example:

1–199 Expenses
- 1– 99 Manufacturing
- 100–149 Selling
- 150–174 Administrative
- 175–199 Non-operation

In connection with any system of numbering, it seems usual to

indicate, at times, a departmental differentiation by means of prefixing a letter to a number to specify to what department an income or expense item belongs.

Status of Journalization—Journals.—To journalize, is to classify systematically the debits and credits arising out of a business transaction. In connection with this topic, the following seem axiomatic:

1. Since all records of original entry are Journals, all entries are journal entries.
2. Since it is necessary to keep the basic accounting equation always in balance, the sum of the debits must equal the sum of the credits.

Because of (1) above, the direct Ledger closing at the end of a period would seem to be absolutely in error; all closing entries should be entered, preferably, upon the Journal and be posted therefrom to the Ledger.

Basically, original entries are made upon Journals, regardless of what names may be used therefor, and postings of these entries are made to Ledgers. Therefore, the basic books of account would be:

1. Journals
2. Ledgers

Some bookkeepers have a habit of making monthly summary entries of each record of original entry upon the General Journal and of posting therefrom to the General Ledger. This practice seems unnecessary and a duplication of effort in that since all records of original entry in which entries are made with debit and credit distinctions are Journals, the monthly postings therefrom to the General Ledger may be made direct, provided, naturally, that these records have been kept properly.

Ledgers.—Books of original entry contain the first entry of a transaction, the record being written up in the order in which the transactions took place,—in the order of the dates upon which the transactions occurred. On the other hand, Ledgers are books containing the accounts to which these Journal entries are transferred (posted). For present purposes, all Ledgers may be grouped under three headings:

1. General Ledger
2. Subsidiary Ledgers
3. Private Ledger

It seems unnecessary to discuss any of these.

Forms of Ledger rulings are many, their use being dependent primarily upon desirability and utility. However, it would seem that, unless an excellent reason exists to the contrary, the Ledger ruling should follow the standard form which, basically, is called the T form. And where a change from the standard ruling appears in order, it would seem that the usual differentiation would consist in the addition of one or more "balance" columns to the standard ruling.

Because of the fact that a Ledger is not a book of original entry, a court will not accept it as evidence unless testimony is offered that its contents have been verified by an examination of the records of original entry; in such event, it will be considered as a summary or abstract of the books of original entry.

Adjustment Account.—In order to prove the accuracy of a subsidiary Ledger Trial Balance, ordinarily, one must refer to the controlling account thereover carried upon the General Ledger. Where a separate bookkeeper runs a subsidiary Ledger, having no duties in connection with the General Ledger, an expedient is resorted to by means of which this bookkeeper is not required to consult the General Ledger to prove the accuracy of his Trial Balance. The subsidiary Ledger is made self-balancing by the introduction thereon of an Adjustment account. Such account is an exact duplicate of the controlling account, but set up in reverse order. Items posted in detail to the debit of the separate accounts carried on the subsidiary Ledger are posted in total as a credit to this Adjustment account, whereas items posted in detail to the credit of the separate accounts carried on the subsidiary Ledger are posted in total as a debit to this Adjustment account. The Ledger, therefore, is in balance by itself,—in other words, it is a self-balancing Ledger.

Vouchers.—Any document may be considered as a voucher which sufficiently identifies or verifies:

1. The correctness of charges for cash paid or to be paid.

2. The correctness of credits for cash received or to be received.

In any business house which boasts of a system of accounts, entries may be vouched or verified even though specific vouchers, so called, are not available.

For example; the following is illustrative:

1. Purchases
   a. Copies of orders
   b. Receiving clerk's records
   c. Checked invoices
   d. Minute book
   e. See cash payments below
2. Sales
   a. Customers' orders
   b. Shipping clerk's records
   c. Copies of invoices
   d. Customers' accounts
   e. Cash receipts
   f. Bills of lading
   g. Etc.
3. Returned Purchases
   a. Stock records
   b. Shipment records
   c. Credit memos
   d. Etc.
4. Returned Sales
   a. Copies of memos and invoices covering original charge
   b. Vouchers covering cash refunds
   c. Customers' statements of settlement
   d. Etc.
5. Cash Receipts
   a. Bank pass book
   b. Copies of deposit slips properly bank stamped
   c. Receipt book stubs
   d. Etc.
6. Cash Payments
   a. Receipts
   b. Cancelled checks
   c. Pay rolls
   d. Petty cash vouchers
   e. See Purchases above
   f. Etc.
7. Journal Entries
   a. Journal vouchers, properly approved
   b. Correspondence
   c. Minute book
   d. Approval signature of proper official against entry
   e. Etc.

Voucher System.—The apparent predominant use of the Voucher System seems sufficient reason for a summary discussion thereof at this point. This system purports to treat creditors' accounts so that the necessity for keeping the individual accounts in a Ledger is eliminated. All invoices and expense bills are attached to what are designated as "Voucher Jackets" after the items thereon described have been checked out properly as being in order. These voucher jackets are numbered consecutively and set out the following specific information:

1. Name and address of creditor.
2. Items received.
3. Account or accounts to be charged either by name or by number. This seems unnecessary in a small concern where one person either makes or superintends the making and entering of vouchers. The distribution well may be made only upon the Voucher Record.

As soon as a voucher has been prepared, and the miscellaneous papers relative thereto attached, it is entered upon a Voucher Record or Register and at least the following information set down:

1. Voucher number. Vouchers are numbered consecutively as entered.
2. Date.
3. Creditor's name and address.
4. Total amount credited to either Vouchers Payable or Accounts Payable.
5. Distribution of the charges (debits) to the usual accounts for which separate columns have been provided, and to a Sundry column for unusual items which is divided to show both the name or number of the unusual account and the amount.

When a voucher is paid, the payment thereof is made through the Cash Book in the usual way except that the charge is against the Vouchers or Accounts Payable account rather than to separate creditors' accounts. Next, such payment is indicated upon the Voucher Register so that one may ascertain therefrom what vouchers are still outstanding unpaid, the total of the unpaid vouchers thereon agreeing with the balance of the Vouchers Payable account upon the General Ledger after the latter has been posted completely.

Formerly, when a voucher was paid, it was current practice to send out the voucher with the check, so that the former would be signed, after which it was to be returned. However, creditors were not usually sufficiently efficient or courteous in the matter of returning a voucher, so that this system proved to be decidedly at fault; it was necessary to rely to a considerable extent upon duplicate copies of these vouchers to operate the sys-

tem. Because of this, the use of the voucher check has proved of great value. However, one would be in error to assume that the voucher check necessarily is an outgrowth of the voucher system; the voucher check is of great value in connection therewith but may be used to advantage even where no voucher system is in operation. A voucher check may be no different from an ordinary check beyond the fact that provision is made thereon for indicating for what it has been issued in payment. Its use combines two advantages:

1. That of having evidence a certain creditor was paid.
2. That of having a creditor's signature (the indorsement) as evidence that the payment covered certain specific invoices or bills.

Voucher checks may carry either one or two numbers:

1. One number. In this case, the number thereon would agree with the voucher. But since vouchers, usually, never are paid in the order of their entry upon the Voucher Register, the voucher checks cannot be entered upon the Cash Book in consecutive order; this is a disadvantage.
2. Two numbers. When a voucher check carries two numbers, the first one would be the voucher number and the second the check or treasurer's number. Consecutive entry upon the Cash Book is possible by this means and the entry upon the Voucher Register relating thereto easily is traceable; in fact, this double numbering permits of a ready cross-index between the Voucher Register and the Cash Book.

The advantages and disadvantages of the voucher system may be summarized as under:

1. Advantages:
   a. Labor is saved by elimination of the Creditors' Ledger.
   b. All purchases are analyzed in detail.
   c. All liabilities are booked immediately.
   d. Responsibility is localized because the authority for auditing, entry, and payment of items is set out.
   e. All payments of cash are evidenced by a receipted bill.
   f. An audit is expedited.
2. Disadvantages:
   a. The partial payment of bills and notes payable tends to break down the system.

b. Returns and allowances require more than usual handling to take up properly.
c. The volume of business with important creditors is not summarized for reference purposes.
d. In a business of any size, the added activities necessary relative to filing, recording, and O. K.'ing vouchers is decidedly expensive.
e. Certain information of a private nature may come into unscrupulous hands because of the availability of the documents that are attached to the voucher jackets.

No comment upon these advantages and disadvantages will be made herein.

Confusion sometimes results on the part of the student in attempting to comprehend the difference between certain terms used to designate the various stages relative to a creditor's account. In an attempt to clear up this matter, the following is offered for illustration:

1. Usually there is no difference between the terms Accounts Payable and Vouchers Payable; as between the two, the latter is preferable in connection with the voucher system.
2. At times one encounters the terms Unaudited Vouchers and Audited Vouchers upon the same set of records. The first represents creditors' claims for payment that have not passed through the routine of the internal audit procedure; the latter represent such claims that have passed through and await payment. The accounts will be arranged to permit of proper transfer, as:

   A—Dr. Goods
   Cr. Unaudited Vouchers
   B—Dr. Unaudited Vouchers
   Cr. Audited Vouchers
3. Another possibility sometimes encountered is as per (2) above, plus the use of the term, say, Items in Transit. The reason therefor, is merely to have the books of account reflect all liabilities as soon as incurred, as:

   a. Dr. Goods in Transit
   Cr. Items in Transit
   To record the liability when an order has been placed and accepted.

b. Dr. Goods
  Cr. Goods in Transit
    To record receipt of all or part of above order.
b. 1. Dr. Items in Transit.
  Cr. Unaudited Vouchers
    To book invoices received.
c. Dr. Unaudited Vouchers
  Cr. Audited Vouchers
    To record vouchers audited and ready for payment.

Trial Balance.—Briefly, a Trial Balance is a list or table of Ledger balances, showing either debit and credit totals of each account or the debit or credit balance of each account drawn as at the end of a business day to prove the mathematical accuracy or equilibrium of the Ledger. By itself, a Trial Balance should not be taken as proof of the correctness of the Ledger since it is possible, where errors offset each other, to secure a Trial Balance from a Ledger in which every entry is in error. However, if a Trial Balance does not prove, it is proof positive that the Ledger is incorrect, but when it does prove, the correctness of Ledger postings is inferred.

The usual Trial Balance is drawn prior to commencing the process of closing; such a one contains both real and nominal accounts. Again, a Trial Balance is often prepared after the closing process is completed to make certain the Ledger is in balance prior to entering therein the transactions of the subsequent period. Such a Trial Balance contains only real accounts and may be considered as an unclassified Balance Sheet.

After a Trial Balance is found to be in balance, it properly may be called Schedule of Ledger Balances.

Blocking the Ledger.—It does not seem advisable to use the ordinary methods advocated for locating an error in a Trial Balance since most of them (being more or less a matter of guess work), result in a waste of time. The analytical method of making an independent posting seems to be the only satisfactory method of locating an error after a detailed reversed checking has failed in finding the amount; this method is used by many auditors when making an ordinary audit, and is known as "blocking the ledger."

Assuming the bookkeeper has been accurate in entering his folio numbers, one of these methods proceeds about as follows: The Ledger is divided into blocks of fifty or a hundred pages each, as desired. Upon a sheet of analysis paper, postings are made from the records of original entry to the columns of the analysis sheet by blocks, the postings from each book of original entry being kept separate from the others. For example, the Cash Book, would be posted, by debits and credits, to the block columns, the latter then added up, and the totals compared with the Cash Book totals corresponding thereto.

By this process, the footings on the records of original entry are proved out; and the balances of each block are found as follows:

1. Secure original net balance of a block.
2. Add or deduct therefrom the debits and credits of such block and compare with the net total of the balances at the end of the reviewed period.
3. Eliminate each block that proves out. Then recheck in detail the work relating to each block that does not prove out. Even though the above method is a great consumer of time, the error eventually will be located; therefore, it is worth while.

Articulation Statement: Abstracting Accounts.—An articulation statement, as to meaning, may convey more than one idea to a person's mind; but it would seem that the only meaning of practical worth such a statement should have, would be to consider it as providing a convenient means for classifying the entries for an elapsed fiscal period according to the books of original entry. Auditors often use such a statement without recognizing it by the title herein suggested, its use arising in connection with the process known as "abstracting accounts." An auditor often will abstract a set of accounts upon working sheets rather than check out a General Ledger against a Trial Balance either prepared by the bookkeeper or by himself. Again, the method is useful to locate the error when a General Ledger is out of balance since, as the items are posted to the sheets according to account names, posting errors will be detected.

Under this abstracting process, analysis paper is used that has

plenty of columnar subdivisions. The General Ledger accounts are entered by name at the left of these sheets one under the other, at intervals sufficiently separated one from the other to permit of the inclusion of all items thereunder by postings. Next, to the right, the columns are laid out in pairs, debit and credit, one pair for each record of original entry. From the books of original entry, all items will be posted to these sheet accounts, only the totals of special columns and books being used. The result secured by this process, is a skeleton General Ledger, with Accounts Receivable and Accounts Payable controlling accounts.

On a second sheet of analysis paper, a working Trial Balance would be prepared. The General Ledger balances as of the beginning of the period would be entered in the first two debit and credit columns at the left; then in the next pair of columns the totals of the debits and credits of each account from the first sheet are entered on the respective lines and, finally, in the third or last pair of columns the resultant balance of each account would be entered. These final figures represent the General Ledger Trial Balance at the end of the period, which is to be checked out against the actual Ledger balances.

The abstracting process commences with the Cash Book, all items being posted therefrom to the sheets, including the total receipts and disbursements. The total debits and credits then are summarized; if the summary balances, the Cash Book requires no footing except as to the columns from which only totals have been taken. After the work in connection with the Cash Book has been completed, the other Journals are taken up, one after the other. And after the ending Trial Balance has been proved, as found in the third pair of columns upon the second set of sheets, the remaining columns may be used for the usual working sheet closing the set of books.

Financial Statements.—Nothing will be said at the present time, beyond the second paragraph below, concerning either:

1. The Balance Sheet, or
2. The Profit and Loss Statement since a considerable portion of the later work revolves around a discussion of each.

The accounts shown in a Balance Sheet are valued as follows:

1. Capital assets—at cost less depreciation.

2. Current assets.
    a. Working assets—at cost or market whichever is lower.
    b. Other current assets—at estimated cash value.

Each of the above statements is a statement of opinion, not one of fact:

1. Balance Sheet. The value of no asset, other than Cash, can be ascertained to a certainty. Each other asset is subject to contingencies which may change the valuation given.
2. Statement of Profit and Loss. Inventory valuations, the reserves for depreciation, and the doubtful accounts receivable, as to amounts, are all matters of opinion. Therefore, the net profit is a matter of opinion, tempered by the experience of the accountant.

However, the opinion of a qualified accountant, as to these statements, will be sufficiently accurate to the end that, therefrom, one may secure a reasonably correct idea of the condition of the business concerned.

Types of Assets.—Assets may be divided into a number of classes, about as follows:

1. Current. These are assets which are presumed to be readily convertible into cash under the usual routine of business. They are not permanent investments but are intended for sale,—in their present condition as manufactured product or as the elements from which manufactured product will be made. At times, these assets are spoken of as floating, active, or circulating.
2. Quick. These are assets of the current group exclusive of securities,—those readily marketable and saleable, and notes and accounts given by or due from officers, stockholders, and employees; also, exclusive of deferred charges. At times, these assets are spoken of as liquid.
3. Working or trading. These are the current assets of inventories,—raw material, goods in process, and manufactured product; and, sometimes, supplies.
4. Capital. These are the assets of a business that are not held for sale purposes, since held as permanent investments to enable the business to function for the purposes for which organized. They may be spoken of as fixed, permanent, or passive.

5. Deferred charges to operation. These assets represent portions of expense items paid in the current period but applicable to a subsequent period.
6. Accrued. These are current assets which accumulate gradually with the passage of time.
7. Contingent. These are assets in what might be called an embryonic stage, becoming full-fledged assets only upon the happening of some event which at present is more or less uncertain.
8. Wasting. This type of asset loses value because the asset itself is used up; it diminishes or shrinks in direct proportion to:
   a. Operations—Natural resources such as stumpage, etc.
   b. Lapse of time—Patent or leasehold.

   A depreciating asset should not be confused with a wasting asset. Of course, both lose value, and such loss, in general, may be designated as depreciation, but the former type is not consumed, or does not shrink in size, as does the latter.
9. Secret. These represent asset values in excess of the book values thereof.

Types of Liabilities.—Liabilities may be divided into a number of classes, about as follows:

1. Current. These are liabilities which must be paid at once or which will mature within a short period of time and which, presumably, are to be paid in the normal course of events.
2. Capital. These liabilities need not be paid at once since they will not mature except after the passage of a long period of time. They are of a permanent character and do not change frequently since they are intended to furnish the funds for investment in the business. They may be spoken of as fixed.
3. Deferred credits to income. These liabilities represent portions of income received in a current period but applicable to a subsequent period.
4. Accrued. These are current liabilities which accumulate gradually with the passage of time.
5. Contingent. These are liabilities in what might be called

an embryonic stage, becoming full-fledged liabilities only upon the happening of some event which at present is more or less uncertain.

6. Funded. These are liabilities the payment of which has been provided for definitely; usually, they are secured by a mortgage.
7. Bonded. These are liabilities which are evidenced by a bond issue. Such liabilities may be funded or not funded, secured or not secured.

Two Bases of Accounting.—There are two bases of accounting, each of which is described briefly below:

1. Cash basis. Hereunder, income and expenses are recorded only when they affect either
   a. Cash or
   b. Personal accounts.
2. Accrual basis. Hereunder, all income and expenses are booked as incurred, rather than when received or paid in cash. Particularly, at the end of each fiscal period, care must be observed to make certain that all accruals have been placed upon the books. In adjusting the accruals at the end of the year, the procedure resolves itself into two steps:
   a. Reverse or write back the accrual as of the preceding January 1.
   b. Record the accrual as of December 31.

Deferred and Contingent Items.—It usually is worth while to distinguish between accrued and deferred items. Deferred items are of two classes:

1. Deferred charges. In turn, deferred charges are of two kinds:
   a. Expense items which, in part, benefit future periods. The portion benefiting a subsequent period is a deferred charge.
   b. Expense items which, although they do not benefit future periods are deferred to be written off gradually thereover.

   Again, deferred charges may be separated into a further two-way division:
   a. Those which have a realizable value, as prepaid insurance.

b. Those which have no realizable value, as organization expense.

This distinction may be important in setting up what is known as a Statement of Fund Application, which will be discussed in a later chapter.

2. Deferred credits. These represent income items received in a current period which are applicable to subsequent periods. Therefore, the amount so applicable to future periods must be considered, as of the present moment, as a liability.

Contingent items are of two classes:

1. Contingent assets. Ordinarily, these are not shown upon the books.
   a. Not shown upon the books.
      i. Pending damage suit against another.
      ii. Conditional bequest in a will.
   b. Shown upon the books.
      i. A note receivable which has been endorsed and discounted. This, also, is a contingent liability.
2. Contingent liabilities. Ordinarily, these are not shown upon the books.
   a. Not shown upon the books.
      i. Pending damage suit against our firm or company.
      ii. Surety bonds.
      iii. Guarantees.
   b. Shown upon the books.
      i. Notes receivable discounted.

Capital Versus Deficit.—Capital has two meanings dependent upon the viewpoint:

1. Economic. The total amount of wealth invested in a business,—all assets of a business.
2. Accounting. The excess of the assets of a business over its liabilities,—the proprietor's net equity.

Working capital is the excess of net current assets over current liabilities.

Deficit may be considered the exact opposite of accounting capital,—the excess of liabilities over assets.

Income—Revenue—Earnings.—Income may be defined as the remuneration or gain which results from the use of property

and labor, and the results of business. Income may be doubly classified:

1. First classification:
   a. Rent.
   b. Wages.
   c. Interest.
   d. Profits.
2. Second classification:
   a. Operating.
   b. Non-operating.

Revenue, as a term, has a slightly different meaning from income, even though, at times, the two terms are used interchangeably. Non-trading concerns are apt to use the term revenue in preference to that of income.

Earnings represent income that has been secured from the sale of personal services. A public service corporation and a professional man would use this term in preference to that of revenue or income.

Profit: Gross—Net—Operation—Capital.—Profit may be defined, from the accounting viewpoint, as the surplus of income remaining at the end of a period after all costs and expenses have been taken into consideration. From this viewpoint, accounting profit and economic profit are dissimilar:

1. Accounting viewpoint:
   a. Net income and net profit are assumed to be the same.
2. Economic viewpoint:
   a. Net income would be classified as:
      i. Rent.
      ii. Wages.
      iii. Interest.
      iv. Profit.

Gross profit represents the excess of net sales price over the cost of goods sold. Net profit from operation represents the excess of gross profit over the total of the selling and administrative expenses. Net profit for an elapsed period represents the excess of the net profit from operation over the net deductions from income (financial expenses less financial income).

A capital profit results from a change in the value of certain

of the capital assets. It should not be shown upon the books unless the assets concerned have been disposed of in some way.

Losses, qualified by prefixes as above set out, may be considered the opposite of profits thus qualified. Basically, no profit should be taken unless a just cause for legal action has arisen.

Receipts—Disbursements—Expenses—Expenditures.—Receipts, as a term, refers to cash or other assets received during the course of business, regardless of whether they are concerned with capital or revenue. Ordinarily, however, when one speaks of "receipts," he refers entirely to cash. Receipts may be divided into two classes:

1. Revenue receipts. Cash or other assets received on account of the regular operation of a business.
2. Capital receipts. Cash or other assets received on account of the sale of a fixed asset, of capital stock, or of a bond issue.

Where receipts is used in connection with disbursements, the two refer to cash receipts and cash disbursements, regardless of purpose.

A revenue expense is an operation expense, one the result of an attempt to make a profit from business operation. A capital expense is a non-operation expense, a financial expense made necessary in providing the capital needs of a concern. A revenue expenditure may be considered as a revenue expense except as concerns the deferred portion thereof which will be shown upon a Balance Sheet as a deferred charge to operation. A capital expenditure is one made on account of an improvement, or of an addition, to the more or less permanent plant of an enterprise.

A fixed charge is an expense to be met periodically without regard to the amount of business done, as bond interest. It is more or less fixed in its recurring amount.

CHAPTER II

SPECIFIC REAL AND NOMINAL ACCOUNTS

Introduction.—It is the purpose of this chapter to review, in more or less summary form, many of the points usually discussed in first-year accounting as indicated by the present chapter title. The background afforded by the review of Chaps. I, II, and III should prove of exceptional worth in bridging the gap so apt to exist between the work of the first and second years in a course in accounting.

Cash and Cash Records.—If Cash be treated properly, all moneys received should be deposited in bank; and all moneys paid out should be by check, except small payments which are handled through the Petty Cash fund operated, preferably, upon the imprest basis.

As concerns Cash receipts, the following points appear to be of considerable importance:

1. All incoming remittances should be listed upon a Daily Blotter by some person other than the cashier or bookkeeper, and prior to turning these remittances over to the cashier for entry.
2. The bank deposit should be prepared, say, daily, beginning at a specified moment of time which will allow sufficiently for the deposit to be made before the depositary closes for the day. When the deposit is in order, the person mentioned in (1) above should be on hand, enter upon his daily blotter the cash receipts for the day taken in over the counter, or shown on the cash register, secure a total of the two amounts and compare such total with the deposit slip. Again, upon the return of the Pass Book, this individual should scrutinize the entry therein, comparing its amount with the total referred to above.
3. All checks making up part of the cash balance on hand

should be deposited even though some have been signed by the concern. Sight drafts are considered as checks.

4. If the cashier and the bookkeeper are one and the same person, which ought not to be the case where possible to separate the two functions, the proprietor must exercise the greatest of care for his protection; the greatest of care will be defective in certain respects. At least, he can require to have turned over to himself duplicate copies of all detailed cash records; these he should keep under lock and key until audited.

As concerns cash payments, the following points seem important:

1. Since cancelled checks, by themselves, are not sufficient vouchers covering cash disbursements, all cash payments should be supported by vouchers other than cancelled checks.
2. Missing checks always must be accounted for, after either the Pass Book has been balanced or the Bank Statement received.
3. If more than one bank account is necessary, it may be advisable to carry each with a separate depositary, rather than have them all with one bank. Likewise, if funds are carried in more than one bank, a separate Check Register for each such bank may be desirable.
4. Checks should not be drawn until they are to be delivered. The habit of drawing checks and holding them seems to be bad practice. Such checks, naturally, do not affect the accounts.

In reconciling the Cash balance on hand, per Cash Book, with the balance reported by the bank, one should work from the reported bank balance, after this has been checked up and appears in order, backward to the Cash Book balance since the latter, if correct, must appear upon the Balance Sheet when the latter is prepared. If the bank balance as at a particular moment of time should be different from the Cash Book balance, the reconciliation may assume the following form frequently used in auditing:

1. We debit, bank does not credit.
2. We credit, bank does not debit.

3. Bank debits, we do not credit.
4. Bank credits, we do not debit.
5. Bank balance plus (1) and (3) should be equal to Cash Book balance plus (2) and (4).

A cash account should be carried upon the General Ledger; in fact, all accounts necessary to the securement of a Trial Balance of the General Ledger should be found thereon. A Cash Short and Over account should hold the daily overage or shortage ascertained when the daily balance is checked against the Cash Book. The net balance thereof may be handled in one of two ways:

1. If the cashier is held accountable for any shortage to the end that he must make it good, the balance represents a claim against him. If an overage, he has that much on hand to apply against a future shortage.
2. If the cashier is not required to make good a small shortage, the Cash Over and Short account, ultimately, will be closed out into Profit and Loss.

Payments of actual cash should be kept as few in number, and as small in amount, as possible. In this connection, the Petty Cash fund is used. This fund may be one of two types:

1. Constant balance. This is said to be operated on the imprest basis.
2. Fluctuating balance. This type of fund is not to be preferred to (1) above.

Cash Books may be divided into four types:

1. General Cash Records. In these, all cash transactions are booked, except those pertaining to the Petty Cash funds. There may be one record in which both receipts and disbursements are carried, or a number of such records. Again, the receipts may be recorded in one or more Receipt Registers which are bound separately from the record or records holding Cash disbursements,—the Check Register or Registers.
2. Petty Cash Records. Herein are recorded the expenditure of the various Petty Cash funds, one book for each fund.
3. Private Cash Book. This record is used in connection with the Private Ledger and Private Journal.

4. Casn Journal. Herein are recorded both Cash and non-Cash items. It is a columnar record which is supposed to replace all the usual records of original entry. It even may be used so as to replace the use of a General Ledger; in this case, it might be titled Cash Book—Journal—Ledger.

Statement of Cash Receipts and Disbursements.—This statement may be considered as a transcript of the Cash Book for a specified period of time. It should be constructed along the following lines:

1. Balance—Beginning of period.
2. Receipts—properly classified.
3. Total cash available,—sum of (1) and (2).
4. Disbursements—properly classified.
5. Balance—end of period,—(3) less (4).

This statement is not, generally, the same as a Statement of Income and Expenses:

1. The former statement represents merely a rearrangement of the information shown in the Cash Book.
2. The latter statement includes all income and expense items, whether received or paid in cash or not. Only in an activity similar, say to that of a club would it be possible to have both statements include the same items, and thus they would both hold the information for a Statement of Receipts and Disbursements:
   a. No cash balance on hand at the beginning of the period as where, perhaps, it is the first year of existence.
   b. No accruals of any kind.

Notes Versus Bills.—These two terms, often used interchangeably, really do not represent the same thing:

1. Note. A promissory note,—unconditional promise to pay a specified sum of money upon a fixed or determinable future date.
2. Bill:
   a. A draft or bill of exchange,—a written order by one person upon a second person to pay a third person the amount of money therein set out. Example: Trade acceptances.
   b. Invoice. An invoice often is referred to as a "bill."

In general, however, it seems correct to use one title as covering both,—Notes Receivable, or Notes Payable.

Notes Receivable.—A note receivable is assumed to be preferable to an open account with a debtor for three reasons:

1. It acknowledges that the amount of the debt is correct.
2. A dishonored note may wreck one's credit rating, whereas an overdue open account may not be considered of much discredit to the payer.
3. The date upon which the debt is payable is specified, whereas the due date of an open account may not be fixed except by custom.

In this case, it is usual to have the collateral in an amount equal to from 25 per cent to 50 per cent of the face value of the note secured thereunder.

Dishonored Notes Receivable.—When a note has been dishonored, practice dictates that the note should be written back into the account receivable that was credited originally when the note was received. By so doing, the account with the debtor will contain a record of the dishonor which will be of great use in granting such debtor future credit. This writing back, however, does not change the status of the note claim back again to that of an account claim; the holder may sue either upon the note or upon the account.

When a number of notes are taken, it becomes important not to lose sight of the fact that the credit made to a customer's account does not necessarily represent a complete settlement to that extent. In such event, the practice is followed more or less of having the Customer's Ledger ruled with two debit and two credit columns. The inside columns would be used for the note transactions and the outside columns for the regular open account transactions; only the latter would hold amounts affecting the Trial Balance.

Notes Receivable Discounted.—Since a discounted note receivable is a contingent liability, it is in error to credit the Notes Receivable account when a note is discounted; the credit should be made to the account of Notes Receivable Discounted, this latter account being proportionately cancelled against the Notes Receivable account when notice has been received that payment of a note has been honored. The same procedure is possible when a note receivable has been given to a creditor, since no essential difference exists between giving a note receivable to a creditor and discounting it at the bank.

On the Balance Sheet, the Notes Receivable Discounted account may be handled in either of the following ways as under:

1. Deduct the balance therein from the balance of the Notes Receivable account.
2. Show on the asset side of the statement the notes in two amounts,—those on hand and those discounted,—and set out the discounted amount on the liability side.

Loss on Notes Receivable.—Provision should be made periodically for possible loss on uncollectible notes receivable. Such provision may be computed in either one of the two following ways:

1. Calculate the amount to be provided separately upon the note item alone. This seems preferable to the second one below.
2. Total the notes and accounts receivable, and compute the estimated provision for uncollectible items on the basis of such total. This means that the Reserve for Uncollectible Accounts covers both notes and accounts receivable. This second possibility does not appear to represent good accounting practice.

Notes Receivable Register.—This record may or may not be considered as a Journal,—as a record of original entry from which postings are made to the Ledger or Ledgers.

1. When not considered as a Journal. Such a record is a mere memorandum book, the note entries being made upon the General Journal and being posted therefrom. Naturally, where a large number of notes are taken, it would seem that this method of booking is not conducive to time-saving in that two operations are necessary, whereas one would suffice:

   a. The notes must each be recorded in the memo record.

   b. The notes must each be journalized on the General Journal.

2. When considered as a Journal. One operation is sufficient hereunder. Each note is entered upon the Register and the posting, both to the detail and control accounts, may be made immediately.

The same idea of recording would be followed in the case of notes payable.

Interest and Discount on Notes Receivable.—Before concluding the present discussion of notes receivable, a few remarks concerning interest and discount on notes receivable seem in order. Ordinarily, a note receivable should be booked at its face value, *i. e.*, without considering interest from the day it is dated to the date of maturity. An exception to this treatment is found where a bank adds interest to the basic amount of the note so that its face value will be equal to the total amount due upon date of maturity; naturally, when the bank discounts such a note it will calculate interest upon the whole amount, which means that, thereunder, interest is calculated upon interest.

Bank discount is interest deducted in advance, chargeable to a prepaid Interest account, or to an account earmarked in such a way that the charge will not be merged in the account carried with Cash Discount,—the latter representing an allowance made for paying an open account promptly.

Since bank discount is interest deducted in advance from the face of a note, the bank thereunder giving credit merely for the net amount remaining, the fact should be noticed that, by this means, the borrower receives proceeds in an amount less than the whole amount of the note, whereas, he pays interest upon the whole amount of the note. Because of this fact, the difference arises between bank discount and true discount. To calculate the latter, divide the amount of the face of the note by $1 plus interest on this $1 at the rate specified, for the time involved; the amount thus determined represents the sum the borrower should receive upon the true discount basis. Interest upon such sum for the period and rate specified, represents the amount of the true discount.

Accounts Receivable.—As a title, this term should not be used as a Ledger account heading except, perhaps, in connection with the controlling account over the Customer's Ledger. Practice, at least, will advocate the latter use of the term, even though the caption Customers' Accounts or Trade Debtors would seem preferable. If other than the accounts of customers be involved, as accounts with officers and employees, these other accounts should be set out separately by kinds. The credit balances in customers' accounts represent liabilities to be set out upon the Balance Sheet under an appropriate heading.

Regardless of what one may encounter in practice, when only one Ledger is used for holding all the accounts of a business, care should be observed in sectionalizing such Ledger to the end that the customer's accounts will occupy one division by themselves. By this means, a controlling account thereover may be carried in the division allotted to the general accounts. The same comments apply to creditors' accounts. However, the number of customers' accounts does not have to be great to justify the use of a subsidiary Ledger therefor; in fact, as soon as any justification exists for the use of a separate Ledger, the latter should be secured. Such justification would seem to exist, even when the number of accounts is small, where a Ledger ruling different from that of the General Ledger is desirable.

In the use of a separate Ledger for customers' accounts, the account arrangement therein may depend more or less upon existing circumstances. The following arrangements are illustrative:

1. In the order in which the accounts are opened. In connection herewith an index seems necessary even though the bookkeeper, through long experience, may be thoroughly familiar with the location of various accounts.
2. Alphabetically. Such arrangement may be desirable upon either a loose leaf or card Ledger.
3. By geographical location. Give each state a particular section of the Ledger, and arrange the towns thereunder in alphabetical order; customers within each town, likewise, should be arranged in alphabetical order. In connection with this arrangement, a card index, or an index of some kind, should be kept by customers' names.
4. Etc.

When drawing off a Trial Balance or an abstract of the customers' accounts, for Trial Balance purposes, it would seem that the most satisfactory method to follow would be to list the amounts in three columns:

1. Current—good.
2. Past due—short time only.
3. Doubtful.

Whether or not an account actually is bad depends entirely

upon both the character of the customer and of the business; no general rule can be advanced which will cover all cases.

Bad Debts: Reserve for Bad Debts.—Periodically, provision must be made for customers' accounts which appear to be doubtful of collection. To this end, it may be highly desirable to do what is known as "aging the accounts,"—preparing a list of the accounts with their balances and then, with the aid of some person familiar with the circumstances of each case, as the credit man, analyze the balances separating them into good, doubtful, and bad. The bad accounts should be charged against the Reserve for Bad Debts, and the reserve then should be increased sufficiently to offset the total amount of the doubtful items. Provision for losses on bad debts is a non-operating expense, and the amount of the reserve should be considered as a valuation item; the Reserve for Bad Debts does not seem to be a surplus reserve, a liability reserve, or a contingency reserve.

Doubtful accounts are better eliminated from the regular customers' Ledger than retained thereon; if done, they would be transferred to what might be termed a Suspense Ledger. Likewise, if desired, instead of writing a bad debt off the books, these may be included upon this Ledger also, and the individual accounts placed in the hands of attorneys for collection. In either event, a reserve account should be created of a size sufficient to offset the inflated asset value thereon. If the doubtful accounts are carried upon the regular Ledger, and only the accounts in the hands of attorneys are carried upon the Suspense Ledger, the size of the offsetting reserve for the Suspense Ledger would be calculated about as follows: ¼ of the total items for the current year; ½ of the total of the items two years old; ¾ of the total of the items three years old; all those four years old charged off completely. However, to take advantage of the Income Tax Law provisions permitting bad debts to be considered as expenses, the bad accounts must actually be written off.

If a bad account which has been written off in one period is collected in whole or part in a subsequent period, it would seem correct to credit the Surplus account in the amount of the collection, rather than credit the Profit and Loss account, in that, when the charge was made originally, the Surplus account was affected.

Average Due Date.—Without discussing this topic at length, it is impossible to do more herein than present one of the rules for calculating the average due date. The rule given relates to the product method of ascertainment since it is believed that this method is simpler than any other:

Select the first or last date in the account as the focal date. Multiply each item by the number of days in the period between the due date of the item and the focal date selected. Add the resultant products, securing one total for each side of the account. Subtract the smaller total from the larger and divide the remainder by the balance of the account. The resulting amount represents the number of days that the average due date is before or after the focal date. The average due date then is determined by one or the other of the following:

1. If the focal date is the first date in the account:
   a. If the dollar-days balance is on the same side of the account as the balance of the account, count forward.
   b. If the dollar-days balance is on the opposite side from the balance of the account, count backward.
2. If the focal date is the last date in the account:
   a. If the dollar-days balance is on the same side of the account as the balance of the account, count backward.
   b. If the dollar-days balance is on the opposite side from the balance of the account, count forward.

Fixed and Capital Assets.—These assets, for a going concern, should be valued at cost less depreciation. The following points, relative to cost, should be of interest:

1. Cost includes all expenses incurred up to the moment when the asset is ready for use,—in place, ready for operation.
2. When a capital asset is purchased.
   a. Cost would include such items as cash paid, freight, duty, insurance in transit, drayage, installation, and improvements and changes made necessary to make such asset suitable for the use to which it is to be put.
   b. If securities have been issued as part of the purchase price, their present value, plus the expenses in connection with their issue, would comprise a portion of the cost price.
   c. If securities have been issued for capital assets, as often

is the case, the valuation placed upon such assets by the board of directors is final, unless fraud can be proved.

d. Cash discounts secured upon the purchase of capital assets are deducted, generally, from the invoice cost thereof.

3. When a capital asset is constructed.
   a. Cost would include such items as material, labor, a portion of the overhead, fees of architect, charges for licenses and permits, insurance during construction, cost of injuries and accidents to workmen engaged upon such work, damages, cost of strikes, interest on borrowed money during construction period, bond discount during construction period, etc.
   b. In general, even though bond discount and the expenses of a bond issue, should be spread (amortized) over the period during which the bond issue is outstanding, and bond discount is considered as partaking of the nature of bond interest, it would not seem justifiable to capitalize, as part of construction cost, the amortized portion applicable to the period of construction. The same is true of bond expense. However, some accountants do not approve of the above practice. (See bonds—post, Chap. 8.)
   c. If the construction cost is less than market price, the asset should be valued at cost; a saving has occurred, but no profit has been made.
   d. If the construction cost is greater than market price, the asset may be valued in either one of two ways:
      i. Value at market and charge the excess against the current net profits.
      ii. Value at cost and reduce by a heavier than usual charge against the Depreciation account so that, when the Balance Sheet is prepared, the net carrying charge will be reduced to the present appraised value.

If a capital asset appreciates in value, due to changes in the conditions of the market, such appreciation may or may not be booked, probably not:

1. If not booked. An unrealized profit should not be booked.

A Balance Sheet footnote relative to such appreciation may be desirable.

2. If booked. The accountants following this practice maintain that a Balance Sheet should set out actual values, regardless of cost. Two methods of booking may be used:
   a. Dr.—Asset account affected.
      Cr.—Reserve for Appreciation.
      The above credit will prevent merging the amount of the appreciation into regular Surplus from there to be distributed as dividends.
   b. Adjust the asset to present replacement value, and then adjust the Reserve for Depreciation account so that the net carrying value will equal the present appraised value.

In selling a capital asset, the following should be borne in mind:

1. The credit should not be to the regular Sales account.
2. The booking procedure will be about as follows:
   a. Charge up the depreciation from last closing date to date of sale by debiting Depreciation account and crediting Reserve for Depreciation account.
   b. Charge Reserve for Depreciation account and credit the asset account affected for the amount standing as a credit balance in the Reserve account; this entry will eliminate the Reserve account amount applicable to the asset disposed of and reduce the latter to a net figure.
   c. The amount received in the sale then should be credited to the asset account in the amount necessary to clear the account, and the profit or loss resulting from the transaction should be so booked that it will not affect operation results; in fact, its amount is a credit or debit to Surplus.

Repairs—Renewals—Replacements—Additions—Betterments.—These items bring up certain points that are more or less difficult of interpretation:

1. Repairs. A repair is a replacement of a part of a unit which, in amount, is less than a certain figure. A repair is not supposed to increase the estimated life or value of the repaired asset; hence, the repair amount is a revenue charge.
2. Renewals. A renewal is a replacement of a whole unit.

The worn out asset should be cleared from the books, and the new asset entered thereon.

3. Replacements. A replacement contemplates the removal of a worn out asset and the purchase of a new one.
4. Additions. An addition is a new asset which does not replace any asset owned previously.
5. Betterments. If, when a new asset is purchased, more value is represented thereby than was represented by the asset replaced, originally, the excess represents a betterment.

Wasting Assets.—These capital assets are subject to both depreciation and depletion. They comprise material resources as timber, oil, coal, stone, gold, clay, etc., properties. The accounting point here involved relates to the return of the investment to the proprietors,—stockholders because, as the properties are worked, there is a reduction or depletion in the asset value which is absorbed by the profits. The accounting treatment will be as follows:

1. Depletion may be disregarded to the extent that when dividends are paid a portion thereof represents a return of the capital investment.
2. Depletion may be considered. In this event, a periodic amount, equal to the proportion that the amount of asset product used bears to the total estimated amount of asset product owned, should be set aside in a Depletion Reserve so that, when the entire asset product owned has been consumed, the stockholders may have their capital returned to them.

Take a mine, for example, as representing a wasting asset in which many people are interested. When so-called profits are paid to the stockholders in the form of dividends, it is questionable whether or not these dividends really represent profits; usually, a portion thereof is a return of capital. At some time or other, no matter how rich a mine may be, the mine either will be exhausted or it will become so difficult to work that it will not pay to do so. The harder the mine is worked, the less the amount of ore that remains; consequently, due to this working, the asset value decreases. Only when the size of the ore body is ascertainable, which is not possible as an ordinary rule, except perhaps in the case of certain coal mines, will the dividend represent only a

distribution of profits; hence, practically every dividend represents an unknown portion of the original investment.

Land.—In addition to the points studied in connection with the earlier work, or coextensive therewith, the following points are offered concerning this asset:

1. "Land," as a term, is not synonymous with that of "real estate," since the latter term includes both land and buildings.
2. Land should be carried in an account separate from that of buildings; the two items should not be charged to the same account, even when purchased together for a specific sum. The separation of these items is due to the following reasons:
   a. Since land, originally, does not depreciate, whereas buildings do, depreciation could not be calculated unless the two items are separated.
   b. Since land is not insured, whereas buildings are, the separation should be made so that a basis may be secured for determining insurable value.
3. If land is purchased with the idea of selling it at a later date, it is a current asset, not a capital asset.
4. Land should appear in the accounts at its fair cash value, when acquired. Such value would consist of either the actual money paid therefor, if purchased by a going concern, or its fair cash value if taken over when an enterprise is started; also, the cost of any permanent improvements. If interest enters in relation to purchase price, the actual amount paid, not accrued, may be regarded as a portion of the cost.
5. Land is an asset only when owned,—at least covered by the term "freehold premises"; this would include property in which there is only a life interest. Therefore, if a plant receives a gift of land upon a condition that must be fulfilled before title passes, care must be taken to book properly, if at all; for example:

   Dr.—Land—Contingent Gift.

   Cr.—Reserve for Land—Contingent Gift.

   Only after the contingency has been fulfilled, should the asset be taken up in regular order, at a reasonable appraised value, offset by a special Surplus account which, after being

charged with the costs entailed by the gift, may be transferred to regular Surplus.

Leaseholds.—If land is held under a lease, one which is a long-term lease, the lease may or may not be booked. It should not appear in the accounts unless it has been paid for; then only at the price paid under the caption, say, of Leasehold, except as under:

1. It may be booked at its present value in a statement upon the basis of which the property is offered for sale.
2. It may be booked in the same manner as in (1), in a statement prepared for credit purposes, because it represents an addition to net worth. A leasehold is a wasting asset.

Buildings.—This item is an asset only when owned. As an asset, its booked cost may include every expense essential in making it ready for occupancy. The following items are illustrative as part of the cost:

1. If a building replaces an old one that was useless when a piece of land was purchased, and was not considered in the purchase price, the cost of tearing down the old structure is a legitimate charge to the cost of the new one.
2. The sum paid to a tenant holding a lease upon such old building which expires beyond the time when the old building is to be razed.
3. Interest on money paid to contractors during construction period.
4. Insurance and taxes up to the time when the new structure is ready for occupancy.
5. Value paid for a building, whether in cash, in stock, or in bonds.
6. Additions to cost which distinctly add to the value (betterments), or the excess cost of replacement value over the cost of the element replaced.
7. If bonds are sold at a discount to provide funds to erect a building, the amount of such discount should not be charged to building cost.

As to depreciation, care should be taken in determining the amount thereof, especially relative to variations applicable to different portions of a building. If one part of a building is used for purposes other than those applicable to another portion of

the building, it will be necessary to keep the cost of the different portions separate one from the other, since the amount of depreciation on each part will not be similar; for a like reason, it may be desirable to book the cost of foundations separate from the superstructure, since the former will depreciate but slightly, if at all.

If a person owns a building for life only,—has a freehold interest therein, depreciation may be ignored unless he:

1. Expects to live beyond the point of time that the building is serviceable, or
2. Expects to leave the property when the building no longer is usable for his purposes, or
3. Expects to replace the building in whole or in part.

Again, under the circumstances where a building is on leased ground, and the condition exists that title to such building passes to the owner of the land upon termination of the lease, the entire building value should be charged off annually upon a pro rata basis during the life of the lease. Finally, when a building is leased and the lessee is required to expend money thereon in order to prepare it for use, the cost of such additions and improvements should be spread over the life of the lease as an addition to the rental charge; where the lease has expired, these additions and improvements become the property of the owner.

Machinery.—This asset should be booked at a value that will include not only the purchase price but all legitimate expenses necessary to place it upon a production basis, as: in freight and cartage thereon, setting up labor and expenses, and labor charges related to experimenting and testing up to the point where the machine runs true to form.

When machinery is purchased upon the installment plan, title not passing until a certain number of payments have been made, a problem arises as to the proper recording of the payments as between capital and revenue, since interest is included as a portion of each payment made:

a. Determine the cash price of the asset, and the interest rate, and by means of tables ascertain the periodic portions that represent capital, and that represent revenue, charges.

b. Book the entire cost of the asset, by a charge to the proper asset account and a charge for interest to a deferred charge to operating account, offset by a credit to a liability account.

c. Where each payment is made, periodically:

   i. Charge the liability account and credit cash, and
   ii. Charge Interest Expense account and credit the deferred charge to operating account for the interest portion.

When machinery is made by the factory itself its value, as recorded, should consist of the actual material cost, labor cost, and a fair amount of the factory overhead. If this total value is less than the cost necessary, should the machinery be purchased, the difference represents a saving, not a profit; this saving will be realized eventually by the smaller yearly depreciation charge against profits.

When machinery is moved from one place to another within a plant, the cost incurred may be booked separately and be spread over the period estimated as representing the life of the saving caused thereby.

If the machinery items are not numerous, one or more accounts may be carried therefor upon the General Ledger, as desired. If only one account be carried, and no subsidiary Ledger used to hold the detail accounts, a book memo should be used in which a detailed list of the items may be found; otherwise, depreciation cannot be calculated as it should be and, in case of fire, it would be difficult to prove the amount of the loss. It would seem desirable, in nearly all cases, to carry one Machinery account upon the General Ledger to act as a control over a so-called card Ledger or file in which each card covers one specific machine or other unit of property covered by the title "machinery," as: boilers, shafting and pulleys, belting, etc.

Tools.—This asset should represent the miscellaneous small articles that are used directly on the material which is being fabricated into manufactured product, as: hammers, chisels, etc., which, when used, are held either in the hand or fastened to a machine in some way. They should be carried in an account separate from that of Machinery.

Since the depreciation of tools by the application of a fixed

rate cannot be determined in any manner that approaches accuracy, due to the fact that the uses to which a tool may be put are numerous and varied, it is customary to handle the reduction in value other than in a manner similar to that applied usually. In other words, when the books are closed, tools should be revalued and the book value thereof reduced to such amount.

Patterns.—This asset may be of considerable importance in a manufacturing concern, in that it may represent a fairly large sum of money. Actual or frequent use would seem to be the test of whether or not a pattern has value. And even so, the cost of stock patterns should be depreciated liberally. Special patterns used in connection with a specific piece of work should be charged thereto as part of its cost. When a new design replaces one that has been used, the old patterns should be dropped from the books unless there still exists a sale for articles of the old type; even so, it may be advisable to carry them only at a mere nominal amount.

Good-will—Patents—Royalties—Copyrights—Trade-marks, etc.—Good-will will be discussed in considerable detail later in connection with consolidated statements; hence, only two points will be mentioned at this time:

1. Good-will may be said to represent or measure "the earning capacity of a business in excess of a given rate of profit recognized as normal." This definition will answer for the use of this intangible capital asset in connection with the general corporate work discussed in subsequent chapters.
2. Good-will should be recorded, if at all, at its exact cost and only when purchased. This must be taken as a general statement only, in that the amount of good-will as originally booked may be reduced,—or may not be made use of at all in an account by that name, as when adjustments thereof are made against specific asset accounts. (See Treasury Stock, post).

Patents present considerable difficulty in the matter of valuation; however, an accountant should be governed only by what seemingly has been paid for them. In general, the following summary will cover the item:

1. A patent should be recorded at cost:
    a. The purchaser of a patent would book it at its cost to him.

b. The inventor would record it at a cost composed of:
    i. Cost of producing the invention.
    ii. Legal fees involved.

c. The owner of a patent may consider as part of its cost the expenses incurred in protecting it from infringement.

A patent has no value until it is shown to be valid.

2. Patents should be depreciated heavily, regardless of use and of new patents which may be secured upon improvements which tend to prolong the life of the original patent beyond the usual seventeen years. It is a wasting asset. A patent may prove of no practical value within a short time due to lack of demand for the product resulting from its use or due to the fact that something new and better has been placed on the market by another. Patents are considered as expiring in seventeen years, but when this period of life is used, it would seem conservative to set up a reserve to cover the contingency of possible obsolescence due to better patents issued to others, in addition to the annual credit made directly against the asset.
3. The patent expense on machinery used in producing a certain manufactured product is a manufacturing cost, whereas, if the patent covers the article sold, its expense is chargeable as a selling cost.

Royalties received are non-operating income, whereas, royalties paid in connection with the use of a patent are manufacturing expenses chargeable under the same principles that govern the handling of patent expense. The royalty contract must be carefully scrutinized before an attempt is made to make entries therefor. Where a certain minimum royalty has been guaranteed the holder of the patent, as a total, and the actual amount due on account of operations is less than this minimum guaranteed total, the excess must be treated as a deferred charge to be written off later against future operations, provided the royalty contract permits.

Formulas or trade secrets should be booked at cost, and be depreciated heavily, especially if not protected. Their value is related closely to the article produced inasmuch as there will be no value if the article produced has no value.

Copyrights and trademarks should be recorded at cost, if at all, and should be depreciated heavily beyond the amount which

would be required by following the number of years for which each is granted:

1. Copyrights are granted for twenty-eight years, and may be renewed for a similar period, under certain conditions. Very few copyrighted articles have any value at the end of twenty-eight years.
2. Trademarks, when registered, are protected indefinitely, provided they are used continuously. It is not usual to book a value for a trademark unless it has been purchased.

A license, as to cost, is a deferred charge to be written off over the period for which the license was granted.

A franchise should be recorded at cost. The matter of depreciation depends upon circumstances:

1. If perpetual—no depreciation.
2. If for a definite period—depreciate in proportion to time elapsed.
3. If indefinite—depreciate heavily.

Notes Payable.—This type of liability may be classified in two different ways:

1. First classification:
   a. Those with collateral.
   b. Those without collateral.
2. Second classification:
   a. Those issued for merchandise.
   b. Those discounted by banks.
   c. Those sold through brokers.
   d. Demand loans.
   e. Those of officers and employees.
   f. Purchase money notes.
   g. Accommodation notes.

Each class of this second group may be subdivided further as to the amount due on demand and as to the amount secured by collateral.

A note given for accommodation creates both a contingent asset and a contingent liability. In general, although no entries are apt to be made to cover such a transaction, it would seem preferable to make some book record thereof, as:

Dr. Accommodation account
Cr. Liability as Indorser

especially where an exchange of notes has taken place. Even when a note has been indorsed as an accommodation, it is possible to make use of the above entry inasmuch as this act, also, creates both a contingent asset and a contingent liability.

When a time draft has been accepted, it should be booked as a Note Payable.

Accounts Payable.—As concerns this liability, some of the points mentioned already in connection with accounts receivable are applicable. The term, as a title, should not be used as a Ledger account heading except, perhaps, under the two following conditions:

1. As the title of the controlling account over the creditors' Ledger.
2. As the title of an account upon the General Ledger to which is posted monthly the total of all credit transactions, no separate creditors' accounts being carried.

Practice, at least, will advocate the use of this term under the above conditions even though the caption Creditors' Accounts or Trade Creditors would seem preferable.

Three methods exist, in general, for carrying the open accounts with business creditors:

1. All transactions of each month are posted as a credit to one account upon the General Ledger, which is given some descriptive title. Hereunder, all creditors are treated as but a single creditor, due to the fact that as long as a business owes money, it is really immaterial to whom the money is owed. Accounts receivable should not be handled in this way, under any circumstances, since the credit standing of each customer is a most important consideration in determining whether or not more money is owed the business by such customer than should be owed, and whether or not such customer pays promptly.
2. Each creditor is given a separate account, usually upon a subsidiary Ledger, the latter being controlled by an account upon the General Ledger.
3. Combination of (1) and (2). Certain creditors are given separate accounts so that the volume of business with each such may be determined readily, whereas, concerning the others, one general account to cover all may be sufficient.

Naturally, hereunder it is necessary to columnize the original records so that the above separation is made possible readily.

Purchases.—Purchases and sales, and the various accounts closely allied thereto should not be recorded in the old-style Merchandise account, but should be so recorded that, from the accounts used, an intelligent statement thereof, leading to a figure representing gross profit, may be prepared without the necessity of recasting the accounts.

To the extent that a concern is liable for the purchase price of the material, the bookkeeper should make proper records thereof; this means that all unrecorded purchases of the kind above referred to, when statements are drawn, should be considered as increasing the Purchases account, the Inventory and the Accounts Payable.

The form of the Purchase Book depends upon the organization under review. Purchases may be classified by kinds of material, or by departments, or not at all. It may be desirable to use a Voucher Record in preference to a Purchase Book; the latter has been described briefly in the preceding chapter. Under either possibility, it is necessary to have the right side of the Cash Book provided with columns in which payments, and cash discounts (unless the latter are taken up on the Purchase Record or Voucher Register), may be entered. Provision should be made for posting the items from this side of the Cash Book to the proper lines of the Purchase Record, even though the regular creditors' Ledger is used to which postings are made in regular form; naturally, when a Voucher Record is operated, this posting to the proper lines thereon will be the only posting made, unless certain creditors are carried in special detail accounts.

Returns and allowances, related to Purchases, should be entered upon a separate record; if not, the General Journal must contain a column on the debit side for such purpose titled, say, Accounts Payable. Likewise, the General Journal should contain a column on the credit side for adjustment purposes; in fact, even where a separate Return and Allowance Record is used, these two columns on the General Journal may be desirable to take care of possible miscellaneous adjustments.

In proving up the accounts payable, where both a Purchase

Record is used as above indicated, and a Creditors' Ledger is maintained, a double check is secured upon the work:

1. List the open items upon the Purchase Record and secure their total.
2. This total should agree with the balance of the controlling account upon the General Ledger.
3. This total should agree with the total of the Trial Balance or abstract of the Creditors' Ledger.

The procedure revolving around the placing of a purchase order, the receipt of the invoice and the goods, and the bookkeeping involved, are dependent upon the particular concern under scrutiny. On the one hand, the whole procedure may be decidedly simple and, on the other, it may be more or less involved or complicated. The following example will suffice:

1. When the storekeeper discovers a certain material has reached the minimum quantity that must be on hand at all times, he notifies the purchasing department by means of a Purchase Requisition, keeping a carbon copy on file and making entry of such notification upon his Stores Ledger.
2. When the purchasing department receives this requisition, an order is placed, after the usual preliminaries have been met, by means of a Purchase Order, made in quadruplicate:
   a. Original to vendor as authority to ship.
   b. Duplicate retained and filed with Purchase Requisition.
   c. Triplicate to receiving department, as notification to expect shipment.
   d. Quadruplicate to storekeeper, who may make entry in the Stores Ledger account in a section for such purpose.
3. When the vendor receives the Purchase Order, he ships the material and sends along an invoice which, when received in Purchasing Department, is filed with the copy of the Purchase Order there held.
4. When the material is received, the receiving clerk will make out a Report of Material Received, after inspection, perhaps, consisting of three copies:
   a. Original to purchasing department.
   b. Duplicate to be sent storekeeper with material after same has been cleared.

c. Triplicate to be retained in the files, after being receipted by storekeeper.

5. When the purchasing agent receives his copy of the Report of Material Received, it is compared with the Purchase Order and the invoice on file, after which the material is cleared to the control of the storekeeper. Perhaps the material goes immediately to storekeeper after inspection.
6. The invoice then is indorsed, and is forwarded to the accounting department for entry and payment.

Sales.—All sales orders should be recorded systematically. Before a sales invoice is sent out, it should be checked against the sales order. Likewise, the shipping clerk should keep a separate record of all shipments made.

The usual form of Sales Book should consist of a binder in which are contained carbon copies of the invoices sent customers. The detail postings are made from these carbon copies, whereas, the control account posting and the sales distribution would be secured from what might be called a Sales Journal which, practically, might better be termed a Recapitulation of Sales.

A summary presentation of some of the principles of use in connection with various kinds of sales seems in order:

1. Cash sales. Great care must be exercised to ascertain that the proper system of internal audit is in use. (See previous discussion relative to cash receipts.) One means of taking care of cash sales is to handle them in about the same way as credit sales, but in totals. A separate column is provided upon the sales recap sheet, and herein each cash sale is entered and distributed in the same manner as the charge sales are distributed. The total of this column is charged to the Cash Sales account. A similar column is provided on the Cash Book to hold the amount of payments received from cash customers. The total of this column is credited to the Cash Sales account. A credit balance in this account represents cash received for which goods have not been delivered.
2. Sales to proprietor. These may be handled in either one ot two ways:

a. Dr. Personal Account—Proprietor,	$ ¢	
Cr. Purchases,		$ ¢
At cost price.		
b. Dr. Accounts Receivable (Detail and control),	$ ¢	
Cr. Sales.		
At cost price,		$ ¢
Dr. Personal Account—Proprietor,	$ ¢	
Cr. Accounts Receivable (Detail and control),		$ ¢
To clear from Accounts Receivable.		
Dr. Sales.	$ ¢	
Cr. Purchases,		$ ¢
To clear from Sales account. This entry is unnecessary unless the aggregate is of sufficient size to affect sales statistics.		

3. Instalment sales. The following entries are illustrative:

Dr. Instalment Accounts Receivable—19—	$ ¢	
Cr. Cost of goods sold,		$ ¢
Unrealized Gross Profit—Instalment Accounts Receivable—19—		$ ¢
To record the sale.		
Dr. Cash,	$ ¢	
Unrealized Gross Profit—Instalment. Accounts Receivable—19—,	$ ¢	
Cr. Instalment Accounts Receivable—19—,		$ ¢
Realized Gross Profit—Instalment Accounts Receivable—19—,		$ ¢
To record payment on account.		
Dr. Realized Gross Profit—Instalment Accounts Receivable—19—,	$ ¢	
Cr. Profit and Loss,		$ ¢
To close.		

The hire-purchase plan contemplates renting an article to the would-be-purchaser under an agreement that, when the required number of instalments have been paid as rent, a bill of sale will be given for the article. Title does not pass until all payments have been made, and if a payment is defaulted, the owner may recover possession of the article under the lease terms.

4. Sales on approval. No sale has taken place until the goods have been accepted. Therefore, the following entries would suffice:

Dr. Approval Accounts Receivable,	$ ¢	
Cr. Approval Sales,		$ ¢
To record sale at sales price .		
Dr. Approval Sales,	$ ¢	
Cr. Approval Accounts Receivable,		$ ¢
To record goods returned.		
Dr. Cash (or Accounts Receivable) / Approval Sales } Same Amount,	$ ¢	
Cr. Sales / Approval Accounts Receivable } Same Amount,		$ ¢
To record actual sale of goods.		

Goods out on approval are part of the establishment inventory, and care must be observed to provide for more than usual loss in value here against when the periodical statements are prepared.

5. C. O. D. sales. Regular entries upon the books of account should be made to cover these sales rather than mere memo entries:

Dr. C.O.D. Account,	$ ¢	
Cr. Sales,		$ ¢
To record C.O.D. sale.		
Dr. Cash,	$ ¢	
Cr. C.O.D. Account,		$ ¢
To record collections.		

Delivery drivers are charged for all C. O. D. goods to be delivered by them, and offsetting credits are made only for cash received or goods returned. Adjust the C. O. D. account against the Sales account at closing time.

6. Sales to branches. These are not regular sales, being ordinary shipments; therefore, credit such sales to a Shipment account:

Dr. Branch—A	$ ¢	
Cr. Branch Shipments,		$ ¢

On the branch books, the offsetting entry would be:

Dr. Purchases (goods),	$ ¢	
Cr. Home Office,		$ ¢

Goods are billed to branches at cost or at some figure other than cost; if the latter practice be followed, a periodical adjustment must be made on the books of the home office to take up the inventory of the branch at cost.

7. Sales for future delivery. Nothing need be said concerning this kind of sales unless a contract exists under which a customer can be sued. If such contract exists:

a. The sale may be recorded, provided the goods are in stock ready for shipment, even though there be a delay in delivery.
b. The sale should not be recorded if the goods involved have not been fabricated.

However, it is usual not to record such sales until delivery has been made. Selling expenses applicable to sales not delivered may be deferred in closing the books.

8. Sales on consignment. Title to goods sent out on consignment has not passed; therefore, consignment sales are not regular sales. The entries covering consignments are illustrated below, as to one method:

Books of Consignor:	Books of Consignee:
A.B.—Consignment. To—Goods on Consignment (A.B.). To record goods shipped.	Dr. None. Cr. None. Memo entry made only.
A.B.—Consignment. To—Accounts Payable (cash). To record charges incurred, as freight, insurance, drayage, etc.	XY—Consignor. To—Accounts Payable (cash). To record all expenses incurred on behalf of consignor.
A.B.—Personal. To—A.B. Consignment. Gross proceeds as per account sales.	Accounts Receivable (cash). To—XY—Consignor. To record sales made.
A.B.—Consignment. To—A.B. Personal. Expenses and commission as per account sales.	XY—Consignor. To—Commission. To record commission charged.
A.B.—Consignment. To—Profit and Loss. Profit on consignment after unsold goods have been entered on the credit side of A.B. Consignment account.	Commission To—Profit and Loss. To close out gross profit.
Cash. To—A.B. Personal. Receipt of cash to balance A.B.—Personal account.	XY—Consignor. To—Cash Payment of cash to balance XY—Consignor Account.
Goods on Consignment (A.B.). To—Profit and Loss. To close.	

9. Loss in transit. At times, goods are lost in transit while on the way to a customer, and this may require that another lot be sent. If a claim be made to the railroad company, the following entries may result:

Blank Railroad Company,	$ ¢	
To—Goods Lost in Transit,		$ ¢
To record claim made.		
Cash,	$ ¢	
To—Blank Railroad Company,		$ ¢
To record receipt of damages.		
Goods lost in Transit,	$ ¢	
To—Sales,		$ ¢
This entry is made when damages are received.		

Likewise, the value of the goods lost in transit should be set out as such as part of the inventory, prior to receipt of damages or recovery of the goods.

10. Sales guaranteed. When goods sold carry a guaranty, such guaranty is a contingent liability, which might be provided for, as to loss, by a periodical charge to Profit and Loss account and a credit to a liability reserve account.

Sales to Foreign Branches.—The subject of foreign branches and foreign exchange in connection therewith is sufficiently important to require a separate chapter. However, the following points are deemed sufficient for present purposes:

1. Arbitrage relates to the method of remitting to one foreign country through another foreign country so as to take advantage of current foreign exchange rates.
2. When a company has a correspondent in a foreign country, it is usual to carry the account therewith in a Ledger account ruled with two debit and two credit columns. The inside debit and credit columns are used for showing values in the foreign currency. When the balances are drawn, the amounts are calculated at the exchange rate as of the Balance Sheet date. The two sets of columns then are balanced by an amount representing a paper profit or loss due to exchange, which amount can be written off to:
   a. Profit and Loss, or
   b. Reserve for Exchange Fluctuations.
3. The fixed assets of a foreign branch should be brought upon the books of the home office at cost less depreciation.

4. The current assets of a foreign branch should be brought upon the books of the home office at their realizable value in American money.
5. Remittances to a foreign branch should be booked by the home office at actual cost,—rates paid.
6. Revenue items should be converted, upon the home office books, at the average rate for the period.
7. The controlling account on the home office books should be calculated at the same rate as that established at the last period.
8. When a branch receives a shipment from the home office, the latter should be recorded on the branch books at actual cost.

Returns and Allowances; Expenses Related to Goods.—Purchase Returns are deductions from Purchases, and Sales Returns are deductions from Sales. Separate Journals should be used for each class of returns rather than recording them in the regular Purchases and Sales Books. Allowances on Purchases and on Sales may be combined with the Returns on Purchases and on Sales, respectively, although some accountants maintain that returns should be booked separately from allowances.

Freight and cartage outward may be handled in either one of two possible ways:

1. If goods are sold f. o. b. destination, such expenses may be considered as sales deductions.
2. If goods are not sold under these terms, but as f. o. b. point of shipment, such expenses may be considered as selling expenses.

Purchasing department expenses are related to the cost of purchases, whereas credit department expenses are considered either as selling or administrative expenses, preferably the latter.

Ordinarily, warehouse expenses are considered as selling expenses, but at times it may be advisable to apportion part of them as a cost of purchases. Advertising expenses are not always to be charged off currently to Profit and Loss:

1. Current advertising never should be considered except as a current selling expense.
2. Heavy outlays connected with an advertising campaign

may be considered as a deferred charge to be written off over a short period of time.

Trade and cash discounts present a few points that seem worthy of being reviewed:

1. The correct treatment of trade discounts, deductions from list prices, depends upon circumstances:
   a. Ordinarily, they should be deducted from the invoices so as not to be taken up on the books at all.
   b. If a discount is in excess of the usual terms, as 2/10, n/30, a trade discount is assumed.
   c. If trade discounts are shown upon a set of books, they are deductions from purchases or sales.
2. Cash discounts, "allowances not in excess of a rate that a business could afford to pay for the use of money for the credit period," are not treated uniformly by accountants:
   a. Cash discounts on purchases:
      i. If considered as a reduction in the price of goods, they are deducted from purchases.
      ii. If considered as concerned with the financing side of a business, they are non-operating profit. This latter view seems to be the better of the two.
   b. Cash discounts on sales:
      i. If considered as an overstatement of sales, they are deducted from the sales.
      ii. If considered as a bait offered possible customers, they are booked as selling expenses.
      iii. If considered as a fine incurred on account of bad financing, or as made up of the two elements of interest and bad debts, they are non-operating expenses. This last view seems to be the correct one.
3. Reserves for cash discounts on purchases and on sales, to cover prospective discounts that may be taken, are advocated by some accountants. However, it would seem that their use is an attempt to make distinctions that are altogether too finely drawn for practical purposes. If used, as where they sum up to a considerable amount:
   a. Reserve for Purchase Discounts is deducted, on the Balance Sheet, from the Accounts Payable.

b. Reserve for Sales Discounts is deducted, on the Balance Sheet, from the Accounts Receivable.

Turnover.—Turnover may be considered as the number of times a stock of goods has been turned within a specified period of time. This number of times is determined by dividing the cost of sales by the average amount of the inventory on hand during the period under review. The greater the turnover, the less need be the percentage of profit to earn a definite fixed amount of profit a year.

Insurance.—The subject of insurance contains a number of points or principles that seem important enough to require at least a complete chapter. But for present purposes, the discussion must be curtailed to a marked degree, and only certain general principles be given. Some of these have been covered in a more or less detailed manner in the work of the first year, provided that such work represents a course in accounting rather than a course in bookkeeping which so often is presented under the guise of an accounting title.

1. Policy Register. This record should prove valuable where a number of policies are in force so that a glance at any one page will take in a number of significant facts.
   a. The ruling for such a register should provide for tabulating the following basic information:

Policy numbers.	Agencies used.
Names of insurance companies.	Expiration dates.
	Nature of contract.
Premiums.	Amount of insurance.
Policy dates.	Monthly premium distribution.

2. Unexpired premiums. These represent deferred charges to operation to the extent of the unexpired portions. The expired portions are written off periodically as an expense. Expired insurance on a factory is an item of overhead, and expired insurance on manufactured product is a selling expense. Two questions arise as to the handling of the unexpired premiums:
   a. In case of fire. The unexpired premium, counting from the date of the fire, is not recoverable from the insurance company; therefore, this amount should be written off.

This may be accomplished by writing into the Fire Loss account such an amount as represents the "ratio of the amount of settlement on the part of the insurance company to the face of the policy."

b. In case of cancellation of a policy. A certain amount of the premium paid will be returned by the company, but this amount will not be upon a pro rata basis. The premium will be recalculated on the basis of the length of the period during which it was in force, upon what is known as a "short rate" basis. Then the difference between the original premium and the recalculated amount will represent the portion of the premium that will be returned.

Co-Insurance and Fire Loss.—Many fire insurance policies carry what is known as the "average" or "80 per cent co-insurance" clause. Such a policy makes the insured a co-insurer with the insurance company for the difference between 80 per cent of the property's cash value and the face of the policy. Where such a clause is in force, the amount that may be recovered from the insurance company can be computed as follows:

1. Multiply the face of the policy amount by the amount of the loss.
2. Divide the product from (1) by the product obtained by multiplying the cash value of the property by .80.
3. The result secured by (2) above, represents the amount that may be recovered.

When a fire has taken place, a Fire Loss account should be opened in which should be recorded the amount of the loss suffered. The account would be charged with the value of the asset or assets destroyed, after depreciation thereon has been adjusted down to the date of the fire, and the portion of the depreciation reserves applicable thereto have been closed into the asset accounts affected; it would be charged further with any expenses arising in connection therewith, and with the unexpired portion of the cancelled insurance. The account would be credited with the allowance granted by the insurance company; further with the scrap value allotted to the ruins. The balance of the account should be closed into Surplus.

If perpetual inventories are not kept of goods on hand, the

amount of goods on hand as of the date of the fire must be calculated by the gross profit test. The average gross profit for a period of years is calculated. Then beginning with the last closing date, a gross profit section of the Profit and Loss Statement is prepared covering the period from such last closing down to the date of the fire. The average gross profit on sales for this period, or portion of a period, is assumed to be the same as before. Hence, by working backward, to a certain extent, the missing inventory may be calculated fairly readily.

Miscellaneous Insurance Procedures.—Certain other principles relating to insurance, not included above, are summarized below:

1. Life insurance. If a concern is the beneficiary under a straight life policy, it is customary to capitalize the cash surrender value of such policy. After three yearly payments of premium have been made, a cash surrender value comes into existence, which may be booked as an asset. Subsequently, each premium payment is recorded in two portions:
   a. One portion representing the increase in cash surrender value is capitalized.
   b. One portion representing the excess of the premium over the increase in cash surrender value is charged to an expense account.

In the event of the death of the insured and the payment of the policy by the insurance company, the account carried with the cash surrender value would be closed and the excess of such payments over the balance in that account would be credited to Surplus account.

2. Liability insurance. Premiums covering insurance against employees' claims for damages due to injuries are payable in advance; therefore, there will be a certain portion of the premium unexpired at the end of each period. Again, at such date, it may be necessary to make an adjustment due to either a refund on the part of the insurance company, or to the fact that after the period's payroll is known, the premium paid may be found to have been insufficient.
3. Bonding employees. Premiums paid for this purpose usually are charged out as administrative expenses.

4. Burglary insurance. The premiums paid for this protection usually are charged off at once as expenses. The distribution of such expenses depends upon the kind of property protected.
5. Marine insurance. This point is not of usual importance but is covered briefly in that many C. P. A. examinations have at least one question bearing thereon. If the master of a vessel in time of distress jettisons a portion of the property in order to save the vessel and the retained portion of the cargo and freight, the loss suffered must be borne upon a proportional basis. The above probably is the point of most importance to an accountant.

CHAPTER III

PARTNERSHIPS, VENTURES, CONTRACTS, MANUFACTURING CONTROL

Introduction.—Four major topics are discussed in the present chapter. For the most part, it has been assumed that a considerable portion of the work of the first year was devoted to a detailed consideration of these subjects Therefore, the current presentation acts both as a review and as an approach to the work of the subsequent chapters, most of which concerns corporations.

Partnership Formation.—The legal organization of a business is the organization unit which holds property values and directs their use so that they will dovetail harmoniously with the efforts of persons. This organization unit may take one of three forms:

1. Sole proprietorship.
2. Partnership.
3. Corporation.

On the other hand, the working organization of a business is concerned with the internal activities thereof regardless of its legal form of organization. A study of partnerships necessarily must resolve itself into a consideration of both phases of partnership organization. But in the present instance, since it is assumed the student is somewhat familiar with both these angles, from his past work, the principles presented have been condensed as much as seems possible consistent with reason.

Partnership Defined.—"A partnership, as between the numbers thereof, is the association, not incorporated, of two or more persons who have agreed to combine their labor, property and skill or some of them for the purpose of engaging in any lawful trade or business, and sharing the profits and losses as such between them."

Definite rules to determine when, and when not, a partnership

is in existence under any given set of facts, cannot be given since each case arising must be judged upon its own merits,—the facts existing thereunder. In general, however, the two following legal principles are made use of:

1. Are all the elements present which are essential to the formation of a legally binding contract?
2. Was there an intention, on the part of all parties concerned, to form a partnership?

If so, it would seem that the preponderance of opinion states a partnership to be in existence.

Partnership, Advantages and Disadvantages.—The reasons, or advantages in favor of the partnership form of organization, as opposed to that of the sole tradership, may be set out as under:

1. To secure additional capital.
2. To enlarge the scope of the business.
3. To secure the services of another, because of:
   a. Ability, or
   b. Business connections.
4. To secure a subdivision of duties, so that specialization in one particular direction may result.

The disadvantages existing against the formation of a partnership may be summarized as follows:

1. Unlimited liability. In general, each partner is liable beyond his partnership investment to the extent of his whole personal fortune.
2. Friction. Partners are most apt to find it difficult to get along harmoniously with each other.
3. Deferred action. Since each partner, in general, has as much authority in management, as each other partner, decisions as to a definite course of action are apt to be made slowly, if made at all.

The disadvantage of partnership liability is exceedingly important, except as concerns the limited partner who jeopardizes only his investment and who is specific in his actions to give the general public notice of such limitation. Such disadvantage is shown by the following:

1. Each partner, being a surety for each other partner, is liable for the full amount of the firm's debts. This means that his private estate may be attached for such purpose. Of

course, in such event, he would be entitled to proportionate contribution from the other partners but, even so, the mere right to contribution does not mean necessarily that he can enforce such right; the others may have dissipated their private fortunes prior to such attachment.

2. Incoming partners may be held liable for the debts of the old firm unless they serve notice specifically that they will not be so held.
3. Retiring partners are held liable for the debts of the firm, both due and not due, as of the date of retirement regardless of what might be the actions of the vendees in this respect, unless the creditors specifically agree to look to such vendees for payment.
4. Naturally, the remaining or continuing partners are jointly liable with those who are retiring.

Classification of Partners and Partnerships.—Persons forming a partnership must be competent under the law to contract (exclusive of corporations unless so authorized specifically in the charter). Competent persons are:

1. Minors (since their contracts are not void, but merely voidable).
2. Adults.
3. Partnerships.
4. Corporations, if expressly authorized.

Partners may be classified as follows:

1. General (active). These take an active part in the firm management.
2. Limited (special). These have less than full participation in firm liability. The statutes must be complied with strictly, because the limited liability is in derogation of the common law liability.
3. Dormant (sleeping). These have no part in the firm management, and their connection is a secret one. They are both secret and silent.
4. Silent. These have no voice in the firm management, and they may or may not be dormant partners.
5. Nominal. Those who are held out to the world as partners, but who, in reality, are partners in name only; these may

be held legally as regular partners by creditors who have granted credit to the firm on the strength of their connection.

6. Ostensible (real or public). Those who hold themselves out to the public and are known, therefore, as partners, and who, in reality, are such.
7. Secret. These partners are not known as partners, although they may be engaged actively in the business.
8. Sub-partner. An outsider who shares in the firm interest of a regular partner. He is not a member of the original firm and is not liable to its creditors.

Partnerships may be divided as follows:

1. General. In these, all the partners are tenants in common, for the continued prosecution of a general line of business. They are of two basic kinds:
   a. Trading. These are formed to buy, sell, and manufacture.
   b. Non-trading. These are found among brokers, professional men—lawyers, accountants, etc.
2. Special. These partnerships are formed to carry out some one line of endeavor, or to transact one single piece of business; a joint venture is included hereunder.
3. Limited. These partnerships are composed of two classes of partners:
   a. General. Those liable for the whole of the firm debts as in a general partnership.
   b. Special. Those liable only for a limited amount of the firm debts, usually in the amount of their investments.
4. Joint stock company. This is a partnership in which the capital is divided into shares which are transferable without the express consent of all the partners. Usually, it has a corporate name, and is governed by directors. A transfer of interest, war, and death or bankruptcy of its members will not necessarily terminate its existence. It is created by contract, and the law of the particular state in which it is domiciled must be followed strictly in its formation.

Provisions of Partnership Agreement.—The usual provisions which should be found in a partnership agreement are many, but the following points, at least, should be covered:

1. Date of commencement, term of existence, and conditions of termination prior to agreed-upon date.
2. Name of partnership and of each partner.
3. Nature and location of business.
4. Amount and form of partners' contributions, and valuation of investments other than cash.
5. Rights, duties, and powers of partners.
6. Personal drawings.
7. Interest on personal drawings and capital.
8. Salaries.
9. Distribution of profits and losses.
10. Books of account, and audit thereof.
11. Arbitration of disputes.
12. Life insurance on firm members.
13. Procedure upon dissolution, including closing of books, good-will valuation, and disposal of firm name.

Rights, Duties and Powers of Partners.—Every general partner is a general agent of the firm in the transaction of firm business. His acts, however, are circumscribed to the extent that, unless he has been given specific authority, by virtue either of having entire charge of the administration of the business, or because the others, for some reason, are incapable of acting, he cannot legally:

1. Act so that, thereunder, the business cannot be continued as originally agreed. He may sell all the merchandise, but not the business.
2. Confess a judgment.
3. Submit a partnership claim to arbitration.
4. Dispose of the good-will.
5. Make an assignment to a creditor or trustee.

Interest—Salaries—Profits and Losses: Court Rules.—Specific agreements in respect to the above points, either written or oral, will hold. But where proof thereof is impossible, the Courts will apply the following rules:

1. As to interest allowances:
   a. No interest is to be allowed on investments.
   b. No interest is to be charged on withdrawals.
   c. The fact that interest is allowed on investments does

not mean that interest is to be charged on withdrawals; the latter must be covered specifically by agreement.

d. Interest is to be allowed on partners' advances and on personal payments in behalf of the firm.

e. The legal rate of interest applies, if no other is specified.

2. As to salaries.

   a. None are allowed.

3. As to profits and losses.

   b. These are to be shared equally.

Opening Entries.—After the partnership agreement has been formed, and the amount of capital investment decided upon, the opening entries are in order:

1. Where contributions are definite and fixed:

A. Current Account,	$ ¢	
B. Current Account,	$ ¢	
To—A. Capital Account,		$ ¢
B. Capital Account,		$ ¢
To record capital investment as agreed.		
Cash and Sundry Assets (in detail),	$ ¢	
To—Sundry Liabilities (in detail),		$ ¢
A. Current Account,		$ ¢
B. Current Account,		$ ¢
To record contributions as agreed.		

2. Where contributions are indefinite and fluctuating. The usual example hereunder is where a partner agrees to contribute certain assets, as Accounts Receivable, which he guarantees to be worth the value thereon placed:

Accounts Receivable,	$ ¢	
To—A—Capital Suspense,		$ ¢
To record contingent contribution.		
Cash,	$ ¢	
To—Accounts Receivable,		$ ¢
To record collections.		
A—Capital Suspense,	$ ¢	
To—A—Capital,		$ ¢
To credit A with definite amount of capital contributed or guaranteed.		
A—Capital Suspense,	$ ¢	
To—Accounts Receivable,		$ ¢
To close.		

In admitting a partner into a firm or business, the two following basic points and their differentiations should be borne in mind:

1. Purchasing an interest in a business: capital not increased thereunder. The incoming partner pays over his contribution to the other or others who pocket the proceeds as agreed. The possibilities hereunder may be classified as below; assume A is in business with a net adjusted capital of $10,000.00, and that B purchases a one-half interest therein:
   a. If B pays over to A an amount equal to one-half the present book value of the business, or $5,000.00.

A. Capital Account,	5,000.00	
To—B—Capital Account,		5,000.00

   b. If B pays over to A an amount equal to more than one-half the present book value of the business, say, $7,-000.00:
      i. Good-will not considered:

A—Capital Account,	5,000.00	
To—B—Capital Account,		5,000.00

      ii. Good-will considered (existing in the business):

Good-will,	4,000.00	
To—A—Capital Account,		4,000.00
A—Capital Account,	7,000.00	
To—B—Capital Account,		7,000.00

   c. If B pays over to A an amount equal to less than one-half the present book value of the business, say, $3,000.00:
      i. Good-will not considered:

A—Capital Account,	5,000.00	
To—B—Capital Account,		5,000.00

      ii. Good-will considered (brought into the business—same amount as above):

Good-will,	4,000.00	
A—Capital Account,	3,000.00	
To—B—Capital Account,		7,000.00

2. Making an investment to secure an interest in a business: Capital increased thereunder. The incoming partner pays over his contribution to the business fund as agreed. The possibilities hereunder may be classified as below; assume the same facts as in (1) above,—that A is in business with

a net adjusted capital of $10,000.00, and that B makes an investment to secure a one-half interest therein:

a. If B invests an amount equal to the present book value of the business, or $10,000.00:

Cash,	10,000.00	
To—B—Capital Account,		10,000.00

b. If B invests an amount equal to more than the present book value of the business, say, $12,000.00:

i. Good-will not considered:

Cash,	12,000.00	
To—A—Capital,		1,000.00
B—Capital,		11,000.00

ii. Good-will considered (existing in the business):

Goodwill,	2,000.00	
To—A—Capital,		2,000.00
Cash,	12,000.00	
To—B—Capital,		12,000.00

c. If B invests an amount equal to less than the present book value of the business, say, $8,000.00:

i. Good-will not considered.

Cash,	8,000.00	
A—Capital Account,	1,000.00	
To—B—Capital Account,		9,000.00

ii. Good-will considered (brought into the business—same amount as above):

Cash,	8,000.00	
Good-will,	2,000.00	
To—B—Capital Account,		10,000.00

If, instead of an agreement in accord with one of the possibilities mentioned just above, the incoming partner merely purchases an interest in the profits of a business, the only adjustment necessary when the contribution in cash or other assets has been received is to book the assets thus received and give the incoming partner credit therefor, regardless of the interest in profits purchased, as:

Cash or other assets (in detail),	$ ¢	
To—B—Capital,		$ ¢

This is because there is not necessarily any connection between the distribution of profits and the amount of the capital investments.

Partnership Operation.—The operation of a partnership, from the standpoint of record making, differs in no way from a sole proprietorship or even from a corporation. In other words, the principles followed in the recording of current transactions are similar in each of the three basic types of legal organization; the only differences encountered are due to the size of the concern in question and to the intelligence and efficiency of its management,—not at all due to the legal form thereof.

Because of the above, it is unnecessary herein to comment upon partnership work, as to operating periods, until one reaches the time where a closing of the books is in order. Then certain specific principles must be known, peculiar to partnership work, in order that such closing may be made in a correct manner.

Partnership Profits.—The first point relative to partnership closing, a simple one, concerns the distribution of the net profit of the period, after the latter has been calculated in the usual manner, except for salaries. Partners' salaries are not operating expenses, being considered as a distribution of profits. In other words, the net profit for the period should be calculated without reference to salaries of partners. Then the salary adjustments would be made, following which the remaining amount of the net profit, or the resulting net loss, should be distributed; such distribution may be made:

1. Direct to capital accounts, or
2. To the personal accounts, after which these are closed into the capital accounts.

Undrawn salaries are not current liabilities; in the Balance Sheet, they should be allocated under the proprietorship section.

Profits may be distributed in any one of a number of ways:

1. If agreement is silent in respect thereto:
   a. The profits will be shared equally; likewise, the losses would be shared in the same proportions.
2. If agreement covers the case:
   a. On the basis of the capital originally contributed. In this event, care must be observed to determine what were the original contributions. To this end, it may be advisable to have the original contributions carried in separate accounts, and all accretions thereto or reductions therein carried, also, in separate accounts.

b. On the basis of the capital originally contributed and accumulated—net investments existing at the time the profits are divided, i. e., at the end of the period, capital accounts plus personal accounts.

c. On the basis of capital contributed and time employed,—average investments. The method of calculation is arithmetical in every particular, and this follows a two-way possibility:

  i. Day-basis. This is usable where the investments and withdrawals have not been made on the first day of the month.

    (a) Multiply separately for each partner each investment and withdrawal by the number of days elapsing between the date of the transaction and the closing date of the period. The difference between the day-dollars for the investments and for the withdrawals represents the average investment for the period for each partner.

    (b) Follow the same procedure as above except that the multiplication is on the basis of net investments and the number of days each net investment remains unchanged.

  ii. Month basis. This is usable where the investments and withdrawals have been made on the first day of the month.

    (a) Qualified by the month basis, proceed as indicated above for i–(a).

    (b) Qualified by the month basis, proceed as indicated above for i–(b).

d. On a basis which bears no relation to investment. Partners may agree to share profits in any proportion regardless of the amounts of capital contributed to the business. This method is used frequently to adjust inequalities between partners, as where one partner has a peculiar training and skill which is highly desirable in the quest for success, or where one partner devotes more time to the business than the other or others. It is possible, because of one of the above reasons, to find a partner

sharing in the profits without having made any investment at all either in cash or in properties.

Interest on Capital Contributions.—Charging interest on partners' investments and withdrawals would be in order under every condition except where profits are shared in proportion to investments,—when the profit sharing ratios and the capital ratios are alike,—and all partners draw equally and at the same time. When interest is not allowed on partners' capital, the following results:

1. If the investment or capital ratios are equal, and the profit or capital ratios unequal, the partner with the larger ratio of profits loses.
2. If the profit sharing ratios are equal, and the investment or capital ratios unequal, the partner with the smaller ratio of capital loses.
3. If the investment or capital ratios are unequal, and the profit sharing ratios are unequal, the result depends upon the proportion in which the profits are shared and the respective investments of each partner.

Interest adjustments are handled usually through the Profit and Loss Account after the operating net profit has been calculated. The resulting credit or debit balance then remaining is distributed to the partners in their profit sharing or loss sharing ratios. Such interest adjustments, not being business expenses, should be made just prior to the eventual distribution of the surplus net profit, or net loss. Such interest, in other words, represents profit allocation. Of course, the partnership agreement may specify that such interest be booked as an expense and, in this event, such manner of recording would be in order. At times, the adjustment of interest is made directly in the drawing or personal accounts, first charging them with the amount and then crediting them with the distribution thereof.

The arithmetical calculation of interest charges and credits is a simple matter, as a rule, as when allowed on:

1. Net investment, or
2. Original investment.

However, when calculated on the average investment, care must be observed in arriving at the proper averages upon which the computations are made. The principles mentioned above in

the last section, covering the distribution of profits on the basis of capital contributed and time employed, should be borne in mind.

Where partners have agreed to furnish a certain amount of capital and one or more has not fulfilled such agreement, and where interest is to be considered on the excess or deficit of capital, three methods of adjustment would seem in order:

1. Consider the respective excesses or deficits on capital contributed. Charge interest against partners with deficiencies and credit interest to partners with excesses, offsetting by credits and charges to Profit and Loss account. Then distribute the resulting balance amount according to the interest each partner has in the firm's profits or losses.
2. Consider the whole capital actually contributed by each partner and then credit each one for the interest thereon, charging Profit and Loss account. Distribute the total Profit charge according to the interest each partner has in the firm's profits or losses.
3. Determine the ratios of the agreed capitals, one to the other. Then on the basis of preserving the same ratios of interest as regards the actual contributions, calculate the adjustment of the interest. Those who have contributed in excess of the established ratios are assumed as having loaned such excess amounts to those who have contributed less than prescribed by the established ratios. In this case, the interest adjustment would be between capital accounts entirely, the credits in favor of those with the excess amounts being calculated upon such excess amounts, and these credits being offset by charges against those with deficiencies, the calculations being upon the deficient amounts. The debits and credits will offset each other.

Partnership Dissolution.—A partnership may be dissolved for one of many reasons, the dissolution being either voluntary,—by agreement of all partners, or involuntary,—against or without the consent of one or more of them:

1. Expiration of term of partnership agreement.
2. Mutual agreement.
3. Partnership object becoming illegal or impossible.
4. Sale or assignment of a partner's interest.

5. Admission of a partner.
6. Bankruptcy of the firm.
7. Withdrawal of a partner.
8. Sale or transfer of a firm to another.
9. Death of a partner.
10. Insanity, bankruptcy, misconduct, or disability of a partner.
11. War between nations represented by the partners.

Asset Application Upon Dissolution.—Under partnership law, upon dissolution, the assets are applied as folows:

1. Firm debts to outside creditors.
2. Advances or loans made by partners.
3. Return of capital, as per capital accounts.
4. Return of profit residue, if any, among the partners in the profit and loss sharing ratio.

If a loss is suffered in the dissolution process, the loss must be distributed at the point of No. 3, above, following which the capital will be returned. Again, if the loss in the dissolution is so great that thereby the capital of one or more partners is wiped out and a deficit replaces it, a transfer should be made from the loan account of such partner, before the loan account is liquidated by the return of assets, so that such deficit will be cancelled.

In winding up the affairs of a partnership, regardless of cause, it would seem that the following points or principles are of importance. Some of them should have been incorporated into the articles of agreement, but, even if not so done, it would seem advisable to consent, where necessary, to their use:

1. In case of a partner's death, the interest that the estate of the latter may have therein, as to profits, would be for the portion of the current period up to the date of death. Provision should be made for continuing the business for a certain time so as to realize as much cash as possible to pay over to such estate, or provision should be made for buying out the interest of the deceased partner and paying for this, periodically, over a period of time. Likewise, from date of death to the date of final settlement it is customary to allow interest upon the deceased partner's share in the business. Again, if the firm has a certain amount of good-

will, the estate of the deceased partner should receive some allowance for the share of the deceased partner therein.

2. Upon dissolution, by retirement or death, great care should be observed in placing a value upon the firm assets, so that the interest of the retiring partner or the estate of the deceased partner will not suffer. The usual rule would be to value at reproduction cost, less depreciation to date of dissolution, regardless of book valuations. The depreciation reserves should be written off against the assets affected, but surplus reserves should be considered as part of net worth. Further, if notice of dissolution be not given to firm creditors, a retiring partner will continue to be liable for new obligations.
3. One or more of the surviving partners usually is appointed to take charge of the liquidations; even though, theoretically, all partners have an equal voice and share in such work. Notice must be given to all persons dealing with the firm that the partnership is being dissolved, and who is winding up affairs; this may be through the local newspaper. Further:
   a. Existing contracts must be fulfilled.
   b. The assets must be disposed of as advantageously as possible.
   c. Debts and obligations must be discharged.
   d. New contracts cannot be made unless necessary in connection with realizing upon the assets.
   e. In general, no compensation, in the way of salary or commission, is to be demanded by the liquidator unless agreed to, in which event the following may result:
      i. The amount may be adjusted privately between the partners.
      ii. The amount may be paid by representatives of the deceased partner.
      iii. The amount may be charged up as part of the liquidation; this is to be preferred.
4. Uncompleted contracts. The interest of the retiring partner or the estate of a deceased partner in contracts uncompleted as of the date of dissolution may be determined in one of two ways:

a. They may be valued as of dissolution date at market price, and the estimated profit resulting from this basis of valuation distributed.
b. The books may be kept open until the contracts are completed, after which the regular realization would be in order.

5. Sharing liquidation losses. Liquidation losses, and for that matter, liquidation profits, may be allocated to the various partners:
   a. In the capital ratios, or
   b. In the profit and loss sharing ratios. This would seem to be the more correct method of the two.
6. Instalment distribution; liquidation dividends. The principle herein involved is exceedingly important in that since the liquidation of a partnership is apt to be spread over a considerable period of time, the partners may wish to receive by instalments from time to time what is coming to them rather than wait until everything is finally wound up, and the liquidator must protect himself from overpaying a partner unless he wishes to be personally responsible to all who may suffer by virtue of such overpayment. Since no one knows what the ultimate net realization will be, the liquidating partner or partners must proceed as if all the assets on hand, except cash, at any distribution date, are worthless. The liquidator would calculate the share of each partner, the amount to be charged against each partner, of the assumed worthless assets and, the partners whose capital accounts still show a credit balance would be the only ones entitled to share in the instalment to be paid. The distribution of such instalment would then be made in such a manner that, as quickly as possible, the capital ratios will be reduced to the profit and loss sharing ratios. After the capital accounts have been reduced to the point that their ratios equal the profit and loss sharing ratios, further distributions of instalments will present no problem, being made in accord with the profit and loss sharing ratios.

JOINT VENTURES AND CONTRACTS

Joint Venture Defined.—A joint venture exists when two or more persons combine in contributing some capital and services

on a temporary partnership basis, to participate in some particular business deal involving the buying and selling of a single article, the making and selling of some particular thing, or trading in a particular lot of goods, and sharing the profits or losses resulting therefrom. A joint venture is practically a partnership for a specific purpose, the members being partners so far as the specific transactions of the venture are concerned. As relates to these transactions, the laws of partnership apply,—as to profits, losses, salaries, and interest adjustments. It is usual for one of the members to the venture agreement to act as manager and handle the greater portion of the work, including the record keeping, for which perhaps he receives a small percentage on the amounts handled to remunerate him for his time and trouble.

Venture Entries.—Two basic methods exist for handling the book entries relating to a venture:

1. No separate set of records is opened. Each venturer, upon his own records, records the transactions he enters into in behalf of the venture. No joint bank account is used. Eventually, each party renders a detailed statement of all transactions entered into by him on account of the venture. The various separate statements then would be summarized into one statement, or Joint Venture account which, when agreed to as being correct, becomes the basis for settlement. This Joint Venture account is a Trading account in which is indicated the profit or loss from the venture. Upon the results therein shown, each venturer will adjust his own books for his share of the outcome. The balance shown upon his books will indicate the amount due to him from the others or by him to the others.
2. A separate set of records is opened. Hereunder, a joint bank account is opened, and the records are handled in the same manner as are those of an ordinary partnership. The number of accounts to be opened depends upon desirability:
   a. A complete classification of accounts may be established.
   b. An incomplete classification of accounts may be used, as:
      i. A Capital or Investment account for each venturer.
      ii. A Joint Venture account, which is charged or credited whenever a Capital account is credited or charged.

Accounts Related to Contracts.—When a contract is to be the basis for the making of book entries, from the standpoint of the contractor, two problems arise:

1. The cost accounting necessary in connection therewith. This would resolve itself, primarily, under the division of specific order cost accounting as distinguished from process cost accounting. Naturally, a complete discussion of this problem must be reserved for a course in Cost Accounting, except insofar as certain control principles are reviewed in subsequent sections of the present chapter.
2. When the completion of a contract covers more than one fiscal period, the problem arises of proportioning the profit as between periods.
   a. Even though each period is entitled to the profit earned therein, the difficulty of estimating the profit accrued as of any particular closing date, due to the fact that a considerable risk exists in estimating the cost of completion, may make it necessary or conservative to wait until the contract is completed before the profit therein is calculated.
3. Since the delay, due to (2a) above may not be acceptable, dividends thereunder perhaps being affected seriously, it may be necessary to estimate the profit thus far made as of a current closing date. If so, the most conservative treatment would be in order. The cost of completion should be estimated at a figure sufficiently high to cover all ordinary contingencies. Then upon the basis of the periodical estimated costs, the estimated periodical profit may be calculated by a prorating process.

Contracts Upon the Balance Sheet.—The profit upon contracts preferably is considered as an operating profit, rather than allocating the item to some other section of the Profit and Loss account. If profit is to be calculated upon uncompleted contracts, the Balance Sheet set out would be about as follows:

Uncompleted Contracts, cost to date,	$ ¢		
Estimated Profit Earned on Above,	$ ¢	$ ¢	
Deduct—Amounts Received on Account,		$ ¢	
Net Equity in Uncompleted Contracts,			$ ¢

Entries Upon Contractor's Records.—In view of the fact that in the student's work up to this time nothing has been mentioned concerning contract accounting, and, also, because the principles mentioned in the above sections are not all sufficient, the following simple problem, and its solution, are given below.

Problem.—A contractor secures a contract for $40,000.00, which will take about two years to complete. The cost is estimated to be $30,000.00. Ten per cent. is to be retained by the customer until the latter is satisfied that the work completed is not defective. The estimates, covering amounts to fall due from time to time, are:

1. First year: $12,000.00; $8,000.00—Make only one entry to cover.
2. Second year: $14,000.00; $6,000.00—Make only one entry to cover.

Required:

1. Entries, on the assumption that the contract price is entered upon the books when the contract is signed, and that the profit thereon is not booked until the contract is completed.
2. Entries, on the assumption that the contract price is entered upon the books when the contract is signed, that the profit therefrom is applied to the period in which earned, and that the books are closed when the contract is half completed.

Solution.—The entries presented below are illustrative only, in that great variations are found in entry making of this kind. Usually, the first entry will be to charge the customer as soon as the contract is awarded. Naturally, no real account receivable comes into being at that point but only when a contract either is completed, or when a payment is due thereon, —as when an estimate is rendered. Again, in the first instance, the credit often is made to an income account which is adjusted periodically as to the then completed portion of the contract. However, no income is earned merely by the act of signing a contract; therefore, such entry, theoretically, is in error. Since it is usual for the customer to hold back a portion of the contract price as a guarantee against defective work, this angle is covered in the problem above. Such a holding back may be made at the time each estimate is paid or in connection with the last payment due, assuming such last payment is larger than the amount agreed upon to be held back. The solution follows:

First Assumption			Second Assumption		
First Year					
Upon Signing the Contract					
Contracts Secured (No. 1)	$40,000		Contracts Secured (No. 1)	$40,000	
To—Uncompleted Contracts (No. 1)		40,000	To—Uncompleted Contracts (No. 1)		40,000

For Costs of Contract—1/2 Assumed

Contracts in Process (No. 1)	15,000		Contracts in Process (No. 1)	15,000	
To—Accounts or Vouchers Payable		15,000	To—Accounts or Vouchers Payable		15,000

Upon Rendering Estimates

Accounts Receivable (Contracts)	20,000		Accounts Receivable (Contracts)	20,000	
To—Advances on Contracts		20,000	To—Advances on Contracts		20,000
Uncompleted Contracts (No. 1)	20,000		Uncompleted Contracts (No. 1)	20,000	
To—Contracts Secured (No. 1)		20,000	To—Contracts Secured (No. 1)		20,000

Upon Payment of Estimates

Cash	18,000		Cash	18,000	
To—Accounts Receivable (Contracts)		18,000	To—Accounts Receivable (Contracts)		18,000
Amount billed less proportion for defective work reserve			Amount billed less proportion for defective work reserve		
No Entry			Advances on Contracts	20,000	
			To—Profit and Loss (No. 1)		3,000
			Reserve for Defecfective Work (No. 1)		2,000
			Contracts in Process (No. 1)		15,000

Second Year

For Costs of Contract—1/2 Assumed

Contracts in Process (No. 1)	$15,000		Contracts in Process (No. 1)	$15,000	
To—Accounts or Vouchers Payable		15,000	To—Accounts or Vouchers Payable		15,000

Upon Rendering Estimates

Accounts Receivable (Contracts)	20,000		Accounts Receivable (Contracts)	20,000	
To—Advances on Contracts		20,000	To—Advances on Contracts		20,000

Uncompleted Contracts (No. 1)	20,000		Uncompleted Contracts (No. 1)	20,000	
To—Contracts Secured (No. 1)		20,000	To—Contracts Secured (No. 1)		20,000

Upon Payment of Estimates

Cash	18,000		Cash	18,000	
To—Accounts Receivable (Contracts)		18,000	To—Accounts Receivable (Contracts)		18,000
Advances on Contracts	40,000		Advances on Contracts	20,000	
To—Profit and Loss (No. 1)		6,000	To—Profit and Loss (No. 1)		3,000
Reserve for Defective Work (No. 1)		4,000	Reserve for Defective Work (No. 1)		2,000
Contracts in Process (No. 1)		30,000	Contracts in Process (No. 1)		15,000

Upon Complete Acceptance by Customer that Work O.K.

Cash	4,000		Cash	4,000	
To—Accounts Receivable (Contracts)		4,000	To—Accounts Receivable (Contracts)		4,000
Reserve for Defective Work (No. 1)	4,000		Reserve for Defective Work (No. 1)	4,000	
To—Profit and Loss (No. 1)		4,000	To—Profit and Loss (No. 1)		4,000

Entries Upon Records of Contract Customer.—The concern which awards a contract to a contractor may or may not book the contingent asset and liability thereunder; preferably, the booking should be made. The simplest example of the method of making such record is illustrated by the entries below given covering one portion of a recent A. I. A. problem.

Problem.—The portion of the problem referred to above reads about as follows:

Frame any entries necessary to record the action of the directors as it appears in the minutes of the meeting of August 15, 1917, of which the following is a synopsis, and the action of the officers taken pursuant to authority conferred on them by such minutes: . . . . . The president reported that he had received tenders for a new building planned in the amount of $185,000.00. He was authorized to execute a contract accordingly.

Solution.—As under the date of the contract executed in accord with the above authority, the entry might be as follows:

Construction Account	185,000.00	
To—Contracts Payable		185,000.00

The account above credited is assumed as not being a credit to the contractor, because the actual liability to him is not incurred until the contract is completed or until an estimate has been received.

MANUFACTURING: ACCOUNTS AND CONTROL

Purpose of Discussion.—The material presented in this section is submitted for the following purposes only:

1. To review certain definitions and simple principles of manufacturing and general cost accounting.
2. To set out certain definitions and simple principles of manufacturing and general cost accounting of a general nature but which, it is hoped, will cause the student both to recognize the existence of a great specific accounting field of study and research relative to manufacturing industries and become sufficiently interested therein to devote a year or so of his time to acquaint himself thoroughly with some of the practices therein followed. It would seem that no one rightly should call himself an "accountant" until he has familiarized himself thoroughly at least with the general principles followed in industrial accounting as well as those covered in a theoretical manner in a general course in accounting.

Interest in cost accounting is growing by leaps and bounds, reflecting the increased demand by employers for accurate and helpful costs. Each industrial establishment, having internal organization problems and external market relationships, should regard a cost system as a requisite piece of administrative machinery functioning to "combine the various factors of production in the most advantageous proportions and relationships and to adjust his output to the market so that there will accrue (to the enterprise) a maximum net return."

Manufacturing Accounts.—In a manufacturing business the accounts are grouped under three main titles:

1. Manufacturing. These show the cost of materials, labor, and factory expenses that compose:
   a. Manufacturing or factory cost.
   b. Cost of manufactured product.
   c. Cost of finished and unfinished product on hand.
   d. Cost of manufactured product sold.

When cost records are kept, it is usual to charge a Selling

account with the cost of manufactured product sold, rather than with the total cost of manufactured product which usually is the procedure followed when no cost records are kept. In both cases, however, the result is the same.

2. Selling or trading. These accounts show:
   a. Gross sales.
   b. Sales returns and allowances.
   c. Net sales.
   d. Cost of manufactured product sold.
   e. Gross profit on sales.
   f. Selling expenses.
   g. Net profit on sales.
3. Profit and loss or administrative. These accounts set out the general administrative expenses. The total of these deducted from the net profit on sales produces the net profit on operations. And when the expenses related to the financing are deducted herefrom, there remains the net profit for the period.

The selling and administrative expenses, as a rule, may be estimated closely in advance, some enterprises, as to these, following a budgetary system under which a specific sum of money is determined upon to be used for the general conduct of the business. On the other hand, the manufacturing cost cannot well be determined in advance, since its elements are varied, the production hazards are great, and the ultimate results uncertain.

The amount of money for which an article may be sold, usually, is limited because, in general, the demand or market controls selling price. Therefore, the amount of money which may be spent for materials, for manufacture, for selling and administration is circumscribed more or less, and the amount of profit which can be realized is limited, also. Note the following:

Selling Price

Cost of Material	Cost to Manufacture	Selling Cost	Administrative Cost	Profit

Given a specified selling price (the whole rectangle), a closely estimated selling and administrative cost, and a definite material

cost, if a certain amount of profit is desired, it becomes absolutely necessary to keep the cost to manufacture within the bounds of the remaining space.

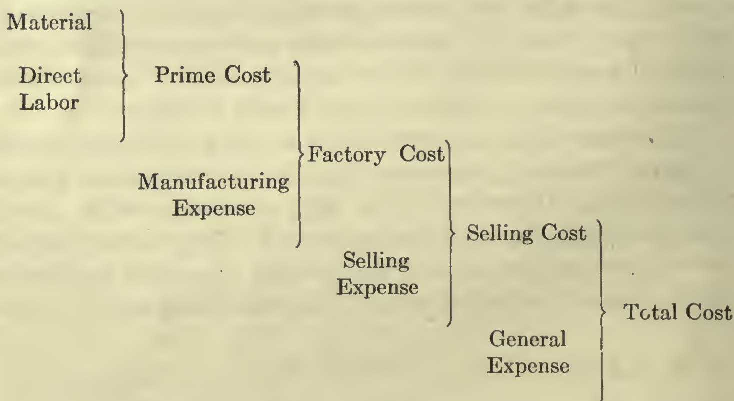
The same idea as the above often is expressed in another way. The average manufacturing enterprise divides itself into three logical sections:

1. A manufacturing section.
2. A selling section.
3. An administrative section.

Each section, naturally, contributes certain charges toward the ultimate cost of the product which, eventually, comes into the hands of the consumer,—the purchaser:

1. Manufacturing section.
   a. Material.
   b. Direct labor.
   c. Factory overhead or burden.
2. Selling section.
   a. Selling expenses.
3. Administrative section.
   a. Administrative or general expenses.

Therefore, note the following:



On the basis of the above diagram, the following definitions seem to be in order:

1. Direct or productive labor. Services rendered directly in processing the product through the various operations. The cost of these services can be applied or assessed directly

against a given piece of product work, or a given process in connection therewith, by merely recording the time a workman commenced operations on the job or process and when he stopped.

2. Indirect or non-productive labor. Services rendered in the general conduct of the plant,—in general activities, such as stores distribution, supervision, inspection, time-keeping, planning, repair work, and promoting the general welfare of the concern. The cost of these services cannot be applied or assessed directly against any single unit of product.
3. Material. Raw materials are materials that go directly into the product,—into a particular article, job, or process. In general, the cost of raw material is the vendor's invoice plus infreight and drayage. The quantity used is determined in a number of ways:
   a. By recording the material actually issued from stores.
   b. By weighing or measuring the completed article and allowing for water.
4. Prime cost. The total expenditure for raw material and direct labor of any kind that can be allocated in a specific amount to a specific article, job, or process because of having been used directly thereon.
5. Factory overhead or manufacturing expenses. All outlays for general services such as are indicated above in (2) for indirect labor, for taxes, insurance, depreciation of factory buildings and machinery, power, light, heat, sundry supplies, etc. The cost of this item is not exceedingly difficult to ascertain, but only close study, common sense, and ingenuity will enable an accountant to distribute this overhead among the products manufactured. These overhead items are distributable or diffusable to product in a number of ways, at best, more or less of an estimate, tempered by training and experience. The following bases are illustrative:
   a. Cost of productive labor. This probably is the oldest method of distribution. It consists of taking the total burden for a department or for the plant for a specific period and ascertaining what percentage it is of the money paid out for labor. The resultant percentage

is added to each job according to the amount of actual labor charged to it.

b. Hourly burden plan. This may be more satisfactory than the percentage on wages method in that time, and not wages, is the basis for distribution. The total burden of a department for, say, a month is divided by the number of hours worked during the month, the result being what is called an "hourly constant," this to be added to each job according to the time spent thereon.

c. Machine rate. Hereunder, the factory is departmentalized and each department further subdivided into what are known as production centers, each machine or work bench at which a workman is employed being considered a production center. To each center are charged all expenses which, upon analysis, can be allocated thereto. These charges are reduced to an hourly charge, which may be termed a "rental charge." Each job passing through a production center is charged with this rental according to the number of hours worked on it. When a machine is idle, the rental charge goes on just the same, and is charged into what is known as a "supplementary rate," which later will be charged to the different jobs according to the time spent on each, or on a percentage basis. Besides the idle time, there will be included, also, in this rate the items of superintendent's salary, foremen's salaries, and any general items which cannot be allocated to the different specific centers.

Cost Accounting Defined.—Cost accounting is that branch of accounting which furnishes an accurate record of production costs and the data upon which the management may judge the efficiency of present operations and plan future actions. Costs may be determined from the general records where only one kind of an article is produced, but not otherwise, at least so far as unit costs are concerned.

Not so long ago, certain accountants made a distinction between cost accounting and cost finding, the latter representing a method to determine what the cost of an article should be under present conditions in advance of manufacturing the article, as against the former term which is said to be the method of de-

termining what the cost of an article actually is while the article is being manufactured. However, the opinion is ventured, that such a hair-splitting distinction is not followed by the best of cost authorities; it appears to be a school-room differentiation.

The main purposes or more important uses of a modern cost system may be set out about as follows:

1. Determination of unit costs to be used as a guide in fixing selling prices.
2. Securement of information as to what lines are profitable and what are unprofitable.
3. Determination at any time of the value of material, goods in process, and finished or manufactured product; i. e., the maintainance of perpetual inventories.
4. By means of perpetual inventories, waste in the use of materials and product may be eliminated to the end that their use will be only as intended.
5. Preparation of frequent statements of operation and condition, since the maintenance of perpetual inventories will permit this to be done.
6. Frequent statements of operation and condition permit the ready estimate of future financial requirements and the ready determination of future policy in general.
7. Determination of efficiency variation as to operations or departments in respect of quantity output, and increase in the cost of labor, material, and overhead expense.
8. Determination of a standard cost based upon normal conditions of operation.
9. Ascertainment of causes of increase or decrease in production costs as compared to former similar orders or with the standard cost, so that differences in cost may be explained thoroughly.
10. Determination of profit or loss due to efficiency variations so that responsibility therefor may be divided and allocated as between the shop and the management.
11. Determination of inventory values, upon a standard cost basis in abnormal times.

Cost Methods and Factory Orders.—The type of industry under scrutiny determines the method of cost finding to be used.

Two possible methods of cost finding may be installed within any particular plant, separately or in combination:

1. Process method (product method). This method may be used within an industry or within certain departments of an industry "where there is mass production, either continuous or intermittent, or both, the product requiring similar operations, though perhaps varying in size, shape, appearance, and so on; or where the goods for specific factory orders are not easily distinguishable, or where they become part of a volume of output." (Walton: Cost Course). If the cost of a specific order is required, costs are distributed thereto on a quantity basis.
2. Specific order method (job or special order method). This method may be used in an industry where a special type of product is manufactured, or where standard articles are fabricated for stock. The dissimilar orders going through the plant, each calling for a special kind of material and special methods of processing, resulting in a variation in types of output, make the process method of cost finding impossible. Costs are collected for each specific order, as to material, and labor, and the overhead is distributed to each order upon some reasonable basis. Hereunder, factory orders must be issued for "the manufacture or assembling of special articles, or the production of standard articles for stock." (Walton: Cost Course.)

Under the second method, and usually under the first one, no work is begun until a factory order has been issued. These orders are of three kinds:

1. Production orders. These orders represent the authority under which the factory may commence the fabrication of the product therein called for. Again, sub-production orders may be issued, based upon production orders, in order to:
   a. Ascertain costs by departments, by operations, or both.
   b. Keep the cost of special patterns or tools needed on an order separate from the cost of the product.
   c. Give the departments information as to work coming through from other departments, or as authority to do work.

Again, partial production orders may be issued, based upon production orders, to fabricate a part of what the production order calls for where the quantity thereon specified is greater than can be handled at one time. Cost sheets, upon which are accumulated the labor, material, and overhead expense costs, are used in connection with each of the above orders.

2. Betterment orders. When the factory itself is to do the work in connection with additions, and improvements to buildings, machinery, and equipment, betterment orders are issued and, in connection therewith, the charges for material, labor, and overhead are recorded in a manner similar to that used in connection with production orders. Cost sheets, also, may be used with betterment orders.
3. Maintenance orders. These orders account for all the manufacturing expenses incurred in production. They are of two kinds:
   a. Standing. These cover the account classification of manufacturing expense or overhead. They are issued from time to time as a change is made in such classification, and "stand" during each such interim.
   b. Special. These cover special repair work whose cost is estimated to exceed a certain fixed sum, as $10.00.

Methods of Control.—Two methods exist for keeping the accounts of a manufacturing concern, as between the general office and the cost department:

1. The accounts related to the factory activities are carried on the General Ledger; the cost department is considered as a department.

   These factory activity accounts are of two classes:

   a. Controlling accounts.
      - i. Stores.
      - ii. Factory cost.
      - iii. Cost of manufactured product.

   b. Statistical accounts.
      - i. Payroll.
      - ii. Manufacturing expense.
      - iii. Manufacturing expense distributed.
      - iv. Cost of manufactured product sold.

2. The accounts related to the factory activities are carried on a Factory Ledger; the cost department is considered as a separate company or branch. As concerns the factory:
   a. General Ledger. Only one account is carried thereon, a controlling account, that of Factory Ledger. All stores purchased, expenses incurred, and payroll money would be charged on the General Ledger to Factory Ledger.
   b. Factory Ledger. This would be a regular Ledger kept in the cost department, and the factory accounts thereon would be:
      - i. Controlling accounts.
        1. Stores.
        2. Factory orders.
           a. Production.
           b. Betterment.
           c. Maintenance.
        3. Cost of manufactured product.
        4. Cost of manufactured product sold.
      - ii. Statistical accounts.
        1. Payroll.
        2. Manufacturing expense.
        3. Manufacturing expense distributed.

Control Entries.—Pro forma entries illustrative of the procedure indicated above in the last section would be about as shown below. Further, these entries have been grouped into four divisions or sections:

1. Material.
2. Labor.
3. Manufacturing expenses.
4. Production and sales.

MANUFACTURING CONTROL

General Ledger Only — Factory Accounts Thereon: Factory Orders	General Ledger Only — Factory Accounts Thereon: General Ledger	General Ledger and Factory Ledger: General Ledger	General Ledger and Factory Ledger — Factory Accounts on Factory Ledger: Factory Ledger	General Ledger and Factory Ledger — Factory Accounts on Factory Ledger: Factory Orders
(1) MATERIAL TRANSACTIONS				
Material Purchased, to be placed in Stores				
No Entry To—No Entry	Stores To—Vouchers Payable	Factory Ledger To—Vouchers Payable	Stores To—General Ledger	No Entry To—No Entry
Material Taken from Stores and Returned to Vendor				
No Entry To—No Entry	Vouchers Payable To—Stores	Vouchers Payable To—Factory Ledger	General Ledger To—Stores	No Entry To—No Entry
Material Purchased and Expense Incurred Specifically For Particular Factory Orders				
Factory Orders (as necessary): Production Betterment Maintenance To—No Entry	Factory Cost To—Vouchers Payable	Factory Ledger To—Vouchers Payable	Factory Orders (as necessary): Production Betterment Maintenance To—General Ledger	Factory Orders (as necessary): Production Betterment Maintenance To—No Entry
Stores Issued and Stores Returned				
(For stores issued) Factory Orders (as necessary): Production Betterment Maintenance To—(For stores returned) Factory Orders (as necessary): Production Betterment Maintenance	Factory Cost, or Payroll Advances To—Stores	No Entry To—No Entry	Factory Orders (as necessary): Production Betterment Maintenance Payroll Advances To—Stores	(For stores issued) Factory Orders (as necessary) Production Betterment Maintenance To—(For stores returned) Factory Orders (as necessary): Production Betterment Maintenance
(2) LABOR AND PAYROLL TRANSACTIONS				
Establishment of Payroll Fund				
No Entry To—No Entry	Payroll Fund To—Cash	Factory Ledger To—Cash	Payroll Fund To—General Ledger	No Entry To—No Entry

MANUFACTURING CONTROL.—(*Continued*).

		Payroll Advances		
No Entry To—No Entry	Payroll Advances To—Payroll Fund	No Entry To—No Entry	Payroll Advances To—Payroll Fund	No Entry To—No Entry
		Payroll		
Factory Orders (as necessary): Production Betterment Maintenance To—No Entry	Factory Cost To—Payroll	No Entry To—No Entry	Factory Orders (as necessary): Production Betterment Maintenance To—Payroll	Factory Orders (as necessary): Production Betterment Maintenance To—No Entry
		Cash in Amount of Payroll Transferred to Payroll Fund		
No Entry To—No Entry	Payroll Fund To—Cash	Factory Ledger To—Cash	Payroll Fund To—General Ledger	No Entry To—No Entry
		Payment of Payroll Payroll Advances First Deducted		
No Entry To—No Entry	Payroll To—Payroll Fund	No Entry To—No Entry	Payroll To—Payroll Fund	No Entry To—No Entry
		Payroll Advances Closed Out into Payroll Account		
No Entry To—No Entry	Payroll To—Payroll Advances	No Entry To—No Entry	Payroll To—Payroll Advances	No Entry To—No Entry
		(3) MANUFACTURING EXPENSES		
		Manufacturing Expenses as per Capital Charge Schedule		
Maintenance Orders To—No Entry	Factory Cost To—Reserves for Depreciation, Taxes, Insurance, etc.	Factory Ledger To—Reserves for Depreciation, Taxes, Insurance, etc.	Maintenance Orders To—General Ledger	Maintenance Orders To—No Entry
		Total Manufacturing Expense Per Summary of Maintenance Orders		
No Entry To—Maintenance Orders	Manufacturing Expense To—Factory Cost	Manufacturing Expense To—Factory Ledger	General Ledger To—Maintenance Orders	No Entry To—Maintenance Orders

MANUFACTURING CONTROL.—(*Continued*).

		Total Manufacturing Expense Distributed to Factory Orders		
Factory Orders (as necessary): Production Betterment To—No Entry	Factory Cost To—Manufacturing Expense Distributed	Factory Ledger To—Manufacturing Expense Distributed	Factory Orders (as necessary): Production Betterment To—General Ledger	Factory Orders (as necessary): Production Betterment To—No Entry
		(4) PRODUCTION AND SALES		
		Production and Betterment Orders Completed		
		Per Summary		
No Entry To—Factory Orders (as necessary): Production Betterment	Cost of Manufactured Product Stores Fixed Assets (as necessary) To—Factory Cost	Fixed Assets (as necessary) To—Factory Ledger	Cost of Manufactured Product Stores General Ledger To—Factory Orders (as necessary): Production Betterment	No Entry To—Factory Orders (as necessary): Production Betterment
		Cost of Manufactured Product Sold		
		Per Summary		
Entry To—No Entry	Cost of Manufactured Product Sold To—Cost of Manufactured Product	Cost of Manufactured Product Sold To—Factory Ledger	General Ledger To—Cost of Manufactured Product	No Entry To—No Entry
		Sales		
No Entry To—No Entry	Accounts Receivable To—Sales	Accounts Receivable To—Sales	No Entry To—No Entry	No Entry To—No Entry
		Return Sales		
No Entry To—No Entry	Sales Returns and Allowances To—Accounts Receivable	Sales Returns and Allowances To—Accounts Receivable	No Entry To—No Entry	No Entry To—No Entry
		Cost of Manufactured Product Returned		
No Entry To—No Entry	Cost of Manufactured Product To—Cost of Manufactured Product Sold	Factory Ledger To—Cost of Manufactured Product Sold	Cost of Manufactured Product To—General Ledger	No Entry To—No Entry

CHAPTER IV

CORPORATIONS: DEFINITIONS; OPENING ENTRIES

Introduction.—Three general forms under which business activities are conducted have been pointed out in the accounting work thus far covered:

1. Sole proprietorship. A business conducted by an individual on his own account and for his own benefit. The general accounting principles hereunder are those usually studied in the work of the first year.
2. Partnership. A business owned by two or more individuals, and conducted on a cooperative basis for mutual benefit, the partners having a share both in its management and in its profits. The general accounting principles hereunder differ in no way from those applicable to a sole proprietorship, except as to the following.
   a. Opening entries.
   b. Profit sharing and distribution.
   c. Dissolution and liquidation.
3. Corporation. A business conducted for the benefit of the stockholders through a board of directors, their elected representatives. The corporation owns the business and the stockholders own the corporation. Although the general principles of operative accounting practically are the same in a corporation as in a partnership and sole proprietorship, there are many principles which are peculiarly corporate. The greater portion of the remainder of this volume is devoted to a consideration of the principles and allied procedures peculiarly corporate in character.

In connection with corporate problems, it is difficult ofttimes to distinguish clearly between law, finance, and accounting, since all three subjects overlap to an appreciable extent. Therefore, at times, reference must be made in the subsequent discussions

to one or both of the subjects mentioned other than accounting. The law will be referred to frequently, both in general and as set out specifically in the New York statutes. The latter are especially representative of states considered as having the most intelligent corporate laws. In this connection, the citations thereto will be abbreviated as follows:

1. General Corporation Law—G. C. L.
2. Business Corporations Law—B. C. L.
3. Stock Corporation Law—S. C. L.

The subject of corporations has attracted considerable public notice during recent years, in part, because the corporate form of organization, for reasons to be noted later in detail related to permanency of organization and limited liability attaching to persons therein interested as stockholders, has simplified the complexity of modern business demands, and has made possible the carrying out of many great achievements. Under certain conditions, though its privileges at times have been most shamefully abused, the corporation is the "only safe, rational and efficacious means of uniting capital for the promotion of any business enterprise."

Corporation Defined.—Although various definitions of a corporation are to be found, the only difference between them appears to be in their viewpoint. The following are well-known and illustrative:

1. "An artificial being, invisible, intangible, and existing only in contemplation of law." (4 Wharton 636.)
2. "An artificial person created for preserving in perpetual succession certain rights, which being conferred on natural persons only, would fail in the process of time." (Blackstone.)
3. "A corporation is a person which exists in contemplation of law only and not physically. It is a collection of many individuals united in one body under a special denomination, having perpetual succession, under an artificial form, and vested by the policy of the law with the capacity of acting in several respects as an individual, particularly of taking and granting property, of contracting obligations and of suing and being sued, of enjoying privileges and immunities in common and of exercising a variety of politi-

cal rights, more or less extensive, according to the design of its institution, or the powers conferred upon it at the time of its existence." (1 Kyd 13.)

4. "A body created by law, composed of individuals united under a common name, the members of which succeed each other, so that the body continues the same, notwithstanding the individuals who compose it, and is, for certain purposes, considered as a natural person." (Angel and Ames on Corporations.)

Numerous other definitions could be cited, if space permitted (23 Wend. 103; 57 U. S. 314; etc.), and the greater part of the differences of opinion and consequent discussion thereon could be harmonized satisfactorily. It is axiomatic that all powers spring primarily from the Sovereign, or the People. The People select their representatives,—the legislature. To this body is given the power to create corporations and endow them with powers, rights, privileges and immunities; subject, however, to such duties, obligations and conditions as the legislature may deem proper. These powers, rights, privileges and immunities must be within the Constitution and the law, State and Federal. It is right at this point,—relative to this power and capacity to create out of certain persons and their successors an "artificial person," a "legal entity," and giving it a name, make it a resident of the State, with power to buy and sell and to exercise the other powers, rights, privileges and immunities, belonging to natural persons,—that the stumbling block exists for many who have discussed the subject.

At its inception, the corporation is composed both of the living, existing individuals described in its charter, and their successors, whoever the latter may be. These successors are a part of the corporation even though their identity cannot be disclosed except through the efflux of time. Succession is one of the most vital elements of a corporation. Shares of stock, being convertible, pass readily from owner to owner. A few weeks may be sufficient for the original incorporators to pass from the scene and be replaced by the unknown successors. Therefore, with reason, it is impossible to say that the corporation and its members (stockholders) are one. Because of this, the long-established and well-authenticated definitions of a corporation

still remain regardless of all the attempts made to erase the "legal fiction."

However, it should be remembered that a corporation is an artificial being, a legal entity, entirely separate and distinct and apart from those who own and hold its capital stock just so long and so far as justice and equity deem it necessary so to be considered. When it appears clearly that this entity with all its powers, rights, privileges, and immunities tends toward some wrongful end, immediately, in equity, the corporation becomes merely an association of individuals whose wrongdoing the Courts will remedy or restrain. (Spelling: Private Corporations, vol. 11, sec. 541.)

Corporation Distinguished From Partnership.—Note the following comment on the difference between a partnership and a corporation (Angel and Ames on Corporations):

"The difference between a company established for private hazard and profit by an act or charter of incorporation and an ordinary copartnership is obvious and striking. The latter is simply a voluntary contract, and the result of such a contract, whereby two or more persons agree to combine their property or labor, or both, for the purpose of a common undertaking and the acquisition of a common profit; and the gain or loss is to be proportionately shared between them. But this definition greatly falls short of a company established as a body corporate, which, though originating in a voluntary contract, is the result not only of that, but of its confirmation by special legislative authority. This confirmation is indispensable to enable the parties to the compact to sue and be sued, as a company, by a general name, to act by a common seal and to transmit their property in succession. One, if not the principal and main inducement, in procuring an act of incorporation is to limit the risk of the partners and to render definite the extent of their hazard; for it is a perfectly well-settled rule of law that each member of a common partnership, whether active, nominal or dormant, is the accredited agent of the others, and, as such, has authority to bind them, to the extent of their private property, by any simple contract he may make, either respecting the goods or business of the concern, or by negotiable instruments in its behalf to any person dealing bona fide. This personal responsibility of a stockholder is inconsistent with a perfect body corporate; and therefore, where an execution issued against a corporation by the name of 'President, Directors and Company,' with special instruction to the officer to take

their bodies for want of estate, no authority was communicated to him thus to do. And the stockholders of a corporation do not become liable as partners, on notes given by the treasurer of the corporation, merely because, after organizing under the act of incorporation, no corporate business is transacted or because the notes were given for debts beyond the corporate authority of the company."

One must not forget, as indicated above already, that since a corporation exists as a legal fiction, independently of its members, it must derive its character from the persons who direct it. These latter, because of the fact that the nature of the corporation makes it a mere legal abstraction, must be the ones to suffer should they be guilty of misconduct under the law, and of committing in its name, what are known in law as "ultra vires acts."

Corporation Distinguished From Joint Stock Company.—A joint stock company is composed of numerous partners, the ownership in the enterprise being evidenced by shares as in the case of a corporation. It has the following characteristics in common with corporations:

1. Any member may transfer his ownership interest therein without or with the consent of the other partners.
2. A board of directors controls the body so that no member, as such has agency powers to act for the company.

On the other hand, it differs from a corporation in that:

1. The members are liable for the debts jointly and severally.
2. A joint stock company sues and defends in the name of an officer; a corporation sues and defends in its own name.

The creation of a corporation merges in the artificial body and draws in the individual rights and liabilities of the members, while the organization of a joint stock company leaves the individual rights and liabilities unimpaired and in full force. (See 7 Hill 312; 2 Denio 380). Joint stock companies, as a means of combination, have become antiquated and fallen into deserved disuse. No longer can they be said to exist outside of the statute; therefore, in America, they are almost obsolete. Joint stock companies are common in England; and if the members' liability therein is limited, the name of the concern will have at the end of the term "Ltd.," which means "limited."

Advantages of the Corporate Form of Organization.—Corporate activities are subject, more or less, to certain legal and customal restrictions supposed to benefit both the corporate stockholders and outsiders having business dealings with the corporation. The sole trader, in his independent search for wealth, may do about as he pleases toward the accomplishment of this purpose so long as he does not interfere with public policy or with the rights of others. Under certain conditions, his business must be registered, and he must obey the local police regulations at all times. Partnership activities, likewise, are subject more or less to certain restrictions, both legal and customal, whose purpose is supposed to benefit both the partners and outside persons who are brought into business contact with these partners.

Since the present volume is devoted primarily to corporations, the merits and disadvantages of either of the above two forms of business organization are of no present interest except by way of comparison with those of the corporate form of organization.

The principal advantages gained from incorporating a business may be set out as follows:

1. Ability to secure greater capital. The corporate form of organization provides for increased capital by the sale of shares to outside investors. The small investor may invest small amounts with advantage, and the capitalist may spread his investments over a number of enterprises, each without being required to devote any time whatsoever to management problems, or without being required to assume the indefinite risk attached to either one of the other two forms of organization.
2. Limited liability. A stockholder's liability, in general, is limited to the amount of his stock. Even in the case of a bank, where this liability is for double the amount of stock held, such liability, nevertheless, is limited. The liability of a sole trader or partner may place his entire fortune in jeopardy.
3. Permanent organization. A corporation continues its existence regardless of any change in the stockholders' personnel; it exists for the period of time specified in the charter, unless sooner dissolved by vote of the stockholders or by

action of the state from which the charter was received. A sole trader or partnership organization is dissolved by the death, insolvency, insanity, or withdrawal of a member.

4. Transferability of interest. A corporate stockholder is free to dispose of his share holdings as he may see fit, as by sale or will, without the consent of the others, except in the case of a pooling agreement. Again, a stockholder can pledge his holdings as security for loans without prejudice to the business. A partner cannot dispose of his firm interest except with the consent of the other partners, or by winding up the business; neither can he pledge his partnership interest as security.
5. Improved organization efficiency. In a corporation, no stockholder, as such, may transact corporate business with outsiders. A corporation is managed by a board of directors who periodically, in meeting assembled, outline the general business policy and who, between these periodical meetings, delegate the actual conduct of the business to certain officers who are given definite powers, and whose actions are subject to criticism by the entire body of stockholders when the latter come together at their annual meeting. Dispute and dissension are common in partnership enterprises and difficult to eliminate, since it is not easy for two or more partners to oust another who seems unsatisfactory to them. In a corporation, it is an easy matter, relatively speaking, as compared with a partnership, for the directors or stockholders to drop an officer whose conduct is unsatisfactory.
6. Improved borrowing facilities. Frequently, a corporation, when it needs additional capital, may raise the money readily by marketing an issue of preferred stock with a preferred dividend feature making it an attractive investment, or by floating an issue of bonds, by going to its own stockholders as a source of supply. The stockholders who invest get the same security as an outsider and are placed in the same preferred position, in this particular, as any outside investor. If a sole trader advances money to his business beyond his original investment, his position is no more preferred thereafter than before; being the proprietor,

everything he has is at stake to satisfy the demands of creditors. If a partner advances money to his partnership, his position, likewise, is not the same as that of outside creditors, since the latter must be satisfied entirely before he has a right to the return of anything.

Disadvantages of the Corporate Form of Organization.—Some of the disadvantages of the corporate form are:

1. Restriction of power. A corporation is restricted to the kind of business for which it was incorporated. The corporate charter (the contract entered into between the state and the incorporators) defines and limits the scope of corporate power. If a change in this particular is desired, the consent of the state, under whose laws the corporation was formed, must be secured. A partnership can conduct any legal business, and may change from one business to another without consulting the state officials. Because of this restriction as to the character of the business that may be carried on, corporations more and more are being formed with broad charter powers so as to avoid the necessity of securing frequent subsequent consent on the part of the state.
2. Limitation of credit. A new corporation may find it difficult to secure the credit necessary with which to carry on its activities. Creditors may be willing to grant credit to a firm or to individuals with their unlimited liability, but they may be reluctant to extend the same credit to a new corporation whose liability is limited, as to its members, to the investment made therein by them. This reluctance may be so great that credit will not be granted unless the corporate officers, as individuals, endorse the company's notes.
3. Restriction in freedom of action. If prompt action is necessary in a corporation to meet a contingency that has arisen suddenly, this will be more or less impossible where a formal meeting of the board of directors is necessary, since such meeting cannot be held without first giving due notice to each member. On the other hand, prompt action by a majority of a firm's partners may be secured readily.
4. Governmental supervision. State and federal governments, through their various boards, may exercise a control over

business corporations that is decidedly annoying, if not burdensome.

5. Inability to hold stock in other corporations. Some states prohibit one corporation from holding stock in another.
6. Majority control. One of the greatest disadvantages of a corporation is that the majority, in general, control and conduct affairs after their own ideas; on the other hand, in a partnership the majority and minority interests are protected alike. However, this disadvantage may be avoided by giving the minority stockholders, at the time the company is formed:
   a. Half the voting stock.
   b. The right to elect half the directors.
   c. The right to cumulative voting. By this means, a stockholder has one vote for each share of stock held for each director to be elected. By this means, the minority, through pooling their votes, may secure representatives upon the board.

Classification of Corporations.—The General Corporation Law of New York, which is practically the same as the statutes in many other states, specifies that a corporation shall be either:

1. A municipal corporation.
2. A stock corporation.
   a. A moneyed corporation.
   b. A railroad or other transportation corporation.
3. A non-stock corporation.
   a. A religious corporation.
   b. A membership corporation.
   c. Any corporation other than a stock corporation (Article 1).

The above classification would seem to be complete if a fourth grouping were added:

4. Mixed corporations.
   a. Cemetery corporation.
   b. Library corporation.
   c. Board-of-trade corporation.
   d. Agricultural and horticultural corporation.

A municipal corporation includes a county, a town, a school district, a village, a city, and any other territorial state division

which is established by law, and which exercises powers of local government. A municipal corporation is a public corporation. A stock corporation is one with its capital stock divided into shares and which, by law, may distribute dividends from its surplus profits to the holders of its shares. A corporation is not a stock corporation merely because it issues certificates which represent membership only. A moneyed corporation is one formed under or subject to the banking or insurance acts. A non-stock corporation is one whose purpose is charitable, religious, educational, etc. In fact, the term includes every corporation other than a stock corporation, even though the above classification would not seem to indicate such fact.

Variations as to the classification of corporations would appear, in summary form, about as follows:

1. As to purpose.
   - a. Those organized for profit.
   - b. Those not organized for profit.
2. As to ownership.
   - a. Public or governmental.
   - b. Private.
     - i. Stock companies; those operated for profit.
       - a. Sole—All stock held by one person, or perhaps all but a few shares held by one person.
       - b. Close—All stock held by but few persons, and not generally traded in.
       - c. Open—Stock freely purchased and sold.
     - ii. Non-stock companies; those not operated for profit.
3. As to fact of incorporation.
   - a. De jure—Those legally incorporated.
   - b. De facto—Those which have not met fully all the legal requirements, but which to all intents and purposes are corporations in fact.
4. As to sovereignty.
   - a. Domestic—Those organized under the laws of the state in which they do business.
   - b. Foreign—Those organized under the laws of a state other than that in which they do business.

The corporate discussion of the present volume is concerned with private corporations organized for profit.

Incorporation Procedure.—It may be stated, in general, that the laws of the various states governing the incorporation of a company require that three or more persons must prepare the application to be filed with the Secretary of State, and that this application, after publication in an approved manner, after approval by the proper officials, and after payment of the requisite fees, becomes the certificate of incorporation or the charter of the corporate body. Following this, or concurrent therewith, the stockholders complete the other necessary organization details, such as adopting the by-laws, electing the directors, and doing whatever else appears necessary to place the business at a point where it may commence to conduct its operations, after which operations as a corporation begin.

In New York, "a certificate of incorporation must be executed by natural persons, who must be of full age, and at least two-thirds of them must be citizens of the United States and one of them a resident of this state." The above rule, however, does "not apply to a corporation formed by the reincorporation or consolidation of existing corporations, or to the reorganization of a corporation upon the sale of the property and franchises of a previously existing corporation or otherwise." (G. C. L., Art. 2, Sec. 4.)

Stockholders.—The owners of a corporation are titled "stockholders." They correspond to the partners in a partnership. Stockholders, except as officers or directors, take no active part in the corporate operations; in a partnership, all the partners may do so, and some of them must do so. Corporate ownership is evidenced by "shares of stock," each share representing a specified equal part of the total corporate property capable of being owned.

At common law, the stockholders have the right to make the code of rules under which the corporation is governed in conjunction with its charter and the statutes. These rules are known as "by-laws." The stockholders have a right to elect a board of directors, who are responsible to them for the manner in which the corporation is operated. In some cases, where the statutes or charter permit, or where the stockholders by lawful action give their consent, the board of directors may make the by-laws, or change them as desired.

The Corporate Charter.—Before discussing in any way the corporate charter, it may not be amiss first to define three terms used in connection therewith:

1. Charter. An instrument by which, in the United States, the sovereign people, through the legislature as their representative agents, by special grant and enactment, create bodies corporate and clothe them with miscellaneous and sundry rights, powers, privileges and immunities.
2. Franchise. A franchise is not a charter, although often spoken of as such; again, it is often used to denote the corporation itself. In reality, it is the right or privilege which is conveyed and bestowed upon the corporation by the charter.
3. Certificate of incorporation. This is a term in use since the enactment of general incorporation laws. However, it seems to be a misnomer. In the early days, all corporations were created by special enactment of the legislature and a charter in due and regular form was taken to be an absolute necessity prerequisite to corporate life and existence. In other words, formerly all corporate existence, in the absence of general laws, was based upon the possession of a charter, and a special petition to the legislature and the latter's affirmative act were required in every case wherein a corporation was to be created. Since favoritism often crept in in the granting of these charters, the People, with well-advised insistence, began to demand that in regard to this matter of corporate creation, and in the granting of corporate rights, etc., there should be absolute equality to all and favoritism to none, and that citizens might, in the matter of corporate creation and endowment, obtain as an absolute right that which theretofore could be had only by petition to the legislature. This demand plus the existing need of securing the benefits which accrue to business and commerce from the aggregation of capital and the forestallation of death, advantages to be had only through the instrumentality of private business corporations, compelled the various states to enact general incorporation laws. Substantially, all these laws have the same features. Therefore, notwithstanding technicalities and numerous defini-

> tions, the instrument which is either an evidence of the performance of all the formalities required by the incorporation law, or a declaration of the intent and purpose of the incorporators to avail themselves of the benefits of the act, —whether it be a certificate or a declaration, or both,—is, when read and construed in connection with the law, practically the same thing as a charter, because it is the legally provided substitute therefor.

The charter of a corporation, whatever its name and however conferred, is a contract by and between the sovereign creating power as the party of the first part and the aggregation of persons forming the corporation and their successors, the party of the second part: Under which the creating party, the state, grants to the other party, the incorporators, within the limitations and restrictions of law, certain rights, powers, privileges and immunities; this contractual element extends beyond the creating power and the corporation, and exists not only between the corporation and its members, but between the corporation and the public (a sort of tripartite agreement), comprehending not only the persons named originally, but all those who may, shall, or will succeed them.

Since the charter is a contract, it cannot be rescinded by the act of one party without the consent of the other. A grant of corporate privileges for a specified period cannot be resumed by the state within such period. If the charter be without limitation as to time, it is forever irrepealable. However, when the corporate privileges have been abused, the courts may pronounce them forfeited. In some cases, the legislature, when granting the franchises, reserves to itself the right to revoke them; if the charter contains such a stipulation, the latter is as much a part of the contract as anything else that is in it. The power to repeal sometimes is reserved absolutely, so that the franchises of the corporation may be revoked whenever the legislature may think proper. Again, the power of repeal may be reserved conditionally, to be exercised only in case a certain event shall happen; when such event does happen, the charter is repealable, whether the event be one the corporators could not control or one that could not occur without some default of their own.

Capital Versus Capital Stock.—The capital stock of a corporation is the amount for which the company is incorporated under the law,—the amount of stock it is authorized to issue. The charter specifies how much capital stock may be issued, and this cannot be changed except by charter amendment. The total capital stock as fixed by the incorporators, usually, may be any amount desired, so long as it equals the minimum prescribed by law as the smallest amount with which a corporation may begin business. Statutory requirements governing the issuance of capital stock vary from state to state. In New York, the amount of capital stock shall be "not less than five hundred dollars." (B. C. L., Art. 2.)

The determination of the amount of stock which a corporation is to be authorized by law to issue depends upon a number of factors:

1. The amount needed to develop the proposition.
2. The cash value of property to be taken over.
3. The probable earning power of the new enterprise.
4. The actual earning power of the old business from which the new corporation is an outgrowth.
5. Combinations of (1–4), above.

When one speaks of corporate capital as against capital stock, he should keep in mind the elementary distinction between economic and accounting capital:

1. Economic capital represents the whole fund of assets employed regardless of whether or not it has been contributed by the proprietors of the enterprise or by others. Accounting capital represents only the difference between the total asset values recorded and the third-party liabilities which eventually must be paid therefrom; it represents proprietorship.
2. The capital of a corporation relates to the difference between the assets into which the capital contributions have been converted and the third-party liabilities resulting from the activities of the corporate personality. It is seen, therefore, that its amount would be determined in a manner similar to that followed in determining the accounting capital of a sole trader or partnership. On the other hand, capital stock

represents the actual liability of the corporate personality to the shareholders for the capital they either have paid in or subscribed for, which must be paid in eventually plus whatever difference remains as between the above two amounts and the authorized capitalization according to the charter; the accounting capital less retained profits or plus deficit, where the total authorized capitalization is outstanding, should represent the amount of the capital stock.

Practically every corporation organized for profit can be classed as a stock corporation. This means that the original capital assumed as necessary for financing the business is raised principally by selling shares of stock. A corporation's capital stock is divided into a number of equal units, each unit being called a "share"; a share of stock, therefore, represents a proportionate interest in the net worth of a corporation. Each one of these shares may or may not have a specified value; if the value is specified, such value is known as its "par value," whereas, if no value is specified, the stock is said to have "no par value." The discussion of stock with no par value is reserved for a later chapter. Each one of these shares may have a face (par) value of almost any amount, depending upon the laws under which the corporation is organized. Whatever amount the par value may be, this must be uniform for all the shares within a given class. Usually, the par value is $100.00, although frequently one encounters a par value of $10.00, or less; in industrial and mercantile companies the par value usually is $100.00, whereas, mining companies frequently have a capital stock of the par value of $1.00. In New York, each share "shall not be less than five nor more than one hundred dollars." (B. C. L., Art. 2.) Unless some excellent reason exists for so doing, it is advisable to have a par value of $100.00, since this is a most common and convenient unit to use. At any rate, the par value of any issue of stock is the amount specified in the stock certificate.

Capital Stock Values.—It may be said that each share of stock has four values:

1. Par or nominal value. This is the face value printed somewhere upon the face of each stock certificate. The par value of one share of stock is equal to the total authorized issue divided by the number of authorized shares. In addi-

tion to a corporation having shares of stock with a specified par value, certain states, as New York, permit stock to be issued without a definite par value, under certain conditions to be explained later.

2. Book value. The book value of a share of stock is represented by the remainder resulting from dividing the net worth of a corporation (capital stock plus surplus, or minus deficit) by the number of shares of stock actually issued and outstanding. When a corporation is organized, it is authorized to issue a limited number of shares of a stated value, but it is not required to issue all such shares beyond the legal minimum except in accord with the desires of the corporate officers or stockholders. Book value, supposedly, should be ascertainable from the Balance Sheet.
3. Market value. The market value of a share of stock is the price it will yield when sold upon the open market. This value depends primarily upon earning capacity.
4. Real value. The real value of a share of stock is the amount which its holder would expect to receive if the corporation were liquidated. The real value of a share of stock is ascertained from what is known as a Statement of Affairs (to be discussed in a later chapter), a statement in which the assets are valued at what they may be expected to realize, regardless of book values.

Primary Classes and Kinds of Capital Stock With Par Value: Common Versus Preferred.—The capital stock of corporations may be divided into a number of classes, the usual division being into two classes as follows:

1. Common stock. This is evidence of ordinary ownership in a corporation. It has no financial preference or special privileges over any other stock of the company and, generally, the common stockholders are those which have the voting power. By voting power is meant the right the stockholders have in assisting in the management of the company's affairs by means of annually electing the board of directors, the latter representing, and acting for, the general body of stockholders in the conduct of the enterprise.

2. Preferred stock. This stock is entitled to first consideration in either the distribution of profits or assets, or both, over other stock of the company. As compared to common stock, it has been given, by proper procedure, a special privilege of some kind to make it more attractive than the common stock as an investment. Unless expressly provided, preferred stock has no preference in the return of capital upon liquidation. Ordinarily, the preference consists in an agreement to pay a definite dividend out of profits before any dividend will be paid upon the common stock. The classes of preferred stock may be listed about as under:
   a. Cumulative as to dividends. Preferred stock designates a certain minimum rate of dividend, but if the net profits of the company are not sufficient to pay the dividend, the preferred stockholders are no better off than the common stockholders. However, when the stock is designated as cumulative, each unpaid dividend laps over into the next period to the end that it must be satisfied from the profits of succeeding periods before the owners of the common stock may share in the profits at all.
   b. Non-cumulative as to dividends. Preferred stock, as a rule, is cumulative but infrequently it may not be so. Hereunder, the preferred stockholders will not receive a dividend for the current period unless the net profits are sufficient to pay the rate of dividend specified—may be considered as non-participating stock.
   c. Entitle holders to voting power.
   d. Not entitle holders to voting power—non-voting stock.
   e. Redeemable at a certain price on or before a date specified—redeemable stock. Redemption is not possible if, by such action, creditors' interests are jeopardized.
   f. Convertible into some other form of corporate ownership, or obligation. All states do not permit a conversion into bonds of the company.

   In other words, a great variation exists in the kinds of preferred stock that may be issued. Because of such fact, it is advisable to make certain that each preferred stock certificate has its character indicated upon its face. The lack of such information may prove disastrous to all persons

concerned; courts have held that where such information is lacking, at least to the extent of reference being made therein to the clauses in the charter authorizing the issue, the preferred stock will be preferred as to profits, but not be preferred as to anything else.

Preferred stock may be issued at the time of the organization of the company and, when so done, the common stockholders do not need to authorize its issue. However, if it be issued subsequent to the organization of the company, after the rights of the common stockholders have been established, the latter must authorize its issue.

The following is the New York law relative to issuing preferred and common stock (S. C. L., Art. 4):

Every domestic stock corporation may issue preferred stock and common stock and different classes of preferred stock, if the certificate of incorporation so provides, or

1. By the unanimous consent of the stockholders expressed in writing and filed in the office of the secretary of state and in the office of the clerk of the county in which the principal business office is located, or
2. By the consent of the holders of record of two-thirds of the capital stock, given at a meeting called for that purpose upon notice such as is required for the annual meeting of the corporation. A certificate of the proceedings of such meeting, ... shall be filed and recorded in the offices where the original certificate of incorporation of such corporation was filed and recorded. . . .

Preferred stock, usually, is issued to provide a corporate security which is more readily salable than common stock. But because of its numerous possible variations, preferred stock is available for other purposes:

1. It may represent or be used to pay for the actual value of the properties taken over by a new company, whereas, the common stock may be used to represent good-will and other intangible properties.
2. In the incorporation of an existing partnership, non-voting preferred stock may be issued to cover the excess investment of one of the partners, and to take care of the interest of a silent partner.
3. In a consolidation of properties, preferred stock may be used in adjusting the interests of all parties equitably. It is

believed, however, that (1) above is to be preferred to (3) in every way.

4. It may be used as a means of raising money rather than doing so by an issue of bonds. Not only are bonds an absolute obligation both as to interest and principal, but they must be paid upon maturity without regard to the then existing condition of finances, under penalty of foreclosure; preferred stock, at least, is only a claim against profits, being neither a debt as to dividends nor a debt as to principal. If the stock is not redeemable, it is never due as to principal

Sundry Classes and Kinds of Capital Stock With Par Value.—There are many classes of stock other than the two usual kinds mentioned above. These are described briefly as follows:

1. Guaranteed stock. This stock, usually, is issued under a guaranty by some person, concern, or corporation, that a specific dividend will be paid thereon. Since dividends can be declared only out of profits, a company cannot guarantee its own stock except upon the condition that profits have been earned sufficient for that purpose. However, one company may guarantee, under contract, a certain dividend to the holders of the stock of another company, say, a smaller one. Such a guaranty is not contingent upon the earning of profits, but is a lien against the guarantor company regardless of what the amount of the earning of the latter company may be; it is an actual obligation to be met when due, exactly as any other interest or obligation. Sometimes the term is used in connection with preferred stock on which dividends are guaranteed by the action which created the issue. Such guaranteed preferred stock merely is cumulative preferred stock; since a dividend must be paid from profits, no debt is created if profits are not sufficient to cover such dividend. The unpaid dividends cumulate as a charge against future profits. Again, the guarantee may cover the principal, or both dividend and principal.
2. Founders' stock. This is an English type of stock issue, not found in the United States. This stock has a dividend

preference which may cause its market value to rise considerably beyond that of other stock. It consists of a certain small portion of the common stock which has been set aside for the founders or promoters of the company and labeled "founders' stock," rather than being an issue of preferred stock with a dividend preference. The dividends upon this small portion of set-aside common stock are greater than the ratio their amount bears to the whole regular stock issue.

3. Debenture stock. This is a term applied in England to a class of liabilities and not to anything signifying net worth or proprietorship. It represents "an unsecured loan issued in irregular amounts." Debenture stock is in the nature of bonds, and rightly might be called "debenture bonds" were the issues made in regular, instead of in irregular, amounts. The Public Service Commission of New York defines debenture stock as "those issued under contract to pay absolutely thereon at specified intervals a specified return." Debenture stock is not much made use of in the United States, although common in Canada. If found, it should be classed as a liability.
4. Watered stock. This has a higher nominal value than the properties for which it has been issued. If $50,000, par value, of stock is issued for assets which only have a market value of $40,000, the stock contains $10,000 of "water." Since the accounting records must show the par value of the stock issued, it is necessary to keep the basic accounting equation in balance, to offset the credit of $50,000 to the Capital Stock account by a debit of an equal amount to certain other accounts. Usually, these other accounts are those kept with the properties taken over, the values of the latter being therein recorded at an inflated amount of $10,000. The issue of this stock may be entirely justifiable and, again, its issuance rightly may be condemned. In the above case, if a going concern were incorporated, and for a number of years past its earnings were such that it is reasonable to believe earnings are sufficient to pay a dividend upon a capitalization of $50,000, the inflation would seem to be justifiable and proper. On the other hand, if

the capitalization were far beyond both the value of the properties and any earning power possessed, the water in the stock would not be justifiable and proper; the "water" would be the excess of nominal value over real value.

5. Forfeited stock. This is stock which is forfeited by order of the board of directors by failure of those who have promised to buy at a certain price refusing to make good the agreed purchase payments. State laws differ markedly in regard to forfeited stock. Sometimes the amounts paid in must be returned to the persons who have made the payments; again, the amounts paid in need not be returned. Forfeiture only is possible where the statutes specifically grant such power. When the right is exercised, it should be for the benefit of the corporation, not for the benefit of the stockholder or stockholders. The New York law on this subject is as follows (S. C. L., Art. 4): "If default shall be made in the payment of any instalment as required . . . . . , the board may declare the stock and all previous payments thereon forfeited for the use of the corporation, after the expiration of sixty days from the service on the defaulting stockholder . . . . . Such stock, if forfeited, may be reissued or subscriptions therefor may be received as in the case of stock not issued or subscribed for. If not sold for its par value or subscribed for within six months after such forfeiture, it shall be canceled and deducted from the amount of the capital stock." In event of forfeiture, the corporation makes a profit which must be shown upon the books of account.
6. Treasury stock. This is stock that has been issued as fully paid, in due form, has then been reacquired, and is held by the company subject to the wishes of the directors as regards its disposition. Further will be said on this subject later.
7. Donated stock. This is stock that has been issued as fully paid, in due form, and which has been handed back to the company as a gift. When this stock is taken up on the books, it is recorded as treasury stock.
8. Bonus stock. Any stock issued as a gift to purchasers of preferred stock or bonds is bonus stock. Usually, bonus stock is treasury stock because, otherwise, the recipient

would be liable for the par value of such stock. However, bonus stock may be unissued stock and no liability for its par value will be incurred, provided certain conditions are encountered. In New York, unissued stock may be issued as a bonus where necessary to float a bond issue successfully (106 N. Y., 97). Again, such bonus is proper in the case of floating a bond issue where the par value of the bonds is greater than the actual value of the bonds plus the stock (139 U. S., 417).

9. Canceled stock. Shares of stock that have been declared canceled, i. e., void, the result being to reduce the number of shares the company can issue.
10. Outstanding stock. Stock issued, and outstanding in the hands of the public.
11. Authorized stock. The total amount of stock, or shares of stock, which a corporation, under its charter, has authority to issue.
12. Unissued stock. The total amount of stock, or shares of stock, for which stock certificates have not been issued. No obligation rests upon a corporation to issue the full amount of its authorized issue. After the statutory requirements governing the minimum amount of stock issue have been complied with, the company may do whatever it pleases with the remaining amount so far as issuance is concerned. In reality, unissued stock is merely the right to issue stock (a potentiality); by itself, it has no value, and neither can be voted nor participate in dividends. Unissued stock is not treasury stock, as some would have us believe. However, if stock certificates (see post) have been detached from their stubs in the stock certificate book (see post), have been signed, sealed, assigned in blank, and have been placed with transfer agents or others for sale and delivery, the shares represented should be booked both as an asset and as a liability.
13. Unsubscribed stock. Unissued stock for which no subscrpition has been received.

Capital Stock Issuance and Mode of Payment.—The capital stock of a corporation is issued for a consideration of some sort,

the nature of which is found to vary under the different statutes. In general, it may be said that the consideration may be:

1. Cash or its equivalent, including subscriptions that are subject to call.
2. Labor or services, including both manual and brain effort.
3. Property, at a valuation to be fixed by the board of directors.

In this connection, note the New York law (S. C. L., Art. 4):

> No corporation shall issue either stock or bonds except for money, labor done or property actually received for the use and lawful purposes of such corporation. Any corporation may purchase any property authorized by its certificate of incorporation, or necessary for the use and lawful purposes of such corporation, and may issue stock to the amount of the value thereof in payment therefor, and the stock so issued shall be full paid stock and not liable to any further call, neither shall the holder thereof be liable for any further payment under any of the provisions of this chapter; and in the absence of fraud in the transaction the judgment of the directors as to the value of the property purchased shall be conclusive; and in all statements and reports of the corporation, by law required to be published or filed, this stock shall not be stated or reported as being issued for cash paid to the corporation, but shall be reported as issued for property purchased.

Fully Paid and Partly Paid Capital Stock.—In general, a corporation may sell its stock for any fair price and, when this price has been collected, it has no further claim against the buyer; but:

1. If this agreed price is less than the face value of the stock, it is not fully paid and, in case of insolvency, the corporate creditors could force the original purchasers, who then hold any of the stock, to pay over the difference between the purchase price and the par value, or whatever portion of this difference is needed to discharge the corporate liabilities. Such a sale would be illegal in New York.
2. If this stock is sold for full face value, payments thereon to be made in installments, and these installments have not been all paid, the buyers would be liable either to the corporation or to its creditors for the balance due.

As to capital stock not fully paid, the New York law states (S. C. L., Art. 4):

> Every holder of capital stock not fully paid, in any stock corporation, shall be personally liable to its creditors, to an amount equal to

the amount unpaid on the stock held by him for debts of the corporation contracted while such stock was held by him.

Stock Subscriptions.—Capital stock subscriptions are enforceable promises in writing, made by persons who contemplate becoming stockholders in a corporate enterprise, to pay, on a certain date or dates, or upon call or demand, an amount usually equal to the par value of the number of shares purchased. Only after a certain number of shares have been subscribed for, and a certain amount thereon paid in, in cash, property or services, can the corporation, as such, commence business.

The New York requirements of interest in this connection are as follows (S. C. L., Art. 4):

> If the whole capital stock shall not have been subscribed at the time of filing the certificate of incorporation, the directors named in the certificate may open books of subscription to fill up the capital stock in such places and after giving such notice as they deem expedient, and continue to receive subscriptions until the whole capital stock is subscribed. At the time of subscribing, every subscriber, whose subscription is payable in money, shall pay to the directors ten per centum upon the amount subscribed by him in cash, and no such subscription shall be received or taken without such payment. . . . . Subscriptions to the capital stock of a corporation shall be paid at such times and in such instalments as the board of directors may by resolution require.

In New York, therefore, one may assume that stock cannot be issued at a discount. The company must receive in exchange for stock issued the par value of the stock in cash, and if property or services are received therefor, the latter must be worth, in the discreet judgment of the board of directors of the corporation, the par value of the stock issued therefor.

When the final stock subscriptions have been paid, and possibly before their full payment, an allotment takes places by means of which the subscribers to the capital stock are determined upon.

In general, an unconditional subscription to the stock of a corporation is binding upon the subscriber to the end that either the company itself may enforce payment thereunder, or the corporation creditors, upon insolvency, may do so. However, where the statutes require that a certain per cent of the subscriptions must be paid in in cash at the time of subscribing, such a pay-

ment must be made before the subscription can be enforced. As soon as a corporation accepts a subscription, the subscriber becomes a stockholder of the company.

Stock Certificates.—The interest of a stockholder in a corporation is evidenced in two ways:

1. Certain entries upon the corporate books.
2. A certificate or certificates signed and sealed by the proper corporate officials showing the number of shares owned by the person or company to whom the certificate or certificates is or are issued, the par of such shares, and the total number of shares of the corporation.

By having his name entered in due and regular form upon the corporate books, a stockholder is said to be an "owner of record."

There are two separate and distinct corporation certificates:

1. Incorporation certificate. In effect, this performs the functions of a specially granted charter, as has been shown above.
2. Stock certificate. The certificate is not the stock itself, but is the evidence of the ownership of the number of shares therein certified to. The owner or holder of a stock certificate is a stockholder, endowed with the rights, privileges, duties and other incidents pertaining to the relation (40 How., 196).

Every stockholder is entitled to a certificate as written evidence of his ownership of a certain amount of capital stock. Under certain conditions, he could force such a certificate to be issued to him. However, actual possession of a certificate of stock is not necessary to complete ownership, nor is it essential to the existence of a corporation that any certificates be named at all (22 N. Y., 551). A certificate of stock is only a convenient voucher (40 How., 196), merely the symbol or paper evidence of property; hence, the proprietary right may exist without the certificate (Thompson on Corporations). As evidence of the ownership of a certain number of shares of stock, the stockholder may have one certificate to cover; or he may have a number of them, each such certificate representing a portion of his total holdings.

By general mercantile usage, shares in a corporation are assignable by indorsements and delivery of the certificates issued to the owner as evidence of his rights. (Morawetz on Corporations).

Whatever contributes to make a share of stock a safe mode of investment and easily convertible tends to enhance its value.

It is no less the interest of the shareholders than the public that the certificate representing his stock should be in a form to secure public confidence, for without this he could not negotiate it to any advantage. It is in obedience to this requirement that stock certificates of all kinds have been constructed in a way to invite the confidence of business men, so that they have become the basis of commercial transactions in all the large cities of the country and are sold in the open market as other securities; although neither in form nor character negotiable paper, they approximate it as nearly as practicable. . . . . . No better form could be adopted to assure the purchaser that he can buy with safety. He is told under the seal of the corporation that the shareholder is entitled to so much stock, which can be transferred on the books of the corporation, in person or by attorney, when the certificates are surrendered, but not otherwise. This is a notification to all persons interested to know that whoever in good faith buys the stock and produces to the corporation the certificates, regularly assigned, with power to transfer, is entitled to have the stock transferred to him. And the notification goes further, for it assures the holder that the corporation will not transfer the stock to anyone not in possession of the certificate. (11 Wall. 369.)

A stock certificate may become lost or destroyed. Whether or not such loss or destruction will have an adverse effect upon the ownership of the stock in question depends upon circumstances:

1. If the stockholder is the owner of record. The loss or destruction will not affect ownership. Since he is still the owner of record on the corporate books, he is entitled to all his rights as formerly:
   a. To receive dividends.
   b. To be present and vote at stockholders' meetings.
2. If the stockholder purchased his stock from one who is the owner of record, but has not had an opportunity to have such recorded ownership transferred to himself. The situation here is of a most serious nature. When the purchaser bought the stock, the certificate or certificates in question would be transferred to him by assignment. Since such assignment is made only on the back of the certificates in question, the corporate books will have no record thereof until the old certificates are surrendered. According to the

corporate books, the vendor will be the owner of record, not the vendee. And it may be a difficult matter, should the vendor be unscrupulous, for the vendee to establish his true status.

If the owner of record has lost his certificate, and wishes to sell his stock, it would be well-nigh impossible for him to do so; very few persons would be foolish enough to purchase stock without a transfer of the certificates involved. It is natural to assume that the vendor first would have to secure a new certificate (a reissue), and to secure such it would be necessary for him to give a bond to the corporation to protect the latter in the event that the lost original certificate turned up in the hands of an innocent holder for value. In general, by the operation of the law of estoppel the purchaser of a certificate of stock, in good faith and for value, may take it free from any claims of previous holders, which would be allowed to come in, in the case of a sale of an ordinary chose in action (79 Fed. Rep., 228).

As to lost or destroyed certificates of stock, the New York law states as follows (S. C. L., Art. 4, secs. 67–68):

The owner of a lost or destroyed certificate of stock, if the corporation shall refuse to issue a new certificate in place thereof, may apply to the supreme court, at any special term held in the district where he resides, or in which the principal business office of the corporation is located, for an order requiring the corporation to show cause why it should not be required to issue a new certificate in place of the one lost or destroyed. The application shall be by petition, duly verified by the owner, stating the name of the corporation, the number and date of the certificate, if known, or if it can be ascertained by the petitioner; the number of shares named therein, to whom issued, and as particular a statement of the circumstances attending such loss or destruction as the petitioner can give. Upon the presentation of the petition the court shall make an order requiring the corporation to show cause . . . . . Upon the return of the order, with proof of due service thereof, the court shall . . . . . inquire into the truth of the facts stated in the petition, and . . . . . if satisfied . . . . . it shall make an order requiring the corporation, within such time as shall be therein designated, to issue and deliver to the petitioner a new certificate for the number of shares specified in the order, upon depositing such security, or filing a bond in such form and with such sureties as to the court shall appear sufficient to indemnify any person other than the petitioner who shall thereafter be found to be the lawful owner of the certificate lost or destroyed. . . . . .

Stock Ledger.—In most states, the law specifies that the capital stock outstanding shall be shown in detail in a record known as a Stock Ledger. Under all circumstances, such a record is necessary when the stockholders are numerous. An account is carried in the Stock Ledger with each stockholder. Each such account is credited with the par value of the stock issued to the stockholder whose name is the title of such account, and it is charged with all transfers made; when each such transfer is made, the transferee's account must be credited. The balance of each account should show, at all times, the par value of the holdings of the stockholder whose name appears as the heading of such account.

Separate Stock Ledgers are kept for each class of capital stock. If the amount of work necessary in connection with the keeping of the Stock Ledger is large, a Trust Company, usually, is appointed to take over these duties; such company is titled "registrar."

Each such Ledger is made self-balancing by including thereon an account with Capital Stock, which is in the nature of a control, and which holds as a debit balance the net total of the outstanding balances carried as credits in each of the detail accounts. Such controlling account articulates with the account of Capital Stock carried on the general or primary Ledger.

More will be said concerning this record in a subsequent chapter.

Opening Entries.—The question of opening entries seems to be one which causes considerable trouble for a large number of students. This, perhaps, is due both to the fact that accountants are not uniform in respect thereto, and that the account titles used are not accepted exactly as meaning what apparently the wording thereof would indicate. Naturally, an account title should be as clearly expressive of the items thereunder to be accumulated as it is possible to make it.

For purposes of illustration, a number of varying conditions will be presented, for each of which an opening entry will be framed; at times, more than one solution will be given. These variations may be set out as follows:

1. Stock issued for money only: fully subscribed—one class.
2. Stock issued for money only: partly subscribed—more than one class.

3. Stock issued for cash on the installment plan: fully subscribed.
4. Stock issued for both money and notes: partly subscribed.
5. Stock issued for property or for cash and property.
6. Issue of no par value stock.
7. Transfer of a sole trader's, or of a partnership, business to a corporation.

Illustrations relative to the first four possibilities will be presented in the remaining portion of this chapter, and illustrations covering the remaining three variations will be reserved for the next chapter.

Stock Issued for Money Only: Fully Subscribed—One Class.—The entire capital stock of a corporation may be subscribed and paid for in cash. Such condition is a simple one, and presents no difficulties. After the certificate of incorporation has been accepted, a record thereof usually is made in what is known as the Minute Book; this record will be described in more detail at a later time. The entry of the incorporation certificate upon the Minute Book may be made after the first organization meeting is held, or it may be made before that meeting takes place. When the subscriptions have been paid in, stock certificates are issued to the stockholders. Each stockholder may have one certificate issued to him covering his total holdings, or he may have a number of them issued to him, each representing a portion of his holdings. Usually, however, it will be found that no certificate will be issued for more than 100 shares unless the corporation is not listed upon the Stock Exchange. After the stock certificates have been issued, the Stock Ledger is opened, each stockholder being given an account therein. If the opening entries have not been made prior to this time, they should be considered next. This is accomplished usually by means of an opening entry in the Journal, such entry being made upon a regular bound book or upon a Journal voucher, as the case may be. Such opening entry, as in the case of a sole trader or partnership, is preceded by a brief statement containing items of interest concerning the corporation, as name, object, capitalization, number of shares, names of incorporators, etc.

Problem.—The Bixby Company was incorporated January 2, 1920, with an authorized capital stock issue of $100,000.00, each share of the par value

of $100.00, the subscribers being as follows: George Lacey, 200 shares; John Ball, 500 shares; and Ray Smith, 300 shares. All the stock was subscribed and paid for in cash.

Solution.—In every instance, the opening corporate entries depend upon the facts of the case in hand, upon the legal requirements of the state in which the company is incorporated, and the ideas of the person making them.

THE BIXBY COMPANY

Incorporated Under the Laws of the State of New York

With an Authorized Capital Stock of

$100,000.00

Divided into 1,000 Shares

Par Value $100.00

January 2, 1920

Subscriptions,	100,000.00	
To—Capital Stock,		100,000.00
To record authorized issue and subscriptions made therefor, as shown by subscription list		

Date

Cash,	100,000.00	
To—Subscriptions,		100,000.00

To record cash received in payment of stock subscribed, as follows:

George Lacey,	200 shares
John Ball,	500 shares
Ray Smith,	300 shares
Total,	1,000 shares

Entry made in Cash Book.

The general records do not show the capital stock held by each stockholder. The capital stock issued appears in one account only, as indicated above. The interests of the various stockholders are shown in detail upon the Stock Ledger. The cash item, assuming the above entries were made upon the Journal in the first instance, would be transferred to the Cash Book and from there be posted to the Ledger account of Cash.

Stock Issued for Money Only: Partly Subscribed—More Than One Class.—The capital stock of a corporation may be of more than one class; usually, when this condition is encountered, the classes will consist of common and preferred stock. Likewise, all the stock may not be subscribed for in full, or be all paid in in cash. In this connection, it is possible to digress from the simple opening entry shown above, and use one or two other

methods of booking the issue. In fact, corporate records may be opened in a number of ways, under almost all conditions. Naturally, the governing factor, in every case, is to have the opening entry record actual facts and to have the result of such opening entry stated correctly.

Problem.—The Bixby Company was incorporated on January 2, 1920, with an authorized capital stock issue of $100,000.00, divided into $50,000.00 preferred stock and $50,000.00 common stock, par value, $100.00 per share. The incorporators subscribed and paid for $20,000.00 of the common stock, and $30,000.00 of the preferred stock was sold to the general public for cash, the cash being paid in.

Solution No. 1.—The formal heading is omitted. The entries are as follows:

January 2, 1920

Subscribers,	20,000.00	
To—Subscriptions,		20,000.00
To record subscriptions of incorporators who agree to take 200 shares common stock		

Date

Cash,	20,000.00	
To—Subscribers,		20,000.00
To record payment of subscriptions by incorporators		

Date

Subscriptions,	20,000.00	
To—Capital Stock—Common,		20,000.00
To record issue of stock to incorporators		

Date

Cash,	30,000.00	
To—Capital Stock—Preferred,		30,000.00
To record sale of 300 shares of preferred stock to sundry persons.		

Solution No. 2.—The formal heading is omitted. The entries are as follows:

Date

Unissued Capital Stock—Perferred,	50,000.00	
Unissued Capital Stock—Common,	50,000.00	
To—Authorized Capital Stock—Preferred,		50,000.00
Authorized Capital Stock—Common,		50,000.00
To place authorized issue on books.		

Date

Subscribers to Capital Stock—Common,	20,000.00	
To—Subscriptions to Capital Stock—Common,		20,000.00
To record subscriptions of incorporators for 200 shares.		

Date

Cash,	20,000.00	
To—Subscribers to Capital Stock—Common,		20,000.00
To record payment by incorporators for their subscriptions to the common stock.		

Date

Subscriptions to Capital Stock—Common,	20,000.00	
To—Unissued Capital Stock—Common,		20,000.00
To record issue of 200 shares of common stock to incorporators		

Date

Cash,	30,000.00	
To—Unissued Capital Stock—Preferred,		30,000.00
To record sale of 300 shares of preferred stock for cash to sundry persons		

Solution No. 2, may be termed the formal method of opening a set of corporate books, and can be used to advantage in every case in that thereunder the entire authorized stock issue always is placed upon the books where its amount is under scrutiny whenever occasion arises. The formal method follows the requirements of both the Interstate Commerce Commission, and the Public Service Commission of New York.

Solution No. 3.—The formal heading is omitted. The entries are as follows:

Date

Unsubscribed Capital Stock—Common,	$30,000.00	
Subscribed Capital Stock—Common,	20,000.00	
To—Authorized Capital Stock—Common,		$50,000.00

Date

Unsubscribed Capital Stock—Preferred,	50,000.00	
To—Authorized Capital Stock—Preferred,		50,000.00

Date

Subscribed Capital Stock—Preferred,	30,000.00	
To—Unsubscribed Capital Stock—Preferred,		30,000.00

Date

Cash,	50,000.00	
To—Subscribed Capital Stock—Common,		20,000.00
Subscribed Capital Stock—Preferred,		30,000.00

It is desirable, next, to notice the provisions of the New York law as regards the issue of only part of the authorized capital stock of a corporation. The same provisions are found, in more or less modified form, in nearly all the states. The law provides (B. C. L.; Art. 2):

> One-half of the capital stock of every such corporation shall be paid in within one year from its incorporation, or the corporation shall be dissolved, and the directors, within thirty days after such payment, shall make a certificate of the fact of such payment, which shall be signed and acknowledged by a majority of the directors, and verified by the president or vice president and secretary or treasurer, and filed in the offices where the certificates of incorporation are filed. The dissolution of any such corporation for any cause shall not take away or impair any remedy against it, its stockholders or officers, for any liabilities incurred previous to its dissolution.

Some accountants insist that no record need be made in the regular books of account of the capital stock authorized but unsubscribed and unissued, on the ground that the certificate of incorporation, the Stock Ledger, and other special corporate records are sources all-sufficient from which to determine the authorized issue. Other accountants advocate that the entire authorized issue shall be booked. The law is silent upon this point; in England, a corporate Balance Sheet, when published, must disclose the authorized issue.

Although either method may be used, the writer ventures the opinion that the booking of the entire authorized issue, in the first instance, is to be preferred at all times. Since the published corporate Balance Sheet should disclose the authorized issue, as this may have a marked importance upon the fact that an investor may or may not purchase such stock, the General Ledger should have the authorized amount carried thereon in

some properly ear-marked account. Again, if the authorized amount be found upon the Ledger, considerable time may be saved at some future day by a strange accountant who has been called in to do certain work, and who, in carrying such work through to a satisfactory conclusion, finds it necessary to determine the authorized stock issue. This second point may not appear, to the average reader, worthy of the importance assigned to it; however, experience is a good teacher, and experience has demonstrated, at least to the writer, the truth of the statement made, even though he cannot claim to be the originator of it.

Stock Issued for Money Only: Fully Subscribed—Issuance on Instalment Plan.—Capital may be paid for upon the instalment plan, a certain amount of cash to be paid down at once, and the remainder to be paid in, say, at equal intervals in specified amounts. Capital stock certificates may be issued by a corporation before the entire subscription has been paid. But each such certificate, upon its face, must show that the stock is not fully paid. The unpaid amount is subject to call, as agreed upon. After full payment has been made, fully paid stock certificates will be issued.

In connection with this subject, there is a provision in the New York law which reads about as follows, (S. C. L.; Art. 4):

> The original or the amended certificate of incorporation of any stock corporation may maintain a provision expressly authorizing the issue of the whole or of any part of the capital stocks as partly paid stock, subject to calls thereon until the whole thereof shall have been paid in. In such cases, if in or upon the certificate issued to represent such stock, the amount paid thereon shall be specified, the holder thereof shall not be subject to any liability except for the payment to the corporation of the amount remaining unpaid upon such stock, and for the payment of indebtedness to employees pursuant to sections . . . . ; and in any such case, the corporation may declare and may pay dividends upon the basis of the amount actually paid upon the respective shares of stock instead of upon the par value thereof.

Problem.—Assume a corporation with an authorized capital stock of $100,000.00. The issue has been fully subscribed for, 50% to be paid in at once, and the remaining 50% to be paid for at equal intervals in the amounts of 20, 20, and 10%. The cash payments to be made at stated intervals have been provided for in order to make it somewhat easier than otherwise for a person to subscribe to the stock.

Solution No. 1.—Three methods are presented for solving this simple problem in order to show that no one fixed rule governs:

Date		
Subscriptions,	$100,000.00	
To—Capital Stock,		$100,000.00
To record authorized issue and subscriptions made thereto		

Date		
Cash,	50,000.00	
To—Subscriptions,		50,000.00
To record receipt of cash		

Date

As each subsequent payment is made, entry (2) above, would be repeated covering the amount involved

Solution No. 2.—The second method of solution shown makes use of instalment accounts.

Date		
Subscriptions,	$50,000.00	
Instalment No. 1,	20,000.00	
Instalment No. 2,	20,000.00	
Instalment No. 3,	10,000.00	
To—Capital Stock,		$100,000.00
To record authorized issue and subscriptions made thereto.		

Date		
Cash,	$50,000.00	
To—Subscriptions,		$50,000.00
To record cash received as initial payment for stock.		

Date		
Cash,	$20,000.00	
To—Instalment No. 1,		$20,000.00
To record cash received in payment due to first call.		

Date

Same as last entry made above, only for instalments Nos. 2 and 3, as each one is paid.

Solution No. 3.—This solution will be described but not illustrated. A separate Ledger account is carried with each subscriber. If the latter are numerous, a special Subscription Ledger may be used, controlled by an account upon the General Ledger. Under this condition, the Cash Book must contain a special column in which to record the cash amounts received upon subscription, so that the total thereof may be calculated readily for purposes of entry in the controlling account upon the General Ledger. It may be that the volume of transactions will make the use of a special Cash Receipts Register desirable.

Stock Issued for Both Money and Notes: Partly Subscribed.

Problem.—Assume a company incorporated for $100,000.00, of which $50,000.00 has been subscribed, and of which amount one-half has been paid in cash and one-half in notes.

Solution.—Only one method of recording the above is shown. Omitting the opening statement, the entries to cover might be as follows:

Date		
Subscriptions,	$50,000.00	
Unsubscribed Stock,	50,000.00	
To—Capital Stock,		$100,000.00
To record authorized issue, and subscriptions made there against.		

Date		
Cash,	$25,000.00	
Notes Receivable,	25,000.00	
To—Subscriptions,		$50,000.00
To record receipt of cash and notes for subscriptions paid, one-half each.		

It should be remembered that under the statutes which require stock payments to be made in cash, labor or services, or property, the receipt of notes receivable does not comply with the law. Therefore, whenever a note is found to have been given in payment, such note should be replaced by cash immediately. (N. Y. Penal Law: sec. 644; [3].)

Organization Expense.—Certain expenses are absolutely necessary as being incidental to the incorporation of a company. Legal services are necessary in connection with the application for a charter, and with the advertising in the local papers of the fact that application has been made for a charter; stock certificates and miscellaneous supplies must be purchased; and certain filing fees must be paid.

In New York, the filing fee amounts to one-twentieth of one

per cent. of the amount of the authorized capital stock. Likewise, under the federal law, each certificate of stock issued is taxed, a tax stamp or stamps being required to be affixed to the stubs of the stock certificates issued.

All of the costs of the above indicated nature are titled "organization expense." Such expense is in the nature of a deferred charge to profit and loss which may be carried upon the books as an asset for an indefinite length of time, if desired. However, good accounting practice advocates writing off such expense during the first year, or, at least, within the first three years of the company's existence. Again, if the amount be sufficiently large, it may be advisable to extend the period to five years.

Capital Stock Premium and Discount.—Stock selling above par is said to sell at a premium. Such premium should be credited to an account properly captioned, as Premium on Capital Stock, in order that the capital stock may be booked at par in the account or accounts with Capital Stock. When stock is issued at a premium, the disposition of the premium upon the books depends upon circumstances; the following are illustrative of possibilities:

1. Interstate Commerce Commission requirements. Their amount should be held in a properly ear-marked account to the end that it may appear always upon the Balance Sheet as a capital stock liability until extinguished either by discounts suffered on subsequent stock sales or by retiring stock. As stock is retired, the amount of premium applicable thereto should be charged to the account with such premium so that such account may be reduced by the amount thereof.
2. When organization expenses are abnormally large. The organization expenses may be charged against the premium account as above titled, or against the premium amount which originally was credited to a Special Surplus account. The final balance in the latter account sometimes is transferred to regular Surplus.
3. Permanent surplus. It may be that the charter or by-laws provide that premiums shall not be available for dividends. If so, the credit may be made to an account called Permanent Surplus.

4. Premium amortization. The above methods all consider capital stock premiums as neither income nor profits, which is believed to be correct. Some accountants, however, advocate spreading, or amortizing, the premium over a period of years by crediting the Profit and Loss account with a proportionate amount of the premium each month or year. These accountants consider the premium as a profit but not an operating profit.

The opinion is ventured that, in general, capital stock premium should be considered a capital surplus, a surplus not available for dividends even though the law does not restrict the premium being distributable as dividends. This Capital Surplus account should be kept open and never transferred to regular surplus. In other words, the first method above is preferred.

Only in certain states may capital stock be sold at a discount,—for less than par. And even where such practice is permitted, a tendency seems to exist to hide the true facts from being shown upon the books. The handling of this discount item upon the books varies considerably. The following are illustrative possibilities:

1. When the original stock is sold and the cash received is invested in a capital asset. Under this condition, the discount may be charged to the cost of the asset, in view of the fact that an item called "Discount on Stock" may not be desirable upon the Balance Sheet. Naturally, this handling of the situation is in error inasmuch as thereunder the asset value has not been recorded correctly; the Balance Sheet does not represent facts as they are actually.
2. When considered as an organization expense. In order to eliminate making the error mentioned above in (1), and yet keep the discount item off the Balance Sheet, as such, the charge may be made to the Organization Expense account, on the ground that this is what it amounts to, to be written off against profit and loss within a limited number of years. However, for reasons already advanced above, even though the item may be assumed as partaking of the nature of organization expense, it is of sufficient importance and interest to require a separate booking, at least.
3. When considered as a commission to be given the purchaser of the stock. This method is not apt to be found except

in states which prohibit issuing stock at a discount. The purchaser of the stock, or a dummy broker supposedly representing the purchaser, buys the stock at par and receives in return the amount of the discount as a commission. In order to hide this commission from appearing upon the periodical statement, it may be charged to a capital asset account. Naturally, this whole method of handling has nothing in its favor.

4. Interstate Commerce Commission requirement. Consider the discount as a permanent item thus to be booked. The item is carried permanently upon the books under its true title, being reduced from time to time by:
   a. Premiums secured on subsequent stock sales.
   b. Assessments levied against the stockholders.
   c. Appropriations of income or regular (free) surplus.
   d. Retiring stock; here the proper adjustment must be made by crediting the account with an amount equal to the unextinguished discount on such stock.

In accord with the principles of the fourth possibility, the Balance Sheet set-out would vary with the ideas of the particular accountant:

1. Some would show the discount as a deferred asset.
2. Others would show the discount as a deduction from the par value of the capital stock outstanding. The writer favors this fourth method of handling, plus the second manner of showing the discount upon the Balance Sheet.

Treasury Stock: Definition and Status.—This stock has been once legally issued for full value but which once more has come into the possession of the issuing company either by purchase or gift, and is held subject to disposal by the directors. Unissued stock never should be confused with treasury stock, the two being radically dissimilar. In theory, at least, treasury stock is worth its face value and may be carried upon the books as an asset. On the other hand, unissued stock or unsubscribed stock has no asset value, since nothing has been paid for it, unless the subscriber's obligation to pay for his stock is looked upon as an asset; but even under this latter contention, the asset is the claim against the subscriber, not the unissued stock itself.

Usually, treasury stock is held in the corporate name, although at times it is assigned to the treasurer or to a trustee. When held in the corporate name, the received stock certificates are cancelled, and proper entries made upon the corporate records to show that such stock has been transferred to the company. New stock certificates would not be issued until a sale has been consummated for a portion thereof. Treasury stock, upon proper authorization of the stockholders, may be cancelled; if so, it is no longer treasury stock, since its status reverts to that of unissued stock.

Treasury stock, held either by a company, or by a trustee for the company, is inactive. Being so, the corporation neither can vote its treasury stock nor draw dividends thereon. (3 Sanford Ch. (N. Y.) 285; Morawetz on Corporations, sec. 478); the reasons for this may be summarized about as follows:

1. As to voting. Treasury stock belongs to the whole body of stockholders, not to any one particular stockholder or even to the majority who are active.
2. As to dividends. Dividends are paid out of profits. Profits, usually, before dividends are paid, are transferred to Surplus account. And if a dividend is paid on treasury stock out of profits, its amount would be returned at once to the Surplus account as a credit out of which it just was paid.

Accounting Treatment of Treasury Stock: Donated Stock.—Basically, it would seem that the accounting treatment involves a two-way differentiation so far as the books of account are concerned:

1. A concern secures some of its stock through a donation.
2. A concern secures some of its stock through a purchase. Each point seems to demand a discussion of some length; hence, a separate section is devoted to each one.

In case a concern secures some of its stock through a donation, it is possible, again, to separate the discussion into two portions, as follows:

1. In the case of a new company where the entire capitalization has been issued as payment for some property which requires either complete or partial development so as to be placed upon a proper operating basis. This condition, usually, arises about as follows: Some one in interest, who desires to maintain a controlling interest in a prospective

corporation wishes, also, to provide the company with a supposedly ready means of securing working capital. He may own some land, a mine, a patent, or something else which well could be used by the enterprise even if the latter were not formed specifically to develop the property (as a mine). This asset is sold to the company, usually, for all its common stock issue (except two or three shares required by law to be held by others so that the corporation may be formed legally). Naturally, there being no cash on hand for development purposes, this person will donate back a portion of his received holdings (usually about one-half) to be disposed of at whatever price they may bring or, if necessary, to be given away in part as a bonus to aid the sale of the preferred stock (the treasury stock being the common stock and two classes of stock being issued). In fact, treasury stock may be:

a. Sold, usually at a discount; sometimes at a premium.
b. Given as a bonus to:
    i. Purchasers of other classes of stock.
    ii. Purchasers of bonds.
    iii. Syndicates underwriting bond issues.

The fund of proceeds provided through the sale of treasury stock is designated best, perhaps, as "working capital." Therefore, the booking of treasury stock, when received, might be as under:

Treasury Stock (at par),	$ ¢	
To—Donated Working Capital (or Treasury Stock Donation),		$ ¢

In certain states where it is doubtful whether or not the legal right exists for a corporation to hold treasury stock, the donated stock could be placed in the name of a trustee, to hold same subject to the order of the directors. Later, when the treasury stock is sold, the question arises as to how the matter should be dealt with. In any case, the Treasury Stock account should be credited at par. The premium or discount involved will be handled, in general, according to circumstances; but even here it would seem that only one principle is involved: The premium secured, or the discount lost, eventually, must be either a credit or

a charge against the working capital, as the case may be. The difference in handling may be indicated about as follows:

a. If all the stock is sold by one sale. Credit the amount of the premium, or charge the amount of the discount, at once against the account of Donated Working Capital.

b. If the stock is sold piecemeal. Since most of the stock, as a rule, will be sold at a discount rather than at a premium, it is perhaps safe to say that the only account needed will be the Stock Discount account, which should be charged or credited, as the case may be, for the discount or premium, in order to secure a basis for verifying each period's sales in connection with the period's rate or price as set by the directors. In the interim, before all the stock is sold, the amount of the stock discount would be shown upon the Balance Sheet deducted from the Working Capital account, and the net balance represents two things:

  i. Amount of treasury stock still on hand.

  ii. Amount of cash actually received from sales made.

After all the treasury stock has been sold, the net balance in the Working Capital account represents the amount of cash actually realized from sales made. The final point hereunder relates to the disposition to be made of this Working Capital account balance. Briefly, the principle suggested may be indicated as under:

a. Close out the balance to free Surplus account, where it would be available for dividends. But if dividends be declared therefrom, it stands to reason that the purpose of the gift has been defeated unless, perhaps, the dividends so distributed are stock dividends. However, it appears that no legal restriction exists against treating such an item as free surplus.

b. Close out the balance to a special Surplus account, as Capital Surplus account in which, presumably, such balance will not be available for dividends. However, when an account carries the word "surplus" in its caption, a strong temptation exists to make use of a mere book entry and thereby transfer such balance to the free Sur-

plus account. And when once therein, dividends may be declared therefrom, as before, resulting in the defeat of the purpose of the gift. Such manipulation often results where one or more periods have suffered extraordinary losses resulting in the earned profits not being sufficient for the dividends contemplated.

c. Close the balance out to the credit of the asset account representing the asset which gave rise to the treasury stock. Again, whether or not this practice is in order, would seem to depend upon circumstances:

    i. In the case of a mining company. Since the stock was donated to pay for the cost of developing the property, it would seem that the development cost, as totaled in a Development Expense account (considered during the interim as an asset), could be charged against the Working Capital account which, in turn, could be credited out against the Mine account.

    ii. In the case of an ordinary company. Here it is assumed that the asset acquired should not be valued at the par value of the capital stock issued therefor. The effect of such treatment would be to reduce the book value of the asset. However, such treatment, theoretically, at least, seems inconsistent in that, in the original instance, the directors fixed the value of this asset, and such prescribed value would now be, apparently, in serious error to the end that, by this means of closing, the directors may expose themselves to the odium of appearing guilty of fradulent practices. In New York, (S. C. L.; Art. 4): "In the absence of fraud in the transaction the judgment of the directors as to the value of the property purchased shall be conclusive."

d. Since by reason of the gift, future stockholders are benefited as well as the present ones, the Working Capital or Treasury Stock Donation account is carried along permanently upon the books in the same manner as the account holding unextinguished premiums secured through the sale of stock.

e. Where a company has a considerable amount of organization expense, some accountants advocate reducing such amount by the amount of treasury stock donated rather than make a credit to some other account.

2. In the case of a company which has been going some time. Stock is donated to the treasury of such a concern, either to wash a deficit or to be sold to provide additional ready working capital. Here, briefly, the treatment is illustrated as:
   a. If desired to be available for dividends, credit Surplus account.
   b. If the gift be made under the condition that it must remain as permanent working capital, credit a special Surplus account, to show it is not available for dividends.

Accounting Treatment of Treasury Stock: Purchased Stock.—When a concern purchases some of its own stock, say, either to sell later at a price in excess of that originally obtained for it, or to avoid the payment of large dividends earned and about to be declared, or for some other reason, the question of book treatment arises again:

1. At what value shall the booking be made? The stock should be placed in the treasury at par. This investment is not similar to an investment made in an outside concern since, at least for the time being, treasury stock amounts to a reduction in the company's capital stock, to be carried upon the Balance Sheet as a deduction from the total stock. This deduction cannot be made if the offsetting items are of unlike components.
2. When purchased at a premium. The vendor, in this instance, has sold two things or elements to the company:
   a. A certain number of shares.
   b. A portion of his undivided interest in the company's surplus.

   Therefore, it would seem that the premium involved should be charged against Surplus account; if so, the remaining shares outstanding would have a book value represented by the par of the stock outstanding plus the remaining surplus.
3. When purchased at a discount. The purchase at a discount

is not the exact reverse of a purchase at a premium; the premium represents an actual cash loss offset by a reduction in surplus; whereas, the discount, at best, is only a paper profit. The discount, therefore, should be credited to a properly ear-marked account indicating a contingent profit. When the stock is sold, this account would be adjusted in the amount of the premium or discount involved, after which, the remaining balance in the contingent profit (or loss) account represents the actual realized profit or loss resultant.

Opposed to the above method of handling, as in (2) and (3), above, consider the following:

1. The excess paid above par or the difference between par and the amount paid (where the latter is less than par) is debited or credited to Profit and Loss account. The assumption here is that an additional loss or profit has resulted for the period in which the stock was bought.
2. A debit or credit is made to a special account of Premiums and Discounts on Treasury Stock. The assumption here is that an additional loss or profit has been incurred which is applicable proportionately to a number of subsequent periods, to the end that such account gradually is washed by periodical amortization.
3. Carry permanently the premiums as liabilities and the discounts as assets until offset by subsequent activities.

Although the writer favors the first indicated methods above shown, it would seem that of the second group, the third possibility has more to be said in its favor than the other two shown as alternatives, because of the usual reasons advanced therefor, which may be stated about as follows: Such purchase activity has no relation whatever to income, and the assumed gains due to discounts should belong exclusively to the business, whereas assumed losses should not be charged against the current stockholders to the end that, by so doing, future stockholders may secure an advantage over the present ones to which they are not entitled.

In conclusion, it might be said that the choice of the method to be used relative to handling treasury stock is a matter more or less to be decided upon by the directors.

CHAPTER V

CORPORATIONS: ORGANIZATION; RECORDS; OPENING ENTRIES (Continued)

Genesis of a Proposed Corporation.—The idea of organizing a particular corporation originates with some one individual; even the organization details may be planned by him. The conceiver of the idea broaches his proposition to certain friends believed to be best fitted and most likely to join, and aid, him in floating the enterprise. After the feasibility of the plan has been discussed informally, a formal meeting is called to shape and define the various angles of the organization scheme, perhaps about as follows:

1. Purpose of the corporate endeavor.
2. Who the directors shall be for the first year.
3. What shall be the amount and kinds of capital stock, the number of shares of each kind, the par value of each, and the manner of payment therefor.

All of these facts must be set out in the certificate of incorporation when the latter is framed. Many variations from the above are found, but for illustrative purposes it seems unnecessary to consider them here.

Filing the Certificate of Incorporation.—In general, the organization procedure is the same in all states, only the details presenting variations. Since the New York law specifies that the incorporators must be "natural persons of full age," minors, partnerships, corporations, and persons acting in a representative capacity are considered incompetent to organize a corporation.

The articles of incorporation must be prepared in the English language, must be signed by each incorporator, and must be acknowledged either before a notary public or other officer capable of taking acknowledgments. One of the most important portions of the incorporation laws in every state relates to the contents of these articles. To conserve space, and also because

of the fact that a competent attorney should be on hand when the formation of a corporation is contemplated, the major points to be contained therein have been omitted purposely. (But see N. Y., B. C. L., Art. 2.)

Frequently, the specific parties interested in organizing a corporation may wish to hide their identity until after the company actually has come into existence. If so, the legal expedient of organizing the corporation with dummy incorporators who, generally, are attorney's clerks, is made use of. The least number of incorporators allowed by law are permitted to subscribe for the smallest number of shares necessary to bring the corporation into existence. Similarly, the advertised directors for the first year may be dummies; at the first meeting of the board of directors, after incorporation, these dummies resign and the regular directors, who are to manage the company, succeed them.

After the incorporation certificate has been prepared, it must be filed and recorded with the proper authorities. It seems to be a practical idea to send three copies of this certificate to the office of the Secretary of State. One copy is retained there to be filed and recorded; the remaining two are certified and then disposed of,—one to the office of the County Clerk to be filed and recorded, and the other to the office of the corporation for its files.

Prior to filing with either the Secretary of State or the County Clerk, in New York, the organization tax must be paid the State Treasurer, one-twentieth of one per cent., or fifty cents for each $1,000.00 of the authorized capital stock. The State Treasurer's office makes a duplicate receipt to cover this payment, one copy to be sent the corporation and the second to be sent the Secretary of State. When filing the articles with the Secretary of State, the requisite fees at this point must not be forgotten,—for filing and recording; likewise, there is a fee payable to the County Clerk for filing and recording. "No corporation shall exercise any corporate powers or privileges until such taxes and fees have been paid." (G. C. L., Art. 2.)

Since the corporation is not in existence when the initial fees must be paid, this item is taken care of in one of the following ways:

1. The incorporators advance the money to their attorney who prepares the incorporation papers and attends to incorpo-

rating the company. No one but an attorney should prepare these papers.

2. The incorporators advance the money to one of their number who is charged with attending to such payment.
3. The incorporators pay a portion or all of their subscriptions in advance, so that the attorney or one of themselves may have the money required.

As to fees, see:

1. Executive Law of New York, section 26.
2. Code of Civil Procedure of New York, section 3304.

Amending the Certificate of Incorporation; Reincorporation.—The articles of incorporation of an incorporated company may be amended, in general, in any way deemed desirable except that, in so doing, the prescribed powers which, at the time of amendment, apply to corporations engaged in business of the same general character or which might have been included in such articles but were not, cannot be exceeded.

Stockholders representing three-fifths of the outstanding shares of each class of stock issued must authorize such amendment at a special meeting called for that purpose, notice of which must be given according to law. Likewise, the majority of the directors must authorize such amendment. (See New York S. C. L.; Art. 2, sec. 22.)

The Business Corporations Law, Article 2, section 4, sets out the procedure to follow in case an existing corporation wishes to reincorporate. In this connection, moneyed, transportation, banking and insurance corporations are excluded. A special meeting of the stockholders must be called legally by the directors for this purpose, a majority of the latter signing such call. Votes representing a majority of all the stock of the corporation outstanding must be cast in favor of the proposition. In no way, by such procedure, can a corporation avoid existing liabilities.

First Regular Meeting.—After all the requirements of the law have been met, in the original incorporation of a company, the corporation, as a distinct and legal entity, comes into existence. Immediately thereafter, the first regular meeting of the stockholders is held. In some states the corporation comes into existence as soon as the State has accepted the articles of incor-

poration (date filed), as New York, and in other states the stockholders first must have their first regular meeting at which the articles will be accepted. If the organizers of a corporation have been doing business before all requirements have been complied with and have incurred certain debts, they are liable for such debts as partners.

At this meeting, also, the by-laws are adopted, unless the stockholders should waive their rights in this particular and delegate them to the directors. Since the stockholders, legally, are not agents of the corporation, they elect a board of directors to manage the corporate affairs. In turn, this board functions by appointing officers to whom it delegates certain of its powers. And in order to circumscribe and keep all persons within due bounds, by-laws are enacted. Insofar as these do not conflict with the laws of the State and the certificate of incorporation, these by-laws regulate the relations:

1. Of stockholders with directors.
2. Of directors with stockholders.
3. Of directors with officers.
4. Of the corporation with outsiders who are familiar with the by-laws and, therefore, assumed to accept their validity. (Angel and Ames on Corporations, sec. 325; 1 Gray 317; 43 Me. 192; 7 Barb. 508; 9 Howard (U. S.) 172; Potter, Law of Corporations, vol. 1, p. 116.)

In general, after the board of directors has been elected, the stockholders must act through it because, unless the by-laws restrict, this board practically has the same power as the corporation. The directors really occupy the role of being trustees of both the stockholders and the corporate creditors (54 N. Y. 314). Such being the case, they may not take unto themselves any advantage which cannot be shared by the stockholders (Potter on Corporations, vol. 1, sec. 85; 168 N. Y. 157; 146 U. S. 536), or which would reduce creditors' rights to a position subordinate to their own (42 Md. 598, 605). Some of the powers and restrictions accruing to directors may be set out as under:

1. Powers:
   a. To borrow money against a pledge of the corporate assets; the by-laws, however, may deny this right.

b. To lease the corporate property where such action will not deprive the company of the power to conduct its own business.
c. To incur new debts in order to pay off old ones.
d. To ratify a debt barred by the Statute of Limitations.
e. To make and transfer negotiable paper.
f. To carry through company litigation at the expense of the latter.
g. To fix official salaries.
h. To authorize the payment of wages in advance.
i. To make service contracts with persons having services to sell or to hire.
j. To pay dividends out of profits earned, as they may desire.

2. Restrictions:
a. To usurp the powers of the stockholders under the statute.
i. To increase or decrease the capital stock.
ii. To dissolve the corporation.
iii. To remove a director from office.
b. To amend the by-laws.
c. To cancel stock purchased upon the open market.
d. To cancel stock subscriptions (Spelling on Private Corporations, vol. 2, sec. 57).
e. To issue more stock than the authorized amount (105 U. S. 143).
f. To issue stock at less than par, unless statutes permit.
g. To lease corporate property to the end that the company will be deprived of the power to conduct its own business (33 Barb. 578).
h. To vote by proxy.
i. To declare dividends unlawfully.

Immediately after the stockholders have held their first meeting, the first meeting of the directors is held. Here the by-laws as submitted are approved and adopted,—unless they themselves have been authorized to frame them,—the issue of shares of capital stock for cash, services, or for property, is authorized, the manner of signing corporate checks is determined upon, election

inspectors are appointed for the ensuing year, and any other miscellaneous matters which come within their province as directors are decided.

The directors hold whatever meetings are necessary, regular and special, to carry out their policy of management. They must not exceed their authority because, if they do so, a personal liability may attach. They must act as a body, not individually, in carrying out their duties. A delegation of their authority is not possible unless such delegation involves merely the performance of a ministerial act; acts involving discretion are not to be delegated. The directors hold office until their successors have been elected.

Continuity of management may be insured by tying up the stock in a "voting trust" for a term of years. The New York law permits such a formation (G. C. L.; art. 2), but restricts the period for which such a trust may be formed to a length not to exceed five years. In most states, a voting trust may be formed for a "reasonable period" and what this is is left to the Courts to determine. A voting trust refers to accumulating shares of stock from various stockholders, under a written agreement, into the hands of one or more persons in whom thereby is vested the right to vote such stock in accord with the terms set out in the agreement. In New York, at least, the transferred stock certificates must be cancelled and new ones issued in the name or names of the persons to whom the transfer is made. After recording such transfers in the proper corporate books, the stock may be voted during the continuance of the agreement by the transferee or transferees. Duplicate copies of each such agreement are on file in the principal corporate office where they may be examined during business hours by the stockholders.

If the directors are guilty of an illegal act,—as paying part of the corporate capital to stockholders, etc.,—they are jointly and severally liable to the corporation, and to the corporate creditors, for any damage caused. In this connection, no director will be held guilty if he does not agree to such illegal act and has had such fact recorded in the minutes of the meeting at which such act was agreed to (Potter on Private Corporations, sec. 337); likewise, if a director was not present at such meeting, he will not be held guilty.

Corporate Officers.—The number of officers a corporation has, and the duties falling to each one, depend upon the particular corporation under discussion. In most cases, one will find a president, one or more vice-presidents, a secretary and a treasurer:

1. President. He is assumed to be the chief official of the corporation. If the board of directors is an active body, his duties primarily are limited in scope, presiding over the directors' meetings and over the meetings of the stockholders. Where the board of directors is an inactive body, his duties may be many and important since he has the power of a general agent of the corporation. He plans the policies and has supreme executive control over all the other officials and over the company employees. However, the exact nature of his power depends upon both the nature of the company and upon business custom.
2. Vice-president. He takes upon himself the duties of the president when the latter is not where he can act, and certain other duties of a regular nature depending upon the case in hand. Where there are a number of vice-presidents, they are ranked as first, second, etc., and each has certain regular managerial duties falling to his lot, depending upon the corporate by-laws.
3. Treasurer. He is usually the financial officer of the company, having charge of the cash funds and, at times, of certain of the accounting records. Usually, he signs the checks, and selects the depositaries.
4. Secretary. He has charge of recording the happenings in the stockholders' and directors' meetings, and he has custody of the corporate seal. Other duties may fall upon his shoulders, dependent upon the corporate by-laws. He may be assisted in his work by one or more assistant secretaries.
5. Comptroller or auditor. This official usually is found in large corporations rather than in small ones. He has direct charge of all matters pertaining to the accounting activities. Usually, he is responsible only to the board of directors, not to any one official.

Corporate Records.—Corporation accounting is based upon the general principles of accounting, and the financial records

kept practically are the same as those of any ordinary business,—Journals, Purchase Records, Sales Records, Cash Books, Ledgers, etc. Likewise, the general scheme of the accounts in a corporation may be, and usually is, the same as that employed in a partnership, or even as that used by a sole trader. The difference between corporate accounting practice and that of other general forms of business activity is found in the opening entries, the closing entries, the recording of the proprietorship interest, and the distribution of profits. However, because of the peculiarities of its organization, a corporation requires certain books and records which are not needed either in the partnership or the sole proprietorship type of business. These records have but little to do with accounting principles.

By law, each corporation is required to keep books in which a complete record of all its business and transactions are entered. These books must be kept at the principal office of the corporation (N. Y., S. C. L.; art. 2). And under proper regulations, these records may be examined by the stockholders as a common law right which, at least in the State of New York, cannot be impaired by legislation (159 N. Y. 250; 70 N. Y. 220). If a stockholder is refused permission to make an examination of these records under the regulations set down, by showing proper cause for making such examination, he can secure a Supreme Court order compelling the corporation to allow him to make such examination. (159 N. Y. 250; 12 Wend. 183.)

Although the exact requirements in regard to the number and form of corporate books vary considerably from state to state, the general scheme covering such records would be about as below:

1. Minute Book.
2. Subscription List or Book.
3. Instalment Book or Subscription Ledger.
4. Instalment Receipt or Scrip Book.
5. Stock Certificate Book.
6. Stock Ledger or Book.
7. Stock Transfer Journal.
8. Stock Transfer Book.
9. Bond Register.

The stock records comprise a group so distinct from the regular

financial records that in large corporations they are kept by a different force of operatives in a separate room or department in charge of a special officer titled Transfer Agent or Transfer Clerk.

Minute Book.—This record should contain the complete chronological record of all the meetings of the stockholders and of the directors. Usually, it is kept by the secretary. The story therein contained should be worded in the clearest manner possible so as to avoid having any ambiguity or misunderstanding arise at a later date. It is an exceedingly important record because, in reality, it is the written history of the acts of the corporation. Its contents, when properly approved, cannot be contradicted by oral testimony, although such contents may be thus explained.

The Minute Book has no special form; it may be either bound or loose-leaf. The minutes may be written therein or they may be written first on loose sheets which afterwards are pasted in. Although the loose-leaf form is the most convenient, it is suggested that the bound form is less apt to be altered should occasion arise when such alteration is assumed to be desirable. In one particular instance, two years after certain resolutions were entered upon the minutes, the directors, finding them undesirable, removed the original sheets and replaced these by others rewritten in a different way in an attempt to reduce the amount of the then determined income and excess profits tax.

The minutes of the first stockholders' meeting would cover the following major points: persons present, by-laws, purchase of property, issue of stock, recording articles of incorporation, stock assessments, nomination and election of directors, etc. The minutes of the first meeting of the board of directors would cover the following prominent points: directors present, election of officers, minutes of incorporation, oath of secretary, bond of treasurer, issue of stock, signing of checks, subsequent meetings, committees, approval of agents and agencies, salaries of officers, sale of securities, powers of attorney, etc.

Subscription List or Register; Subscription Ledger.—The use of these two records begins at the time a corporation is organized. Such use may be described about as follows:

1. If the number of subscribers to the stock of a corporation is small. When the Journal entry is made charging "Sub-

scribers" for the amount of the subscribed stock, it is sufficient to enter the name and subscription of each subscriber upon the Journal, and open an account with each one upon the General Ledger. A formal Subscription List is unnecessary although, theoretically, it may be used. In brief, such a list records the contract existing among the subscribers whereby each binds himself to take the amount of stock set down next to his signature.

2. If the number of subscribers to the stock of a corporation is large. In this case, a Subscription List may be used as the written evidence of the contract between the subscribers to take stock. However, the usual procedure will be to have a separate slip to hold the signature of each subscriber. And from these slips a Subscription Register will be prepared, this being a book containing the names and addresses of the subscribers and the amounts of their subscriptions. When the subscribers are many, the Journal entry to "Subscribers" will not carry the name and subscription of each subscriber,—but only a mere reference to the Subscription Register. From the Subscription Register, detailed postings will be made to each subscriber's account carried upon a subsidiary Ledger, the Subscription Ledger, this being controlled upon the General Ledger by the account of "Subscribers." And when the payments on account of subscriptions are many, the Cash Book should contain a column for Subscribers, the total of which will be credited to the General Ledger account of Subscribers.

As soon as a subscription has been paid in full, the subscriber should be credited upon the Stock Ledger for the par of his stock, this credit being made even though no certificate of stock has been issued.

A form of Subscription Ledger is shown below:

NAME____________ ADDRESS____________

Date	No. Shares Subscribed	At	Total	Calls				Date		Calls				Balance	Remarks
				No. 1 25% Cash	No. 2 25% April 1	No. 3 25% June 1	No. 4 25% Aug. 1	Called	Paid	No. 1 25% Cash	No. 2 25% April 1	No. 3 25% June 1	No. 4 25% Aug. 1		

Instalment List.—The use of this list is limited, necessarily, to cases where the payments for stock are called up in instalments. One separate record either is written or printed from either the Subscription List or the Subscription Register, as soon as a call has been made by the board of directors.

Where the stock subscriptions are numerous, and are subject to calls extending over a period of a number of months, an

account should be kept with every subscriber and with every instalment, in a Subscription Ledger.

A form of Instalment List is submitted below:

INSTALMENT NO. 2

Names	No. Shares	Amount Due	No. Cert.	Received	Interest	L F	Date
A. Jones....	100	1,000	1	1,000	....	2	....
B. Smith...	200	2,000	2	2,000	....	3	....
C. Brown...	200	2,000	3	2,000	....	4	....
D. Gray....	300	3,000	4	3,000	....	5	....
L. Wolf.....	400	4,000	5	4,000	8.34	6	....
Z. Doe.....	500	5,000	6	5,000	....	7	....
				17,000	8.34		

Comprising payments of an instalment of 10 per cent of the capital stock of the Good Luck Trading Company of Syracuse, New York, called for at a Meeting of the Board of Directors on July 5, 1921, and due July 12, 1921.

Instalment Receipt or Scrip Book.—This book consists of receipt forms to be filled out and signed by the secretary and treasurer as instalments are paid; in some cases, the by-laws require that the president and secretary shall sign these receipts. These blanks may be put up in book form, the receipts being attached to stubs therein like checks in a check book, or they may be just loosely padded. When the last instalment has been paid, the scrip should be taken up and certificates of stock issued in their stead. The surrendered receipts, usually, are pasted back onto their corresponding stubs.

A form of the above is shown below:

Instalment Scrip No. . . . . Shares 1st Instalment . . . . per cent. Received the above scrip:	$. . . . . Shares . . . . Company Received from. . . . . Dollars, The same being the first instalment of . . . . Dollars, per share, on. . . . . Shares of the Capital Stock of the. . . . . Company the said shares being set aside for the above subscriber or his assigns, conditional on the fulfilment of the terms of the subscription. . . . . President . . . . Secretary

Stock Certificate Book.—This is a bound book containing the blank stock certificates, the evidence of ownership of the corporation, to be filled out and signed in accordance with the provisions of the by-laws of the corporation, by the secretary, the president and the treasurer, or by the secretary and the treasurer. Each certificate of stock is attached to a stub, a perforated line running between the two parts of the document, as in the Instalment Scrip Book above shown. Certificates are issued to those who are entitled to full-paid shares. For convenience, these certificates are numbered consecutively. A transfer form, usually, is printed on the back of each certificate in order to facilitate the transfer or sale of the stock.

When a stock certificate is surrendered for transfer, it should be cancelled and be pasted back on the stub in the Certificate Book to which it belongs; the number and date of the new certificate issued should be written on the stub of the old one for cross reference. Infrequently, certificates are found in loose form, in which event there is no stub, the Transfer Journal information supplanting that ordinarily carried thereon.

A form of stock certificate is shown below:

No...........	INCORPORATED UNDER THE LAWS OF............................
No. of Shares............	No.......... ....Shares
Issued to:	THE...........COMPANY
....	Capital Stock $.........
Address.................	Common Stock—Full paid and non-assessable
On:....................	This certifies that....................
For:....................	is the owner of.........Shares of the
From whom transferred:.. Name:.................. Address:............... On:.................... No. of Original Certificate:....... No. of Original shares........... No. of Shares Transferred:....... Received the above Certificate this..........day of............., 19.....	Capital Stock of The......................... Company Transferable only on the books of the Corporation by the owner hereof in person or by attorney, upon surrender of this Certificate properly indorsed. In witness whereof, the President and the Treasurer do hereby sign this Certificate and cause it to be sealed with the seal of the Corporation, this.............day of ...., 19......
	(Seal)
.... Signature	.... President
	.... Treasurer

Stock Ledger or Book.—This book is a detailed record of the individual ownership of the shares of capital stock of a corporation, which should be arranged to comply with the statute provisions of the particular state under which the corporation came into being. It contains one account with each stockholder in which he is credited with either the total number of shares issued to him or with both the total number of shares and the total par value thereof; naturally, the latter set-out is preferable to the former one. The total of the balances of these indi-

vidual accounts represents the total capital stock issued and outstanding. The relation of this total to the account of Capital Stock carried upon the General Ledger, may be indicated as follows:

1. If the Capital Stock account records merely the total stock issued and outstanding. The total of the balances upon the Stock Ledger should always be the balance of the Capital Stock account upon the General Ledger.
2. If the Capital Stock account records the total amount of the authorized issue. Under this condition, the above account will be offset by an account showing the total amount of stock unissued, as a debit balance; and the difference between these two accounts, at any time, will represent the amount of capital stock issued and outstanding. In turn, this net balance always should agree with the total of the balances upon the Stock Ledger.

The above two possibilities do not take into consideration the item of treasury stock which may appear upon the General Ledger. Since treasury or trustee stock remains under the control of the company, the account with it may be kept upon the General Ledger only. And under the second possibility above, when treasury stock exists, a further adjustment must be made in reconciling the total of the balances upon the Stock Ledger with the account of Capital Stock upon the General Ledger.

To permit the ready balancing of the Stock Ledger, in fact, to make this Ledger self-balancing, it is customary to carry a summary account upon the Stock Ledger, as the first account therein which, at all times, shows the total number of shares issued, and their total par value if values are recorded as well as number of shares. The items in this account will be found upon the side opposite from that upon which appear each of the detail balances of the numerous stockholders; in other words, in the summary account, the balance will be on the debit side.

A specially ruled Stock Ledger is preferable although not absolutely required unless the law specifies a special ruling. In its simplest form, the standard double column Ledger ruling will suffice. On the credit side of each account are shown the date and number of the stock certificate, the source from whence it came, the number of shares, and the face value. The source either is original (as where original subscriber) or the name of

the person from whom the certificate of stock was transferred. When stock is transferred, the stub of the old certificate should show the name of the person to whom the transfer is made, and the number of the new certificate issued to the transferee; the stub of the new certificate should show the name of the person from whom it came. In this way, a cross index is secured by means of which one may trace the stock forward or backward. The person who transfers stock will have indicated upon the debit side of his Stock Ledger account, the name of the person to whom the transfer was made, the number of the stock certificate surrendered, the number of shares transferred, and the face value of the shares transferred.

In many instances, the total number of shares indicated upon the surrendered certificate of stock will not be transferred completely, but only a portion thereof. In such case, the balance representing the retained portion should be charged upon the Stock Ledger to "self," and be credited for the same amount for the certificate issued to cover the shares retained. In other words, whenever a transfer is made, the old certificate must be cancelled entirely and be charged upon the Stock Ledger, and a like number of shares must be issued and be credited thereon unless treasury stock or trustee stock is involved. As indicated above, treasury or trustee stock remains under the company's control with the result that the account therewith may be carried only upon the regular records. Only this stock which actually has been transferred out should be covered by stock certificates.

The New York law requires (S. C. L., Art. 2) that every stock corporation shall keep:

> A book to be known as a stock book, containing the names, alpnabetically arranged, of all persons who are stockholders of the corporation, showing their places of residence, the number of shares of stock held by them respectively, the time when they respectively became the owners thereof, and the amount paid thereon. . . . . . The stock book of every such corporation shall be open daily, during at least three business hours, for inspection by any judgment creditor of the corporation; or by any person who shall have been stockholder of record in such corporation for at least six months immediately preceding his demand; or by any person holding stocks of such corporation to an amount equal to five per centum of all its outstanding shares; or by any person thereunto in writing authorized by the holders of stock of such corporation to an amount equal to five per centum of all its out-

standing shares. Persons so entitled to inspect stock books may make extracts therefrom. No transfer of stock shall be valid as against the corporation, its stockholders and creditors for any purpose . . . . . until it shall have been entered in such book as required by this section, by an entry showing from and to whom transferred.

Failure to comply with this law entails a fine to be paid the State in the amount of $50.00 a day for every day the corporation neglects or fails to do so.

If more than one class of capital stock is issued, usually, there will be one or more Stock Ledgers for each class of stock. In large corporations, loose-leaf or card forms of Stock Ledgers frequently are used. In connection therewith, a tickler card file frequently is found, being used as a means of check against the Ledger accounts, and as a basis for making up mailing lists for the circulation of reports, meeting notices, and the payment of dividends. Each such list must be checked in sufficient detail so it agrees absolutely with the actual facts as recorded; and to make doubly certain that errors will be eliminated, it is customary to have each such list certified by the secretary as being correct. Each card in the tickler file would hold the name of a stockholder, his address, and the number of shares of each class of stock held.

A form of Stock Ledger is shown below:

Name of Stockholder Address

Date of Transfer of Shares by Above	Transfer No.	To Whom Transferred	L F	Certificate Surrendered		Date of Acquisition of Shares	From Whom Transferred (If original issue, state such)	L F	Certificate Issued		Balance Cr.
				Cert. Nos.	No. Shares				Cert. No.	No. Shares	

Stock Journal.—In certain states all stock transfers must be recorded in a Transfer Journal, which will consist of blank assignments to be filled out and signed by those who are transferring, or by their attorneys. Again, this Journal may be used by a corporation whose stock is active, to summarize daily all the stock transactions taking place both at the office and at the offices of the transfer agents so that postings may be made quickly and accurately to the Stock Ledger. Money amounts are not used therein.

In the form below, one will notice the possibility of charging a stockholder with the shares sold, and of crediting the purchaser; or if a certificate of 100 shares is to be split up into four certificates of 25 shares each, the original would be charged to the stockholder and, in turn, he will be credited with the same number of shares on four certificates carrying four consecutive numbers.

Original stock issues may be recorded herein; when done, the entries therefor usually are made in red ink so they will be clearly distinguishable from those relating to transfers. If more than one class of stock is issued, a separate Transfer Journal may be found for each class.

A form of Stock Journal is shown below:

Date

STOCK CERTIFICATES SURRENDERED						STOCK CERTIFICATES ISSUED					
Name of Stock Holder	L F	Signature of Attorney	No. of Cert.	No. of Shares	Total Shares	To Whom Transferred	L F	Residence	No. of Cert.	No. of Shares	Total Shares

Stock Transfer Book.—The requirements of the statutes of the different states are dissimilar as relates to the Stock Transfer Book, a book to be kept by every corporation or its transfer agent. In New York, the form used must be one approved by the state comptroller. Such a record, approved as to form, is shown below, this being obtainable in most stationery stores.

STOCK TRANSFER BOOK

Date	Serial Number of Cancelled Certificate	No. of Shares	By Whom Surrendered	To Whom Issued	Serial Number of New Certificate	No. of Shares	Number and Face Value of Stamps									
							2¢	4¢	10¢	20¢	50¢	$1	$2	$10	$20	Value

The section at the right of the form relates to the number and value of the adhesive stamps which, by law, must be affixed. In New York, there is a tax payable on the transfer of capital stock. No transfer tax is required on the original issue of the stock, this being necessary only in connection with all transfers of a beneficial interest. The requirements of the law are as follows (Tax Law; Art. 12, sec. 270):

There is hereby imposed and there shall immediately accrue and be collected a tax . . . . on . . . . . the transfer of any stock, on each hundred dollars of face value or fraction thereof, two cents, except in cases where the shares or certificates of stock are issued without designated monetary value, in which cases the tax shall be at the rate of two cents for each and every share of such stock. . . . . . The payment of such tax shall be denoted by an adhesive stamp or stamps

When an old certificate is surrendered to a company whose rules demand a transfer on its books in person or by duly authorized attorney, the individual or his attorney presents the certificate with the form of assignment on the back filled out or having attached a separate assignment paper. The transfer is recorded in the Transfer Book. If the signature be not known to the transfer agent, it should be guaranteed by a responsible person,—a bank, a trust company, or a broker. The signatures on the old certificate first are mutilated before pasting it back on the stub from which it was detached originally. Next, a new certificate is issued in accord with the terms of the assignment to replace the old one. The holder of the new certificate will receipt therefor in the same manner as did the holder of the old one.

Bond Register.—Accounting problems arise in connection with an issue of bonds which are similar to those arising in connection with an issue of stock, at least in many respects. Briefly, without discussing the subject of bonds in any way at this point since one chapter is reserved later therefor, it is sufficient to state that in the case of registered bonds a record of individual ownership usually is kept in a Bond Register which, in ruling, is similar to the record kept of stockholders. This record would be kept even if bonds are registered only as to principal.

New York Stock Exchange.—The New York Stock Exchange is an association of brokers maintained for buying and selling securities which have been listed officially by the Exchange, this activity being conducted for a commission remuneration. The commission charged upon both purchases and sales is one-eighth of one per centum of the par value of the security dealt in.

Before the Exchange will handle any security, it must be listed in a formal manner by what is known as the Committee on Stock List. If a corporation wishes to list its stock, it makes formal application to do so and, as part of such application, a statement must be made relative to the following:

1. Organization and purpose of the corporation.
2. Amount of its capital.
3. Object behind the stock issue.
4. Current financial condition and earnings.

Likewise, in connection therewith, copies of the following must be submitted:

1. Certificate of incorporation.
2. By-laws.
3. Resolutions of stockholders and directors as to the stock issue.
4. Contracts and leases relating to the issue of stock.

All of this information must be certified to as correct by the officers of the corporation. Because of the above requirements, coupled with the work of the Committee on Stock List, questionable issues of securities are barred from being listed on the Exchange.

Many other rules are enforced by the Exchange relating to a number of items too numerous to mention, but perhaps one of interest in connection with the present work is to the effect that certificates of stock or bonds which either are printed or lithographed cannot be dealt in upon the Exchange; such certificates must be printed from steel plates by a firm of approved engravers.

Stock Issued for Property.—It was noticed in the last chapter that the capital stock of a corporation may be paid for in property, in money, or in services. When stock is paid for in cash, the accounting involved is decidedly simple so far as valuation is concerned. On the other hand, when stock is paid for in services, or in property, the question of valuation arises. Theoretically, at least, the valuation given services and property, in the fair and impartial honest judgment of the directors, must be equal to the stock given therefor. Especially is this true in the case of property since its valuation will lie, usually, in the discretion of the directors unless fraud is present, whereas, the worth of services rendered may not, at times, be dependent upon the directors' ideas.

If property has a certain market value which is recognized in the community, or if the value thereof is determinable from the original purchase records, the problem is not so difficult for the accountant. But where the property is such that its valuation is a matter of judgment, the accountant must be on guard not to commit himself, when opening the books, to any extent

in seeming to justify the valuation figures handed him. In other words, he should assume no responsibility for such valuation. The explanation of the entry should be to the effect that the valuation is in accord with the directors' authorization as expressed in the minutes. Perhaps the valuation will be that fixed by the stockholders or by an appraisal company.

The following further points should be observed in booking property values:

1. A general account holding tangible values (also intangible values) should not be used. In other words, good-will, or a like intangible asset should not be merged with a plant account.
2. If the properties taken over are not indicated in detail, as to separate item valuations, a Plant and Sundry Assets account may be used to hold the charge when the properties are turned over in payment of a subscription to stock. Later, when a valuation has been placed upon the separate items of property, separate asset accounts may be debited and the collective account suggested above closed.
3. If all the details are present in the bill of sale covering the specific valuation of the detail assets secured, the Plant and Sundry Assets account really is unnecessary.

Problem.—For illustrative purposes, in this connection, study the solution and comment covering the following simple problem taken from a New York C. P. A. examination. The Prosperous Company is organized under the laws of the State of New York to conduct a manufacturing business. The authorized capital stock is $500,000.00, divided into $250,000.00 common and $250,000.00 preferred stock, par value of shares $100.00. Five incorporators subscribe each for one share of common stock at face value. John Peters, one of the incorporators, purchases from three manufacturing companies their complete plants for $499,500.00, and transfers said plants to the Prosperous Company for the remaining $499,500.00 of common and preferred stock and $100,000.00 of the first mortgage bonds out of a total issue of bonds amounting to $150,000.00, leaving $50,000.00 of bonds in the treasury. The incorporators then pay in cash for their respective subscriptions.

The individual assets acquired are as follows: land and buildings, $75,000.00; plant and machinery, $200,000.00; tools, equipment, and fixtures, $50,000.00; inventories, $100,000.00; accounts receivable, good, $28,000.00, doubtful, $5,000.00; cash, $12,000.00.

Prepare: (a) Opening entries for the books of the Prosperous Company

(b) Initial Balance Sheet showing the company's financial condition.

Solution.—The first step is to book the authorized stock issue, preceding same with a formal heading:

THE PROSPEROUS COMPANY
A Corporation Organized
Under the Laws of
The State of New York
With an Authorized
Capital Stock of
$500,000.00
Consisting of
$250,000.00 Preferred Stock
$250,000.00 Common Stock

Unissued Capital Stock—Preferred,	$250,000.00	
Unissued Capital Stock—Common,	250,000.00	
To—Authorized Capital Stock—Preferred,		$250,000.00
Authorized Capital Stock—Common,		250,000.00

The next step is to make entry of the subscriptions of the five incorporators for one share each of the common stock:

Subscribers to Capital Stock—Common,	$500.00	
To—Subscriptions to Capital Stock—Common,		$500.00

Next, it is necessary to book the take-over of the assets from John Peters. Note in this entry the use of the general asset account of Plant and Sundry Assets. The various asset items could have been placed upon the books in this entry but, in opening entries of this kind, it is desirable to make use of a general asset account instead in that frequently after the various assets have been taken over:

1. These assets must be appraised, and
2. Because the element of good-will is a frequent factor to demand consideration when a going business is taken over.

By conforming to this practice, the books may be opened immediately whereas, action by the board of directors relative to the valuation of specific assets may be deferred until convenient to take up the matter.

Plant and Sundry Assets,		$599,500.00	
To—John Peters, Vendor,			$599,500.00
To record purchase of sundry assets per bill of sale on file for:			
Preferred Stock,	$250,000.00		
Common Stock,	249,500.00		
Mortgage Bonds,	100,000.00		
As Above,	599,500.00		

The next entry covers the issue of stock and bonds in full payment of the properties taken over. A specific discussion of bond entries is deferred until a later chapter. The entry presented below seems sufficient for the present.

John Peters, Vendor,	$599,500.00	
To—Unissued Capital Stock—Preferred,		$250,000.00
Unissued Capital Stock—Common,		249,500.00
First Mortgage 5 per cent Bonds,		100,000.00

Next, the incorporators pay in their subscriptions in cash:

Cash (Cash Book),	$500.00	
To—Subscribers to Capital Stock—Common,		$500.00

following which, stock certificates are issued requiring for entry:

Subscriptions to Capital Stock—Common,	$500.00	
To—Unissued Capital Stock—Common.		$500.00

The last and final entry covers the placement of the specific assets acquired upon the books in accord with the action of the board of directors in respect thereto. Since accounts receivable in the amount of $5,000.00, are considered doubtful, it would be reasonable to assume that a Reserve for Bad Debts account of an equal amount was set up on the books. Also, note the item of good-will for which an account is established. This is perfectly proper under the present circumstances in that, since the concerns taken over were going concerns a certain amount of good-will may be assumed as being possessed by them. Since good-will is a measure of earning capacity, only an established business can possess it. Had there been no take over of a going concern, but only an embryo business commenced, no good-will rightly could be assumed to be in existence. A further discussion of good-will is reserved for the chapter on consolidations. The entry necessary, as a final step, is as follows:

Land and Buildings,	$ 75,000.00	
Plant and Machinery,	200,000.00	
Tools, Equipment, and Fixtures,	50,000.00	
Good-will,	134,500.00	
Inventories,	100,000.00	
Accounts receivable,	33,000.00	
Cash,	12,000.00	
To—Reserve for Bad Debts,		$ 5,000.00
Plant and Sundry Assets,		599,500.00

To complete the solution of this problem, it is necessary only to submit the opening Balance Sheet. This is as follows:

THE PROSPEROUS COMPANY

BALANCE SHEET

as at...............

Assets

Capital Assets:		
Land and Buildings,	$ 75,000.00	
Plant and Machinery,	200,000.00	
Tools, Equipment, and Fixtures,	50,000.00	$325,000.00
Good-will,		134,500.00
Total Capital Assets,		$459,500.00

Current Assets:			
Inventories,		$100,000.00	
Accounts Receivable,	$33,000.00		
Less: Reserve for Bad Debts,	5,000.00	28,000.00	
Cash,		12,500.00	
Total Current Assets,			140,500.00
Total Assets,			$600,000.00

Liabilities

Capital Stock:		
Capital Stock—Preferred,	$250,000.00	
Capital Stock—Common,	250,000.00	
Total Authorized, Issued and Outstanding,		$500,000.00
Capital Liabilities:		
First Mortgage 5 per cent Bonds (Authorized $150,000.00),		100,000.00
Total Liabilities,		$600,000.00

Transfer of the Business of a Sole Trader to a Corporation.—Nearly all corporations have their inception based upon some previously existing business. An individual starts in business on a small scale. As his activity expands, he needs more capital. This capital he secures in the following ways, one or more:

1. By borrowing money.
2. By inducing some one to go into partnership with him.
3. By inducing at least two people to join with him in forming a corporation; perhaps these two will take only a minimum number of shares commensurate with the help needed.

If he forms a partnership, the latter may succeed to the end that the partners cannot control and develop it as they should. The result is that a corporation is formed to secure both more capital and the protection of a limited liability.

Again, two or more existing business concerns may combine or consolidate into a corporation. A sole trader may combine with another sole trader in the formation of a corporation; he may combine with a partnership or with a corporation in the formation of a new corporation; a partnership may combine with another partnership or with a corporation to form a new corporation; two or more partnerships and corporations may combine; two or more corporations may combine. In fact, the possible variations as to the original constituent units combining into the formation of a new corporation are many.

Some of the problems encountered in merging and consolidating with the end in view of forming a new corporation are difficult and intricate, and a discussion of these, exclusive of certain fundamentals, of necessity, must be omitted until a later time when the student shall have gained a certain familiarity with underlying corporate principles of accounting. Therefore, it is the purpose at the present time to consider only the more rudimentary elements involved in the above,—namely, the transfer of the business of a sole trader or partnership to a corporation.

Problem.—The Jones Manufacturing Company was incorporated under the laws of the State of New York to acquire and conduct the business heretofore operated by H. B. Jones. The authorized capital stock of the corporation is $700,000.00, divided into $400,000.00 preferred stock and $300,000.00 common stock, each class of the par value of $100.00 per share. The preferred stock is preferred as to assets; likewise, it is entitled to receive an 8 per cent dividend before any dividends are paid to the common stock, but after the common stock has received an 8 per cent dividend, both classes of stock shall then participate equally in whatever dividends are to be distributed from the surplus.

The following is a Trial Balance drawn from the books of H. B. Jones, as of December 31, 1920, which is assumed to be correct:

Land,	$ 20,000.00	
Buildings,	30,000.00	
Machinery and Equipment,	16,500.00	
Furniture and Fixtures,	2,000.00	
Finished Product,	10,400.00	
Product in Process,	13,800.00	
Materials,	8,000.00	
Supplies and Sundries,	1,000.00	
Accounts Receivable,	23,000.00	
Notes Receivable,	6,000.00	
Mortgage Payable,		$ 12,000.00
Notes Payable,		3,400.00
Accounts Payable,		22,000.00
Reserve for Depreciation of Capital Assets,		45,000.00
Capital,		48,300.00
	$130,700.00	$130,700.00

In the corporate enterprise, Jones is joined by his wife who invests in the company the same amount of capital as Jones gets common stock; likewise, his brother introduces therein $50,000.00. The price the corporation has agreed to pay for the properties taken over is $150,000.00 which is to be paid in stock of the corporation. The two other incorporators accept common stock.

The stock is issued on January 3, 1921, and on January 15, the directors hold a meeting at which time the following is agreed upon, as based upon replacement values:

1. Value of land to be carried at $28,000.00.
2. Value of buildings to be carried at $64,000.00.
3. Value of machinery and equipment to be carried at $18,500.00.
4. Value of furniture and fixtures to be carried at $2,500.00.

   The reserve for depreciation of capital assets as carried in the Trial Balance is to be reduced by the amount of increases shown above except as to land. The balance of the take-over price is to be set up on the books as good-will.

Required: Journal entries to record the above on the books of the Jones Manufacturing Company.

Solution.—An elaborate discussion of this solution is unnecessary, in that the explanation of each entry is deemed sufficient.

Usual Pro-Forma Entry (Omitted)

(1)

Plant and Sundry Assets,	$150,000.00	
To—H. B. Jones, Vendor,		$150,000.00
To record acquisition of sundry properties and assets, subject to certain liabilities and reserves; in general, subject to decision of Board of Directors concerning the valuation of detail items of assets.		

(2)

H. B. Jones, Vendor,	$150,000.00	
To—Capital Stock—Preferred,		$ 48,300.00
Capital Stock—Common,		101,700.00
To record issue of stock to vendor, preferred stock being issued for intrinsic value of properties and assets acquired, namely:		

Book value of assets,	$130,700.00
Less: Reserve,	45,000.00
Balance,	$ 85,700.00
Less: Liabilities,	37,400.00
Net Total—Preferred Stock,	$ 48,300.00
Total, all stock,	$150,000.00
Total, Preferred Stock,	48,300.00
Net Total—Common Stock,	$101,700.00

(3)

Subscribers to Capital Stock—Common,	$151,700.00	
To—Subscriptions to Capital Stock—Common,		$151,700.00
To record subscriptions of wife and brother, as follows:		

Wife,	$101,700.00
Brother,	50,000.00
Total,	$151,700.00

(4)

	Dr.	Cr.
Cash,	$151,700.00	
To—Subscribers to Capital Stock—Common,		$151,700.00
To record cash received on account of subscriptions.		

(5)

	Dr.	Cr.
Subscriptions to Capital Stock—Common,	$151,700.00	
To—Capital Stock—Common,		$151,700.00
To record issue of stock certificates to above subscribers.		

(6)

	Dr.	Cr.
Land,	$ 28,000.00	
Buildings,	64,000.00	
Machinery and Equipment,	18,500.00	
Furniture and Fixtures,	2,500.00	
Good-will,	20,700.00	
Finished Product,	10,400.00	
Product in Process,	13,800.00	
Materials,	8,000.00	
Supplies and Sundries,	1,000.00	
Accounts Receivable,	23,000.00	
Notes Receivable,	6,000.00	
To—Mortgage Payable,		$12,000.00
Notes Payable,		3,400.00
Accounts Payable,		22,000.00
Reserve for Depreciation,		8,500.00
Plant and Sundry Assets,		150,000.00

To record closing account of Plant and Sundry Assets, and set up on the books the individual asset and liability accounts, for net properties acquired and assumed, based upon a valuation arrived at by the Board of Directors on January 15, 1921.

The amount of the good-will is calculated as follows:

Cost of good-will,			$101,700.00
Deduct:			
Application to increase land value,		$ 8,000.00	
Application to increase value of other assets:			
Buildings,	$34,000.00		

Machinery and Equipment,	2,000.00		
Furniture and Fixtures,	500.00	36,500.00	
App. to reduce reserve,		36,500.00	$81,000.00
Balance, net good-will,			$20,700.00

Procedure by Vendor Upon the Sale of the Business of a Sole Trader or of a Partnership to a Corporation.—Thus far in the present chapter, there has been discussed only the procedure of the vendee (the corporation) when either the business of a sole trader or of a partnership has been transferred to a corporation. Since a definite course should be followed by the vendor under each of these conditions, it cannot be amiss to take the time here to present this angle of the case. In this connection, the student should recall to mind the procedure to be followed where the net assets of a sole trader are transferred to a partnership since, by so doing, the present discussion will not be absolutely new and strange.

Where a sale has been made to a corporation, the course to follow, necessarily, will depend somewhat upon how the deal was effected. In general, a formal bill of sale becomes the basis of the arrangement in which are set out:

1. The assets to be transferred.
2. The liabilities to be assumed.
3. The valuations agreed upon.
4. The manner of paying the vendor.

The general possibilities of procedure herein considered may be summarized roughly about as follows:

1. Valuation in take-over:
   - a. The valuation at which the take-over is made differs in respect of the individual assets from that shown on the books of the vendor. Where the assets are transferred at a valuation different from that shown on the vendor's books, a two-way possibility exists:
     - i. The assets are transferred at a valuation greater than the book figures.
     - ii. The assets are transferred at a valuation less than the book figures.

In either event, the first step necessary is to adjust the book figures to the new valuations, and absorb the difference, representing a profit or loss, in the Profit and Loss account; here there is a realized profit or loss which makes the absorption through the Profit and Loss account in order. The further treatment will depend, generally, upon the variation of conditions as indicated below in (2) and (3).

b. The total assets transferred on the basis of a lump sum valuation, including good-will. Hereunder, the transfer will be for a lump sum in excess of the book valuation. The procedure necessary must be varied to a slight degree because such excess cannot be attributed as being attached to any specific asset or assets disposed of. One assumes, naturally, that the vendee has purchased the asset of good-will in addition to the tangible assets under process of sale. Especially is this true in the sale of a going concern. The first step necessary would be to book the excess to be received as a charge to the Good-will account and offset such debit by a credit either to the Profit and Loss account, or to the Capital account or accounts. Following this entry, the procedure will vary as above indicated.

2. Settlement for take over. The manner of booking the settlement separates itself along the following lines:
   a. Old concern considered as liquidated. Hereunder, the vendor's books will be closed by Journal entries debiting the corporation with the sum of all the assets, crediting each asset account,—and debiting each liability account, inclusive of the Capital account or accounts, and crediting the corporation.
   b. Old concern, as an enterprise, considered as accepting the stock in payment for its net assets. This method will show the settlement upon the vendor's books by changing the last entry so that the liabilities outside of the Capital accounts will be charged, and the corporation credited; that a Stock account will be charged for the amount of stock received from the corporation, and a credit to the corporation; that the Capital accounts will be charged, and the Stock account credited.

3. Records in which entries are made. Briefly, the idea hereunder may be described as follows:
   a. Old books of account used by the corporation. When a sole proprietorship or a partnership business is incorporated, and no actual transfer of assets from one enterprise to the other is contemplated, the old books of account may be retained and only certain changes be made therein necessitated by the incorporation. This method of handling is illustrated by the solution to the problem presented at the end of the present section.
   b. New books of account used by the corporation. The use of new books of account presents nothing of difficulty with the result that their consideration will not be commented upon except in connection with illustrative problems. In fact, the solutions to the problems already used were made from the point of view of new books being used.

Problem.—The following simple C. P. A. problem illustrates the changes required in the old records when the business of a sole trader is incorporated, no assets being transferred to a new set of books.

A. J. Andrews has conducted a retail business for three years. His profits have been $7,000.00 for 1913, $8,000.00 for 1914, and $10,000.00 for 1915 before charging any salary for his own services. To obtain the capital needed to purchase the new fixtures necessary in a new store which he proposes to lease, and also to increase his stock of merchandise, he decided to incorporate on December 31, 1915, for $50,000.00 and to sell part of the capital stock.

C. F. Martin agrees to purchase $20,000.00 of the stock at par and to pay for it immediately. It is agreed, also, that in the new corporation Andrews is to be allowed credit for good-will equal to the sum of his profits for the past three years after deducting an annual salary of $4,000.00.

Draft the Journal entries necessary to adapt Andrews' books for use as the books of the corporation, and prepare a Balance Sheet showing the condition upon completion.

Andrews presents the following list of assets and liabilities, which Martin accepts as correct:

Assets: Furniture and Fixtures, book value, $6,000.00, worth $4,000.00
Merchandise, market value, $20,000.00, cost $18,000.00
Accounts Receivable, book value, $6,500.00, collectible, $6,000.00
Cash, $400.00

Liabilities: Trade Creditors, $8,900.00
Bank Loans, $1,500.00

Solution.—The first step is to book the good-will item, its amount being calculated as under:

Profits:	
1913,	$ 7,000.00
1914,	8,000.00
1915,	10,000.00
Total,	$25,000.00
Three years' salary @ $4,000.00	12,000.00
Good-will,	$13,000.00

The entry for this good-will would be:

Good-will,	$13,000.00	
To—A. J. Andrews—Capital,		$13,000.00

Next, the corporate stock entries may be recorded:

Unissued Capital Stock,		$50,000.00	
To—Capital Stock Authorized,			$50,000.00
To record authorized issue.			
Subscribers to Capital Stock,		$50,000.00	
To—Subscriptions to Capital stock,			$50,000.00
To record subscriptions as follows:			
C. F. Martin,	$20,000.00		
A. J. Andrews,	30,000.00		
Total	$50,000.00		

At this point it will be necessary to determine how close the stock taken by Andrews agrees with the net amount in his Capital account, on the valuation basis used:

Furniture and fixtures, booked at	$6,000.00	
Less: Reduction agreed upon,	2,000.00	$ 4,000.00
Merchandise (at cost),		18,000.00
Accounts receivable,	$6,500.00	
Less: Bad debts (uncollectible),	500.00	6,000.00
Cash,		400.00
Total Assets,		$28,400.00
Trade creditors,	$8,900.00	
Bank loans,	1,500.00	10,400.00
Net Assets Invested,		$18,000.00
Good-will (entry No. 1),		13,000.00
Net Present Balance in Capital Account,		$31,000.00
Stock taken (see subscription entry),		30,000.00
Balance to Remain in Capital Account,		$ 1,000.00

Upon the basis of the list of assets and liabilities which C. F. Martin agrees to accept as correct, it is necessary to reduce the Capital account of A. J. Andrews in accord therewith:

A. J. Andrews—Capital,	$2,500.00	
To—Furniture and Fixtures,		$2,000.00
Accounts Receivable,		500.00

When C. F. Martin pays in his cash, the entry will be:

Cash,	$20,000.00	
To—Subscribers to Capital Stock,		$20,000.00

Likewise, when A. J. Andrews contribution is booked, the entry to cover is as under:

A. J. Andrews—Capital,	$30,000.00	
To—Subscribers to Capital Stock,		$30,000 00

And the last entry necessary, will be:

Subscriptions to Capital Stock,	$50,000.00	
To—Unissued Capital Stock,		$50,000.00

If desired, in the above solution, one might short cut the entries so as to eliminate the use of the Subscription and Subscribers accounts.

The final step in the solution will be to prepare the opening Balance Sheet of the corporation. This follows:

RETAIL CORPORATION

BALANCE SHEET

as at....................

Assets		
Current Assets:		
Cash		$20,400.00
Accounts Receivable,		6,000.00
Merchandise (cost),		18,000.00
Total Current Assets,		$44,400.00
Furniture and Fixtures,		4,000.00
Good-will,		13,000.00
		$61,400.00
Liabilities		
Current Liabilities:		
Bank Loans,		$ 1,500.00
Accounts Payable,		8,900.00
A. J. Andrews:		
Net Assets Invested,	$18,000.00	
Good-will,	13,000.00	
	$31,000.00	
Stock Issued,	30,000.00	1,000.00
Total Current Liabilities,		$11,400.00
Capital Stock,		50,000.00
		$61,400.00

Transfer of the Business of a Partnership to a Corporation.—To illustrate further the transfer of a business to a corporation and, likewise, to show the closing entries necessary upon the books of the vendor concern, the following simple problem and solution are submitted:

Problem.—Smith, Jones & Company, a partnership conducting a toy manufacturing business, and sharing profits in proportion to investments, decides to sell out to the Sterling Toy Company, which the partners have incorporated with an authorized capital stock of $175,000.00, all of which stock is to be issued to the three partners in exchange for their respective interests in the business as covered below. The contract of sale refers only to the fixed assets and to the working and trading assets, since the partnership has agreed to liquidate its own liabilities. The following Balance Sheet was prepared as of September 30, 1921, on the basis of which the corporation is to succeed to the business as of October 1, 1921:

Cash,	$ 11,000.00	
Notes Receivable,	7,000.00	
Accounts Receivable,	40,000.00	
Finished Goods,	6,000.00	
Goods in Process,	20,000.00	
Materials and Supplies,	25,000.00	
Furniture and Fixtures,	4,000.00	
Small Tools,	6,500.00	
Machinery and Equipment,	40,000.00	
Land and Building,	46,700.00	
Notes Payable,		$ 10,000.00
Accounts Payable,		45,000.00
Wages Accrued,		1,200.00
Smith—Capital,		60,000.00
Jones—Capital,		60,000.00
Edgar—Capital,		30,000.00
	$206,200.00	$206,200.00

Required:

1. Closing entries for the partnership
2. Opening entries for the corporation

Solution.—The entries required to close the partnership books are as follows:

(1)

Good-will,	$ 26,800.00	
To—Smith—Capital,		$ 10,720.00
Jones—Capital,		10,720,00
Edgar—Capital,		5,360.00
To raise the value of the good-will of the partnership at the time of its sale to the Sterling Toy Company, and to distribute same to the partners in proportions to which they are entitled.		

(2)

The Sterling Toy Company,	$175,000.00	
To—Good-will,		$ 26,800.00
Land and Building,		46,700.00

Account	Debit	Credit
Machinery and Equipment,		40,000.00
Small Tools,		6,500.00
Furniture and Fixtures,		4,000.00
Materials and Supplies,		25,000.00
Goods in Process,		20,000.00
Finished Goods,		6,000.00
To close, to the debit of the vendee company, the assets sold thereto, as per bill of sale on file.		
(3)		
Cash,	$ 47,000.00	
To—Notes Receivable,		$ 7,000.00
Accounts Receivable,		40,000.00
To record collection of above assets.		
(4)		
Notes Payable,	$ 10,000.00	
Accounts Payable	45,000.00	
Wages Accrued,	1,200.00	
To—Cash,		$ 56,200.00
To record settlement of above liabilities.		
(5)		
Capital Stock (The Sterling Toy Company),	$175,000.00	
To—The Sterling Toy Company,		$175,000.00
To bring onto the books the 1,750 shares of stock received from the Sterling Toy Company in exchange for the business of the partnership.		
(6)		
Smith—Capital,	$ 70,720.00	
Jones—Capital,	70,720.00	
Edgar—Capital,	35,360.00	
To—Capital Stock (The Sterling Toy Company),		$175,000.00
Cash,		1,800.00
To close the capital accounts of the partners, thus closing all the accounts on the partnership books, they having received stock from the vendee corporation, and cash, as their interests may appear, as follows:		

	Stock	Cash	Total
Smith,	$ 70,000.00	$ 720.00	$70,720.00
Jones,	70,000.00	720.00	70,720.00
Edgar,	35,000.00	360.00	35,360.00
Total,	$175,000.00	$1,800.00	$176,800.00

The entries to open the corporation books are as follows:

(1)

Pro-Forma Entry

The Sterling Toy Company, A Corporation

Incorporated Under the Laws of the State of ....

With an Authorized Capital of

One Hundred Seventy-Five Thousand Dollars ($175,000.00)

Divided into

Seventeen Hundred and Fifty Shares (1,750)

of the Par Value of

One Hundred Dollars ($100.00) per Share

With Express and Implied Power to Conduct

A Manufacturing Business

(2)

		Dr.	Cr.
Plant and Sundry Assets,		$175,000.00	
To—Smith, Jones & Company, Vendors,			$175,000.00
To record purchase of the following assets, as per bill of sale on file·			
Fixed Assets:			
Land and Building,	$ 46,700.00		
Machinery and Equipment,	40,000.00		
Small Tools,	6,500.00		
Furniture and Fixtures,	4,000.00		
	$ 97,200.00		
Working and Trading Assets:			
Materials and Supplies,	$ 25,000.00		
Goods in Process,	20,000.00		
Finished Goods,	6,000.00		
	$ 51,000.00		
Total Assets,	$148,200.00		

The values shown above are as they appear upon the Balance Sheet of the vendor firm; the account of Plant and Sundry Assets will remain open as above shown until the passage of a resolution by the Board of Directors valuing the assets,

and at the same time stating the nature of the excess purchase price over the book value.

(3)

Smith, Jones & Company, Vendors,	$175,000.00	
To—Capital Stock,		$175,000.00
To record settlement of purchase price		

No Par Value Capital Stock.—Certain states, among them New York, permit corporations to organize with shares of stock of no specified par value. Considerable may be said in favor of issuing such stock, and it is believed that in the course of time nearly all corporations will be organized under this principle. Each share of stock represents an aliquot part or interest in the corporate assets, the value of each such share being dependent upon the actual value of the assets rather than upon some fictitious or visionary value; in ordinary stock, the par value necessarily has no relation whatever to actual value, the par value being merely an arbitrary amount which often proves to be an easy medium for carrying out fraudulent schemes.

The accounting for this class of stock really is a simple matter. Basically, there is no need of doing otherwise than to provide for showing in the Capital Stock account the exact value or selling price of the stock at the time of issuance. No Unissued Capital Stock account, and no accounts with premiums or discounts need be used.

The Capital Stock account should reflect the value of whatever the no par value stock was issued for,—whether for cash, property, or services. Next, if any change should take place in such values during any period of time, the fluctuations thereof should be absorbed and be indicated in the proper reserve accounts and in the Surplus account; the Surplus account, in other words, at all times should record undistributed net earnings.

In using this class of stock, no need exists for using a Surplus account to represent paid in surplus, which so often is made use of when par value stock is the class used. The effect of disposing of shares at different values is merely to raise or lower the value of each unit or share already outstanding so that all are on a parity. By such act, each share represents a definite

portion or aliquot part of the entire capital excluding, however, whatever amount of capital may be allocated to some other class of stock due to the existence of some preference in relation thereto.

But it should be recognized at present, in connection with placing a value upon no par value stock that, where legally possible, an expedient is used of placing a value thereon which in amount is less than the value received therefor. In New York, for example, this stock cannot be issued for less than $5.00 a share, and the capital value as stated in the articles of incorporation is the minimum below which such value cannot be reduced, as by dividend payments. Hence, by taking advantage of the law, a $5.00 value often is placed upon each share regardless of what actually was received, so that dividends may be paid out of capital if the desire exists to do so.

The difference between the amount of capital paid in and the small arbitrary value booked against the no par value capital stock will be carried as a special surplus, say, Capital Surplus. However, it would seem that if no par value capital stock is booked at the original value placed thereon, as is capital stock having a par value, which may be done, the one Surplus account would be sufficient even though both kinds of stock are in existence. As concerns the surplus, no real difference would seem to exist between par value stock and no par value stock.

Donated treasury stock will be a rarity in that no reasonable object will be secured by any act of donation. The donation of par value stock too often represents merely an expedient to get around the legal requirement that stock shall not be issued at a discount; the use of no par value stock was designed, from one point of view, to prevent such a practice. If, however, occasion should arise under which such stock was donated to the treasury, the donation may be booked in the Treasury Stock account by number of shares only, and no par value be shown therefor; the number of shares so carried then would be deducted from the total shown as issued in the Capital Stock account, so that, on the Balance Sheet, there would be shown the actual number issued and outstanding. If, however, the company purchased some of this stock and placed it in the treasury, the Treasury Stock account should show the purchase cost thereof as

well as the number of shares involved. And when the Balance Sheet is prepared, both the number of shares and their value should be deducted from the total shares outstanding originally.

Problem.—Assume the Ajax Manufacturing Corporation is to be formed under the laws of the State of New York, with a preferred capital stock issue of $100,000.00, divided into 1,000 shares of a par value of $100.00 each. Likewise, there are to be issued 500 shares of common capital stock having no par value. Present the opening entries in Journal form.

Solution.—At the time of organizing this company, the opening entry will cover only the preferred capital stock, but a portion of the formal heading should refer to the fact that "500 shares of common capital stock with no par value" have been authorized. Since the actual entry required hereunder already has been shown previously in connection with another problem, it is omitted here.

When the preferred stock is sold, the proper entries should be booked. Likewise, when some of the no par value common capital stock is sold, an entry is necessary, about as follows:

Subscribers (or Cash)	$ ¢	
To—Capital Stock—Common		$ ¢

And this common stock should be recorded so that the value at which the stock was issued will be shown, whether for property, cash, or services. Also, since the account with Capital Stock—Common will not reflect the number of shares outstanding, a notation should be made in the account itself of the number of shares issued.

Conclusion.—When one views corporate enterprises from the angle of possible stock investments he finds, in general, that corporations may be classed as:

1. Those with a small capital stock.
2. Those with a large capital stock.

The former are the so-called "close" corporations, the stock therein being held by a relatively small number of persons; the latter comprise those companies in which the stock ownership is scattered widely, and the shares of which are handled upon the various stock exchanges.

If a person has a small trading or manufacturing business which he wishes to expand, or to which he wishes to attach the benefits of a corporate organization (as limited liability), but still retain therein a controlling ownership or interest, he will commonly form a corporation, the stockholders of which will consist of himself and certain relatives or close business associates. Such a company is the common type of close corporation met with in accounting work.

In a close corporation, a stockholder who does not own or control a majority of the shares of capital stock is always at a disadvantage. Those in control can elect a management subservient to their mandates and, by so doing, keep the minority stockholders from any active connection with the company; likewise, they may refuse to declare dividends on the ground that the earnings must be put back into developing the enterprise. Again, by voting large salaries to the corporate officers, they may show a deficit at the end of the year rather than a profit out of which dividends can be declared.

By keeping the minority stockholders ignorant of the actual condition of affairs, and by depriving them in divers ways of sharing in the management of the company, and of securing a periodical return upon the investment made, those in control may so discourage the minority that the latter may attempt to dispose of their holdings. And since these conditions tend to create a limited market in which such holdings may be disposed of profitably, such a disposal may prove to be impossible or, if possible, only at a marked sacrifice. Therefore, although the close corporation idea may appeal to one who desires to control corporate affairs, the one who expects only to have a minority interest therein should be extremely careful before making his investment. If the controlling interest does not play fair,—though not guilty of actual fraud or gross mismanagement, the minority shareholder, even without wanting to have anything to do in the management of the company, may be so "manhandled" that his investment will, at best, be a decidedly questionable one.

To get around this possibility of not interesting a possible minority shareholder in a contemplated corporate enterprise, the incorporators may decide to place on the market more than one class of stock, as preferred and common. Since the preferred stockholder, ordinarily, is assured of his dividend, he may decide to come in. Again, the hesitancy may be removed by providing for cumulative voting; this has been discussed above.

The large industrial and public utility companies are found in the second class. Their capital stock is divided into a great number of shares and the stockholders are continually changing. The stocks of these companies are dealt in upon the various

exchanges and, under ordinary conditions, they are readily marketable.

In these corporations, control through stock ownership is rare. Ordinarily, the management controls, and the management will remain in control only so long as it remains efficient. As soon as the management becomes inefficient, the stockholder, voting at the annual meeting, either in person or by proxy, even though it may on the surface appear as if his vote, one for each share of stock held, was insignificant as compared to all the votes possible of being cast, may be a decidedly important factor. Ordinarily, at least, his vote will have more weight than if he were a minority shareholder in a small company.

CHAPTER VI

INVESTMENTS: STOCKS, BONDS AND MORTGAGES

Introduction.—The major topic of the present chapter relates to certain accounting principles which an investor, individual or company, should find of value. Investment accounting and the accountancy of investment are not one and the same. The latter is a term of much narrower and technical significance than the former and is but slightly made use of herein in that this is not assumed to be a text upon mathematics.

Investments in General.—At this moment, the bookkeeping necessary for the investment of a sole trader in his business, for the investments of partners in a firm, and for stockholders in a corporation, should be familiar to the student, in that the procedure in relation thereto often is referred to as contemplating the opening entries. This angle of the subject is of no concern in the present chapter except, perhaps, by way of comparison.

Profit is the general object for which a business organization functions, regardless of its particular line. And to carry out an undertaking, capital is necessary which, in amount, should be adequate. The form of this capital will vary, comprising the assets necessary for the purposes in mind. In the original instance, some will be land, some buildings, some equipment, and some cash; later, there usually will be, also, notes and accounts receivable, as well as materials and supplies and merchandise.

As to each one of these items, the capital therein invested should be proportionate to needs. Cash should not be tied up to the end that current liabilities cannot readily be liquidated. If profits be made, it is presumed they will be converted into cash so that dividends may be paid. If the profits accumulated or acquired exceed a fair dividend return on invested capital, a surplus is created, consisting of undivided profits. Finally, if the

fund of cash on hand grows beyond the requirements of current purposes and dividends, this excess cash may be converted into different forms of assets known generally as "Investments."

These investments, for purposes of discussion, may be divided into two general groupings:

1. Investments other than securities.
   a. Goods and commodities.
   b. Real estate investments—land or buildings.
2. Securities.
   a. Stock.
   b. Bonds.
      i. Conditional—bond and mortgage.
      ii. Single—usual corporate bonds.

Any income secured herefrom is considered as of a secondary nature in that it is not incident to the general operation purposes. Excluding item 1a, above, concerning which but little will be said, this income will consist of: rent, dividends, and interest.

Investments Other Than Securities.—Two classes of investments hereunder considered are discussed separately:

1. Goods and commodities. Some persons may feel this type of investment rather far fetched, but it contemplates merely:
   a. The purchase of goods and commodities upon a favorable market to be held for future use, or
   b. The purchase of goods and commodities upon a favorable market to be held for future sale should the market advance.

At best, they are temporary in character. Since they have been discussed fully in connection with elementary phases of accounting, and involve nothing further worthy of comment, additional discussion seems unnecessary.

2. Land or buildings, collectively known as real estate. These investments arise in one of two ways:
   a. By direct purchase.
   b. By foreclosure based upon investments in mortgages or bonds. The purchaser, in general, secures title to real property only as good as that which the seller had in the original instance (the former owner). Before title is passed, the latter should be free from incum-

brances, and the vendor should see to this before the sale is consummated. But in the absence of fraud on the part of the seller, the covenants of the deed of sale regulate the rights and liabilities as between vendor and vendee. A purchase may be made subject to certain incumbrances, which latter include such items as: mortgages, mortgage interest, taxes, assessments, mechanics' and landlords' liens, judgments, attachments, pending litigation, etc.; some of these to be binding upon third persons must be recorded and others will not entail this requirement. The prospective purchaser should ascertain what the incumbrances are, if any; ignorance thereof is no defense should a controversy arise later thereon.

Certain of the variations encountered in relation to the above may be summarized about as follows:

1. The buyer may purchase *ex* all incumberances. Here the vendor must take care of them.
2. The buyer may assume all lien liabilities.

In any given case, the statutes must be consulted carefully to determine whether (1) or (2) above may be carried out in its entirety. For example, the owner as of a day certain may be held liable, in some states, for the year's taxes. A vendor's creditor cannot look to the vendee for payment unless the latter has bound himself by written agreement to make such payment.

Accounting for Real Estate Investments.—The procedure hereunder follows a two-way possibility:

1. If purchaser assumes existing liens. His books should show a purchase value consisting of two elements:
   a. Cash paid.
   b. Liabilities assumed.
      i. Existing liens assumed.
      ii. Purchase money mortgage.
2. If the purchaser does not assume existing liens, but leaves the vendor to take care of them. His books should show a purchase value consisting of either one or two elements:
   a. Cash, or
   b. Cash plus a purchase money mortgage.

Property may be acquired in either of two ways, and the cost thereof, as to elements included, is dependent thereon:

1. By purchase in the open market. This point should have been covered sufficiently in the student's earlier work to require no further comment at this time.
2. By result of foreclosure proceedings. This would permit as inclusion in purchase cost such items as advances made by mortgagee to mortgagor, and amounts paid out for taxes, insurance, repairs, and improvements prior to default of mortgagor.

At times, properties may be booked at market values rather than cost. If so, the market value fluctuations must be adjusted periodically, by debiting or crediting the asset account and crediting or debiting the Profit and Loss account.

Investment items may be carried upon the General Ledger in but one account called Investments. Again, if the investments are of more than one class, separate accounts may be carried upon the General Ledger for each such class. Again, especially in large organizations, the investments may be sufficiently numerous to warrant the use of subsidiary records each such controlled upon the General Ledger by the proper controlling account; and each such subsidiary record should provide for all the information worth-while pertaining to the assets. In the present connection, if one has a number of pieces of investment property, it might be highly desirable to give each such piece a separate account upon a subsidiary Ledger controlled upon the General Ledger in the usual way. A special form of Ledger ruling may be desirable, also. If so, the heading of each account would provide space for a number of notations concerning the property therein booked, as: name, location, date acquired, and how acquired. The body of each account may be divided into three major portions: investment, incumbrances, and income; and each such section would be columned to show: date, particulars, debits, credits, and balance.

Bond Defined.—A bond is a written promise under seal to pay a definite sum of money at a stated future time. It is secured usually by a formal trust deed mortgaging the real estate held by the issuing company. Likewise, an agreement exists to pay interest at certain periods.

Bonds are issued in varying denominations, $100.00, $500.00, $1,000.00, $5,000.00, $10,000.00, and at times even larger. Some-

times, for popular subscription, bonds are issued at a face value less than $100.00. In no way does a bond partake of the nature of stock. A bond is a direct corporate obligation which may or may not be given certain other rights incidental to those usually accorded a bond, as:

1. Right to participation in corporate profits.
2. Voting rights, unless the statutes forbid.

Classification of Bonds.—A corporation has its choice of issuing any one of a number of various kinds of bonds. It is impossible herein to discuss thoroughly each and every kind; a book on corporate finance should be studied in this connection. All bonds may be classified under four possible headings and, when considering the name of a specific bond, care should be taken to allocate properly such name against the correct heading so that such title may be the better understood. On the basis of a representative list of bonds this four-way classification may be as follows:

1. As to manner of payment:
    a. Coupon bonds.
    b. Registered bonds.
        i. Registered as to principal only.
        ii. Registered as to both principal and interest.
2. As to security:
    a. Mortgage bonds.
    b. Car or equipment trust certificates.
    c. Collateral trust bonds.
    d. Prior lien bonds.
    e. Debenture bonds.
    f. Income bonds.
    g. Receivers' certificates.
    h. Bottomry and respondentia bonds.
3. As to purposes:
    a. Refunding bonds.
    b. Consolidated bonds.
    c. Adjustment bonds.
4. As to conditions of redemption:
    a. Gold bonds.
    b. Convertible bonds.

Upon inspection, it will be noticed that the above grouping depends upon a number of things, as:

1. Nature of security.
2. Purpose of issue.
3. Conditions of payment of interest and principal.

From the standpoint of an accountant, the distinction between registered and coupon bonds must be understood clearly. Therefore, a considerable discussion of each of these types is shown below. Certain of the other types are discussed in a brief manner merely to give the student an inkling of the variations encountered in bond issues; the details concerning them are of considerably more interest to an investor than to an accountant.

Bond and Mortgage.—Another bond classification is to classify bonds as follows:

1. Single. This is one under which the obligor agrees to pay a certain sum of money to some one at a determinable future date. The usual corporate bonds are of this type.
2. Conditional. This is one under which the obligation becomes void when the obligor performs some act which, otherwise, would remain in force. The simplest way to secure a debt by mortgage is to pledge property to secure the payment of a promissory note, which has been made out in due and usual form. A mortgage, representing a conditional transfer of certain property, as real estate, is made out in favor of the payee named in the note who, in case the maker of the note does not fulfill the obligations he has undertaken, will commence proceedings to have the property sold in accord with both the statutes and the terms of the mortgage to the end that the proceeds from such sale may be applied toward the payment of the principal and interest due upon the note; any residual sales amount will be turned over to the former owner of the property covered by the pledge. In New York, and in some other states, especially as concerns real estate loans, it is customary to use a bond and mortgage rather than a mere note secured by a mortgage; such a bond may be classified as "conditional" in contradistinction to "single". The amount of the bond, as a rule, is for a sum twice the size of the principal sum to be paid. Formerly, the full amount of the bond could be

collected, but now, at least in New York, nothing can be collected beyond the actual amount due for principal, interest, and costs, in case the obligor fails to meet his obligation. The property which is security for the bond will be sold subject to provisions as indicated already above. Naturally, this method of raising money is of limited application; where money must be raised from a number of creditors, to be held for a number of years, it is unsatisfactory in that provisions are not made to make trading and transfer convenient. Hence, the form of bond obligation, already considered, is preferable.

Loans secured by bonds and mortgages require no difficult accounting, but provision should be made to cover all the possibilities that may arise. As will be noticed later, in connection with the usual types of bonds, no question arises here as to par, premium, and discount. The records should show: date of the bond, date of maturity, amount or face of the bond, interest rate, and dates on which interest is payable.

If a person classifies securities as: (1) stocks, and (2) bonds, a short term note must be considered as a bond. Then, likewise, it would seem in order to consider a note secured by a mortgage as a bond. The ordinary term of Mortgages Receivable, therefore, would fall within the present grouping.

Where a mortgage is taken as security for a loan, great care must be observed in keeping a complete detail record thereof; a subsidiary Ledger may be necessary therefor, if transactions are numerous. And therein, for each mortgage, the following points should be known and set out: name of mortgagor, amount of loan, date mortgage given, loan maturity date, location and general description of property mortgaged, state and county, book and page in which mortgage recorded, interest rate, interest dates, fire insurance carried on buildings—number of policy, term amount, and date of expiration, insurance company, name of person paying premium; appraised land values and building values; amount of instalment payments on loan principal; amount of interest accrued, due and paid. Such a loan should not be made for more than 80 per cent of the appraised value of the pledged property; generally, it will be less. Interest accrues from the date on which the money is paid over to the

mortgagor, and will be at the legal rate if no other rate is mentioned.

Registered Bonds.—Registered bonds have a certain distinctive feature in that their number, denomination, payee, payee's address, etc., are registered in the name of the payee on the books in the office of the issuing corporation. Transfer of ownership can be made only by executing a power of attorney upon the back of the bond or bonds in question and by entry of such transfer upon the Bond Register in the office of the issuing company.

The owner of a registered bond is secure in his possession since title does not pass to the holder; he does not have to remember even the interest periods, and he runs no chance of loss due to losing coupons. Even should he lose the bond, or should it be destroyed, the registered owner may secure a new one by proving his loss, and by giving the issuing corporation a bond to indemnify it in case a bona fide holder of the supposed lost bond puts in an appearance and holds the company to the terms of their agreement. The cost of giving such a bond of indemnity is slight.

Registered bonds are printed with stubs and are bound together in a manner similar to that of a Check Book or Stock Certificate Book. When a bond is issued, the stub is filled out with the name of the payee, etc. An account is opened with each bond holder in a Bond Ledger or Register and information is entered therein as suggested in the beginning of the present section.

When a transfer is made, the old bond is cancelled and pasted back on its stub from which first detached. Then an entry is made in the account of the surrendering holder, and one in the account of the new bond holder. If the issue is large, and the transfers many, it is customary to make use of a Transfer Journal to expedite the labor involved in making transfers.

So far as the general books are concerned the issuing company merely has to debit the Cash account for proceeds received and credit a Bond account headed to indicate the particular issue involved.

When interest falls due on these bonds, checks therefor are mailed to the persons whose names and addresses appear upon

the Bond Register as of the date upon which the books are closed against further transfers.

When interest is paid, which must be done periodically, the issuing company first will prepare a list of the bondholders from the Bond Ledger, and the amount of interest each is to receive. The total thereof is then proved against the bonds outstanding as shown on the General Ledger. Subsequently, the checks are drawn in favor of the persons whose names and addresses appear upon the Bond Register,—those whose names are shown upon the interest list.

Coupon Bonds.—Coupon bonds are negotiable instruments, title passing to bearer by delivery, having a number of interest coupons (promissory notes or contracts payable to bearer) attached to them, one such coupon being payable quarterly, semi-annually, or annually, and becoming at such date a definite liability of the issuing corporation. The number of coupons attached to such a bond depends upon the number of years the bond runs and the number of interest periods within the full term.

Each coupon should be detached when due, and then be presented for payment, payment usually being made through the bank of the investor who holds the bond. The investor usually deposits them in his bank account, and the bank accepts them for collection. Since coupon bonds are negotiable, the holder of an interest coupon is entitled to have the interest paid to him when he presents the coupon for payment, provided it is due. A coupon does not bear interest after due date. Since these bonds usually are payable to bearer, and since the coupons are payable to bearer, title passing by delivery, the investing public considers such bonds decidedly convenient for speculative purposes.

The coupons are numbered in the order of their maturity. As coupons are paid, the issuing corporation collects and cancels them. After cancellation, the coupons are pasted into a specially prepared coupon book being kept therein as evidence that the interest has been paid. Upon this record, the coupons may be arranged in the order of their numbers,—Coupon No. 1, from all bonds being together, then Coupon No. 2, and so on.

Coupon bonds, at times, may contain a clause providing for

their conversion into registered bonds. When a coupon bond is exchanged for a registered bond, all interest coupons past due must be detached and cancelled. Likewise, all coupons that are to mature subsequently must be attached to the bond when the latter is surrendered.

The form of a coupon bond does not differ materially from that of a registered bond. It would have a different name and recite that the interest is payable upon presentation of the attached coupons as they mature.

If a company has both forms of bonds outstanding, registered and coupon, care must be observed to preserve an accurate record thereof. As concerns the registered obligations, the record therefor was described in the last section; this will be entirely satisfactory. But as regards the coupon bonds, the record of ownership cannot be made entirely in a satisfactory manner, due to the fact already indicated that ownership may be transferred without formality of any kind. Therefore, in the accounts, the outstanding amount of coupon bonds will be shown in one amount. It might be advisable, however, to carry upon the Registered Bond Ledger an account to show the total outstanding amount of coupon bonds.

A coupon-bearer bond may have on its back a printed space in which the owner may indicate his ownership in writing. If filled out properly, this bond then may be registered upon the books of the company so that subsequently no transfer thereof will be possible until the registered owner has made a proper assignment. In this case, registration will not apply to the interest coupons, the latter being payable to bearer as before. Often a bond issue may be either coupon or registered at the option of the purchasers.

Mortgage Bonds.—Mortgage bonds are secured by a mortgage on a company's property. Against such property, usually, they are first mortgage liens taking precedence over every other claim in every case except taxes and receivers' certificates where the latter are in use. First mortgage obligations must be satisfied before second or subsequent mortgages are satisfied. A second mortgage issue may be made where the first issue is small as compared to the value of the property.

Mortgage bonds are based upon a trust deed mortgaging the

specific property, the trustee being either an individual or a trust company, usually the latter.

Collateral Trust Bonds.—These are used mostly by railroads. Many railroads own large blocks of stocks and bonds of subsidiary companies or proprietary lines. These securities are used as collateral by the main company, being placed in the hands of a trustee to form the security of the bonds. A collateral trust agreement is executed and delivered with these securities to the trustee to secure the payment of the bonds.

Usually, the securities given are in excess of the bond issue. The income from these securities is used by the trustee, first, to pay the interest upon the bonds and, second, to become part of the sinking fund set up for their redemption.

If the collateral consists of the stock of subsidiary companies, the bonds are no better than the stock they represent. If the collateral consists of notes receivable taken for loans made, these being secured by real estate mortgages, the mortgages are given to the trustee and bonds of convenient form are issued against them; the effect here is to separate a large mortgage into small parts to enable a small investor to place his small funds to good use, as a revenue producer.

Miscellaneous Classes of Bonds.—Some of the classes of bonds not mentioned above are explained briefly hereunder:

1. Equipment bonds. These are secured by a mortgage upon a corporation's equipment. They are peculiar to railroads, in which case they are secured by a mortgage on the rolling stock.
2. Car trust certificates. These are a peculiar type of bond used by railroads to pay for their equipment, constituting a first lien on locomotives, passenger and freight cars. They are issued to an amount equal to 80 per cent of the cost of the equipment and, usually, they are in serial form, one series falling due each year. Their use permits the railroad to pay for its equipment on the instalment plan. The title to the equipment remains in the holders of the certificates until the last certificate is paid; this means that the security increases each year in the same ratio as the company's equity. Car trust certificates carry a high rate of interest, are readily marketable but, being much in demand by large

investors, seldom reach the regular market. They may have coupons attached to them.

3. Receivers' certificates. When a railroad goes into receivership, its affairs practically are in control of the Court. In order to meet emergency or maintenance expenditures, the Court may authorize the issuance of receivers' certificates. They are an extraordinary means made use of to protect creditors and to prevent unnecessary loss or waste of assets. Such certificates have a priority over first mortgage bonds and over all other claims.
4. Prior lien bonds. These have a prior lien upon all the assets of a corporation. Receivers' certificates are an example of prior lien bonds.
5. Adjustment bonds. Sometimes, when a railroad is in the hands of a receiver, the other bondholders may be forced to make a settlement; this leads to an issue of what are known as adjustment bonds.
6. Consolidated mortgage bonds. If a corporation has too many outstanding bond issues and business becomes bad, it may not be able to pay all the interest out of the income. When such is the case, some sort of a reorganization will be necessary for purposes of safety. Frequently, when this happens, the various outstanding bond issues are consolidated into one issue which carries a lower rate of interest. The bondholders accept the new bonds in exchange for the old, upon some agreed basis, because this is perhaps the only way out of a bad situation. Again, these bonds may be issued to raise new capital, to unify outstanding issues, or to retire certain outstanding issues, without the reorganization element entering into consideration.
7. Refunding bonds. If a sinking fund (see discussion in later chapter) proves inadequate for redeeming maturing bonds, a new issue may be financed to fund the old outstanding issue. Such new issue would be classed as refunding bonds. The consolidated mortgage bonds above mentioned fall within this group.
8. Debenture bonds. This class of bonds has two meanings depending upon the type of the issuing corporation:

a. Debenture bonds of financial institutions. These bonds pledge first mortgages owned by the company which issues the instruments of credit.

b. Debenture bonds of railroads, and the ordinary debenture. These bonds are not secured by anything, being nothing more than a formal acknowledgment of a debt, under seal. Since they carry no special pledge of corporate property to secure them, they may be considered as formal unsecured notes (promissory) carrying coupons to assist in the payment of interest. They constitute a charge against a corporation's general assets, not against any particular class of assets. As concerns the interest payable thereunder, they present the same general characteristics as income bonds.

In England it seems that all bonds are called debentures.

9. Income bonds. These bonds partake of the nature of both preferred stock and debenture bonds in that they possess characteristics of both. They are not necessarily issued upon the security of any tangible property but depend for payment usually upon the net income of the corporation both as to principal and as to interest. It may be, however, that the principal sum will be secured by a pledge of specific property, or by a preference claim against certain corporate property. Interest is payable always only out of net income, and only after all other fixed charges have been paid; in this they resemble preferred stock. Likewise, as to interest, they may be either cumulative or non-cumulative; in this, they resemble preferred stock. If non-cumulative, the coupons for any one year cannot be cashed when sufficient net income has not been earned wherewith to pay them. Income bonds, in the matter of security, resemble the ordinary debenture. They differ therefrom in that they constitute a first lien against profits and no dividends can be paid until they have been taken care of.

10. Deferred bonds. These are somewhat in the nature of an indefinite or perpetual loan, which may or may not be redeemed at face value. The payment of interest may be contingent upon the happening of some event; or the interest may be paid at a graduated rate up to a certain point

which, when reached, means they must be converted into active bonds.

11. Bottomry and respondentia bonds. These two classes are peculiar to shipping. A bottomry bond is a conveyance under which the owner or the master of a ship pledges his ship as security for some obligation. If the ship should be lost, the bondholder loses his security. A respondentia bond is a conveyance under which the cargo of a ship is pledged as security for some obligation.
12. Gold bonds. The principal and interest of these bonds are payable in gold coin of equal weight and fineness with the present coinage, or its equivalent. When bonds are classified according to the exchange medium in which redeemable, they would be grouped as gold bonds, silver bonds, and currency bonds.
13. Governmental bonds. The usual division of these bonds would be:
    a. U. S. Government bonds. These are issued by the Federal Government under authority of Congress for various purposes such as carrying on war, replenishing a depleted treasury, etc. They are issued on the credit of the Government.
    b. State bonds. These bonds are issued by a State for public improvements.
    c. Municipal bonds. These are issued by cities for various purposes such as the making of public improvements, purchasing a public utility enterprise, etc. Although they are considered, as a rule, to be a good investment, the issue under a purchase contemplation should be scrutinized most carefully; if any irregularity has crept into carrying out of the statutory regulations thereon, the issue will be invalid.

In contradistinction to government bonds, other bonds may be termed as "commercial."

Loans Secured by Collateral.—Loans secured by collateral may be separated as follows:

1. Time loans. A time loan is made for a definite period of time; it cannot be liquidated, i. e., repaid, until maturity

unless the lender agrees thereto either for, or not for, a consideration.

2. Call loans. A call loan is not made for a definite period of time; it may be repaid at any time according to the wish of either the lender or the borrower.

The collateral pledged as security for these loans may be securities, or almost anything else. In any event, the pledge will have a market value higher than the amount of the loan, the excess depending upon the wishes of the lender. If the market value of the collateral drops so that the excess thereof over the amount of the loan becomes less than the value as on the day the loan was negotiated, new security may be demanded to cover the existing difference. The collateral pledged may be changed at any time by the borrower provided the new collateral is as acceptable to the lender as was the original. If the borrower defaults, the collateral held by the lender may be sold, and the sales proceeds applied to the extinguishment of the debt; any excess remaining after such application must be turned over to the borrower, the former owner of the collateral.

The accounting for loans secured by collateral, whether time loans or call loans revolves around the method of recording the pledged collateral and of showing in the same record in connection therewith the amount of the loan.

In this connection a card record may prove entirely satisfactory, one loan per card. Each loan is given a number which is placed upon the card in the upper right-hand corner. Then the name of the borrower, his address, and the terms of the loan would be recorded. Next, information concerning the amount of the loan, per cent of margin, interest rate, date of loan, interest payment, and collateral maturity should be shown. Lastly, the body of the card would be ruled to show date given, description of collateral, quantity, market value, and total value. Each time the collateral is changed, the new particulars would be added and the old crossed off.

Stock and Bond Values.—Stocks and bonds have the following distinct values, to which reference already has been made:

1. Par (nominal) value. This is the face value, the value shown on the face of the document in question. Such value may or may not be the actual value.

2. Market value. This is the value a security has in the open market, or when offered for sale. Such value fluctuates according to conditions, future prospects, or according to supply and demand. Ordinarily, it may be considered as the mean between the price asked and the price bid. If an investment is to be considered as permanent, the principal must be looked upon as being safe and the income therefrom as being constant and reliable. Because of this fact, the market price of bonds is not apt to fluctuate as much as the market value of stocks. This steadiness permits the investor to rely upon the possibility of realizing upon them in an emergency, either through sale or by using them as collateral for a loan. In the case of stock, this possibility is decidedly uncertain because just when an investor requires his stock for one of these purposes, the chances are excellent that the market will have dropped to such a point that the stock will be useless in this connection.
3. Intrinsic value. This is the actual amount which the stockholders or bondholders will receive when the affairs of the corporation are wound up.
4. Book value. In addition to the above, stocks have what is known as book value. This is the value of the stock as shown by the corporate books; for example, the value represented by assets less liabilities.

Proprietorship Versus Loan Investments.—Security investments may be classified in a number of ways depending upon the viewpoint. Up to the present moment, one classification thereof has been indicated:

1. Stocks versus bonds.

and to this may be added the following:

2. Proprietorship versus loan.
3. Speculative versus non-speculative.
4. Temporary versus permanent.

The primary discussion in this chapter revolves around the first and second groupings as such. The others, as a matter of fact, represent merely a restatement of the first.

If, when one speaks of investments, he has in mind investment securities, and nothing else, the following classification results:

1. Stocks.
2. Bonds.

Hereunder a short term note is considered a form of bond. If a person's investments consist of stocks, he is said to have made a proprietorship investment; whereas, if his investments consist of bonds, he is said to have made a loan investment,—an investment contemplating an interest return. There is an uncertainty about a proprietorship investment in that a return will be secured therefrom only if a profit is made.

Investment in the stock of a business does not necessarily mean an investment made for a definite period of time; in fact, the length of the period is indefinite being limited, in general, only by the life of the concern whose stock is held. No return is secured from a stock investment until a dividend has been declared by the board of directors of the company represented by the stock held. The payment of dividends depends upon profits earned; if profits have not been earned, legally, no dividends should be declared. Therefore, dividends never should be accrued. The uncertainty of a return therefrom, and the insecurity of, a stock investment in comparison to the certainty of a return from, and the security underlying, a loan investment, make the former one of a purely speculative character. The holder has a certain proprietorship interest in the concern which gives him some voice in its management.

The loan type of investment covers the advancing of funds for a definite period, anywhere from one year to fifty, during which a fixed rate of interest return will be received, and at the end of which the principal sum advanced must be refunded to the lender. Certain peculiar characteristics are noticed hereunder:

1. In general, security is demanded before the loan will be made. This security, in part, takes the form of a negotiable instrument which becomes due at a definite future date. The investor, therefore, secures two clear-cut promises:
   a. A promise that the loan will be repaid on a definite future date.
   b. Due to the element of negotiability in the instrument, as referred to, a promise that, if he so desires, he may dispose of the negotiable instrument security at any time by sale.
2. A fixed rate of return is promised in the form of interest, this being a definite percentage computed upon the face

value of the loan. The return, therefore, may be determined readily.

3. In general, specific property is pledged as security for the ultimate repayment of the loan. For example, a bond and mortgage on real estate may be given as security for the loan.
4. The holder of the security has no right of management in the business to which the loan is made. As long as no default is made concerning the provisions underlying the loan, the management can act as it sees fit, without regard to the lender, or to the views of the latter.

Although the market value of a loan security may fluctuate, the fluctuation will be less than that of a proprietorship loan (stock). However, if the security is listed upon the Exchange, the fluctuation may become of such a character as to be sufficiently interesting to an investor who is willing to take a speculaltive chance to make money in buying and selling speculative securities.

In short, the loan type of investment carries a definite and secured return in the form of interest, and in the ultimate repayment of the loan without requiring the investor to participate in any way in the management of the borrowing company. By investing in such securities, one is assured of a certain income without the bother and annoyance of participating in a business and without incurring any proprietorship risk.

Advances which differ from the above second grouping of investments are not to be classified under the same subdivisions, since they are too temporary in their nature. Familiar examples of these would be: credit loans, bank loans, discounting commercial paper, etc.

Speculative Versus Non-Speculative Investments—Temporary Versus Permanent.—When investments are made with the intention of retention until such time as the market value shall increase to a point at which the investor will be enabled to sell at a profit, they are considered as speculative. On the other hand, when investments are made to secure an income return therefrom, they are classed as non-speculative. For example: The laws of New York state that in the absence of

specific instructions in deeds of trust or wills, those charged with the administration of trust funds must invest in:

1. "Bonds and mortgages on unincumbered real property in this State worth 50 per cent more than the amount loaned thereon.
2. The securities in which savings banks are authorized to invest."

These types of investments contain no element of speculation; neither would they be classed as temporary.

Speculative investments are all temporary in character, and may be divided as between:

1. Securities purchased outright.
2. Securities purchased on a margin.

The first class mentioned well may be taken care of, from the point of view of record making, in accord with the ideas set forth below. The second class is discussed by itself in a separate section.

The characteristics above mentioned in respect of speculative investments places them, so to speak, in the same category with goods and commodities in that, like these latter, they are held for the purpose of making a profit through a sale. Therefore, they should be booked like any other commodity, i. e., at cost.

Such cost price includes brokers' fees and any other expenses incident to the purchase of the investment in question. Some persons insist such investments should be recorded at par,—at face value as shown upon the investment certificate. Such booking, however, would seem to be in error because of the fact that by so doing a profit or a loss, as a rule, is anticipated at the time of purchase; whereas, neither of these elements puts in an appearance until a sale is made.

The record-keeping for such investments, on the whole, is a simple matter. An account may be opened upon the General Ledger with each such investment purchased, or one account may be opened thereon titled Investments or Securities, this being backed up by a subsidiary record in which each investment is given a separate account.

Stocks and bonds sometimes are bought upon a margin, for speculative purposes. Under such a set of facts, one has an asset consisting of the right to receive the delivery of the securities

when the balance of the purchase price has been paid. This asset is offset by the liability of the purchaser to the broker for an amount equal to the full purchase price, less the margin that has been deposited. Ordinarily, upon the Balance Sheet, securities bought upon a margin should be carried at cost, this including the broker's fees bearing upon the purchase; investment companies, however, for Balance Sheet purposes, would value such securities at market prices.

Since the broker charges interest upon the difference between the amount deposited as margin and the purchase price, provision therefor must be made in the accounts. To this end, the account carried with the security in question should be charged with the amount of the interest and this charge be offset by a credit to the broker's account. Likewise, it should be remembered, the broker will allow interest in favor of the purchaser on the amount deposited with him as margin. This allowance is an offset to the charge for interest mentioned just above.

If dividends are received on stocks or interest is received on bonds, by the broker for the account of the purchaser, the accounting therefor may be carried out in either one of two ways:

1. Charge the account of the broker and credit the account with the investment.
2. Charge the account of the broker and credit an income account.

The first method is to be preferred to the second because, by so doing, the cost of the investment is gradually reduced so that, when the investment is sold, the owner may determine the net profit or loss on his speculation, all elements therein having been taken into consideration.

At any time, the effect of the entries made in connection with margin investments should be such that the difference between the asset and the liability account will represent the net equity of the purchaser in the investment.

Non-speculative investments are of two types:

1. Temporary. This type contemplates a temporary source of income, as where a corporation has an abundance of cash capital and cannot profitably invest this in merchandise or secure an acceptable rate of interest from having such cash on deposit. In such event, securities may be purchased to

obtain a larger income, but with the idea of converting, at the pleasure of the corporation, these securities into cash when additional cash funds are required.

2. Permanent. This type relates to investments made in order to control the activities of another concern, or investments made of reserve funds.

From this point of view, it is difficult to state, as certain writers do, that all temporary investments contain an element of speculation. It seems fully possible that a temporary investment may be made in which the element of speculation is entirely lacking; but on the other hand, a speculative investment cannot be anything but temporary.

If the element of speculation be eliminated entirely, it would seem that non-speculative investments may be grouped as:

1. Mortgages receivable.
2. Loans secured by collateral.
3. Stocks and bonds.
   a. Parent companies.
   b. Subsidiary companies.
   c. Allied companies.
   d. Outside companies.

Investments which are temporary income producers, in general, should be recorded in the books of account at actual cost price. This is the simplest way because no one knows exactly how long they are going to be held.

As interest is collected thereon, the amount would be credited to an account of Interest Income-Investments, the total amount of this account eventually disappearing into the Profit and Loss account.

When an investment of this character is sold, and a profit or loss thereon is involved, the proper accounting procedure therefor would be to credit the asset account carried with the cost price in order to close it and to credit or debit a nominal account for the profit secured or loss suffered, as the case may be. The amount of such profit is a financial income item and the amount of such loss a financial expense item.

There is no uniformity in booking permanent investments. The point to remember is that the procedure involved becomes

more complicated than indicated above on account of the fact that such investments are purchased under an intention of holding them until maturity. In general, they may be recorded at cost or at par, depending upon the desires of the investor rather than upon anything else.

If recorded at cost, the matter is handled as indicated above for handling investments which are temporary income producers. On the other hand, if recorded at par, it may be necessary to account for the amount of premium or discount involved in the transaction as where the purchase was made either above or below par, as the case may be. This point will be discussed later.

Bonds as Investments.—As an investment security, a bond offers a fixed interest return and repayment of the principal at a specified time. Both of these factors are secured by a pledge of property which, as a rule, is in the form of a first lien. Since a bond carries with it no management responsibility, and since both the income therefrom is fixed and repayment definite as to time, the speculative element present is much less than that present when one makes a stock investment. In the latter event, there is an indefinite profit return, no dividend being possible unless there are net profits available for distribution.

The fundamental differences between stocks and bonds is accountable for the differences that arise in the accounting treatment accorded each. And this accounting treatment revolves around three definite factors which may be stated about as follows:

1. Purchase.
2. Amortization.
3. Sale.

In buying a bond and, also, in selling a bond, three factors must be considered:

1. Par value.
2. Interest return.
3. Sales price.

A bond may be purchased privately, which is more or less unusual, or it may be bought in the market. In the latter event, the market is created through the power of some Stock Exchange, as the New York Stock Exchange; this latter organiza-

tion is the principal bond market in the United States. A broker, for example, who is a member of the Exchange, will purchase a bond for a customer when ordered to do so, buying at market price, and charging one-eighth of one per cent on the par of the bond for his services regardless of what the market price may be. When a bond is bought, the sales price paid usually will include a certain amount to cover the interest that has accrued to date from the last interest payment date; hence, the buyer must take this element into consideration when booking his purchase.

Accounting For Bonds as Investments—Simple Procedure.—The accounting methods used for bond purchases vary with the volume of the transactions consummated and with the desires of the investor. The small investor, i. e., the person who buys a few bonds as a permanent or a temporary investment, requires no elaborate methods of accounting; the simplest method is the best, and sufficient has been presented above, perhaps, relative thereto. He is most apt to carry such investments entirely upon a cost basis, considering any premium or discount either as a profit or a loss at the time his holdings either are sold or mature. In brief, and by way of review, the method advised is illustrated by the following account of Securities Owned.

Securities Owned

Debits:	Credits:
1. Cost of stocks and bonds purchased (issues of other corporations).	1. Sales price of stocks and bonds sold (issues of other corporations).
2. Amount of balance, if a credit to be transferred to the Profit and Loss account. When this entry has been made, the account should be closed.	2. Inventory of stocks and bonds on hand at end of period, at cost price.
3. After debit entry No. 2 or credit entry No. 3 has been made, as the case may be, this account will be closed. Thus the inventory at the end of the period, as per credit entry No. 2, should be entered below closing ruling as the beginning inventory of the next period.	3. Amount of balance, if a debit, to be transferred to the Profit and Loss account. When this entry has been made, the account should be closed.

If accrued interest is involved in the purchase, the purchaser must take this up separately from the cost, as of purchase date, provided he wishes his accounts kept correctly. Assume that five $1,000.00 5 per cent bonds were purchased on August 22, at 73 and accrued interest, interest being payable February 1, and August 1. On August 22, there would be accrued interest of $14.58, for which the purchaser must pay. In other words, the total cost of the bonds would be:

$5,000.00—block par @ 73,	$3,650.00
1/8 of 1 per cent—broker's commission,	6.25
	$3,656.25
Accrued interest, 5 per cent on $5,000.00 for 21 days,	14.58
Total,	$3,670.83

Of this total, $3,656.25 should be set up as the asset, and $14.58 should be recorded in an Accrued Interest account, which, later, upon the next interest payment date must be credited in the amount of the accrued interest as of the purchase date; the remaining portion of the interest collected represents the amount that actually is income for the period from purchase date to February 1.

However, if the investor wishes to use a more accurate accounting procedure than has been indicated above, he may follow either of two possible courses, each of which may be considered far more elaborate than the simple procedure just presented. Each of these two possible variances in procedure will be discussed in due course in the remaining portion of the present chapter.

Bond Premium and Discount; Nominal and Effective Interest Rates; Amortization and Accumulation.—Before proceeding further, it seems in order to set out certain definitions and distinctions necessary to an understanding of what is to follow.

Bonds may be purchased at par, above par, or below par. If purchased above par, they are said to have been bought at a "premium"; if purchased below par, they are said to have been purchased at a "discount." In the example given in the last section above, the bond was purchased at a discount; and in just the same way it might have been bought at a premium, say, for 105.

The rate of interest set out upon the face of a bond is known as the "nominal" rate of interest; it may be at any amount the issuing company desires. This nominal rate may or may not be equal to the worth of money upon the market upon the day the bond is purchased. This latter rate will be the one at which the bond will sell for if issued at par thereunder. This second rate is known as the "effective" rate, upon the basis of which is calculated the net return upon the amount of money actually invested.

If a bond is purchased at a premium, the difference between its cost and par will be a loss at maturity, since at that time only par value can be collected. In other words, disregarding current market fluctuations up and down, the value of this bond will depreciate in proportion to the lapse of time between the time of purchase and time of maturity. This loss, or premium, should be spread, i. e., amortized over the life of the bond rather than be written off in a lump sum at the time the bond matures. Amortization, therefore, may be defined as, "The gradual extinguishment of the amount of an asset, . . . by prorating it over the period during which its benefit will be realized." As applied to bonds, amortization contemplates the periodical adjustment of the amount that is received as interest on the par of the bond, to the real interest,—that which is received upon the amount actually invested.

In other words, if the premium is held as an asset, and all interest actually received is booked as income, the income must be overstated during the interim period inasmuch as when the bond is actually redeemed, the books will hold a nominal element that must be written off at that time. To avoid this lump sum loss in the final period since, as a matter of fact, it has been accumulating gradually from the date of purchase of the bond, there is written off each year against the amount received as interest a proportionate amount of the premium. This process of writing down the premium is known as "amortization."

On the other hand, if a bond is purchased at a discount, the difference between the purchase cost and par will be a profit at maturity, because then par will be collected. And applying the same reasoning here as was set out above,—that if the dis-

count is held as a lump sum until maturity, the books will hold a nominal element representing income which has been accumulating gradually from the date of purchase of the bond, the income for the entire interim time, period by period, has not been stated correctly. The profit on the money invested should be spread, i. e., accumulated,—added to the cost of the bond,—little by little over its life so that at maturity the book value of the bond will have been built up (accumulated) to par. This process of writing down the discount and building up the book value of the bond is known as "accumulation."

Of course, in practice, bonds often are sold before maturity dates; again, they may be held for speculation rather than for purposes of investment. If either of these two possibilities be in contemplation, all the principles raised in the present section will be disregarded entirely, and the owner of a bond will carry it at cost, or even at market.

If the small investor wishes a more accurate accounting procedure than has been indicated, or if investments in bonds form part of the regular business operations of a concern, the first step necessary will be to keep the accounts upon an investment-value basis rather than upon a cost-value basis. Basically, hereunder there is involved a more or less elaborate accounting procedure relative to amortization and accumulation plus a consideration of both the nominal and effective rates of interest. Next, a decision must be reached as to the following:

1. Shall the accounting calculations be made upon an approximate basis of accuracy, or
2. Shall the accounting calculations be made upon a strictly scientific basis of accuracy?

This differentiation will be discussed fully after the principles have been presented leading up to such consideration.

Ascertaining Present Value of a Bond.—The premium or discount on a bond represents a deduction from, or an addition to, the nominal rate of interest a bond carries. The nominal rate of interest which the issuing company elects to have its bonds carry may or may not be equal to the worth of money upon the market,—the interest rate at which the bonds would sell at par if issued thereunder. If the nominal rate of interest is above

the effective rate (market rate), the bonds will sell at a premium; and if the rate be less, they will sell at a discount.

Four elements enter into the value of a bond:

1. Sufficiency of security.
2. Rate of interest return.
3. Number of interest periods.
4. Time the bond has to run.

When an investor contemplates purchasing a bond, he should keep in mind the four elements shown above plus both the nominal and effective interest rates. Knowing these, he is in a position to determine whether the price asked is right. Illustrative of this, study the following problem and its different methods of solution.

Problem.—On January 1, 1919, a small investor contemplates purchasing one Nothen Power Company 8 per cent $100.00 First Mortgage Gold Bond, due December 31, 1923, interest payable semi-annually. The bond is to be purchased upon a 6 per cent basis. How much should be paid for it?

First Solution.—The bond contains ten coupons, each for $4.00.

First coupon compounded for 9 terms at 3 per cent,	$ 5.219092
Second coupon compounded for 8 terms at 3 per cent,	5.067080
Third coupon compounded for 7 terms at 3 per cent,	4.919492
Fourth coupon compounded for 6 terms at 3 per cent,	4.776208
Fifth coupon compounded for 5 terms at 3 per cent,	4.637096
Sixth coupon compounded for 4 terms at 3 per cent,	4.502032
Seventh coupon compounded for 3 terms at 3 per cent,	4.370908
Eighth coupon compounded for 2 terms at 3 per cent,	4.243600
Ninth coupon compounded for 1 term at 3 per cent,	4.120000
Tenth coupon compounded for 0 term at 3 per cent,	4.000000
Total coupons compounded to time of redemption,	$ 45.855508
Redemption value of bond at maturity,	100.000000
Total coupons, interest on coupons, and face of bond to time of redemption,	$145.855508

In all, $140.00 has been received from cashing the coupons and redeeming the bond. The amount involved, however, is to make $140.00 plus interest at 6 per cent, compounded semi-annually,—$5.855508. Next, the question is, what sum at 6 per cent per annum compounded semi-annually will equal $145.855508 at the end of five years? $1.00 in five years upon these terms, will amount to $1.343916. $145.855508 divided by 1.343916 equals $108.53, the price to be paid for the bond. In other words, $108.53 is the present worth of an 8 per cent $100.00 bond running five years, yielding an income of 6 per cent, compounded semi-annually.

Second Solution.—There are ten coupons accruing interest at 3 per cent.

These form a geometrical series, in which three quantities are known and the fourth unknown (to be found).

C, the first quantity, is the coupon,	$4.00
R, the second quantity, is the ratio to the buyer,	1.03
N, the third quantity, is the number of terms,	10
X, the fourth quantity, is unknown,—the sum of the series,	?

These quantities may be arranged into the appearance of a formula:

$$\frac{CR^n - C}{R - 1} = X$$

The first term is 4. This is multiplied by the ratio 1.03 raised to the 10th power (the power indicated by the number of terms). Then from this product is subtracted the first term, that is 4. And the remainder is divided by the ratio 1.03 less 1, or .03. 1.03 (ratio) raised to the 10th power gives the value or amount of $1.00 at compound interest for 10 periods. By deducting from this amount the principal of $1.00, the remainder is equal to the interest on a series of $1.00 investments, i.e., $.343916. Multiplying this amount by 4 (coupon amount), gives a result representing the total interest on the series of coupons, which is $1.375664. This interest is 3 per cent of the principal, or the sum of the series. Now, since 3 is contained in 100,—33 1/3 times, it follows that the sum may be secured by multiplying $1.375664 by 33 1/3, that is, $45.855508. Multiplying by 33 1/3 is the same as dividing by .03 (the equation denominator). Nothing will reduce the mechanical labor involved in securing this solution, except the use of logarithms.

Third Solution.—This method of solution is to proceed from the maturity or par value of the bond back to the book value by determining the present worth of the bond at the different interest periods.

Maturity value, par,	$100.000000
Add—Interest due 9 terms from present, or 1 from maturity,	4.000000
	$104.000000
Discount this amount by dividing by 1.03, the effective rate,—ratio to buyer. This represents the value of the bond 1 term before maturity,	$100.970873
To secure next value, add coupon due 8 times from present, or 2 from maturity,	4.000000
	$104.970873
Discount this amount by dividing by 1.03, as above. This represents the value of the bond 2 terms before maturity,	$101.913449
To secure next value, add coupon due 7 terms from present, or 3 terms before maturity,	4.000000
	$105.913449
Discount this by dividing by 1.03. Value of bond 3 terms before maturity,	$102.828785
Add coupon due 6 terms from present—4 from maturity,	4.000000
	$106.828785

Discount by dividing by 1.03.	
Value of bond 4 terms before maturity,	$103.717267
Add coupon due 5 terms from present—5 from maturity,	4.000000
	$107.717267
Discount by dividing by 1.03.	
Value of bond 5 terms before maturity,	$104.579871
Add coupon due 4 terms from present—6 from maturity,	4.000000
	$108.579871
Discount by dividing by 1.03.	
Value of bond 6 terms before maturity,	$105.417350
Add coupon due 3 terms from present—7 from maturity,	4.000000
	$109.417350
Discount by dividing by 1.03.	
Value of bond 7 terms before maturity	$106.230437
Add coupon due 2 terms before present—8 before maturity,	4.000000
	$110.230437
Discount by dividing by 1.03.	
Value of bond 8 terms before maturity,	$107.019842
Add coupon due 1 term from present—9 before maturity,	4.000000
	$111.019842
Discount by dividing by 1.03.	
Value of bond 9 terms before maturity,	$107.786254
Add coupon due 0 terms from present—10 before maturity,	4.000000
	$111.786254
Discount by dividing by 1.03.	
Value of bond 10 terms before maturity—at present,	$108.530344

The present worth of the bond is seen to be the same as before, $108.53.

Schedule of Amortization.—When the above bond is brought upon the books of the purchaser, the latter might follow any one of three procedures, as to booking:

1. The simple method, as explained above.
2. The amortization methods.
   a. Simple procedure—non-scientific.
   b. Scientific procedure.

Naturally, since the above bond is of such a small amount, the owner is not apt to follow a more or less scientific procedure relative thereto, but if he wished to do so, the preparation of an amortization schedule would be in order. The first schedule shown below has been prepared upon what is known as the non-scientific basis. The second schedule follows the first one as to principle, but involves a more elaborate calculation; hence, may

be termed the scientific basis, in that the difference between the actual income and the effective income is calculated as accurately as possible at each interest paying date and is used to reduce the carrying value of the bond. The scientific calculation may or may not be based upon bond tables; naturally, the element of error creeps in without their use, as will be noticed subsequently.

SCHEDULE OF AMORTIZATION

(NON-SCIENTIFIC)

Period	Coupons 4 per cent	Income Approximate	Net Amortization	Book Value
				$108.530
1	$ 4.00	$ 3.147	$ .853	107.677
2	4.00	3.147	.853	106.824
3	4.00	3.147	.853	105.971
4	4.00	3.147	.853	105.118
5	4.00	3.147	.853	104.265
6	4.00	3.147	.853	103.412
7	4.00	3.147	.853	102.559
8	4.00	3.147	.853	101.706
9	4.00	3.147	.853	100.853
10	4.00	3.147	.853	100.000
	$40.00	$31.470	$8.530	

SCHEDULE OF AMORTIZATION

8 per cent—Five Year Gold Bond

Nothen Power Company

Redeemable at Par, $100.00, on December 31, 1923

Income Rate 6 per cent

Period	Coupons 4 per cent	Income 3 per cent	Net Amortization	Book Value
				$ 108.5300
1	$ 4.00	$ 3.2559	$ .7441	107.7859
2	4.00	3.2336	.7664	107.0195
3	4.00	3.2106	.7894	106.2301
4	4.00	3.1869	.8131	105.4170
5	4.00	3.1625	.8375	104.5795
6	4.00	3.1374	.8626	103.7169
7	4.00	3.1115	.8885	102.8284
8	4.00	3.0849	.9151	101.9133
9	4.00	3.0574	.9426	100.9707
10	4.00	3.0291	.9709	100.0000
	$ 40.00	$ 31.4698	$ 8.5302	

The discrepancy in the last step, being but two points in the fourth place, is not sufficient to discredit the accuracy of the above calculation. Absolute accuracy may be secured by the use of bond tables; these should be used whenever the bond values involved are of considerable size.

Accounting For Bonds as Investments—Amortization Principle.—If the investor wishes to use a more accurate accounting procedure than the simple method, such procedure will revolve around one or the other of the amortization schedules worked out above:

1. In accord with the simple scheme of amortization, or
2. In accord with the scientific scheme of amortization.

Either one of these methods is suggested in preference to the simple method of booking in that, if the books of the investor do not consider the effective rate of interest upon his investment, he cannot tell whether a proposed sale will or will not net him a profit. And by considering the effective rate, the investor requires a method of record keeping different from the simple one already indicated.

Under the simple scheme of amortization, the investor will take the total premium or discount and divide this amount by the number of periods the bond has yet to run. For example, in the previous explanation or illustration, this would be in accord with the non-scientific schedule of amortization. The bond has ten periods to run. The total premium is $8.53. Therefore, the net amortization each period would be $.853. As already indicated, this method is not scientifically accurate, but sufficiently so for working purposes.

In connection with the simple or non-scientific scheme of amortization, the accounts to be carried will be similar, as to title, to those carried in a concern in which investments in bonds are part of the ordinary business operations,—i. e., in a concern using the scientific scheme of amortization. Likewise, the entries made therein will be the same; the only difference will be as to the amounts involved in such entries.

When either the approximate, or the true, investment value of bonds is to be carried upon the books of record, the following accounts must be used:

1. One account for each bond investment, record to be made therein at par.

2. One account with accrued interest, if any is involved.
3. One account with bond income.
4. One account with bond premium.
5. One account with bond discount.

If bonds are purchased between interest dates, a certain amount of interest will have accrued thereon for which the purchaser must pay. Interest on a bond, it should be remembered, accrues day by day, but is not payable until the end of some fixed period. Likewise, when the books are closed, accrued interest upon bonds held must be calculated and booked, unless the concern runs its records upon a cash basis instead of upon an accrual basis.

Problem.—Bond purchased at a premium. H. Jones, on January 1, 1921, purchases two $1,000.00 Clair County Light, Heat and Power Company 5 per cent first mortgage bonds due July 1, 1922, interest payable semi-annually, paying therefor $2,075.00. He holds the bonds until maturity. Make entries therefor on the books of Jones.

Solution.—The solution is given in the form of Journal entries, and is prepared as the average investor would be apt to do if he wished to approximate accuracy therein. January 1, is not herein considered a holiday in order to use equal periods of time.

	Dr.	Cr.
January 1, 1921		
(1)		
Clair Co. Light, Heat and Power Co. 5's—1922,	$ 2,000.00	
Bond Premium—C. C. L. H. & P. Co. 5's,	75.00	
To—Cash,		$ 2,075.00
To record purchase of bond.		
July 1, 1921		
(2)		
Cash,	$ 50.00	
To—Bond Income,		$ 50.00
To record income received.		
(3)		
Bond Income,	$ 25.00	
To—Bond Premium—C. C. L. H. & P. Co. 5's,		$ 25.00
To record amortization of bond premium, term of bond being three periods, 1/3 to be written off premium each period.		
January 1, 1922		
(4)		
Cash,	$ 50.00	
To—Bond Income,		$ 50.00
(5)		
Bond Income,	$ 25.00	
To—Bond Premium—C. C. L. H. & P. Co. 5's,		$ 25.00

July 1, 1922

(6)

Cash,	$ 50.00	
To—Bond Income,		$ 50.00

(7)

Bond Income,	$ 25.00	
To—Bond Premium—C. C. L. H. & P. Co. 5's,		$ 25.00

Date

(8)

Cash,	$2,000.00	
To—Clair Co. Light, Heat and Power Co. 5's,		$2,000.00
To record redemption.		

The Ledger accounts in connection with the above are as follows:

Clair County Light, Heat and Power Co. 5's—1922

1921		1922	
Jan. 1—Cash (1),	$2,000.00	July 1—Cash (2),	$2,000.00

Bond Premium

1921		1921	
Jan. 1—Cash (1),	$75.00	July 1—Bond Income (3),	$25.00
		1922	
		Jan. 1—Bond Income (5),	25.00
		July 1—Bond Income (7),	25.00
	$75.00		$75.00

Cash

1921		1921	
July 1—Bond Income (2),	$50.00	Jan. 1—C. C. L. H. & P. 5's (1),	$2,000.00
1922		Bond Premium (1),	75.00
Jan. 1—Bond Income (4),	50.00	1922	
July 1—Bond Income (6),	50.00	July 1—Balance,	75.00
C. C. L. H. & P. 5's (8),	2,000.00		
	$2,150.00		$2,150.00
July 1—Balance,	$75.00		

Bond Income

1921		1921	
July 1—Bond Premium (3),	$25.00	July 1—Cash (2),	$50.00
1922		1922	
Jan. 1—Bond Premium (5),	25.00	Jan. 1—Cash (4),	50.00
July 1—Bond Premium (7),	25.00	July 1—Cash (6),	50.00
	$75.00		$150.00
Balance,	75.00		
	$150.00		$150.00
		July 1—Balance,	$75.00

The actual income received is seen to be $75.00. This is represented by the credit balance in the Bond Income account offset by the debit balance in the Cash account.

Problem 2.—Suppose in Problem No. 1, above, H. Jones had purchased the bonds for $1,925.00. What would the entries have been therefor on the books of Jones?

Solution.—The solution is given in the form of Journal entries, prepared as the average investor would be apt to do if he deisred to approximate accuracy therein.

January 1, 1921		
(1)		
Clair County Light, Heat & Power Co. 5's—1922,	$2,000.00	
To—Cash,		$1,925.00
Bond Discount—C. C. L. H. & P. Co. 5's,		75.00
To record purchase of bond.		
July 1, 1921		
(2)		
Cash,	$50.00	
To—Bond Income,		$50.00
To record income received.		
(3)		
Bond Discount—C. C. L. H. & P. Co. 5's,	$25.00	
To—Bond Income,		$25.00
To record accumulation for period.		
January 1, 1922		
(4)		
Cash,	$50.00	
To—Bond Income,		$50.00
(5)		
To—Bond Income,		$25.00
July 1, 1922		
(6)		
Cash,	$50.00	
To—Bond Income,		$50.00
(7)		
Bond Discount—C. C. L. H. & P. 5's,	$25.00	
To—Bond Income,		$25.00
Date		
(8)		
Cash,	$2,000.00	
To—Clair Co. Light, Heat & Power Co. 5's,		$2,000.00

CHAPTER VII

DEPRECIATION; RESERVES AND RESERVE FUNDS; SURPLUS AND DIVIDENDS

PART 1.—DEPRECIATION

Introduction.—Depreciation is an important subject. Also, it is too comprehensive for adequate treatment in a portion of but one chapter. Yet from the standpoint of an accounting text, a discussion of the subject ought not to require more than having one's attention called to certain of its leading features, and outlining some of the methods of recognizing or determining depreciation. It should be recognized that an accountant, as an accountant, is not an engineer; likewise, neither is he an expert appraiser.

Depreciation is an old question, but of paramount present interest. This interest seems to be due to two things:

1. Certain economic changes in industrial and commercial life.
   a. Investors are more careful than formerly in scanning the conditions of enterprises in which they are interested. When a plant is small and owned chiefly by the operators themselves, no one but the owner need be interested in how depreciation is provided or the capital kept up. When a plant increases in size, and along with such increase there comes radical changes in ownership, the question of depreciation takes on a new importance. Stocks and bonds are widely held, and the holders, many being located far from the properties in which they are interested, want to know how the property behind these securities is kept up; they demand information concerning the adequacy of depreciation provisions.
   b. A realization on the part of those intimately connected with an undertaking involving the use of fixed assets

that a means must be provided by which their property may be renewed when it has to be discarded. A correct treatment of depreciation permits them to place the burden where it properly belongs.

c. A realization on the part of those intimately connected with an undertaking that net profits or earnings are not true if depreciation either be omitted from or understated in the operating expenses.

2. Governmental action. The national and state governments in extending their activities are exercising a closer supervision over commercial enterprises and levying heavy taxes on incomes and net earnings. In order that business activities may be effectively as well as fairly carried out, all possible operating expenses must be deducted from earnings before profits are stated; otherwise, the taxes, sufficiently onerous at best, will prove excruciatingly burdensome if not actually prohibitive.

Again, depreciation is important for reasons other than those given above. These relate to determining the present valuation of the physical properties of an enterprise for such purposes as:

1. Purchase and sale.
2. Capitalization.
3. Rate making.
4. Etc.

Underlying Principle.—No capital asset employed in any business, with the possible exception of land, remains in its original condition once it is begun to be used. General decay or deterioration commences as soon as an asset is placed in operation and goes on until, eventually, the usefulness of the asset is ended and its value is entirely gone or so nearly gone that nothing remains but scrap value. Wooden parts are certain to rot and decay; iron rusts, wears, and wastes away. Little or nothing about any plant, except perhaps land, will do other than at some time, sooner or later, reach such a state of decrepitude that it no longer pays to repair and keep it in use.

Unless this condition is realized, and provision made to replace the asset by a gradual charge against profits during the life of the asset, eventually the profits of one certain year will

be required to replace the asset. This means that one particular year must stand the expense which, rightly, in part belongs to past years; in turn, this means that these past years will have shown a greater profit than really was earned therein. Further, if this profit has been paid out as dividends, the year in which the replacements must be made may find the enterprise in such a depleted condition that there are not sufficient profits on hand against which the replacements may be charged. Again, at this point, the result will be:

1. A reduction in capital, or
2. A fictitious charge against an asset account. In fact, both possibilities represent a capital reduction although the first is apparent, whereas, the second may not be noticed except from an examination of the records.

Land not subject to depreciation, represents only land not directly used in producing revenue. Land which is used directly in producing revenue is subject either to depreciation as usually understood or to depreciation which represents a wasting away.

a. Farm land. Land planted with crops may depreciate to a marked degree, and will actually depreciate unless scientific farming methods are used.
b. Clay bed. A clay bed in connection with a brick yard will waste away in direct proportion to the amount of product produced.

Depreciation Defined.—The Century Dictionary defines depreciation as:

1. The act of lessening and bringing down value.
2. A fall in value; reduction in worth.

It is one of the unalterable laws of nature that all material things disintegrate, i. e., wear out. Any kind of property will lose its usefulness as time passes.

When an accountant speaks of "depreciation," however, the term should be applied more particularly to the gradual diminution in value and utility of capital assets of a perishable nature rather than to assets of any other type. Illustrations of perishable capital assets are: buildings, machinery, other equipment, and tools.

Significant as these ideas may be to one who is in contact

with actual operating conditions within a plant, they hardly convey to one's mind everything that is implied by the term "depreciation" unless operating conditions actually have been part of one's experience.

Buildings deteriorate or, in time, become hopelessly out of date; machinery is subject to depreciation and, although heavy repairs may prolong or extend its life, sooner or later it must be discarded. As soon as any equipment has been placed in position and the plant put in operation, the value of the equipment begins to drop off. Sooner or later, buildings, machinery, and other equipment, being subject to the ravages of time, will become useless from wear and tear and from general decay. New inventions, unexpected developments, and business growth may require that present equipment be replaced by better, more efficient, or more powerful units, long before it is worn out. Even though some parts show greater resisting power, and will serve their purpose longer than others,—and even though heavy repairs and careful usage may prolong or extend the useful life of many of these parts,—their ultimate fate cannot be prevented; sooner or later they will reach the junk pile. One manufacturing concern calls its scrap heap the "graveyard."

Fluctuation.—Certain fundamental differences exist between fluctuation and depreciation. These may be set out about as follows:

1. A capital asset may fluctuate in market value. Ordinarily, such fluctuation has no place upon the books of account, because outside causes are responsible therefor, rather than the operation of the business. On the other hand, depreciation is due to inside causes incident to use, and must be booked as part of operation expenses.
2. Depreciation is a lessening in property values, which is inevitable, operating only to lessen values, whereas, fluctuation may increase values as well as lessen them.
3. Since fluctuation, in general, has no place upon the books of account, it is not to be taken into consideration when calculating profits for a period of time; depreciation, on the other hand, must be taken into consideration when determining profits.

The question of recording a fluctuation upon the books of ac-

count and including its amount upon the Balance Sheet, depends upon two factors:

1. Character.
2. Permanency.

   If the value of a fixed asset goes up, the increase should not be written up by a charge to the asset account and a credit to Surplus account inasmuch as the increase may not be permanent; again, the business cannot be considered as receiving a benefit from such use unless the asset in question can be sold. Likewise, a downward fluctuation in a capital asset need not be considered unless the drop appears to be permanent and, eventually, causes a serious loss. This would apply specifically to land, because even though other fixed assets may be replaced at a figure different from their carried charge, their efficiency in operation is not affected, hence, a sufficient depreciation charge periodically is all that is necessary.

Appreciation.—Some maintain that the depreciation of a plant may be offset by the increase in the value of plant land. This cannot be unless the land is sold; but since plant land is a capital asset essential in conducting the business, one may presume that it will not be sold unless the business is sold with it. Naturally, therefore, a favorable fluctuation in land value never may be realized. The result is that, in applying this principle, one is offsetting an actual realized loss (depreciation) against an appreciation that is unrealized; and, following this to its conclusion, it would be necessary when a machine is worn out to sell some land in order to secure the funds to replace it. If for no other reason, than impracticability, the application of this principle is impossible.

Maintenance.—Wear and tear, or minor renewals ordinarily are made up of repairing and replacing minor equipment as well as the smaller parts of the larger units of equipment as these wear out, break, or are lost. Examples of such repairs and renewals may be found in the wearing out of bearings on machines, wheels on cars, shoes on horses, commutators on dynamos.

These repairs are almost constantly going on in an operating plant and the expenses involved are fairly regular. Since these expenses are about the same from year to year, they can

be charged directly into the operating expenses without causing serious fluctuations in net earnings. While expenses of this kind are in the nature of depreciation they are, as a rule, not included in depreciation allowances but charged separately into the operating expenses.

Causes of Depreciation.—An asset may depreciate because of one or more of the following causes:

1. Causes certain:
   a. Use in trading or manufacturing. The constant use of an asset will wear it out in time. Even when this wearing away does not commence immediately, as where a new machine will not run at its best until the stiffness is eliminated, depreciation should be taken up as from the moment the machine begins to produce; at that moment, it commences to earn a profit, and depreciation should be charged as part of the cost thereof.
   b. Deterioration due to lapse of time. Even when a machine is idle, depreciation continues; in fact, one may find that a certain machine will depreciate faster when idle than when in operation.
2. Causes Uncertain (contingent):
   a. Obsolescence. Ofttimes an asset may be practically new, and yet become almost useless by being superseded either by improvements or by newer inventions which are more economical and more effective generally. Again, special machinery placed in use to manufacture in accord with a current fad may be useless as soon as the fad has ceased. In the latter event, if the machinery is not usable for other purposes, its whole value must be charged to the cost of the goods manufactured during the time the fad is in existence.
   b. Inadequacy. An asset may be in good condition and yet be discarded for a better one, because of unexpected developments and growth in business. If a utility company expands its field of operations, it may require new boilers, etc., more powerful than those now in use. Inadequacy may occur even where the original design and installation were of the best.

c. Accident. Some concerns may be liable to severe and costly accidents; in fact, any business may suffer a severe loss as the result of an accident, as from explosion, a flood, wind, electrolysis, etc. A contingency exists here against which provision should be made in advance by an average annual charge against profits rather than wait until the accident occurs and have the entire cost applied against one particular year. As far as possible, accidents should be provided against by proper insurance which in some cases may be carried by the concern itself rather than by a regular insurance company.

Contingent Losses as Depreciation.—The separation made in the last section between causes certain and causes uncertain differentiates between what might be considered as true depreciation and questionable depreciation. Further, this separation follows the accounting treatment accorded each class:

1. Causes certain. Depreciation hereunder is a cost of doing business represented by a charge to a Depreciation account and a credit to a Reserve for Depreciation account. The latter account is a valuation account appearing on the left side of the Balance Sheet as a deduction from the cost of the asset affected.
2. Causes uncertain. Although the possibility of loss of value from obsolescence, inadequacy, and accident must be guarded against, the provision therefor, ordinarily, is represented by a charge to Surplus account and a credit to a Reserve for Contingencies account. In other words, provision for loss is made by means of a true reserve account,—appropriated surplus,—the balance of which will be shown as an item upon the right side of the Balance Sheet under the section of "Appropriated Surplus."

Depreciation an Operating Expense—A Manufacturing Cost.—Depreciation is a charge against revenue; it is an integral part of the cost of production or operating expense. It is as much a part of manufacturing cost as materials and labor, even though the accounting involved relates to the ascertainment of the diminishing value of each piece of capital asset for which value has been given, rather than to the determination of an

immediate lump sum amount representing material or labor used daily.

For example, one may conceive of three piles standing side by side. One represents labor cost, one material, and one machinery. If a long enough period of time be taken, it will be seen that all three piles are consumed. Assume, for example, a machine as representing the third pile which has a usable life of ten years, and that the other piles represent consumption of material and labor for the same length of time. Assume further, that a Statement of Profit and Loss is prepared at the end of the tenth year, not before.

It does not seem difficult to observe that at the end of the tenth year, all three piles will be consumed. Hence, if one pile, labor, represents a cost, it seems logical to assume the third pile, machinery, now consumed, is a cost as well. It is only when this ten-year period is divided into smaller periods, as yearly periods, that the speed of consumption of labor and material appears so rapid, whereas, the consumption of the machine appears as nothing. Since the depreciation of the machine is caused directly by the manufacturing processes, it is as much a manufacturing cost as the material or labor used directly in fabricating an article.

Factors Considered in Determining Depreciation Amount. The principal factors by means of which the amount of depreciation may be determined are about as follows:

1. Original cost. This includes all cost elements up to the point where the asset is ready to produce; it is the value to be written out (exclusive of scrap value) as part of the operation expenses period by period. Hence, original cost is the basis upon which all calculations must rest.
2. Scrap value, or minimum service value. The greater the salvage upon a piece of equipment that is no longer usable, the less will be the periodical amount to be written off as depreciation. This value depends largely upon whether the parts or units can be fixed up and used again, or whether they must be treated as junk; in the first instance, the value may be considerable, whereas, in the latter, it may be practically nothing. Scrap value, when found, would

be deducted from the cost new when assigning the life for depreciation purposes.

3. Probable life of the property involved. Perhaps the most complicated and difficult portion of the real work in connection with depreciation consists in estimating the probable life of the asset to be depreciated. The original value or purchase cost of an asset is determined readily, and its scrap value may be calculated fairly accurately without much trouble; but the probable life of an asset is difficult to estimate, inasmuch as it is dependent upon many varied elements:
   a. Character of the asset
   b. Local conditions
      i. Use to which asset is put
      ii. Surroundings
      iii. Plant management. An overworked machine will depreciate faster than one not overworked. An asset that is kept up to a high standard of efficiency by having repairs made thereon constantly, will last longer than if it were allowed to fall into a dilapidated condition. Property when used for the purposes for which intended will last longer than when shifted from place to place.
      iv. Installation. High grade construction will last longer than poor grade. Provision in the original instance to meet future possible conditions likely to materialize within a reasonable time will cause an asset to have more years of life than otherwise.
      v. Line of work
      vi. Climatic conditions. Excessive heat and humidity, and extremely cold weather are all apt to affect seriously the life of certain classes of property.
      vii. Employees. A careful operator will prolong the life of a machine, whereas a careless or incompetent employee will reduce what might be considered the average life of a machine.
      viii. Sales value. Some assets depreciate rapidly at first and then more slowly later on, especially when sales value is considered; equipment will become second-hand almost as soon as placed in operation

and, if it has to be sold, then it will bring only second-hand prices.

ix. Service value. When service value is considered rather than sales value, equipment will depreciate slowly at first and faster later on, the increase at times not being noticeable until just before the end of life.

All these factors, and others, have a bearing upon the probable life of an asset; but only experience will enable one to determine how long an asset may be expected to last. Yet from the standpoint of an accountant, the matters pertaining to determining the probable life of an asset relate to the work of an engineer, not to that of an accountant. It is the engineer's estimate of the life of an asset upon which the accountant must depend, or, at least, should depend.

When the accountant has secured this figure, and knowing the original value, the probable residual value, and the specific case in hand, it is his duty to form an accurate opinion as to what should be considered a reasonable yearly depreciation by means of one of the several methods used in determining depreciation rates. If the amount being charged off appears too small, it is the accountant's duty to give warning that future disaster is being courted.

Again, in certain cases, as in general practice, the accountant may be required by concerns which cannot afford engineering services, particularly small enterprises, to cover all the angles of the problem mentioned above. Hence, his knowledge of the subject should be considerable, although he should not forget that, in solving a problem in its entirety, he is doing so as an accountant; in such case, if his results are reasonable and conservative, his efforts cannot well be criticized.

Method of Determining Depreciation Charges.—The periodical depreciation charge may be computed by any one of numerous methods, some apparently worth while and others apparently more theoretical than practical. It does not seem to be within the province of an accountant to assume an expert knowledge of the practicability of any one method as against another.

Although an accountant is not an expert valuer of fixed assets,

to the end that he will specify the amount of depreciation to be allowed in a specific case, he should be so well acquainted with the general principles of the subject and with the general working of the more usual methods of rate determination that he can form an accurate opinion as to what is reasonable.

The various methods used in determining the depreciation charge may be set down about as under:

1. Straight line (fixed or equal proportion).
2. Fixed percentage on diminishing value (reducing balance).
3. Sum of the year digit (changing percentage or fraction).
4. Sinking fund.
5. Annuity.
6. Revaluation (appraisal).
7. Composite life.
8. Working hours.
9. Production or output.
10. Miscellaneous.

Each of the above will be considered briefly in subsequent sections.

Straight Line Method.—This is the most common method of writing off depreciation, being the simplest and most direct of any. It is advocated by the Interstate Commerce Commission, and for certain purposes by many of the state commissions. It derives its name from the fact that a graphic chart of the depreciated value of the asset year by year will show a plotted straight oblique line with a vertical drop at the end. Hereunder, an equal proportion of cost is written off each year. In formula form, the method may be indicated as follows:

$$\text{Depreciation (D)} = \frac{\text{Cost (C)} - \text{Scrap (S)}}{\text{No. of years(N)}}$$

This method is objected to on the ground that it does not do what it is designed to do,—spread the exact burden in an equitable manner over the periods at the end of each of which net profit is determined. A new machine requires but little in the way of repair and maintenance expenditure, whereas in the latter years of its life this expenditure will be heavy. The amount which must be spread evenly over the life of the machine is the sum of the depreciation charge plus the upkeep charge; in the latter years, this sum will increase faster than in the early years,

whereas the "straight line" method will not, in its working, conform thereto.

Where this method provides for charging all extraordinary or intermittent renewals against a depreciation fund (see next section beyond), the method seems to be greatly in favor among many large corporations. And the opinion is ventured that over a long period of time, this plan actually does work equitably in distributing depreciation over the life of the asset.

Fixed Percentage on Diminishing Value Method.—In order to overcome the objection which is raised to the straight line method, this method often is used. Hereunder, the depreciation burden is reduced year by year, as the net carrying value of the asset is decreased. Theoretically, at least, this method seems to be a just one, inasmuch as by its use the depreciation charge is large when repairs are small, and decreases as the repair charges increase; by its use, the burden is distributed equitably over all the years of the life of the asset.

This method contemplates determining a uniform percentage rate which, when calculated each year on the diminishing balance, will reduce the asset to scrap within the prescribed number of years. The formula for obtaining the required percentage rate is rather complicated, involving the use of logarithms. It is about as follows:

$$\text{Percentage (P)} = 1 - \sqrt[n]{\frac{\text{Scrap (S)}}{\text{Cost (C)}}}$$

n, the number of periods.

To illustrate the use of this formula in determining the percentage rate, consider a machine with a present value of $47,000.00, estimated to last ten years, with a scrap value of $2,000.00. Substituting these values in the above equation, the following results:

$$\text{Percentage (P)} = 1 - \sqrt[10]{\frac{2{,}000}{47{,}000}}$$

And by solving this equation with the use of logarithms, the following results:

$$\log.\left(\frac{S}{C}\right)^{1/n} = \log.\left(\frac{2{,}000}{47{,}000}\right)^{1/10} = 1/10\ (3.3010 - 4.6721)$$

$$= \bar{1}.86289 = 1 - .729 = .271$$

Hence, the rate to use is 27.1 per cent.

In applying this percentage rate, a zero valuation never can be secured, inasmuch as the series becomes indefinite and indeterminate.

This method is advocated by many accountants, and has features worthy of commendation.

Depreciation Fund.—It happens at times that the management of a business wants to set aside a cash fund for depreciation so that as parts of the plant wear out the money will be on hand to replace them. Under this plan, the fund will be equal in amount to, and offset, the Reserve for Depreciation account.

The cash in this fund may be placed in investments which wili be carried in the fund. If so, it is usual to credit all income from such investments to a general miscellaneous income account; it is said that depreciation goes on whether investments pay or do not pay, and hence investment income should not be confused with depreciation, but should be credited to a general income account.

Sum of the Year Digit Method.—Since the fixed percentage on diminishing value method makes use of a formula in determining the percentage rate to use thereunder that is somewhat difficult to apply, a substitute method often is used which gives fairly good results. The application of this method is best discussed by applying it to an example.

Assume the same conditions as were indicated in the problem above. Since the estimated life is ten years, the following is done first: Add together the digits 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. The sum secured is 55. This 55 is then taken as the denominator of a fraction which reduces in size each year, and by means of which the yearly depreciation is calculated. At the end of the first year, 10/55 of $45,000.00 will be charged off; at the end of the second year, 9/55, and so on, until the last year, when the depreciation charge will be only 1/55.

Sinking Fund Method.—One method of handling depreciation is to set aside annually a sum which, at compound interest, will be sufficient to replace a plant when it has to be renewed. This plan is known as the "sinking fund" plan, although, as will be seen in a later chapter, the title does not seem exactly correct, inasmuch as a sinking fund should relate to a method of periodically providing a sum which, at compound interest, will pay off

an existing obligation when the latter matures; the sinking-fund principle is made use of, but that is all.

The annual charge to the Profit and Loss account will be the amount invested each year plus the interest charged to the so-called sinking fund that year. This method is a most conservative one in that thereunder when the property becomes worn out, sufficient cash will be on hand to replace it. Three serious objections seem present against using this method, even though it is used considerably. These may be stated as follows:

1. In general, the amount of cash deposited each year in the fund will not earn as much interest as the same amount invested in the business.
2. The depreciation burden becomes heavier as the asset approaches the end of its useful life. This objection is similar to the one raised in connection with the straight line method.
3. In general, this method does not seem to be a practical one unless elaborate records of properties are kept, and but few companies are willing to incur the expense necessary to keeping such records.

A discussion relative to calculating the annual charge to the sinking fund will not be included herein since, of necessity, it would be similar to that necessary in discussing the calculation of the annual charge to a bond sinking fund. The latter will be taken up in the next chapter, and the discussion of sinking fund calculations seems more important in connection therewith than hereunder.

Annuity Method.—This method is based upon the assumption or theory that the cost of production should include interest upon the capital invested in the fixed asset as well as the usual items of repairs, maintenance, and depreciation. Hereunder, depreciation should be a "sum figured as a constant annual charge, sufficient not only to write off the decline in value, but also to write off annual interest charges on (the) diminishing value."

The method does not seem to have the approval of the best authorities. Interest upon capital is not universally accepted as part of production cost. Again, it may be said to be artificial, and open, also, to an objection already advanced in another connection that the greatest amount will be charged off during the later years of the life of an asset than during the beginning

years. Further, the formula to be used in making the calculation is more or less involved; the method would seem to be one to be favored by a theoretical mathematician, not by a practical man.

Revaluation Method.—This method of dealing with depreciation contemplates a revaluation or appraisal of the assets at the end of each accounting period, as yearly. Hereunder, the difference between the book value at the end of the year and the value disclosed by the appraisal would be written off as depreciation against the operations of the year.

In general, the method is not a practical one for two reasons:

1. Elaborate property records are necessary and but few concerns are willing to incur the expense necessary to keep such records.
2. It does not result in spreading the depreciation scientifically over the various accounting periods (see qualification in next paragraph).

So far as small tools and office furniture and fixtures are concerned, this method seems the most desirable of all, as concerns these items, since it tends to distribute equitably the loss in value or depreciation against each year's operations.

Composite Life Methods.—In public utility accounting, a composite life method is used commonly. In the first instance, in public utility accounting, the composite life of the plant as a whole is determined. Next, the annual depreciation charge is calculated so that at the end of this life period the entire value of cost less scrap will be written off. The depreciation charge may be calculated in connection with the composite life of the plant in a number of ways already discussed, as:

1. Straight line.
2. Diminishing value.
3. Sinking fund.

The property first is classified both as to cost value less scrap, and as to age. Next, the class of property having the longest life is taken as the basis, and the number of renewals of the other classes of property during that basic period is determined. Next, the total cost of renewals in each class during that period is calculated. Next, these costs are multiplied by the years of life for each class and the product secured for each class extended

as "dollar years." The total dollar years divided by the total cost of all renewals during the period gives the composite life, or mean life, of the plant. A schedule to use hereunder would be headed about as follows:

Class of property.
Life.
Cost of reproduction new.
Scrap value.
Cost new less scrap.
Times renewed in . . . (base) . . . period.
Dollars required in . . . (base) . . . period.
Dollar years.

Except for the matter of determining the mean life of a plant by dollar years, this method will not differ from any of the others.

Working Hours Method.—This method calculates depreciation upon the basis of the number of working hours estimated as representing the life of an asset. When the rate per working hour has been obtained, the depreciation for an accounting period is computed by multiplying this rate by the total number of hours the asset has been working during the period, the result secured being the total period's depreciation.

This method seems most desirable from the viewpoint that the charge for depreciation conforms to the use of the asset in question, it being assumed that the depreciation will be in proportion to use. However, regardless of its desirability, the objection may be made, as in the case of the straight line method, that heavy repairs and upkeep toward the end of the asset's life are not recognized, inasmuch as the amount thereof cannot be computed in advance with any degree of accuracy.

Production or Output Method.—Hereunder, the depreciation rate is charged per unit of output. The method, to some extent, resembles the working hours plan. It is especially applicable to assets of the nature of furnaces, kilns, etc., where linings must be renewed on the basis of actual use.

Again, it is particularly applicable in amortizing wasting assets such as timber stumpage, and coal or ore mines, if no distinction is to be made between the assets subject to depreciation and those which are of the wasting type. In the case of wasting assets, however, these decreasing in value in exact

ratio to the amounts used, it is doubtful whether such decrease is depreciation.

In the case of wasting assets, the charge would be made when a sale has taken place, not before. There is just as much ore on hand, for example, whether it is on the surface or under ground; the quantity does not change until a sale has taken place.

It may be stated, in conclusion, that the production method may be operated upon a sinking-fund basis rather than upon the proportional basis presented above.

Miscellaneous Methods.—Depreciation methods, other than the above, may be summarized briefly, since no detailed discussion of any one seems necessary:

1. Arbitrary amounts are charged periodically to depreciation:
   a. Increasing as time passes.
   b. Decreasing as time passes.
2. Arbitrary amounts are written off at any convenient time.
3. Unit cost. Each unit of product has equalized thereover in the periodical depreciation charge, interest on investment, operation and repair charges, and actual depreciation. This method involves an elaborate mathematical calculation making use of the sinking-fund principle.
4. Replacement. Hereunder, no depreciation is booked, all replacements and renewals being assumed as offsetting depreciation.
5. Maintenance. Hereunder, the periodic maintenance cost of an asset measures the depreciation charge made.
6. Gross earnings. Hereunder, the amount of the periodical depreciation charge depends upon earnings. In lean years, therefore, the charge will be less than in prosperous years, since the rate is calculated upon earnings.
7. Insurance. Hereunder, actuarial principles are used. The fund accumulated or measured by depreciation charges does not come into existence until it can be used, and then it is to be used within the period in which it came into existence.
8. Fifty per cent. This method is usable only when an asset reaches the point, due to depreciation, where it must be renewed. The theory is that ordinary repairs will always keep an asset in a 50 per cent condition at least. Hence, depreciation is applicable only to the other 50 per cent.

Fallacy in Theoretical Depreciation Discussion.—In the discussions above, the assumption has been made, which is general, that an asset being depreciated will be used until scrap value is reached; herein lies the fallacy. As a matter of practice, no asset should be kept when its condition drops below 75 to 65 per cent, in other words, no asset should be kept which has depreciated beyond 25 to 35 per cent. If so, the repair and renewal charges will be too heavy for practical purposes, and a new asset should be secured. Again, regardless of how much care is observed in calculating a depreciation rate, many instances will be encountered where the book depreciation to date will be far in excess of actual depreciation. In other words, on the records an asset may be even down to scrap value, whereas, as a matter of fact, the asset will be in use and functioning at least 65 per cent; the deduction to be drawn, naturally, is that production costs in the past were excessive. The conclusion to be drawn would seem to be that, regardless of all the possible methods that may be, or are, used, the correct method, under many cases, has not as yet been found.

Depreciation Rates.—In determining the rate of depreciation for a particular asset, no two persons would agree. In the first place, each problem presented contains dissimilar elements; hence, no specific rules for specific types of cases would seem applicable. At best, the amount to be determined upon is a matter of judgment, tempered by experience. So long as the judgment is conservative, and so long as ample depreciation is provided, the accountant should be satisfied.

Although no two persons will agree in estimating depreciation rates, the following estimates are presented so that the student may have something of a definite nature for reference. The six classes of assets set out are the usual ones concerning which accountants ordinarily have to deal in practice:

1. Buildings. From 1½ to 5 per cent per annum, the average being about 2½ per cent.
2. Machinery. From 5 to 10 per cent per annum.
3. Furniture and fixtures. From 10 to 15 per cent per annum.
4. Horses and wagons.

   a. Revalue at end of each year and write off the difference

between that value and book value against operations of the current year.

b. About 10 per cent per annum. Horses, alone, may average about 15 per cent per annum.

5. Automobiles. From 15 to 33⅓ per cent per annum.
6. Tools and running gear.
   a. Revalue as indicated already above.
   b. From 20 to 33⅓ per cent per annum.

Booking Depreciation.—The following are representative methods of treating depreciation upon the books of account:

1. Charge Depreciation account and credit the asset accounts. Hereunder, the assets are written down; hence, the cost of each written down asset is lost sight of. This is a serious objection to the method inasmuch as:
   a. The cost value of any asset should be its booked value.
   b. The cost value becomes the settlement basis with insurance companies in case of loss.
2. Charge Depreciation account and credit a "pool" Depreciation Reserve account, this reserve covering all classes of property. The objections to this method are about as follows:
   a. The net carrying value of each particular class of fixed assets cannot be determined except by analyzing the account. If an account must be made over before it presents an intelligent story, the account should have been revamped in the original instance before entries are booked.
   b. No means exists of verifying the accuracy of the increases to the account inasmuch as actual depreciation for each class of property, from time to time, cannot be checked against the booked theoretical depreciation.
3. Charge Depreciation account and credit a specific Depreciation Reserve account for each class of property. This seems to be the best method to adopt inasmuch as the cost value of an asset less the amount in the Depreciation Reserve account will show the asset's net carrying value. Usually, this method is the only one used in the elementary study of accounting principles; hence, it should be familiar to all advanced students.

The Depreciation Reserve account for a particular class of assets would record the following elements:

1. Debits.
   a. Extraordinary or periodical renewals which tend to increase the original life of the plant.
   b. Cost value of whatever portions of the asset in question are dismantled; the offsetting credit would be against the asset account.

2. Credits.
   a. Provision for the accrued depreciation calculated upon the basis of the annual rates adopted; the offsetting debit would be against the Depreciation account carried for the class of assets.
   b. Scrap value of whatever portions of the asset in question are dismantled; the offsetting debit would be against a scrap account representing scrap stock.

3. Balance. Represents depreciation that has accrued to date, not yet made good.

The Reserve for Depreciation account may be set out upon the Balance Sheet in either of two ways, dependent upon the viewpoint taken as to what such a reserve represents:

1. As a liability. This viewpoint would consider the reserve as a special liability, to be set out as such, representing a provision to cover a liability for an expenditure which must be made in the future to purchase a new asset when the old one is discarded. Hereunder, the reserve will show as a liability upon the Balance Sheet.

2. As a valuation or estimate account. Hereunder, the reserve is an opinion of some one, assumed as being competent, of the amount that an asset or class of assets has diminished in value by deterioration. It represents merely what may be considered as a suspended credit to the asset account, carried in a separate account for reasons already given. Hereunder, the reserve will be shown upon the Balance Sheet as a deduction from the asset. Since depreciation should represent actual loss insofar as one may estimate the amount thereof, it seems that this view is the correct one.

Replacing or Selling Depreciated Assets.—Two more or less elementary problems arise relative to depreciation elements which may be commented upon briefly:

1. Replacing a depreciated asset. This problem seems to present a two-way differentiation:
   a. Depreciated asset worn out. Charge the cost of the old asset to the Depreciation Reserve account carried. If the reserve has been calculated properly, its amount will represent the whole cost of the asset charged against profits and credited against the reserve.
   b. Depreciated asset not worn out. Sometimes a partially depreciated asset will be replaced by a better one, the replacing being caused by something that could not be foreseen when the original asset was secured. The old asset's remaining net value may be taken care of:
      i. By a charge to Surplus account, provided such procedure does not eliminate this account entirely.
      ii. By leaving the old asset upon the books to be written off as rapidly as possible during subsequent periods or years, and by booking the new asset in a separate account.
2. Selling a partially depreciated asset. Hereunder, a two-way possibility exists:
   a. Sales price less than net carrying value. The difference between the cost and the price realized consists of depreciation charged off already and the profit or loss from the sale. The asset account should be credited to eliminate the cost; the depreciation reserve should be debited to eliminate the amount credited to it on account of this particular asset; and Surplus account should be charged to take up the loss suffered. Even though the above really assumes a sale as at the end of a year after the periodical depreciation has been adjusted, the procedure followed may be applied in exactly the same way to an asset disposed of before the end of a specified period. In other words, if an asset, partially depreciated, be sold between two closing dates, two possible ways exist relative to the handling:

   i. Proceed exactly as above, without attempting first to adjust the depreciation for the partial period. Charge the whole difference, based upon the last figures shown by the books, directly to Surplus, because of the simplicity involved.
   ii. First adjust the depreciation for the part of the period passed, and then proceed as indicated.
b. Sales price more than carrying value. The difference involved represents a credit to Surplus account.

Wasting Assets.—An asset subject to depreciation does not seem to be synonymous with an asset subject to waste, because the loss of value in each case does not take place in the same way. A wasting asset is represented by a mine, a timber tract, a patent, or a leasehold, for example, and, hereunder, the loss in value results because the asset itself is used up either through consumption, or through the passage of time. A depreciating asset, on the other hand, neither is used up through consumption, nor does it become reduced in size by the passage of time or use; it merely loses usefulness.

Because of this difference in the character of these two classes of assets, each should be accorded a different treatment in the books of account. Estimate alone governs the loss of value in an asset subject to depreciation; hence, the use of a Depreciation Reserve account. On the other hand, since a fair degree of accuracy may be secured in determining the loss in value of a wasting asset, the use of a reserve account seems unnecessary, it being sufficient merely to write down the asset by direct credits there against.

Appraisals and Depreciation.—Periodically, say, every few years, an appraisal of the capital assets of a plant should be made by experienced appraisers both as a check upon the accuracy of the depreciation charges to date, and to establish, in turn, a correct basis for insurance claims should occasion require. It should be remembered that an accountant is not an appraiser, at least as an accountant; in fact, accountants who believe themselves appraisers really are assuming a knowledge of two technical subjects, with the result that most of them are not proficient at either line of work.

When an appraisal has been made, the attitude of an accountant in relation thereto would be about as follows:

1. If net carrying value is higher than appraisal value. In this event, the depreciation reserve should be increased.
2. If net carrying value is lower than appraisal value:
   a. If a fraudulent motive is present to understate net worth. The depreciation reserve should be increased and, in the event of refusal by the directors to do so, the accountant should draw attention to the appraisal figures in his report.
   b. If no fraudulent motive is present to understate net worth. The depreciation reserve need not be increased, but the accountant should draw attention to the appraisal figures in his report because, if not done, he may be guilty of being a party to the understatement of assets which will result in the establishment of a secret reserve. (See Part 2 of present chapter.)
3. If market fluctuations have caused the appraisal to show an excess value, the books should not absorb such increase.
4. If excess past depreciation charges are responsible for the increase of the appraisal figures over net carrying value, such excess should be credited to the Surplus account.

PART 2.—RESERVES AND RESERVE FUNDS

Reserve Defined.—As ordinarily employed, the term "reserve" has no definite meaning. Basically, it may refer to either one of two possibilities:

1. A valuation account (an asset account offset).
2. An appropriation of surplus (proprietorship reserve).

Sometimes, a third type is referred to which partakes of the nature of a valuation account or a true reserve, depending upon conditions. It is created, usually, by a charge to operation as in the first type above, but unless an actual liability exists, it has the characteristics of the second type. However, the two basic types above shown are a sufficient differentiation for present purposes, being those ordinarily found in business concerns.

In a financial institution, concerning which this book does not deal, the term "reserve" has not the meaning accorded thereto above. Hereunder, it refers to the amount of cash and cash

items on deposit and on hand which legally may be considered as a fund held against deposits.

Valuation Reserves.—A valuation reserve relates to a charge against profits with a view to covering an expected or actual loss in asset values. From the standpoint of the booked accounts, such a reserve may be said to be provided whenever a charge is made against profits without a corresponding credit being made to reduce the debit balance in an account representing an asset. The corresponding credit is made to a valuation account particularly created to receive such credit. Such a valuation account never should be considered alone, but always in conjunction with the asset account that it offsets. The existence of a valuation reserve account indicates merely that there is an asset account present which, from the standpoint of the total net charge thereto, its debit balance, is assumed to be overstated. Common examples of this class of reserves would be:

1. Reserves for depreciation.
   a. Buildings.
   b. Machinery.
   c. Etc.
2. Reserves for bad debts.
   a. Uncollectible accounts receivable.
   b. Uncollectible notes receivable.
   c. Cash discounts to be given.
3. Reserves for fluctuation in market values (where market drops below cost).
   a. Inventories.
   b. Securities.
4. Depletion of natural resources.
   a. Mines.
   b. Quarries.
   c. Timber.
   d. Oil.
   } Questionable as to being covered by reserves.

Some accountants would add another group of reserves to the above list which relates to liabilities, as, for example, reserve for taxes, reserve for wages accrued, etc. However, in view of some things which have been stated earlier, and which will be presented in later chapters, the opinion is ventured that such reserves are unnecessary inasmuch as when the liability arises,

even though perhaps partially uncertain as to the exact amount, the booking should be as a liability.

Surplus or True Reserves; Proprietorship Reserves.—A surplus or true reserve represents amounts which have been appropriated from surplus for some special purpose. As a matter of fact, it would seem correct to consider the Surplus account as a reserve, if it were not that general practice does not thus consider it. In other words, when a true reserve is created, it is understood, generally, that certain portions of the surplus have been set aside or reserved under particular informative titles for certain specific purposes. Common examples of this class of reserve:

1. Reserves for contingencies.
    a. Fire loss.
    b. Accidents.
    c. Obsolescence.
    d. Guarantees.
    e. Pending litigation.
2. General policy reserves.
    a. Plant extension.
    b. Betterments and improvements.
    c. Working capital.
3. Reserve for sinking fund.

As these reserves stand, with the possible exception of (3), they are all part of net worth since, by book entry, they may be transferred back into unappropriated surplus and become available for dividends. In fact, at times, a reserve is set up with the express purpose in mind of providing a means to equalize dividends during lean years. An exception has been made in the case of the reserve for sinking fund in view of the fact that so many deeds of trust related to bond issues require that the sinking fund be created out of profits. Hence, the transfer back into general or free surplus would not occur. However, since the reserve is created by a direct charge to Surplus account, it is seen to be part of surplus. Sinking funds will be discussed in the next chapter.

One class of reserves has not been included in the above grouping of surplus reserves in view of the fact that their use appears, in general, to be decidedly doubtful. These reserves relate to

appreciation in fixed asset values, as land, buildings, etc. Appreciation should not be taken up on a set of books unless in connection with adjusting book figures to appraisal values where the latter are in excess of recorded values and where further such excess is not due to the overstatement of certain of the valuation reserves. And in this event, the unrealized profit should be credited to a special reserve instead of to Surplus account, so that dividends will not be paid out of the unrealized profit.

Reserves and the Balance Sheet.—In interpreting a Balance Sheet, care must be observed in distinguishing between the two types of reserves mentioned, inasmuch as frequently no distinction between them will be shown. This would be true especially, for example, in computing the book value of the common capital stock of a company.

Funds.—This term is used correctly to designate a grouping of asset values brought together for a specific purpose. Hence, the entire stock of assets that an individual or a business enterprise has under its control and for its specific use may be considered as a fund. However, the term is used more commonly to indicate or set out a particular sub-grouping of asset values, or various sub-groupings thereof.

Funds are of various kinds, and illustrations thereof may be indicated about as follows:

1. Contract obligation involved.
   a. The periodical withdrawal in a systematic manner of assets from the general fund of assets (which may be represented by the total asset values set out upon the left side of the Balance Sheet) for the purpose of meeting specific obligations which, when matured, must be paid. A fund accumulated in this manner is known, generally, as a sinking fund (see discussion in next chapter). The accumulation of this fund may vary with either of the following principles:
      i. Periodical deposits of cash are made, as yearly, from the general fund, into a special fund. And these deposits:
         (a) May be used at once to retire a portion of the obligation, or
         (b) May be held in the special fund which, peri-

odically, is increased by further deposits so that, at maturity date, the obligation can be retired.

This method has no relation whatever to profits; hence, it refers merely to a cash accumulation governed by intervals of time.

b. The periodical accumulation is to be made from profits actually earned. Hereunder, it is to be noticed that profit distribution is restricted during the interval in which the fund is being increased. The use of the fund thus accumulated may be varied, also, in accord with (a-i), (a) and (b), above.

2. No contract obligation involved. Hereunder, any person or business enterprise may accumulate, convert, and use its assets for its own ends and purposes, as is deemed desirable. Since a fund, under the above conditions, may cover about any use capable of being conceived in a person's mind, it may be advisable to differentiate roughly between funds used ordinarily by corporations involving no contract obligation, and those used outside of corporation practice:

a. Non-corporate funds.

i. Endowment fund. This is related to some type of a non-profit organization, as a university. Hereunder, a principal is accumulated, and payments are made only from the interest received from investments of the principal.

ii. Maintenance fund. This is related to property upkeep.

iii. Trust fund. This is a fund held by some one, called a trustee, for the benefit of another, called the cestui que trust (a later chapter will discuss certain angles of this particular problem).

iv. Etc.

b. Corporate funds.

i. Property improvement funds.

ii. Pension funds.

iii. Depreciation funds.

iv. Etc.

Reserve Funds.—The capital investment of a business is shown upon a set of books by an account or accounts carrying a credit balance or balances. And the sum of the balances in these accounts measures the net equity of the proprietors. The elementary student, in general, will not fall into the error of stating, for example, in the case of a corporation, that either the capital stock or surplus, as set down upon the right side of a Balance Sheet, is represented by any particular assets displayed upon the left side of the Balance Sheet. He will recognize quickly that he cannot point out particular items upon the left side and state that they are offsets specifically to capital stock and surplus.

In the event where certain liabilities are present, representing debts to outsiders, he will recognize that the amount by which the assets exceed in value the amount of the liabilities represents merely net equity. Likewise, where no outside liabilities are present, in which event the whole asset fund is owned by the proprietors, he will recognize that the interest or equity of each stockholder cannot be stated in the form of specific assets unless, as rarely happens, cash is the only asset in hand.

Likewise, since surplus reserves are only appropriated surplus, it is not difficult to comprehend that, in the ordinary course of events, no specific assets in particular will represent them. Again, it is not difficult to comprehend that if sufficient assets can be changed into suitable form, these may be set aside for a specific purpose measured by certain surplus reserves already in existence. To restate: Particular assets need not be set aside, as an offset to surplus reserves, but they may be. Further, if the illustration be changed to that of a valuation reserve, it is possible, even, to use a fund in connection therewith.

And when specific assets have been set aside as representing a reserve, a reserve fund comes into existence. A fund always should consist of assets, and a reserve fund always should consist of assets which have been set aside particularly in connection with a reserve. Such a fund may consist of cash, but this is not necessarily so, inasmuch as it may consist of securities. Again, a fund may be restricted as to use, or it may not be thus restricted.

It should be remembered that no accounting connection exists

between the creation of a reserve, even though it is possible to bring the two into existence at the same time. The possibilities hereunder are about as follows:

1. A reserve may be created without a fund.
2. A fund may be created without a reserve.
3. A reserve and a fund may be created at the same time.

Finally, a fund may be accumulated by periodical appropriations, or it may be created entirely at one stroke.

Secret Reserves.—This term refers to the understatement of a concern's net worth; as a term, it is a misnomer, at least insofar as the meaning applied above to "reserve." The understating of the net worth of a business enterprise may be accomplished in the following ways:

1. Understating upon, or omitting from, the books of account certain asset values.
2. Overstating the liabilities.
3. Overstating the valuation reserves.

A common method of understating assets is to either charge capital expenditures to revenue or to make the depreciation charges excessive.

Certain organizations, particularly banks, are apt to understate asset values in hand, and this practice results in the creation of what is known as a secret reserve. For example, it is not uncommon practice for a bank to write the value of its building, and even its equipment, entirely off the books, so that they will not appear upon the Balance Sheet.

Certain accountants seem to favor the practice of creating a secret reserve, regardless of the type of enterprise, on the ground that thereunder a fund of values is stored up which may be drawn upon in periods of depression in order to stabilize income, without drawing upon the accumulated surplus; again, a large unexpected loss may be absorbed without having the records reveal such loss.

The practice of using secret reserves can scarcely be justified. If statements are supposed to be prepared to set forth the truth insofar as human endeavor and the element of time permit, the secret reserve is anything but legitimate. Accounts should tell the truth; otherwise, they serve no purpose and are useless. Theoretically, asset values should not be understated any more

than they should be overstated; if it is wrong on the one hand, it is wrong on the other. Every statement should set forth facts, regardless of whether it covers a bank or any other type of enterprise; too many misstatements of fact occur in the attempt of many accountants to follow out a policy of conservatism. The oft-repeated expression that "an accountant should never be considered in error so long as he is conservative" ought never to have been advanced. There is a limit beyond which conservatism does more harm than good. Further, in these days of varied taxes, especially taxes upon incomes, the facts should be stated as they are, consistent with the training and experience ordinarily assumed as belonging to the accountant who is deemed to be a qualified man in his particular line of work.

PART 3.—SURPLUS AND DIVIDENDS

Corporate Net Worth.—The net capital of a corporation, represented by total assets less total outside liabilities, measures the amount of the organization's proprietary interest or net worth. The Capital Stock account is the principal proprietary account in a corporation, but not necessarily the only one. At the commencement of operations, it may be possible to assume a proprietary interest equal in amount to the Capital Stock, but as soon as operations commence, the proprietary interest will be either greater or less than the capital stock.

If a corporation proves to be successful, profits will be made, and if these profits are not all withdrawn, the result will be an increase in proprietary interest. This increase, however, cannot be credited direct to the Capital Stock account in view of the fact that the latter is fixed in amount; hence, the necessity of providing another proprietary account therefor. This second account is known, generally, as the Surplus account. And, in general, it may be said that this account, when properly constructed, should be built up by credits representing only undivided profits which, at the moment of booking, will be available for purposes of distribution in the form of dividends.

On the other hand, if a corporation does not prove to be successful, with the result that the surplus has been exhausted and that subsequently the losses are greater than the profits, the latter should be debited to a Deficit account. This account will

carry a debit balance. Further, it is not an asset, but merely a book account explaining the difference between the assets and the sum of the liabilities plus investment. In determining corporate net worth, the Deficit account must be considered in connection or in combination with the other proprietorship accounts.

Practically every corporation will have on its books either a Surplus account or a Deficit account, this being due to the fact that, in general, the Capital Stock account never will measure the amount of the net worth.

However, surplus may be of a type other than the one advocated above. If the possible kinds of surplus be classified, the following will result:

1. Surplus accumulated out of past profits. In turn, this surplus may be divided further into:
   a. Appropriated or restricted surplus.
   b. Free surplus. This represents past profits retained which are available for dividends.
2. Surplus created by contribution. Hereunder, the creation will be due to one of the following causes:
   a. Sale of stock at a premium.
   b. Stock donation.
3. Surplus created by revaluation. Hereunder, the creation will be due to one of the following causes:
   a. Increasing book valuations of capital assets.
   b. Reducing par value of the capital stock.

The cause of uniformity in accounting terminology would be aided considerably if persons had the same idea in mind when speaking of surplus. And to this end, the suggestion is made that since the average individual considers surplus as representing something out of which dividends may be paid, its use, as a term, ought to be that indicated by (1-b) above.

Classes of Dividends.—Dividends, as discussed in the present chapter, relate to corporate profits which are to be distributed to the stockholders, not to certain other particular payments to be made to stockholders which often are given the title of "dividends," as,—liquidating dividend. Basically, the following discussion of dividends may be outlined briefly about as follows:

1. Source.
   a. From capital.
   b. From profits.
2. Manner of payment.
   a. Cash.
   b. Property.
   c. Bonds.
   d. Stock.
   e. Scrip.

Capital Versus Profits—Relation to Dividends.—In corporate work, there exist two distinct funds of values:

1. Contributed capital. This fund of values is presumed to be used only for financing purposes. Further, this fund is not to be returned to the stockholders except under the following circumstances, each of which is governed by statute:
   a. When the capital stock is formally reduced.
   b. When the company is dissolved.

   In other words, except when reduced by the sufferance of losses, the stockholders, ordinarily, have no right to withdraw any of this fund; the corporation has no legal right to distribute its capital to the stockholders except under either of the conditions mentioned above. This general rule, however, is subject to one exception, in the case of corporations operating by virtue of depleting some natural resource.
2. Profits. A second fund of values grows out of the operating activity of a corporation; it results from profits being earned. This fund of values may be distributed to the stockholders under certain conditions:
   a. The board of directors, by formal action, must declare a dividend. By such action, the board of directors, who are the representatives of the stockholders, set aside a portion of the profits that have been earned, and when this setting aside has been accomplished in due form under the law, there can be no rescinding of the action; hence, after a dividend has been declared, payment thereof may be enforced by the stockholders, provided such declaration be made in due and legal form.

b. There must be sufficient profits on hand to meet the possible contingencies that may arise before a dividend declaration is in order. This condition, however, is not governed by the law as is the first one above. A dividend might be declared equal to the full amount of the profits earned, but conservative management, for the reason just mentioned, will not favor any attempt to withdraw the entire amount of the profits from a business. Because of possible contingencies, a prudent management will attempt to build up a substantial surplus margin in anticipation of the evil day; and in certain organizations this policy of conservatism is followed so consistently from year to year that eventually the Balance Sheet will disclose a legitimate surplus so large that it is many times larger than the total capital stock.

Because of the shortsightedness and lack of understanding on the part of stockholders,—their continual clamoring for large dividends, plus their attitude that a large surplus represents something that should be paid over to them and when not so paid indicates mismanagement,—it is customary to reserve certain portions of the surplus in a manner that will make them unavailable for dividend purposes. The result of this practice, plus the legal theory underlying the two funds referred to above, would seem sufficient reason for revamping the set out of these two funds about as follows:

1. Capital fund. This may be represented as under:
   a. The par value of the capital stock issued and outstanding.
   b. Profits appropriated by formal action for capital uses.
2. Earned profits or surplus available for dividends:
   a. Free surplus.
   b. Surplus appropriated for distribution by virtue of a specific dividend declaration in due and legal form.

Surplus Profits.—The liability of corporate stockholders being limited, in general, to the amount that they have invested in a corporation, as represented by the shares of stock held, seems to be the basis for the numerous conflicting opinions of judges and accountants as to what is a corporate profit available for dividend purposes. Since it is a fundamental legal rule that

corporations, with the exception of companies operating in connection with a natural resource, must not pay dividends out of capital, it follows that dividends can be distributed only from surplus profits. No difficulty would be encountered in connection with the subject of dividends if it were possible to secure as simple an interpretation of this principle or rule as is its statement; however, regardless of statutes and court decisions, a satisfactory definition of the term "surplus profits" does not seem to have been offered.

Accountants commonly define corporate surplus as the excess of the assets, valued conservatively, over the sum of the liabilities plus capital stock. Legal decisions supporting the above definition consider surplus profits as being the excess of the assets over the sum of the liabilities and capital stock, such excess being actual and not the result of an appraisal. However, in delving further into the subject, a conflicting maze of decisions is encountered, as well as decisions in conflict with generally recognized practice. The following are illustrative:

1. A concern makes a net business profit of $40,000.00, but suffers a capital loss of $50,000,00. Legally, a dividend of $40,000.00 could be paid, but prudence may not favor such a procedure. Legally, a deficit might be carried along with no attempt being made to write it off against current profits.
2. Profit secured from the sale of fixed assets may be distributed as dividends.
3. A surplus profit may be secured by a company converting some of its bonds into stock at a figure above par.
4. A surplus profit may be secured by selling bonds at a premium; on the other hand, premiums on stock may be distributed, but are not legally profit and, therefore, such distribution should not be considered as a dividend.

Illegal Dividends.—The only point to be considered here relates to the illegal declaration of a dividend by the directors. Most states have statutes which hold directors personally liable for losses suffered by company creditors due to the fact that they have reduced the capital fund through the payment of dividends. Naturally, this contingency will not arise so long as creditors are paid as bills mature, but the possibility is ever present that by

virtue of business reverses these outstanding obligations cannot be met. Hence, directors ever should be careful in declaring and paying a dividend.

The type of statute referred to above is well exemplified by the statute existent in New York which reads as follows (S. C. L.; Art. 3, No. 28):

> The directors of a stock corporation shall not make dividends, except from the surplus profits arising from the business of such corporation, nor divide, withdraw or in any way pay to the stockholders or any of them, any part of the capital of such corporation, or reduce its capital stock, except as authorized by law. In case of any violation of the provisions of this section, the directors under whose administration the same may have happened, except those who may have caused their dissent therefrom to be entered at large upon the minutes of such directors at the time, or were not present when the same happened, shall jointly and severally be liable to such corporation and to the creditors thereof to the full amount of any loss sustained by such corporation or its creditors respectively by reason of such withdrawal, division or reduction. But this section shall not prevent a division and distribution of the assets of any such corporation remaining after the payment of all its debts and liabilities upon the dissolution of such corporation or the expiration of its charter; nor shall it prevent a corporation from accepting shares of its capital stock in complete or partial settlement of a debt owing to the corporation, which by the board of directors shall be deemed to be bad or doubtful.

Similarly, in the case of a corporation authorized to issue shares without nominal or par value, another section of the law states as follows (S. C. L.; Art. 2, No. 20):

> No such corporation shall declare any dividend which shall reduce the amount of its capital below the amount stated in the certificate as the amount of capital with which the corporation will carry on business. In any case such dividend shall be declared, the directors in whose administration the same shall have been declared, except those who may have caused their dissent therefrom to be entered upon the minutes of such directors at the time or who were not present when such action was taken, shall be liable jointly and severally to such corporation and to the creditors thereof to the full amount of any loss sustained by such corporation or by its creditors respectively by reason of such dividend.

An illegal dividend may be revoked any time before payment is made; further, if such dividend has been paid, revocation is in

order only as concerns the stockholders who know that the source is illegal.

Mining Company Dividends.—In the case of companies, where the value of the capital asset,—mine, quarry, timber tract, etc.,—is being decreased on account of current operations, good accounting should demand the application of a portion of each period's profits against the book value of the wasting asset so that such book value will be extinguished completely at the end of its life. However, it would seem that the application of this principle is dependent upon the fact of whether or not it is possible to determine with any fair degree of accuracy the number of units of product available for use. Take the case of a mining company as an example:

1. If possible to determine the available units of product with a fair degree of accuracy, the reduction, or so-called depreciation, may be based upon the number of units taken out, to the end that the wasting asset will be amortized over the period of its usefulness so that finally, at the end of such period, it will have been replaced from profits in another form. In this event, stockholders' dividends will not consist partly of profits and partly of a return of capital, inasmuch as the capital return will be made all at one time.
2. If impossible to determine the factors mentioned above, and explanation exists to the end that the stockholders and creditors of such a company are aware of actual conditions, it would seem proper and in order to have the dividends consist of both profits and a capital return. However, although this practice is followed to a considerable extent, such companies being excused from following out any policy of amortization, it appears that such procedure should not be in order unless the stockholders and creditors are informed fully of the facts of the case to the end that they will not labor under a delusion that the entire dividend received from time to time consists of nothing but profits.

Realizing Upon Assets to Pay a Dividend.—The principle that arises in connection with the matter of determining profits correctly may be considered as dividing itself into the following parts:

1. Since it is impossible to allocate a particular asset either to the capital fund or to the profit fund, care must be observed, insofar as operations and activities are concerned, to make certain that current income will absorb all charges possible to the end that the capital plant may be kept intact.
2. In turn, this leads one, first, into the question of valuation of assets:
   a. As to current assets.
      i. Profits should not be anticipated.
   b. As to capital assets.
      i. Depreciation must be calculated most carefully.
      ii. Surplus additions secured through marking up the fixed asset values, if such procedure be tolerated at all, should be so earmarked that a dividend will not be declared from what is a mere book increase not offset by an actual increase in the asset fund contra.
3. Next, one should realize that, before a dividend be declared, the following points must be taken seriously into consideration:
   a. The need for additional capital may be such that available profits should be used for this purpose.
   b. Because of depreciation, the assets may shrink to such a point that the apparent profits do not actually exist.
   c. Current assets are exceedingly slow of realization.

Because of the above, the process of transforming or reducing profits to a specific cash fund available for dividends is somewhat difficult and complicated. In practice, therefore, where a sufficient realization of the importance of the above points is in order, dividends are not declared hastily. Further, after their declaration, the payment thereof will be deferred sufficiently to the end that cash may be secured and withdrawn in order to make payment.

The Supreme Court decisions are vague as to what constitutes net profit. Although a general reading thereof would lead one to believe that profits must be realized in cash before a dividend may be paid, it seems reasonable to assume that such a literal interpretation is not in order in view of the fact that by so do-

ing there would be no agreement with elementary accounting principles:

1. If accounting be done entirely upon a cash basis, the literal interpretation would seem to apply. However, except in the smallest of concerns, a cash basis of accounting is not followed in that thereunder the exact truth relative either to financial position or to profits cannot be expressed in the accounting statements.
2. If accounting be done upon an accrual basis, this literal interpretation could not be followed with reason,—in accord with at least one elementary accounting principle, to the effect that a profit is assumed to be realized at the moment a sale is made, which means at the moment a cause of action arises, regardless of whether actual cash has been received or some other asset, as an open account receivable, a note receivable, or other goods.

If the directors in good faith declare and pay a dividend before profits actually are realized in cash, it appears that no liability would be incurred by them should the values out of which the dividends are expected to be paid never be realized. But even so, conservatism dictates that dividends should be paid only from realized profits.

Declaring and Paying Dividends.—The directors of a corporation are not required to distribute profits to the stockholders unless, in their discretion, it seems proper to do so. This means that before so doing they have the specific duty of protecting the capital fund of the enterprise and in this connection they should make use of the undistributed profits in any way that seems best. And when it has been decided to declare a dividend, the provisions of the charter and of the by-laws must be followed; outside of this circumscription, in the absence of fraud, the directors control entirely the declaration of a dividend.

The directors may exercise their judgment and discretion in paying dividends and when, in good faith, dividends are withheld, nothing can be done to force payment except by a majority of the stockholders electing a new board of directors who will be subservient to their wishes. But if any improper withholding can be shown, the obligation rests upon the directors to explain why a distribution is not in order; under such circum-

stances, legal action may order the declaration and payment of a dividend.

Only after proper provision has been made for protecting the capital fund, should the question of profit distribution be considered. Premature declaration and payment to satisfy clamoring stockholders temporarily may keep up current market values of stock, and result in deceiving these stockholders into believing the management successful, but the policy is a short-sighted one which:

1. Starves business development.
2. May lead into insolvency.

These stockholders lose sight of the fact that a present curtailment of dividend payments may mean:

1. Securing the necessary working capital with which to carry on operations and which could not be secured in any other way except possibly by incurring heavy interest charges.
2. Development and expansion.
3. Payment of larger and steadier dividends in the future.

The Minute Book should contain all the information relative to dividend rate, date, and manner of payment. As soon as a legal dividend has been declared by the directors, and notice has been given thereof the stockholders have a right, each to his proper pro rata share, and such right cannot be curtailed in any way by the directors. Dividend declaration may be revoked at any time by the directors up to the moment public notice thereof is issued; thereafter, revocation is not in order except when the dividends are illegal. The stockholders to whom dividends are payable will be those whose names appear upon the corporate records as of a certain date,—the stockholders of record; hence, dividends are not payable upon treasury stock. Even though certain shares of stock may be owned by some one other than the person whose name appears upon the corporate books, the dividend is payable to the stockholders of record; any error arising hereunder based upon circumstances not of record, is a problem to be adjusted between the stockholders in interest. The company is not interested beyond its records as to whether the owner of record is the actual owner of the stock or not the actual owner.

The procedure in connection with the declaration and payment

of a dividend depends upon the size of the corporation in question and whether or not the stock is held by few or many persons:

1. Small close corporation.
   a. Dividend declaration is made but no formal notice published.
   b. The books are not closed in order to prepare the list of those to whom dividends are payable.
2. Small corporation—not a close corporation.
   a. The procedure hereunder follows that of the large corporations except that the volume of detail in connection therewith is small (see 3 below).
3. Large corporation with stock widely dealt in upon the market.
   a. Notice published to the effect that a dividend has been declared as of a certain date payable to the stockholders of record as of a date sufficiently far in the future to permit of the actual owners becoming stockholders of record before the date mentioned, upon which the Transfer Books will be closed.
   b. The Transfer Books are closed upon the date set, and remain closed for a certain number of days thereafter in order that the dividend list may be prepared correctly. When these books are open again, transfers are made thereon in the usual way as before.
   c. Great care is exercised in preparing the dividend list which, when completed, must be certified to as correct by the officer who has charge of stock transfers.
   d. After the dividend list has been certified to as correct, it is given to the treasurer, or to whoever handles the cash payments, checks are drawn, and payment made.
   e. Dividends, usually, are paid by checks drawn to the order of the stockholders of record as of the date specified. These checks are prepared upon the basis of the dividend list referred to above.

As a rule, the voucher check is used in connection with the payment of dividends and, in a large company, such checks are designed specifically for this purpose in which, at least, the number of the dividend is stamped or printed. If a special check is

printed for each dividend, the number and rate of the dividend would be printed thereon; if not, blank spaces would be left in which this information may be stamped. The advantages of using such a form of check hereunder are:

1. Proof of payment on hand in case of dispute.
2. Sufficient information on each check to make an accompanying form letter unnecessary.
3. Indorsement by stockholder constitutes sufficient acknowledgment.

Corporate net profits or income for a current period, prior to transfer, is found as a credit balance in a Profit and Loss account carried upon the Ledger in the usual way. From that point on, no uniformity exists either in the disposal of this balance or in booking a dividend which may be declared out of such profit. In outline form, the variations may be indicated about as follows:

1. Since corporate net profit or net loss cannot be absorbed in the Capital Stock account or accounts, its disposal from the Profit and Loss account may be as under:
   a. To Surplus account.
   b. To Undivided Profits account. From time to time round amounts are transferred to Surplus account. The balance in the Undivided Profits account is used for dividend payments. Banks follow this practice.
2. The entries in connection with declaring and paying dividends are simple, and are about as follows:
   a. Declaration of dividends (liability incurred):

i. Surplus Account,	$ ¢	
To—Dividend Payable Account,		$ ¢
ii. Profit and Loss Account,	$ ¢	
To—Dividend Payable Account,		$ ¢
Surplus Account,		$ ¢
iii. Undivided Profits Account,	$ ¢	
To—Dividend Payable Account,		$ ¢

The second possibility is unsatisfactory in view of the fact that if current profit is not sufficient for dividend purposes, the dividend still may be paid if sufficient accumulated profits are on hand; naturally, these latter are shown in the Surplus account. Hence, charging the dividend to

the Profit and Loss account makes matters somewhat confused.

b. Payment of dividends:

i. Dividend Payable Account,	$ ¢	
To—Cash,		$ ¢

Final dividend declaration always should precede dividend payment; never should the reverse practice be followed.

Care should be observed to book the liability incurred by virtue of a dividend declaration immediately upon such declaration and notice thereof. An unpaid dividend is a current liability to be set out upon the Balance Sheet as such. Ofttimes, a considerable portion of a dividend payment will remain unclaimed, the issued checks being returned through the post office. In this connection, it may be advisable to send them out again by registered mail, and if still unclaimed, then to transfer them to a special fund account. Unclaimed dividends cannot be returned to surplus except by action of the directors. If the above expedient be followed in connection with attempting to locate the persons to whom the dividends are payable, it would seem that upon the return of unclaimed dividends to surplus, a proportionate amount of the special cash fund could be returned to general cash there to be available for general purposes.

Stock and Scrip Dividends.—Surplus profits commonly are capitalized by the declaration of a stock dividend. In amount, such dividend cannot exceed the amount of the surplus; it is payable in capital stock, the par value thereof equaling the amount of the dividend. In other words, a stock dividend merely converts a pro rata equity of each stockholder in unappropriated profits to the tangible form of stock rights. After the conversion, the total interest of each stockholder will be the same amount as was previously shown; each stockholder's interest thereafter has increased so far as stock interest is considered, but has decreased so far as the equitable interest in surplus profits is concerned, the increase and decrease being of a similar amount. The advantages of issuing a stock dividend may be summarized as:

1. The stockholder may realize a certain amount of profit by

selling some of his new stock which would not be possible by selling the same proportionate amount of old stock.

2. Thereunder, a portion of corporate profit is capitalized for the permanent use of the concern. And in this connection, the big difference between such a dividend and a regular dividend is most noticeable; a regular dividend distributes assets that have been absorbed by the corporation as profits, whereas, a stock dividend retains these profit assets capitalizing them for corporate use. Hence, no profit distribution is made.

So long as a surplus profit exists, a dividend may be declared, even though there is not sufficient cash on hand with which to make payment. Payment may be made in assets other than cash; cash may be borrowed for dividend purposes, if conditions seem to warrant the use of the expedient; a stock dividend may be declared; a scrip dividend may be declared.

Scrip represents nothing but a promise to pay. It is a temporary expedient in the way of a corporate promise to pay, indicating either of the following:

1. Some document into which it is to be converted at a later date. If it is impracticable to have a stock certificate or a bond ready for delivery as of a specified date, scrip will be issued.
2. Some value into which it is to be converted at a later date. Hereunder, scrip may be issued temporarily to settle a dividend, same to be redeemable in cash at a certain future date. This scrip practically may be equivalent to cash where passed readily from hand to hand. Again, the scrip may be payable in stock; hence, a stock dividend may be covered temporarily by the issue of scrip. Further, if interest is due and cash not available for payment, scrip may be issued. Lastly, scrip may be issued for fractional parts of a share of stock or of a bond when securities are being distributed.

In the accounts, "scrip" will show up as an account with a credit balance:

1. If it represents a deferred dividend payment:

An Income Account,	$ ¢	
To—Dividend Scrip Account,		$ ¢

2. If it represents interest due to be paid for which cash funds are not available:

An Expense Account,	$ ¢	
To—Interest Scrip Account,		$ ¢

3. If it represents the temporary coverage of a stock dividend:

Surplus Account,	$ ¢	
To—Stock Dividend Scrip Account,		$ ¢

4. If it represents some document into which later conversion will be made:

An Asset Account (representative of elements received for securities),	$ ¢	
To—Stock Scrip or Bond Scrip Account,		$ ¢

Cumulative Dividends.—These arise in connection with preferred stock, at the time when a preferred stock dividend is passed. A number of methods exist relative to stating cumulative dividends which have been passed. However, since no liability exists relative to a dividend until the latter has been declared, it would seem that no entry relative to a passed cumulative dividend is necessary, it being sufficient merely to set it out upon the Balance Sheet as a footnote.

Profit-Sharing.—This term arises when a portion of the profits of an enterprise are distributed to the employees. The term is not synonymous with that of "dividends," since the former merely represents a bonus and nothing else. The entries to cover would be about as follows:

1. Profit and Loss (or Surplus),	$ ¢	
To—Employees' Bonus,		$ ¢
2. Employees' Bonus,	$ ¢	
To—Cash,		$ ¢

CHAPTER VIII

CORPORATE OBLIGATIONS: BONDS PAYABLE; SINKING FUND

Forms of Corporate Obligations.—A corporation may borrow money in a number of ways among which the following are typical:

1. Bank credit.
2. Notes.
3. Bond and mortgage.
4. Bonds.

If the loan is of a small amount, or is to extend only over a short period of time, or is to be secured from a relatively few persons, the evidence of such obligation will take usually the form of corporate notes. Although the corporate note is a formal promise to pay money, it does not have to be executed under seal, and, usually, it will run for a period less than five years. If the loan is large in amount and is to be obtained in one lump sum, the evidence of such obligation may assume the form of a bond and mortgage on real property. The bond and mortgage, as a rule, will involve only two parties,—the mortgagor (the borrower) and the mortgagee (the lender); usually, it will run for a period less than five years.

Finally, if the loan is large in amount, and is to extend over a long period of time, the evidence of such obligation, usually, will take the form of a bond issue. A corporate bond issue may be participated in by a large number of investors; in fact, this feature is distinctive of bond issues. A bond must be executed under seal. It may be secured, and usually is, as to repayment of principal and the payment of interest, by a lien or mortgage on specified property and, at times, by the creation of a sinking fund held in trust to safeguard its redemption at maturity. A bond issue may run from five years to fifty years or more. The

issuing corporation usually sells its bonds to the public through bankers or brokers.

One of the functions of a corporation is to issue bonds. A government, likewise, has this privilege, only there is a marked difference between the two types. A government issues and sells its bonds only because the public has faith in its stability; on the other hand, a corporation issues bonds, generally, because the buying public knows they are a lien against specific tangible assets which it feels are sufficient to guarantee repayment. Therefore, a corporate bond is an obligation, a promise, under seal, admitting an indebtedness coupled with an agreement that the indebtedness will be repaid at a specified time and that interest thereon will be paid at an agreed rate at periodic intervals. In other words, a corporate bond is a future obligation, sold as of the present, bearing interest until date of maturity. The amount of the obligation of a bond issue is the par value of the bonds plus the interest that must be paid upon periodical recurring dates. The former is a Balance Sheet item, whereas, the latter is a Profit and Loss Statement item.

A bond differs from an ordinary note in that its character is more formal and its terms more specific. This is because a bond runs for a longer time than a note and, therefore, must be safeguarded carefully. A note expires within a short time and during its term the condition of the issuing company is not apt to change materially; in the case of a bond issue, the condition of the issuing company will change materially during the life of the obligation. The form of a bond, so long as it conforms to certain particulars, is more a matter of choice than anything else.

The Trustee and the Trust Agreement.—As a rule, to secure the payment of these bond obligations, the issuing corporation executes a mortgage or trust deed, a collateral trust agreement, in favor of a trustee or trustees, usually a trust company, to be held by the latter as security for the payment of the bonds at maturity and for the payment of the interest as called for at stated periods.

If the bonds are not paid at maturity, or if the payment of interest is defaulted upon any interest payment date, the trustee or trustees will foreclose the mortgage, or sell the securities, as

the case may be, in accord with the terms and conditions of the trust, for the benefit of the bondholders. The one existing possibility, aiming toward the non-carrying out of the above proviso, is that the corporation may be able to place another bond issue on the market successfully and with the money received therefrom retire the first outstanding obligation.

Trustee's Certificate.—The trust deed or mortgage contains usually a provision that a bond cannot come under its protection until the trustee has authenticated it. Therefore, to each bond a trustee's certificate usually will be attached, properly executed, before the bond is handed over to the purchaser.

Compliance With Statutes.—The issuance of bonds must be made in accord with statutory requirements. Extracts from the Stock Corporation Law of New York, Art. 2, covering the issue of bonds, are as follows:

1. In addition to the powers conferred by the general corporation law, every stock corporation shall have the power to borrow money . . . . ; and it may issue and dispose of its obligations for any amount so borrowed, and it may mortgage its property and franchises to secure the payment of such obligations, or of any debt contracted for said purposes.
2. Every such mortgage, except purchase-money mortgages and mortgages authorized by contracts made prior to May first, eighteen hundred and ninety-one, shall be consented to by the holders of not less than two-thirds of the capital stock of the corporation, or, if the corporation is authorized to issue shares without nominal or par value, then by the holders of two-thirds of the total number of shares issued and outstanding, which consent shall be given either in writing or by vote at a special meeting of the stockholders called for that purpose, upon the same notice as that required for the annual meetings of the corporation that such consent was given by the stockholders in writing, or that it was given by vote at a meeting as aforesaid, shall be subscribed and acknowledged by the president or a vice-president and by the secretary, or an assistant secretary, of the corporation, and shall be filed and recorded in the office of the clerk or register of the county wherein the corporation has its principal place of business.

The mortgage or trust deed should contain a clause to the end that the provisions mentioned above have been complied with. And so long as the certificate mentioned remains on record uncancelled, it is final evidence of the truth of the state-

ment of the clause above referred to. This is of considerable importance, at least, to bond purchasers.

Bond Signatures.—The body of a bond usually is signed by the president or vice-president, and by the secretary or assistant secretary. The corporate seal is attached also, attested by the signature of either the secretary or the assistant-secretary.

The coupons attached to a bond may or may not actually be signed. If the issue be a small one, the treasurer actually may sign each coupon; if the issue be a large one, such actual signing may be impossible. In such case, the engraved signature of the treasurer will be used.

Listing Bonds on the Exchange.—Bonds may be listed upon the New York Stock Exchange provided certain requirements have been met. All documents necessary to establish the fact that the issue has been duly authorized and issued must be filed, and the rules of the Exchange covering form, engraving, denomination, etc., must be observed.

Unissued Bonds and Treasury Bonds.—The liability on account of a bond issue is set out in one account upon the financial records, such account being considered, generally, as a capital liability. An authorized issue of bonds may be sold piecemeal in various lots, or they may be disposed of in one lot. Where merely authorized, and not actually signed and sealed, it would be perfectly correct to make no record at all in the accounts to cover the issue. Some accountants will list unissued bonds as an asset upon the Balance Sheet, and others will deduct their amount from the authorized issue; the latter practice seems preferable in that the right to issue is shown distinctly.

The importance of distinguishing between unissued bonds and treasury bonds, ordinarily, is not of much consequence, as bonds may be issued for less than par. But it would seem that where bonds have been signed and sealed, although not actually delivered, they should be recorded otherwise than as unissued. The act of signing and sealing makes at least one corporate officer specifically answerable for their proper custody; if any of these bonds should be misappropriated, and fall into the hands of an innocent purchaser for value, the latter would have an enforcible claim against the corporation. Therefore, it would

seem proper to record corporate bonds authorized, signed, and sealed, as treasury bonds, to provide for their being handled with great care. Likewise, reacquired bonds may be considered as treasury bonds; these, usually, are sinking fund securities and will be discussed when that topic is considered. Transportation companies, under the rulings of the Interstate Commerce Commission, are required to classify authorized bonds, signed, and sealed by the mortgage trustee, as working assets.

Entries Covering the Issue of Bonds.—The entries covering the issuance of bonds, and certain practices relative thereto, may be summarized about as follows:

1. Regular issue. Hereunder, two methods of booking are available. Assume an authorized issue of $500,000.00, of which $300,000.00 are sold for cash, at par, balance unsold being unissued:

   a. First method:

Dr. Cash,	$300,000.00	
Cr. Bonds Payable,		$300,000.00
Hereunder, no entry is made until cash is received.		

   b. Second method:

i. Dr. Unissued Bonds,	$500,000.00	
Cr. Bonds Payable,		$500,000.00
To record authorized issue.		
ii. Dr. Cash,	$300,000.00	
Cr. Unissued Bonds,		$300,000.00
To record cash collected.		

   The second method seems preferable to the first one for reasons already advanced favoring the formal method of recording a capital stock issue: That a complete history of the transaction is available from a reading of the accounts.

2. Issue upon an instalment basis. Assume for the above problem that payment was made in two equal instalments. As in the case of capital stock, the bonds should not be issued until the subscriptions are fully paid:

a. Dr. Unissued Bonds,	$500,000.00	
Cr. Bonds Payable,		$500,000.00
To record authorized issue.		
b. Dr. Bond Subscribers,	$300,000.00	
Cr. Bond Subscriptions,		$300,000.00
To record subscriptions taken.		

	Dr.	Cr.
c. Dr. Instalment No. 1,	$150,000.00	
Cr. Bond Subscribers,		$150,000.00
To record instalment of 50 per cent now due.		
d. Dr. Cash,	$150,000.00	
Cr. Instalment No. 1,		$150,000.00
To record cash received upon instalment No. 1; Cash Book entry.		

In place of entries (c) and (d) above, the following might have been made:

	Dr.	Cr.
Dr. Cash (Instalment No. 1),	$150,000.00	
Cr. Bond Subscribers,		$150,000.00
e. Dr. Instalment No. 2,	$150,000.00	
Cr. Bond Subscribers,		$150,000.00
To record instalment of 50 per cent now due.		
f. Dr. Cash,	$150,000.00	
Cr. Instalment No. 2,		$150,000.00
To record cash received upon instalment No. 2; Cash Book entry.		

In place of entries (e) and (f) above, the following entry might have been made:

	Dr.	Cr.
Dr. Cash (Instalment No. 2),	$150,000.00	
Cr. Bond Subscriptions,		$150,000.00
g. Dr. Bond Subscriptions,	$300,000.00	
Cr. Unissued Bonds,		$300,000.00
To record issuance of bonds.		

3. Bond premium and discount. Bond premium and discount should not be handled similarly to premium and discount on capital stock. Bond premium is in the nature of a liability (a deferred credit), whereas, bond discount is in the nature of an asset (a deferred debit). (But see section, post: Bond Premium, Discount, and Expense.) The Interstate Commerce Commission requires that bond premium be carried upon the Balance Sheet as a deferred income credit, and that bond discount be shown thereon as a deferred charge.
4. Expenses of floating a bond issue. These may be shown in any one of the following accounts:
   a. Bond Issue Expense account.
   b. Underwriting Expense account.

c. Bond Discount and Expense account. The use of this account contemplates combining the discount and the issuing expense under one caption. It would seem not to be in error to use such an account where the expense is to be amortized over the future years.

d. Organization Expense account. The use of this account does not seem proper.

5. Issuance of special types of bonds:

a. Collateral trust bonds. Precede the opening entries by an entry under which the following results, relative to the amount of the collateral:

Dr. Pledged Investments,	$ ¢	
Cr. Investments,		$ ¢

b. Equipment trust bonds:

Dr. Leased Equipment,	$ ¢	
Cr. Equipment Trust Bonds,		$ ¢
To record total issue.		
Dr. Equipment Trust Bonds,	$ ¢	
Cr. Cash,		$ ¢
To record each equal instalment paid off.		
Dr. Equipment,	$ ¢	
Cr. Leased Equipment,		$ ¢
To record taking over the equipment with full title when a release has been secured after payment of the last instalment due.		

Illustrative Problem and Solution.

Problem.—A corporation issued First Mortgage Bonds bearing interest at 5 per cent, dated January 1, 1917, to subscribers at $125.00 for each bond, par value $100.00. The bonds are to be paid for in three instalments: $25.00 on February 1; $50.00 on March 1; and $50.00 on April 1. The February 1, and March 1 instalments have been paid and the proper entries made on the Cash Book. You are called in to formulate the Journal entries on the two instalments. How would you make them? There were issued and sold $100,000.00 par value. (C. P. A.)

Solution.—The above problem is simple in the extreme, but illustrates fairly well what has been covered above in the last section. Note the fact that the entries have been made upon the Cash Book in due and proper form, and that all that is required are the Journal entries. However, for illustrative purposes, all the entries are given, but those not required have been thus earmarked; the entries are in Journal form:

(1)

Date should be that on which issue authorized

Unissued First Mortgage 5 per cent Bonds,	$100,000.00	
To—First Mortgage 5 per cent Bonds,		$100,000.00
To record authorized issue.		

(2)

January 1, 1917

(On assumption that this was subscribers date)

Bond Subscribers,—First Mortgage 5 per cent Bonds,	$125,000.00	
To—Bond Subscriptions—First Mortgage 5 per cent Bonds,		$100,000.00
Bond Premium,		25,000.00
To record subscriptions to above issue.		

(3)

February 1, 1917

Instalment No. 1—First Mortgage 5 per cent Bonds,	$25,000.00	
To—Bond Subscribers—First Mortgage 5 per cent Bonds,		$25,000.00
To record first instalment due this date, representing 20 per cent of bond subscriptions.		

(4)

Dates not known

(Entry not required; being on Cash Book)

Cash,	$25,000.00	
To—Instalment No. 1—First Mortgage 5 per cent Bonds,		$25,000.00

(5)

March 1, 1917

Instalment No. 2—First Mortgage 5 per cent Bonds,	$50,000.00	
To—Bond Subscribers—First Mortgage 5 per cent Bonds,		$50,000.00
To record second instalment due this date, representing 40 per cent of bond subscriptions.		

(6)

Dates not known

(Entry not required; being on Cash Book)

Similar to (4) above, except as to amount.

Payment of Bond Interest.—The usual handling of payments covering bond interest is considered hereunder. In discussing bond interest, two points come to mind:

1. Considerable already has been stated hereon in former sections. Therefore, a detailed discussion appears unnecessary at this point.

2. Variations in procedure are apparent when one considers different classes of bonds. Therefore, it seems advisable to discuss briefly the subject of interest in connection with certain different types of issues. The following is deemed sufficient relative thereto:

   a. Registered bonds. The interest when due would be sent to the bondholders either by the fiscal agent or by the company treasurer. Since bond interest accrues day by day, it would be correct accounting to provide therefor by proper monthly entries so that correct monthly statements may be prepared:

i. Bond Interest,	$ ¢	
To—Bond Interest Accrued,		$ ¢
To record monthly accrual.		
ii. Bond Interest Accrued,	$ ¢	
To—Cash,		$ ¢
To record semi-annual (quarterly or yearly) payments.		

   An alphabetical list of the holders of registered bonds who are entitled to receive interest checks should be prepared as of each interest-paying date.

   b. Coupon bonds. The same procedure as shown above apparently would answer for coupon bonds. Since many coupons are unredeemed at the end of each period, a mere booking upon the cash payment basis would seem incorrect.

   c. Treasury bonds. Interest upon treasury bonds requires no entry unless they are held by a trustee under a provision relating to the sinking fund that he is to receive all interest and invest same.

   d. Guaranteed bonds. Nothing unusual will occur relative to these bonds unless the issuing company defaults in the payment of interest; in such event, the guaranteeing company must make payment. When this occurs, an inter-company transaction results (see post: Chap. 13).

      i. Entry on books of guaranteeing company:

Advances to Subsidiaries,	$ ¢	
To—Cash,		$ ¢

      ii. Entry on books of defaulting company:

Bond Interest,	$ ¢	
To—Advances from Parent Company,		$ ¢

e. Income bonds. If these are considered as being in the same class with preferred stock, as seems to be the case, the interest thereon should be booked similarly to the entries required when dividends are declared. If, on any interest-paying date, profits are sufficient to make payment of the contingent interest amount due, the following entries would be in order:

i. Interest—Income Bonds,	$ ¢	
To—Interest Payable—Income Bonds,		$ ¢
To record interest declared payable.		
ii. Interest Payable—Income Bonds,	$ ¢	
To—Cash,		$ ¢
To record interest paid.		

Bond Interest and Construction.—The various charges arising during periods of construction, under the rulings of the Interstate Commerce Commission and the Public Service Commission of New York, may be capitalized. Therefore, items like bond interest and bond discount may be thus capitalized as well as interest on loans and construction expenses.

In booking these items, the following procedure would be illustrative:

1. As these items currently accumulate, charges to cover would be made to proper accounts:
   a. Bond Interest.
   b. Bond Discount.
   c. Interest on Loans.
   d. Construction Expenses.
2. Periodically, as yearly, or when the construction is completed, transfers would be made from the above accounts, to either:
   a. Construction account, or
   b. Plant and Equipment account.

Bond Premium, Discount, and Expense.—The Bond Premium account is presumed to hold the amount in excess of par value realized from a sale of bonds. Briefly, its amount should be written off over the life of the bonds. The account with Bond Discount and Expense is supposed to hold the cost of an issue of bonds; all expenses incident to a bond issue as well as the discount involved when bonds are sold below par.

One account may be used to gather these charges, as shown above, or separate accounts may be kept with Bond Discount and Bond Expense. Bond discount is considered as being an increase in the actual amount of interest paid which, however, should be written off over the life of the bonds.

The premium received or the discounts allowed upon the sale of bonds is considered as a deduction from, or an addition to, the interest paid on the bonds:

1. In case of discount, the borrower is said to pay for two things:
   a. Interest for the use of money.
   b. Discount, for the use of money.
2. In case of premium, the principal sum borrowed exceeds par and, since the excess, or premium, need not be repaid at maturity, it amounts to a deduction from interest.

Because of the above, most accountants agree that the premium or discount should be written off over the life of the bonds in order that each accounting period may show the accurate or true cost of carrying the issue. The writing off is accomplished either by crediting or charging a proportionate amount or part to the Interest account, and thence from here to the Profit and Loss account, at the end of each fiscal period.

Three methods of writing off are followed, the first of which is not in conformity with the principle indicated in the last paragraph above:

1. Write the amount off immediately either to Profit and Loss or to Surplus accounts. Since the true cost of carrying the issue cannot be shown hereunder, the method is in error.
2. Write the amount off in equal instalments over the life of the issue. Apparently, this method is in accord with the principle advanced above; but as a matter of fact, it is in error for the same reason as the first method. It does not recognize the effective rate of interest. It is known as the "straight line" method and, from a practical point of view, is used considerably.
3. The "effective rate" method seems to be the best one thus far advanced for writing off bond premium or discount. The effective rate is calculated upon the amount actually received, rather than upon the par value. The actual

amount of interest paid is charged to the Bond Interest account. Then the procedure varies as under:

a. If bonds are sold at a premium. The difference between the effective (the market rate of interest) and the nominal (amount actually paid) interest rates is charged periodically to Bond Premium account and credited to Bond Interest account.

b. If bonds are sold at a discount. The difference between the effective and the nominal interest rates is charged periodically to Bond Interest account and credited to Bond Discount (and Expense) account.

This method scientifically writes off the premium or discount over the life of the bonds. The method makes use of the amortization principle.

Sinking Fund.—A fund always should represent an asset. A sinking fund should be created by assets in the proper converted form being set aside for the purpose for which the fund was established. Ordinarily, such purpose will be the retirement of a bond issue. Payments are made into the fund usually at regular recurring intervals by more or less regular amounts, as monthly, quarterly, semi-annually, or annually. These payments either are placed in a bank, or are used for the purchase of gilt-edged securities usually by depositing with a trustee for the bondholders; in either instance, the fund, as booked, will consist of cash or of cash and securities. Naturally, increases in the fund, in part, will consist of interest, and perhaps dividends, collected upon the fund principal.

The liability for the payment of which the sinking fund is created and accumulated may vary as to type, about as follows:

1. It may be payable in one amount at the maturity date of the bond issue.
2. It may be payable in yearly instalments, the bonds to be retired thereunder being determined by the drawing of the bond numbers.

The sinking fund procedure may or may not be governed by the terms of a mortgage agreement which secures an issue of bonds. In other words, the fund accumulation may or may not bear a relationship to corporate profits:

1. Without reference to profit. Hereunder, general assets are converted and set aside by a general procedure in accord with a general plan under which the liability in question eventually will be redeemed. The mortgage will not provide for the creation of such a fund from income assets.
2. With reference to corporate profit. Hereunder, the sinking fund procedure is made necessary by the terms of a mortgage agreement securing a bond issue:
   a. Where the capital plant either is subject to conditions that will reduce the longevity thereof, or is diminished on account of operations:
      i. The usual industrial company is more or less non-permanent.
      ii. A mining company, or one of similar type, will exhaust its capital plant over a period of years.

      Hence, it is usual, when floating a bond issue, to have the mortgage contain a provision requiring the accumulation of a fund out of which the bond principal will be paid at maturity because, by such provision, it is thought the bond issue will sell better and a higher price is securable.
   b. Where the capital plant remains more or less permanent, and the belief is prevalent that such plant will be more valuable at the expiration of the bond issue term than at present. Hereunder, a bond issue may be floated without reference to any sinking fund provision; a railroad would be an example of this type of activity.

The provision that a sinking fund shall be created from income assets is the usual requirement of a corporate mortgage backing a bond issue, inasmuch as:

1. Corporate assets are conserved.
2. The liability will be paid from earned assets, not from those comprising a portion of the assets secured through incurring the liability.
3. Profits cannot be distributed until after the yearly contribution to the sinking fund has been made; hence, a tendency toward a riotous life cannot become full grown without first providing the means for taking care that the liability will be paid when due.

4. Upon the completion of the sinking fund procedure, there will be on hand undistributed profit in the requisite amount for the use originally agreed.

Sinking Fund Trustee.—The terms of a mortgage agreement securing an issue of bonds require, generally, that payments into the sinking fund be made through the medium of a trustee who is given the duty of taking charge of the fund for the benefit of both the bondholders and the corporation. The trustee thus designated, usually, is a trust company, and this latter acts as such for a compensation based upon a percentage of the funds handled.

By virtue of the mortgage agreement requirements, above indicated, the asset fund thus desired is removed from the control of the corporation under which its availability for the specific purpose of eventually meeting a bond obligation might be jeopardized by the incoming of general creditors' liens. In other words, corporate funds, not specifically pledged, cannot be set aside for the use of a particular class of creditors.

In attempting to discuss the general variations governing sinking fund entries, it may not be amiss at this point to recapitulate two or three principles which have been set out above:

1. A sinking fund may be created without regard to profits. If so, the fund account would be charged and, say, the Cash account credited. Increases in this fund on account of interest earnings would be credited to Profit and Loss account, and be charged to the fund account when collected.
2. A sinking fund may be created with regard to profits,—out of assets secured from profits. This requirement should operate about as follows:
   a. A certain amount should be reserved from profits, the effect of which will be to credit a profit appropriation account, as Sinking Fund Reserve account, and to charge Surplus (an undivided profits account) account. The balance in this reserve account indicates the amounts held back from profit for sinking fund purposes.
   b. The fund account then is debited with the cash or other assets sent into it from time to time. If a trustee is to take over the custodianship of the sinking fund, the

trustee will have turned over to him an amount of cash equal to the appropriation from surplus, by means of an entry charging an account with the trustee and crediting Cash account.

Hence, if the booking be done properly, the amount of the sinking fund, as a charge, should be in agreement with the amount of the reserve, as a credit.

The trustee may have authority to invest the sinking fund in gilt-edge securities, or he may be required only to hold the cash on hand on deposit. If securities are purchased, these latter, at least in part, may consist of the corporation's own bonds. Hence, it is possible that the fund will consist in part of cash, and in part of bonds:

1. Cash.
2. Bonds.
   a. Investment securities.
   b. Own bonds.

   If so, when the Balance Sheet is prepared, it would seem to be good accounting to differentiate between the two classes of bonds.

If some of the company's own bonds are held, the differentiation in handling may be set out, as to them, as under:

1. They may be listed upon the Balance Sheet either among the assets or as a deduction from the total bonds payable outstanding; the latter handling seems preferable in that treasury bonds are assets no more than is treasury stock. The above assumes the sinking fund bonds have not been cancelled.
2. If the sinking fund bonds have been cancelled, as may be done, their amount may be handled on the Balance Sheet in either of the two possible following ways:
   a. Deduct from the total bonds payable outstanding.
   b. Show upon the Balance Sheet only the net amount of the bonds payable outstanding. This procedure is believed to be the preferable one inasmuch as cancelled debts ought not to be found upon the Balance Sheet.

Where the sinking fund is held in the form of either cash on deposit or securities, a certain amount of income will be derived therefrom from time to time,—as interest upon bank balances,

and interest (or dividends) from investments. Such income may be handled in one of three possible ways:

1. It may be payable to the corporation.
2. The mortgage agreement may provide that it should be turned over to the trustee as an accretion to the fund. Hereunder, the variation in booking may be shown as:
   a. Charge the collecting trustee, and credit.
      i. Reserve for Sinking Fund account, or
      ii. Sinking Fund Income account:
         (a) The amount may be retained herein until the trust has expired, or
         (b) The amount may be transferred to the reserve account.
3. It may be applied as a deduction against the next sinking fund instalment.

   In any event, such income represents a special profit.

Premium or discount on bonds that have been purchased for a sinking fund may be handled as follows:

1. Write off immediately to Profit and Loss account, or
2. Distribute same (amortize or accumulate) over the life of the purchased bonds, under which the amount thus distributed will affect the interest return. This method, naturally, is preferable to the first one.

   Likewise, fluctuations representing a profit or loss on the sale of securities should be adjusted through the account of Sinking Fund Income.

In the matter of bond redemption, certain variations appear which, briefly, may be indicated about as follows:

1. Nothing may be done until the entire issue matures.
2. From time to time the trustee may use the funds under his control, go out into the market and purchase therewith some of the bonds of the company that have been offered for sale. Naturally, no definite policy in this connection can be followed inasmuch as it is uncertain whether any of the bonds will be offered for sale at the times the purchases are desired. This point has been mentioned above already.
3. Certain numbers of the outstanding bonds may be retired annually under the provisions of the sinking fund indenture,

as by means of a drawing by lot. The bond numbers drawn are published, after which interest ceases to accrue upon the bonds concerned, the trustee secures the cash with which to make payment, and the redemption proceeds as the bonds are presented.

In view of the fact that the trustee cannot go along indefinitely holding himself ready to redeem bonds that have been called, and in view of the fact that at times, as under a large issue, many bonds will not be presented for payment within a reasonable period of time,—some being lost or the owner being dead,—before the trustee turns over the cash remaining in his hands unused, he will require a bond of indemnity to be furnished by the company to protect him against loss in case a bond is presented later for payment. The amount of this indemnity bond will be usually twice the amount of the greatest possible liability for which he may be held.

When the bond liability has been paid off, the books still will retain the amount or the account of Sinking Fund Reserve representing, if correctly set up from actual profits, a surplus item which either may be appropriated for some special use or be used for purposes of stockholders' distribution. Hence, a reversing entry charging the Reserve account and crediting Surplus account would be in order.

To summarize the portion of this chapter relative to handling maturing bonds, the following is offered:

1. Convert outside securities into cash, and write off against the Sinking Fund Income account any differences between the book values and the amounts realized from the conversion.
2. Redeem outstanding bonds from cash available.
3. Secure indemnity bond double the amount of the maximum liability before turning any remaining cash over to the company.
4. Cancel any treasury bonds in the sinking fund, and close out against the bonds outstanding.
5. Turn any remaining cash over to the regular corporate cash fund.
6. Clear the records of any remaining entries relating to the bond issue.

To summarize the usual sinking fund provisions relative to a corporate bond issue, as covered by a trust deed, and to show in tangible form illustrative Journal entries in connection therewith, the following is offered:

1. Usual sinking fund provisions:
   a. Who shall be the trustees of the sinking fund.
   b. What amount shall be set aside periodically in the sinking fund, monthly, quarterly, semi-annually, or annually.
   c. How the money in the sinking fund shall be invested by the trustee or trustees.
2. Pro-forma entries covering sinking provisions:
   a. To record surplus profit set aside for sinking fund purposes:

Surplus (or Profit and Loss Surplus),	$ ¢	
To—Reserve for Sinking Fund,		$ ¢

   b. To record periodical transfer of cash to trustee under agreement:

Sinking Fund Trustee, Cash Account,	$ ¢	
To—Cash,		$ ¢

   c. To record investments for sinking fund from cash available, as per trustee's report:

Sinking Fund Trustee, Securities Account,	$ ¢	
Premium on Sinking Fund Securities,	$ ¢	
To—Sinking Fund Trustee, Cash Account,		$ ¢

   d. To record expenses and compensation of trustee as per agreement:

Sinking Fund Income Account,	$ ¢	
To—Sinking Fund Trustee, Cash Account,		$ ¢

   This entry would be in order where such items are chargeable against the fund; but where these items are paid directly by the corporation, as may be done, the entry would be:

Sinking Fund Expenses,	$ ¢	
To—Cash,		$ ¢

   e. To record income collected by the trustee:

Sinking Fund Trustee, Cash Account,	$ ¢	
To—Sinking Fund Income Account,		$ ¢
Premium on Sinking Fund Securities (pro rata amortization),		$ ¢

f. To record transfer of surplus profit for purposes of sinking fund:

Sinking Fund Income Account, $ ¢
  To—Reserve for Sinking Fund, $ ¢

g. To record cash received on sale of sinking fund securities:

Sinking Fund Trustee, Cash Account, $ ¢
  To—Sinking Fund Trustee, Securities Account, $ ¢

Adjustment must be made, also, through the Sinking Fund Income account for the loss or profit entailed. Likewise, the purchase premium or discount involved must be considered.

h. To record purchase of own bonds for sinking fund:

Sinking Fund Trustee, Treasury Bonds, $ ¢
  To—Sinking Fund Trustee, Cash Account, $ ¢

i. To record cancellation of these treasury bonds:

First Mortgage, Sinking Fund Bonds, $ ¢
  To—Sinking Fund Trustee, Treasury Bonds, $ ¢

j. To record payment of bonds upon maturity:

First Mortgage, Sinking Fund Bonds, $ ¢
  To—Sinking Fund Trustee, Cash Account, $ ¢

k. To record cash turned over to company by trustee:

Cash, $ ¢
  To—Sinking Fund Trustee, Cash Account, $ ¢

l. To record disposition of reserve when bond issue paid up:

Reserve for Sinking Fund, $ ¢
  To—Surplus (or otherwise as directors wish), $ ¢

Illustrative Problems and Solutions.—To illustrate further the booking of bonds and sinking funds, two C. P. A. problems and their solutions are shown below. The two problems selected are fair samples of those encountered in that in each one certain information is lacking; and this makes it necessary for the student to determine what variation from accepted procedure shall be adopted. In any particular case, he should recognize the usual procedure and follow this to a conclusion in so far as is possible, if a variation seems necessary, his solution and comment should be such that the reader will understand exactly what he has done, and why.

Problem 1.—This problem is simple in the extreme, but information is lacking as to the maturity date of the bond issue. Naturally, therefore, it is impossible to apply the amortization principle to the bond discount without making an assumption; the making of such an assumption is entirely unnecessary. This being the case, the expedient has been used of holding in abeyance the amount of this discount until the solution is completed, but indicating just where the reductions thereof occur.

A corporation authorized a total issue of $500,000.00 of 5 per cent bonds in denominations of $1,000.00 and $500.00, with interest payable January 1 each year, and sold the whole issue to underwriters January 1, 1918, at 90. The company issued the bonds for the underwriters at 95, and received the cash in payment February 1, 1918.

The trust deed provides that "there shall be established a fund to be called 'the bond sinking fund,' to the account of which there shall on the thirty-first day of December of each year be carried a sum equal to 7% of the total par value of the bonds issued, and that, out of the moneys so carried to the account of the said fund, the company shall pay the interest on the bonds as the same becomes due, and the balance of said moneys shall be expended each year in purchasing the bonds of the company in the open market."

In January, 1919, the company purchased $10,000.00 of its bonds at 97 and retired and cancelled them. In January 1920, the market price of the bonds is 98.

a. How many bonds may be purchased from the bond sinking fund in January, 1920?

b. Make Journal entries for all the transactions from the date of the sale of the bonds to and including the purchase for the sinking fund in January, 1920.

c. Show trial balance after posting above entries. (C. P. A.)

Solution to Problem 1.—The solution is shown by means of Journal entries:

(1)

Date not known

Unissued 5 per cent Bonds,	$500,000.00	
To—5 per cent Bonds Payable,		$500,000.00
To book authorized issue.		

(2)

January 1, 1918

Underwriters,	$500,000.00	
To—Unissued 5 per cent Bonds,		$500,000.00
To record placement of entire issue with underwriters.		

(3)

Unamortized Bond Discount,	$50,000.00	
To—Underwriters,		$50,000.00
To adjust Underwriters account to show net contract sale cost, at 90.		

(4)

February 1, 1918

	Dr.	Cr.
Cash,	$475,000.00	
To—Underwriters,		$475,000.00
To record cash received by company on behalf of underwriters		

(5)

	Dr.	Cr.
Underwriters,	$25,000.00	
To—Cash,		$25,000.00
To record payment to underwriters of their profit from selling issue at 95.		

(6)

December 31, 1918

	Dr.	Cr.
Bond Sinking Fund,	$35,000.00	
To—Cash,		$35,000.00
To record annual instalment to sinking fund being 7 per cent of par value of bonds.		

(7)

January 1, 1918

	Dr.	Cr.
Bond Interest,	$25,000.00	
To—Bond Sinking Fund,		$25,000.00
To record payment of interest due on January 1, 1919, out of sinking fund.		

The next entry should relate to the proportional extinguishment of the unamortized bond discount. However, this is impossible in the problem since the maturity date of the bond issue is not given. One might make certain assumptions relative thereto, but in solving C. P. A. problems, especially in an examination, the contention is advanced that assumptions should not be made unless absolutely necessary to secure a solution from the facts given. One may well point out an existing error in a given set of facts, or the short-comings thereof, but to make an assumption which, at best' may be extremely far-fetched does not seem in order.

(8)

January, 1919

	Dr.	Cr.
5 per cent Bonds Payable,	$10,000.00	
To—Unamortized Bond Discount		$300.00
Bond Sinking Fund,		$9,700.00
To record purchase of $10,000.00 par value of bonds in open market at 97, which are retired and cancelled. Since exact date of purchase in January is not known, interest accrued must be ignored.		

(9)

	Dr.	Cr.
Bond Interest,	$1,000.00	
To—Unamortized Bond Discount,		$1,000.00

To reduce amount of discount applicable to the $10,000.00 of bonds retired. If it had been possible above to adjust the Discount account when interest was paid (entry 7), the amount adjusted at this time would be less than $1,000.00 since therefrom should be deducted as to $10,000.00 par the amount already charged off.

(10)

December 31, 1919

	Dr.	Cr.
Bond Sinking Fund,	$35,000.00	
To—Cash,		$35,000.00

To record annual instalment as before.

(11)

January 1, 1920

	Dr.	Cr.
Bond Interest,	$24,500.00	
To—Bond Sinking Fund,		$24,500.00

To record annual interest payment on bonds now outstanding. Had maturity date been given, the next entry would cover amortization instalment.

(12)

January, 1920

	Dr.	Cr.
5 per cent Bonds Payable,	$11,000.00	
To—Unamortized Bond Discount,		$220.00
Bond Sinking Fund,		$10,780.00

To record purchase of 11 bonds of $1,000.00 each from sinking fund at 98. At this moment, $10,800.00 remains in the fund:

Debits:		
Dec. 31, 1918,		$35,000
Dec. 31, 1919,		$35,000
Total,		$70,000
Credits:		
Dec. 31, 1918, Interest,	$25,000	
Jan. (__,) 1919, Purchase,	9,700	
Dec. 31, 1919, Interest,	24,500	$59,200
Balance,		10,800
Purchase, this entry,		10,780
Balance,		20

(13)

Bond Interest,	$1,100.00	
To—Unamortized Bond Discount,		$1,100.00
To reduce amount of discount for same reasons as shown in entry (9) above, applicable to the $11,000.00 of bonds retired.		

At this point, a Trial Balance is to be prepared; it follows:

Cash,	$380,000.00	
Bond Sinking Fund,	20.00	
Unamortized Bond Discount,	47,380.00	
Bond Interest,	51,600.00	
5 per cent Bonds Payable,		$479,000.00
Totals,	$479,000.00	$479,000.00

Problem 2.—This problem perhaps is a little more difficult than the first one above in that more entries are required. Likewise, as before, the lack of certain information prevents the proper amortization of the bond discount and expense; this being the case, the expedient has been used of charging off this item at once, rather than holding the amount in abeyance until the solution is completed,—but indicating just where the periodic reductions should occur. By so doing, a variation in solution is secured.

The Standard Trust Company is appointed by the Peninsular Mining Company as trustee of a bond issue, aggregating $1,000,000.00, all Bonds of $1,000.00 denomination, rate 5 per cent, and bearing date January 1, 1914. Bonds mature in ten equal annual instalments, beginning January 1, 1917, unless previously converted or retired.

The issue is not purchased by the trustee, but is sold through Emory Davis & Company, Brokers, the company realizing 90 per cent and accrued interest less the cost of appraisal of property, printing, trustees' expenses, etc., amounting to $9,310.80. (Fees not included above).

SCHEDULE OF

Instal. No.	Due Date	Amount	Discount Involved	Years to Run	12/31/14	12/31/15	12/31/16	12/31/17
1	1/1/17	$100,000.00	$10,000.00	3	$3,333.33	$3,333.33	$3,333 34	
2	1/1/18	100,000.00	10,000.00	4	2,500.00	2,500.00	2,500.00	$2,500.00
3	1/1/19	100,000.00	10,000.00	5	2,000.00	2,000.00	2,000.00	2,000.00
4	1/1/20	100,000.00	10,000.00	6	1,666.66	1,666.66	1,666.67	1,666.67
5	1/1/21	100,000.00	10,000.00	7	1,428.57	1,428.57	1,428.57	1,428.57
6	1/1/22	100,000.00	10,000.00	8	1,250.00	1,250.00	1,250.00	1,250.00
7	1/1/23	100,000.00	10,000.00	9	1,111.11	1,111.11	1,111.11	1,111.11
8	1/1/24	100,000.00	10,000.00	10	1,000.00	1,000.00	1,000 00	1,000.00
9	1/1/25	100,000.00	10,000.00	11	909.09	909.09	909.09	909.09
10	1/1/26	100,000.00	10,000.00	12	833.33	833.33	833.33	833.33
Totals,		$1,000,000.00	$100,000.00		$16,032.09	$16,032.09	$16,032.11	$12,698.77

The above schedule has been prepared on what may be called the "straight line" plan as against the
The first instalment, $100,000.00, matures in three years; therefore, on the straight line plan, 1/3 of the
so that such account will show the true expense of borrowed capital. In other words, on December 31, 1914,
However, since the problem does not indicate:

1. Which of the bonds were converted into preferred stock at 90, on January 1, 1916, and
2. Which of the bonds were redeemed at 103, on January 1, 1917,

it is impossible to adjust the discount as it should be adjusted, without assuming certain things. And indicate that the student understands the case in hand.

The entire issue was taken over, and paid for by the brokers on January 20, 1914.

Among other things the trust deed provides:

Bonds convertible on any interest date for 6 per cent preferred stock at 90, at option of holder.

Bonds may be retired out of sinking fund on any interest date at 103, at option of company.

Sinking fund for payment of principal only to be based on annual production of ore at 10 cents per ton.

Trustee to charge 1/4 per cent of principal on issue, and 1/4 per cent on coupons. Interest payable January 1 and July 1.

The company's production for three years is assumed to be, for the purpose of this problem, 1,000,000 tons per year.

January 1, 1916, $100,000.00 are converted to preferred stock.

January 1, 1917, $200,000.00 are redeemed at 103.

Formulate all necessary entries for the books of:

a. Standard Trust Company,
b. Peninsular Mining Company,
c. Emory Davis & Company,

which may be occasioned by the above transactions up to and including January 1, 1917. (C. P. A.).

Solution to Problem 2.—The requirements of this problem contemplate entries upon three distinct sets of books:

1. The issuing company.
2. The brokers.
3. The trustee.

Therefore, this solution has been divided into three distinct parts.

Part 1 of solution.—This portion of the solution relates to the books of the Peninsular Mining Company, and has been separated into two sections:

AMORTIZATION

12/31/18	12/31/19	12/31/20	12/31/21	12/31/22	12/31/23	12/31/24	12/31/25	Total
								$10,000.00
$2,000.00								10,000.00
1,666.67	$1,666.67							10,000.00
1,428.57	1,428.57	$1,428.58						10,000.00
1,250.00	1,250.00	1,250.00	$1,250.00					10,000.00
1,111.11	1,111.11	1,111.11	1,111.11	$1,111.12				10,000.00
1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	$1,000.00			10,000.00
909.09	090.09	909.09	909.09	909.09	909.09	$909.10		10,000.00
833.33	833.33	833.33	833.33	833.34	833.34	833.34	$833.34	10,000.00
$10,198.77	$8,198.77	$6,532.11	$5,103.53	$3,853.55	$2,742.43	$1,742.44	$833.34	$100,000.00

"effective rate" plan.

discount upon this instalment must be charged off annually, by an entry debiting the Bond Interest account $16,032.09 must be charged to Bond Interest account and be credited to Bond Discount account.

theoretical assumptions better not be made unless absolutely necessary in securing a solution which will

1. Schedule of amortization covering bond discount. The specific information lacking in this problem relates to the following:

a. What bonds were converted to preferred stock on January 1, 1916?
b. What bonds were redeemed on January 1, 1917?

However, even though the correct periodic adjusting entries cannot be made, because of the lack of the above information, it is possible nevertheless to prepare the amortization schedule covering the discount on the bonds sold. This has been done even though the problem does not definitely call for the same. (See schedule on pp. 278 and 279).

2. Entries upon the books of the Peninsular Mining Company. For illustrative purposes, the periodic adjustment and closing entries are indicated:

January 1, 1914

Unissued Bonds—5 per cent,	$1,000,000.00	
To—Bonds Payable—5 per cent,		$1,000,000.00
To record authorized bond issue.		
Standard Trust Company,	$1,000,000.00	
To—Unissued Bonds—5 per cent,		$1,000,000.00
To record transfer of entire issue to trustee.		

January 20, 1914

Cash,	$890,966.98	
Bond Discount,	100,000.00	
Bond Expenses,	9,310.80	
Sinking Fund Expense (Trustee Fees),	2,500.00	
To—Standard Trust Company,		$1,000,000.00
Bond Interest (Accrued),		2,777.78

To record sale proceeds; sale at 90, plus accrued interest, less expenses and trustee fees:

Bond discount: $1,000,000.00 less $900,000.00		$100,000.00
Gross cash received,		$900,000.00
Bond expense,	$9,310.80	
Trustee fees: 1/4 per cent on total,	$2,500.00	$ 11,810.80
		$888,189.20
Interest accrued: 20 days at 5 per cent, (using 4 places),		$ 2,777.78
Balance, cash,		$890,966.98

July 1, 1914

Bond Interest,	$25,000.00	
Sinking Fund Expense (Trustee Fees),	62.50	
To—Cash,		$25,062.50
To record payment to trustee of half-year interest plus 1/4 per cent commission or fee on coupons.		

December 31, 1914

Bond Interest,	$25,000.00	
Sinking Fund Expense (Trustee Fees),	62.50	
To—Liabilities Accrued,		$25,062.50
To set up accrual prior to closing.		
Profit and Loss (Sinking Fund Income),	$159,158.02	
To—Bond Discount,		$100,000.00
Bond Expenses,		9,310.80
Sinking Fund Expense,		2,625.00
Bond Interest,		47,222.22
To close. The lack of proper information prevents amortization of the discount and expense of the bond issue from being taken care of as it should be. The same was true in Problem No. 1, above, and therein the unamortized amount was carried along to be set out in the final Trial Balance; in the present instance, to illustrate the periodical adjustment and closing of a set of books, the entire amount has been written off at once. The point to remember is, that, in any given *actual* case, neither procedure is satisfactory nor correct, the amortization principle being the only correct one to follow.		

January 1, 1915

Standard Trust Company (Sinking Fund Trustee),	$100,000.00	
Liabilities Accrued,	25,062.50	
To—Cash,		$125,062.50
To record payment to trustee of annual instalment to sinking fund for bond redemption, plus interest at 5 per cent on bonds outstanding and commission or		

fees for interest on coupons accrued as under 12/31/14.		
Profit and Loss (Surplus),	$100,000.00	
To—Reserve for Sinking Fund,		$100,000.00
The trust deed apparently states nothing to the effect that the sinking fund must be set aside out of profits, but above entry made on assumption that this is desired, since it is usual so to do. The same entry, then, should be made, also, under dates of January 1, 1916, and January 1, 1917.		
July 1, 1915		
Bond Interest,	$25,000.00	
Sinking Fund Expense (Trustee Fees),	62.50	
To—Cash,		$25,062.50
See entry of July 1, 1914, above.		
December 31, 1915		
Bond Interest,	$25,000.00	
Sinking Fund Expense (Trustee Fees),	62.50	
To—Liabilities Accrued,		$25,062.50
See entry of 12/31/14, above.		
Profit and Loss (Sinking Fund Income),	$50,125.00	
To—Bond Interest,		$50,000.00
Sinking Fund Expense (Trustee Fees),		125.00
See entry of 12/31/14, above.		
January 1, 1916		
Standard Trust Company (Sinking Fund Trustee),	$100,000.00	
Liabilities Accrued,	25,062.50	
To—Cash,		$125,062.50
See entry of 1/1/15, above.		
Profit and Loss (Surplus),	$100,000.00	
To—Reserve for Sinking Fund,		$100,000.00
See entry of 1/1/15, above.		
Bonds Payable—5 per cent,	$100,000.00	
To—Unissued Capital Stock—Preferred—6 per cent,		$90,000.00
Profit on Bond Conversion,		$10,000.00
To record conversion of $100,000.00 of outstanding bonds at 90, into preferred stock—6 per cent. The credit to the Unissued		

Capital Stock—Preferred account assumes that the authorized issue thereof has been spread upon the records. Likewise, if bond discount were amortized properly, the credit of $10,000.00, as above, in part, proportionately, necessarily would be against the account of Discount on Bonds; but in view of the treatment followed in this solution, the above credit would be in order.		
July 1, 1916		
Bond Interest,	$22,500.00	
Sinking Fund Expense (Trustee Fees),	56.25	
To—Cash,		$22,556.25
See entry of 7/1/14. In this case, there are $100,000.00 less bonds outstanding than previously. Therefore, the interest and fee charge must be less than before.		
December 31, 1916		
Bond Interest,	$22,500.00	
Sinking Fund Expense (Trustee Fees),	56.25	
To—Liabilities Accrued,		$22,556.25
See entry of 12/31/14, adjusted to meet reduced amount of bonds outstanding.		
Profit on Bond Conversion,	$10,000.00	
Profit and Loss (Sinking Fund Income),	35,112.50	
To—Bond Interest,		$45,000.00
Sinking Fund Expense (Trustee Fees),		112.50
See entry of 12/31/14.		
January 1, 1917		
Standard Trust Company (Sinking Fund Trustee),	$100,000.00	
Liabilities Accrued,	22,556.25	
To—Cash,		$122,556.25
See entry of 1/1/15, above.		
Profit and Loss (Surplus),	$100,000.00	
To—Reserve for Sinking Fund,		$100,000.00
See entry of 1/1/15, above.		
Bonds Payable—5 per cent,	$200,000.00	
Sinking Fund Loss (Premium on Bonds Retired),	6,000.00	

To—Standard Trust Company (Sinking Fund Trustee),		$206,000.00
To record redemption of $200,000.00 of bonds from the sinking fund at 103.		

The above completes the entries necessary on the books of the Peninsular Mining Company. As indicated already, in an actual case, the entries shown will differ due to the fact that periodically, upon each interest paying date, there should be charged to the interest account a certain amount of the discount upon the original issue.

Part 2, of solution.—The entries upon the books of the brokers, Emory Davis & Company, are as follows:

January 20, 1914

Peninsular Mining Company—5 per cent Bonds,	$902,777.78	
To—Cash,		$902,777.78
To record purchase of $1,000,000.00, par value, of above bonds at 90, plus accrued interest. The information presented in the problem does not indicate that any other transactions occured subsequent to purchase and sale.		

Part 3, of solution.—The entries upon the books of the trustee, the Standard Trust Company, are given below. A question may arise as to the propriety of the adjusting entry on each December 31, covering the accrual of commission in that the commission is said to be payable on coupons redeemed on January 1, subsequently. However, the interest is due from the Peninsular Mining Company on December 31, and the commission thereon should be attached thereto. If both items are accrued as of this date for closing purposes, the commission must be booked as a liability. Being booked as a liability, its amount is an asset to some one else, the trustee; hence, if the latter's books be kept upon an accrual basis, it seems that the asset may be taken up thereon.

January 1, 1914

Peninsular Mining Company—5 per cent Bonds,	$1,000,000.00	
To—Peninsular Mining Company,		$1,000,000.00
To record issue of bonds of above company received as trustee.		

January 20, 1914

Cash,	$902,777.78	
Peninsular Mining Company (for discount),	100,000.00	

To—Peninsular Mining Company—5 per cent Bonds,		$1,000,000.00
Peninsular Mining Company (for accrued int.),		2,777.78
To record sale of entire above bond issue to Emory Davis & Company, brokers, at 90, plus accrued interest.		
Peninsular Mining Company,	$9,310.80	
To—Cash (or Vouchers Payable),		$9,310.80
To record expenses of bond issue.		
Peninsular Mining Company,	$893,466.98	
To—Commission (Fees),		$2,500.00
Cash,		890,966.98
To record payment to above company of net proceeds of bond issue, less commission of 1/4 per cent.		
<u>July 1, 1914</u>		
Cash,	$25,062.50	
To—Commission (fees),		$62.50
Peninsular Mining Company—(Bond Interest),		25,000.00
To record receipt from above company of cash to pay semi-annual interest charges, plus 1/4 per cent fee.		
Peninsular Mining Company—(Bond Interest),	$25,000.00	
To—Cash,		$25,000.00
To record payment of interest coupons on bond issue of above company.		
<u>December 31, 1914</u>		
Accrued Assets,	$62.50	
To—Commission (fees),		$62.50
To adjust books, prior to closing, of accrued asset.		
Commission (fees),	$2,625.00	
To—Profit and Loss,		$2,625.00
To close.		
<u>January 1, 1915</u>		
Cash,	$125,062.50	
To—Accrued Assets,		$62.50
Peninsular Mining Company (Bond S. Fund),		$100,000.00

Peninsular Mining Company (Bond Interest),		25,000.00
To record receipt of cash for purposes shown above.		
Peninsular Mining Company (Bond Interest),	$25,000.00	
To—Cash,		$25,000.00
See entry of 7/1/14.		
July 1, 1915		
Cash,	$25,062.50	
To—Commission (fees),		$62.50
Peninsular Mining Company (Bond Interest),		25,000.00
See entry of 7/1/14.		
Peninsular Mining Company (Bond Interest),	$25,000.00	
To—Cash,		$25,000.00
See entry of 7/1/14.		
December 31, 1915		
Accrued Assets,	$62.50	
To—Commission (fees),		$62.50
See entry of 12/31/14.		
Commission (fees),	$125.00	
To—Profit and Loss,		$125.00
See entry of 12/31/14.		
January 1, 1916		
Cash,	$125,062.50	
To—Accrued Assets,		$62.50
Peninsular Mining Company (Bond S. Fund),		100,000.00
Peninsular Mining Company (Bond Interest),		25,000.00
See entry of 1/1/15.		
Peninsular Mining Company (Bond Interest),	$25,000.00	
To—Cash,		25,000.00
See entry of 7/1/14.		
July 1, 1916		
Cash,	$22,556.25	
To—Commission (fees),		$56.25
Peninsular Mining Company (Bond Interest),		22,500.00
See entry of 7/1/14. Note that on January 1, 1916, $100,000.00 of bonds were retired; hence, the reduction in interest and commission charges.		
Peninsular Mining Company (Bond Interest),	$22,500.00	
To—Cash,		$22,500.00
See entry of 7/1/14.		

December 31, 1916		
Accrued Assets,	$56.25	
To—Commission (fees),		$56.25
See entry of 12/31/14.		
Commission (fees),	$112.50	
To—Profit and Loss,		$112.50
See entry of 12/31/14.		
January 1, 1917		
Cash,	$122,556.25	
To—Accrued Assets,		$56.25
Peninsular Mining Company (Bond S. Fund),		100,000.00
Peninsular Mining Company (Bond Interest),		22,500.00
See entry of 1/1/15.		
Peninsular Mining Company (Bond Interest),	$22,500.00	
To—Cash,		$22,500.00
See entry of 7/1/14.		
Peninsular Mining Company (Bond S. Fund),	$206,000.00	
To—Cash,		$206,000.00
To record purchase and redemption of $200,000.00 of bonds of above company at 103.		

Annuities and Sinking Funds.—A sinking fund may be accumulated in numerous ways, the commonest and simplest being:

1. Equal periodical amounts set aside, without regard to interest earnings thereon. If interest be earned upon the amounts regularly set aside, such interest is sent into general income, not into sinking fund income.
2. Equal periodical amounts are set aside, as annually, which, at compound interest, will accumulate to the sum desired at the end of a certain number of years to meet the principal of the obligation then due.

The second method of creating a sinking fund relates to an annuity, the annual installment so required being thus defined. Likewise, since certain difficulties may arise in the calculation of its amount, it seems expedient to present certain principles related thereto which an accountant ought to comprehend.

In determining the amount of a sinking fund instalment, one works with the mathematical process known as annuities. In fact, in the present worth calculation given in a preceding chapter in connection with bond investments the annuity principle

was used, which in that connection might be restated, from the present viewpoint, about as follows: An investor wishes to purchase an annuity which will return him an income of $......, for........years. In the present instance, in determining the amount of a sinking fund instalment, two variations only will be presented, in that this volume is not presumed to be a treatise on mathematics:

1. The amount of a sinking fund instalment where interest on the debt is not considered.
2. The amount of a sinking fund instalment where interest on the debt is to be considered.

Both of the above will be discussed from the point of view of payments being made at the end of each year, not at the beginning thereof.

Calculating an annuity, which latter may be defined as the payment of a definite sum of money at regular recurring intervals, or as a series of payments of equal amounts due at regular intervals, is based upon the use of compound interest; hereunder, interest is earned on both the principal invested and on the interest accruing from period to period which, in turn, is invested also. The amount thus to be set aside periodically may be determined in any one of the following ways:

1. By an arithmetical procedure involving calculations more or less cumbersome.
2. By the use of annuity tables.
3. By the use of algebraic formulas.

The method followed herein is an arithmetical procedure which, although cumbersome, is more readily comprehended by the average student than that which savors of algebra.

If $1.00 is invested at 4 per cent for twenty years, compounded annually, the $1.00 will amount to $2.19112314, at the end of such time. This means that there is a regular annual addition of 4 cents to the original $1.00,—which, in turn, increases at 4 per cent annually. If the original $1.00 is placed in one bank account for the full period of twenty years, and the annual interest is taken thence when due and is placed in another bank account, in which account it will earn the same rate of interest as before, at the end of twenty years there will be:

1. In bank account No. 1, $1.00
2. In bank account No. 2, $1.19112314

The latter amount represents an annuity of 4 cents per annum paid into bank account No. 2, for twenty years. Hence it may be said that this \$1.19112314 is the value at maturity,—the ultimate or final value of an annuity of 4 cents for twenty years at 4 per cent. Further, herefrom, the final value of an annuity of \$1.00 may be determined quickly, as under:

$$\frac{1.19112314 \times 100}{4} = 29.7780785$$

And, in turn, from the above, the final value of an annuity of any amount, under the conditions assumed, may be calculated. Assume, for example, \$2,000,000.00 as a basis of calculation; \$2,000,000.00 divided by 29.7780785 equals \$67,163.50, representing the annual amount desired.

Problem.—The following problem has been framed to illustrate further the principles presented above. It is a C. P. A. problem revamped. A contractor proposes to build a bridge for a certain city and accept the city's 4 per cent twenty-year bonds in the amount of \$2,000,000.00 in payment. What amount must be set aside at the end of each year, compounded at 4 per cent, to meet the obligation when due?

The solution of this problem has been given above, the annual addition to the sinking fund being \$67,163.50. If a rule were to be propounded upon the basis of the above deductions, it might read as follows:

1. Find the final value of an annuity of \$1.00, for the given time and the given rate, by:
   a. Determining the compound interest on \$1.00 for the given period at the given rate, and
   b. Multiply by 100 and divide by the given rate.
2. Divide the amount of the obligation by the result secured in (1); the annual sinking fund addition will equal the final amount secured.

The above calculations were made without the use of interest tables; if these latter are available, the work would be reduced materially.

The above illustration covers the first possibility to be discussed, determining the annual contribution to a sinking fund without reference to interest upon the obligation in question. Suppose now, that this same city borrowed the \$2,000,000, to carry out certain improvements, and the amount is to be repaid by equal annual instalments including both principal and interest, the interest rate being 4 per cent, and the time twenty years.

Hereunder, the requirement may be stated in either of the two following ways:

1. What equal annual payment is equivalent to \$2,000,000.00, invested at 4 per cent, or
2. What annuity can be purchased for \$2,000,000.00, money being worth 4 per cent per annum?

Solution.—$\$1.04^{20} = \$2.19112314$, the amount of \$1.00, in twenty-years at

4 per cent \$2.19112314 × \$2,000,000 = \$4,382,246.28, the amount of \$2,000,000.00 in twenty years at 4 per cent.

$\frac{\$1.19112314 \times 100}{4}$ = \$29.7780785, the final value of \$1.00, annual payment for twenty years (see above).

$\frac{\$4.382,246.28}{29.7780785}$ = \$147,163.50, the amount of the equal annual payment required (answer).

Total amount of bonds,	\$2,000,000.00
Interest at end of first year,	80,000.00
Annual payment,	147,163.50
Hence, \$147,163.50 less \$80,000.00 equals, the amount of the first redemption of debt.	67,163.50
\$2,000,000.00 less \$67,163.50 equals, the amount of debt drawing interest in the second year.	1,932,836.50
\$1,932,836.50 × .04 equals, interest due at the end of second year.	77,313.46
\$147,163.50 less \$77,313.46 equals, amount of second redemption of debt.	69,850.04

The process may be continued from year to year. In each succeeding year, as the interest payment is reduced, the payment against the principal is increased.

The rule deduced from the second example above might be stated as follows:

1. Determine the compound amount of the given sum for the given time at the given rate.
2. Divide by the final value of an annuity of \$1.00 for the same time and at the same rate.

The third and last possibility to be considered relates to determining the period of an annuity,—or determining the number of years that will be required to redeem a debt, the amount of the debt being known, as well as the periodical amount that can be counted upon to be set aside for redemption purposes. Assume a corporation desires to borrow \$25,000.00, to develop a new line. Its officers determine that they can count upon \$2,000.00 a year to repay the obligation. How many years must the debt run, on the basis of these assumptions, money being worth 5 per cent?

\$2,000.00, annually paid over will liquidate the obligation of \$25,000.00, with 5 per cent interest thereon, in an unknown length of time, or number of years. Restated, there exists an annuity of \$2,000.00, for an unknown period of years, at 5 per cent. Further, an annuity of \$1.00, will have a present worth for this same unknown period, at the same rate, in the amount of $\frac{\$25,000.00}{2,000.00}$ = \$12.50.

Consulting the annuity tables, one seeks for the amount nearest to \$12.50, that is therein contained, on the basis of 5 per cent. This is found to be \$12.46221, which, upon scrutiny, is noticed as being the present worth of \$1.00 for twenty years. Hence, in round numbers, this \$25,000.00 obligation may be repaid in twenty + years.

Cancellation of Redeemed Bonds and Paid Coupons.—When an outstanding bond issue has been fully paid up, and all the interest accumulated there against has been washed clean, it is necessary to have the trust deed or mortgage discharged as of record. However, unless the corporation has followed out certain procedures during the period of the obligation's existence to the end that the trustee, legally, may become a party to the mortgage release without incurring personal liability because of the wrongful discharge of his duties, the satisfaction cannot be obtained.

As bonds are paid, they should be cancelled and be kept carefully to be presented later for the personal scrutiny of the trustee. Similar treatment, likewise, should be accorded the bond coupons as they are paid from time to time. Before the trust deed or mortgage finally is discharged, the trustee will require that all coupons be presented to him for his personal examination. Since some coupons will have been lost or destroyed accidentally by the bondholders, and some, perhaps, will not have been presented for payment, some coupons always will be missing. The open spaces in the coupon books will show what coupons are missing and outstanding.

If the trustee finds certain coupons missing, he will require a bond to be given to protect himself against a possible later presentation for payment; this bond will be double the amount of the missing coupons.

If a bond issue be of considerable size and the final date of payment is far in the future, considerable difficulty may be experienced in caring for the cancelled coupons during the intervening period of time. The coupon books quickly become voluminous in size, and fireproof storage facilities needed in caring for them may require the incurment of considerable expense. Because of this, it is a frequent practice to destroy the accumulated cancelled coupons from time to time. To effect this destruction properly, representatives of both the trustee and the corporation will inspect the cancelled coupons, after which the latter will be burned in their presence. Subsequently, these representatives will prepare what is known as a cremation certificate, covering their act, and this the trustee will accept as evidence that the coupons indicated thereon have been cancelled and destroyed in due form.

CHAPTER IX

BALANCE SHEET: PROFIT AND LOSS STATEMENT

Introduction.—The science of accounting resolves itself into three general branches or divisions:

1. Recordative accounting, or bookkeeping. In turn, this division may be separated into three constituent elements:
   a. Classification. This has to do with selecting the proper titles for Ledger accounts and their functions. In short, it deals with resolving the pecuniary effects of business transactions into their proper debits and credits.
   b. Bookkeeping technique. This recordative element deals with the art of recording in proper form the classified effects of business transactions in terms of money. It represents the manual side of bookkeeping,—writing up the accounting records in accord with the rules of modern practice. The scope of this element commences with the opening, and ends with the closing, of a set of books (exclusive of the compilation of financial statements).
   c. Form and arrangement of financial statements. This element is of sufficient importance and distinctiveness to be accorded a separate treatment.
2. Constructive accounting, or the building of systems. Determining the fundamental operating classification of accounts would fall under this heading, whereas, under recordative accounting the classification element is concerned with selecting the proper accounts, from the prescribed classification, in which a particular transaction is to be recorded.
3. Inspective accounting, or auditing.

In the students' earlier accounting work, much time was devoted, or should have been, to the preparation of financial statements,—the Balance Sheet and the Profit and Loss Statement. The importance which may be attached to statement

preparation never can be overemphasized once the rudimentary basic elementary principles have been mastered. Only by means of properly prepared statements:

1. Can men at the head of large organizations ever hope to keep in touch intelligently with what actually has been, and is, going on therein.
2. Is it possible to present vital facts in a clear and effective manner concerning a business enterprise to:
   a. Those in control, or
   b. Those interested, as
      i. Stockholders.
      ii. Investors.
      iii. Creditors.

However good an accountant may consider himself, if his completed statements be poorly drawn, the following results:

1. His reputation, should he have one, is placed in jeopardy among men who have the ability to discriminate in matters of accounting.
2. An avenue is opened for considerable misunderstanding as to just what are the actual conditions.

An apparently harmless statement, poorly constructed, may become a dangerous document in the hands of those who use it.

The present chapter was written because of the importance attached by the writer to this phase of accounting. Some of the more approved methods of preparing financial statements, with which the writer has come into contact in practice,—as to content, form, arrangement, and terminology,—are presented for the so-called semi-mature student.

Of necessity, since the science of accounting is not exact, many items are treated differently by different accountants. However, in the present instance the writer trusts that he has avoided theoretical hair-splitting distinctions. In presenting elementary principles, the instructor may violate law or practice in any way he deems desirable if his final result will justify such procedure; for example: A business may be personified, capital may be considered an accountability rather than a liability, etc. But the opinion is ventured that most hair-splitting distinctions have little, if any, use in training the more advanced student to the point where he can, with intelligence, perform the duties required

of him in an office of either the practitioner of merit or the discriminating business man.

Preliminary Suggestions.—Before passing to the major discussion of the present chapter, certain suggestions of a general nature relating to statements seem in order. These are presented below in outline form:

1. Highly technical terms and forms should be avoided where possible. Every statement should be prepared so as to be intelligible to the average person who may read it. Clearness of expression should be fundamental:
   a. Terms used should be understandable and descriptive; abbreviations should be avoided.
   b. Figures mean practically nothing unless explained.
   c. If in a major statement the detailed explanation of certain items will take up too much space and tend to confuse the reader, a summary explanation will be in order thereon, with a more detailed explanation being furnished by means of either accompanying comments or supporting schedules.
   d. Indefinite account titles, so frequently found upon a set of books, may be changed without hesitation when a statement is prepared upon which such accounts are to appear.
2. Periodical statements should be prepared in as uniform a manner as possible, so that ready comparisons may be made between the statements of the different periods.
3. Since existing conditions may take a statement out of a general grouping and place it in a particular class all by itself, one should follow neither a stereotyped form nor be adamantine in insisting that a given illustrative statement form never should be varied; to do so would seem to indicate more or less incompetency, or at least a narrow-minded viewpoint. Naturally, only experience will teach one when such a change should be made. An illogical arrangement, even when the figures are accurate and each item clearly defined, will make it impossible for a statement to serve its fullest measure of usefulness. Again, those who examine a statement in proper form and logically arranged will secure a favorable impression of the ability of the compiler,

in that attractiveness of form and of general appearance will be the first qualities impressed upon the mind of the reader when the latter scrutinizes such a statement.

4. Underscoring and indenting individual items and groups of items, so as to indicate relationships between items and groups of items, as clearly as possible, should be made use of at all times.
5. The designation given to statements is a matter of choice, but uniformity therein may be considered a necessity. The writer, for example, makes use of the following designations:
   a. Exhibit. This is a statement which stands by itself independent of all others. The term is followed by a letter to designate the order in which the exhibit comes; for example:
      i. Balance Sheet—Exhibit A.
      ii. Statement of Profit and Loss—Exhibit B.
      iii. Statement of Cost of Manufacture and of Manufactured Product Sold—Exhibit C.
   b. Schedule. This is a statement which is subordinate to an independent statement. The term is followed by a number to designate the order in which the schedule comes, as: Schedule 1, etc.
   c. Statement. This is a statement which is subordinate to a schedule. Each carries a designating number.

   Other methods of designation may be used and, at times, should be used.
6. Attempt to place yourself in the client's shoes, so to speak, and criticize your work from his point of view.

Balance Sheet Title.—One object of keeping a set of books accurately upon sound accounting principles for a business enterprise is to permit its actual financial condition to be ascertained at any time. Such condition is evidenced by the value of the assets owned, the actual or estimated value of all liabilities, and the surplus of one of these groupings over the other which represents net worth or insolvency. The second object of keeping such a set of records is to secure a summary of the operations by which this net worth or insolvency has been created, increased, or diminished.

The formal title given to such a statement of assets and liabilities, prepared from the books properly adjusted, of a business as at a given moment of time is "Balance Sheet." The formal title given to the statement summarizing operations by which the Balance Sheet net worth or insolvency has been created, increased, or diminished, over its amount as of a prior date, in general, may be "Profit and Loss Statement." It is concerning the general form and content of these two statements that the present chapter deals.

It should be remembered that in the strict sense of the word, a Balance Sheet is not a statement of facts, but only an opinion of some one regarding the items contained in it. It is an approximation to facts, the degree of definiteness and accuracy thereof depending upon the skill and accuracy with which the estimates are made.

Whenever a statement is prepared which, by common understanding, may be called a Balance Sheet, many accountants, especially when the enterprise under review is of considerable size, will use the title General Balance Sheet, rather than merely Balance Sheet. In such event, one who reads may be led to assume that the two statements differ one from the other. As a matter of fact, as the meaning of both titles ordinarily is understood, no such difference exists. Since one title does not appear to be more formal than the other,—in that all Balance Sheets present the financial condition of a business as a whole, as at a particular moment of time,—it seems logical to adopt one or the other title and use this exclusively. Again, since general condition is shown by a Balance Sheet, even though the title does not contain the word "General," the shorter title would seem to be the preferred one to use.

Balance Sheet Form.—The form of the Balance Sheet is not an essential feature, except insofar as it has been discussed above in the section on preliminary suggestions. Any statement is a Balance Sheet which contains only the assets and liabilities as found on the Ledger. The variations in form may be indicated as under:

1. Account form. Hereunder, the Balance Sheet is made in one table, in which the items are arranged on each side in the order determined by their character as current or fixed.

Although accountants differ as to whether the current or fixed items should be placed first, both sides should follow the same method of set out.

2. Double account form. Hereunder, the Balance Sheet is made in two tables. In the first table the fixed liabilities of capital, surplus, and bonds are placed, offset by the fixed assets. The difference secured will show how much of the capital and surplus has been invested permanently. This difference, or balance, is brought down into the second table as the amount of active or free capital which is available for carrying on the operations of the business. In this table are listed the current liabilities and assets. This form of Balance Sheet is not ordinarily used, but would seem to be an extremely desirable form to show the fact that the business needs more active capital.
3. Report or running form. Hereunder, the assets are listed and their total extended; under them the liabilities are listed and their total extended and deducted from the total of the assets. The final figure secured represents the business net worth, which then is set out below as it appears:
   a. In the capital accounts of a partnership, or
   b. In the capital stock and surplus accounts of a corporation.

Arrangement of Balance Sheet Items: Account Form of Statement.—Two general methods are used in arranging the items upon the account form of Balance Sheet. Each one of these is commented upon briefly below:

1. Common and usual arrangement. Hereunder, the assets are arranged as nearly as possible in the order of their realizability, and the liabilities in the order in which they are payable, the net worth being set out last. From the standpoint of a bank or of a creditor this arrangement, under which the current assets are displayed at the top on the left side, and the current liabilities displayed opposite thereto at the top on the right side, permits of a ready comparison between the two groups. Likewise, hereunder it may be advisable to set out the net worth in one amount, as where the Balance Sheet is intended for a prospective purchaser.

A Balance Sheet arranged accordingly might appear about as follows for a fairly large corporation:

Assets:	Liabilities:
Current Assets	Current Liabilities
Investments (permanent)	Funded Debt
Sinking Fund (investment of reserves)	Deferred Credits (suspense credits)
Properties	Reserves
Good-will, Patents, etc.	Capital Stock
Deferred Charges (suspense debits)	Surplus

2. Public Utility method of presentation. Hereunder, the fixed or capital assets appear first opposed opposite by capital stock and funded debt. Next, the other assets and liabilities are set out in about the same manner as above shown, the surplus being the last item on the right side. This method cannot be subject to criticism in any way, although not particularly common; it is followed almost entirely among public utilities. A summary form of Balance Sheet arranged according to this method might appear about as follows:

Assets:	Liabilities:
Properties	Capital Stock
Good-will, Patents, etc.	Funded Debt
Sinking Fund (investment of reserves)	Current Liabilities
Investments (permanent)	Deferred Credits (suspense credits)
Current Assets	Reserves
Deferred Charges (suspense debits)	Surplus

Variations from the above are many, but it is believed that for general corporate work the methods shown are both correct and sufficient, at least for the present. Two later chapters will illustrate certain variations therefrom, as well as subsequent sections of the present chapter.

Nomenclature For Balance Sheet Captions.—The first essential in clearness is that each Balance Sheet caption should express the nature of the items thereunder included. Nothing absolutely definite exists in respect of the headings used on a Balance Sheet since accountants are greatly at variance relative thereto.

Current Assets. Often, this term is used synonymously with that of quick assets, floating assets, and liquid assets. Quick

assets, however, as a Balance Sheet caption, would seem to govern a lesser group of assets than any one of the others, especially if one refers to the form of Balance Sheet proposed by the Federal Reserve Board for merchants and manufacturers, in that temporary investments in securities, notes given by officers, stockholders, or employees, and accounts due from officers, stockholders, or employees are excluded therefrom. Since it is probably safe to state that the most prominent accounting firms prefer its use to any other caption, the term "Current Assets" would seem preferable to all the other possibilities so-called synonymous therewith.

The items included under Current Assets may be grouped about as follows:

1. Cash.
2. Notes and accounts receivable. These are intermediary instruments by means of which the conversion into cash is made.
3. Short term and realizable investments in securities (usually at market value) held only until an outlet is found for the surplus cash either in the extension of business activities or in the divisions of profit.
4. Inventories. These are the properties which by the aid of the capital assets continuously are being converted from one form into another, with the purpose of earning a profit by later sale and conversion into cash.

In fact, all items readily convertible into cash, representing values in which an enterprise operates, available for the purpose of financing the current operations or turnover, may be classed as current assets.

Capital Assets. This item is synonymous with that of fixed assets, covering such items as plant, long-term investments, franchises, patents, good-will, etc. The capital assets relate to the acquisition and maintenance of the permanent plant or equipment with which an enterprise operates.

Working or Working and Trading Assets. Many accountants group inventories under one or the other of these headings in preference to including them under current assets. Likewise, deferred charges to operations often are included hereunder (as insurance, taxes, etc.). Expense inventories and funds may be

treated as working assets; again, they may be considered as current assets; again, they may be classed as deferred charges.

Liabilities. Some accountants are satisfied thoroughly to use this term as the heading for the right side of the Balance Sheet; others will insist that this is in error and that such heading should be Liabilities and Capital. Whether or not capital is an accountability or a liability should be of small consequence to the student of advanced accounting. The discussion thereon is more academic than practical. Well established practice should become the rule and guide of one's actions after one reaches the turning point at which he may be considered an advanced student; let facts be facts, and eliminate whatever is non-essential and mere quibble.

Accrued Liabilities. Items such as wages, interest, and taxes accrued are grouped either under the heading of "Current Liabilities" or separately set out under the caption of "Accrued Liabilities." If an accrual be a liability, common sense would seem to indicate or dictate that it should be so considered; although Federal taxes often are set out as Reserve for Federal Taxes, they represent an accrued liability and, in short, ought to be so considered.

Reserves. Ordinary reserves, as for depreciation, and for doubtful accounts, are not liabilities, since they measure actual or estimated reduction in asset values. Therefore, although frequently grouped under the liabilities heading, they ought better be deducted from the assets to which they apply. Other reserves, not measuring actual or estimated asset reduction, rightly may be segregated and be included on the right side of the Balance Sheet.

Deficit. This item may be found either on the left or right side of the Balance Sheet. Some say that by placing it on the left side, it is considered as an asset, and must be if capital is considered as a liability. Apparently, another academic distinction is encountered here which has no practical worth. Common sense will not consider a deficit as an asset even though this item may be placed among the assets; likewise, the mere inflation of the total assets figure thereby means nothing, since such figure has no interpretative importance. Many Balance Sheets show the deficit among the assets and the opinion is ven-

tured that no accountant will jeopardize his professional standing, if he has one, by so allocating it.

Current Assets: Cash.—The current asset of cash as stated in a Balance Sheet presents, if any, but little difficulty. It will consist of three principal variations:

1. Cash on current deposit with banks.
2. Cash on restricted deposit with banks or others.
3. Cash in hands of officials.

If the amount of available cash on deposit be of considerable size, it may be set out as "Cash on Deposit" or "Cash in Bank"; if not of sufficient consequence to justify separate discrimination, the cash may be stated as just "Cash." If the cash on deposit consists in part of funds held for special purposes, these special funds may be stated separately from the current fund deposits.

In case an overdraft arises, the ordinary method would be to show its amount as a current liability. However, sufficient reason may exist for allocating it otherwise:

1. An overdraft on one bank covered by outstanding checks may be deducted from the balance shown as on hand in another bank where this latter balance is greater than the amount of the overdraft; the net cash balance then will be extended out as an asset.
2. An overdraft on one bank greater in amount than the cash available in another bank would be sufficient reason for having each item shown separately upon the Balance Sheet; the overdraft should be set out as a current liability and the debit balance of a smaller amount as an asset.
3. A book overdraft caused by entering checks in advance of having them sent out would seem to permit one, as of Balance Sheet date, to add back the amount of checks so entered but held to the end that the cash balance will be replenished thereby, the amount so added back being offset by a credit to Accounts or Vouchers Payable account. The above reasoning is based upon the fact that a bank account cannot be disposed of on or before closing date by the mere drawing of checks; to do so, the checks actually must have been mailed prior to that date. Practically, after a check has been mailed, it is no longer considered disposable.

Separate cash deposits available only for interest and dividend payments, for capital expenditure, or withdrawable only after a date certain, should be stated separately with complete explanation as to the nature of the restriction, and the offsets thereto, if any, should be found under the caption of current liabilities. Sinking fund deposits and deposits made in order to secure special service should be set out separately, but not under current assets. Free cash balances should be separated so as to distinguish between cash on hand and bank balances both bearing interest and not bearing interest.

Working funds representing cash held by salesmen, cashiers, etc., for the payment of current expenses or for making purchases may be merged as part of general cash in the amount of the cash actually on hand; all such funds may be lumped and one sum shown therefor, or they may be indicated separately.

The practice of keeping the Cash Book open beyond the closing date so that entries relating to receipts and payments may be made at a date later than the closing date although concerned with transactions of dates prior to the closing date,—so as either to show smaller amounts due from debtors or to creditors, or a larger cash balance,—is not in order from any point of view in that, by so doing, the financial position as of the correct closing date will not be the financial position shown thereunder.

Current Assets; Notes, Acceptances, and Accounts Receivable.—All items properly grouped under this caption should be both current and liquid to the end that the aggregate will be realizable at total face value within a definite period of time, dependent upon the nature of the business. The assets hereunder represented day by day and in the ordinary course of business are being converted continually into some more liquid and available asset, as cash; in turn, this enables one to count upon such assets as a source from which corresponding liabilities may be met as they mature.

Notes receivable and trade acceptances receivable are so essentially similar that, in general, no separation need be made upon the Balance Sheet relative thereto. However, if a considerable portion of the notes relates to loans rather than to trade activities, their amount should be stated separately. Notes

and acceptances receivable which have been discounted may be shown upon the Balance Sheet:

1. As a deduction from the gross amount on the asset side.
2. As a footnote.
3. As a current liability.

Since notes receivable will not be due until a date subsequent to that as of which the Balance Sheet is prepared, conservatism will permit one to reduce their amount to a present value:

1. If a note be for a fixed sum with interest, the face value shown will be the present value.
2. If a note be for a fixed sum payable without interest, it would be permissable to reduce the face value to present value by charging an income account and crediting a discount or interest reserve account with the interest thereon from Balance Sheet date to date of maturity.

Again, if it should appear for a given case that, before final collection, a material portion of the face value of the notes will be absorbed by collection costs, it would not be in error to make provision therefor by the establishment of a sufficient reserve; however, the interest accruing upon these notes, to be booked only as actually received, will offset this collection cost to some extent.

Customers' accounts should be shown upon the Balance Sheet separate from the accounts covering loans or advances. In any instance, care should be observed to designate customers' accounts receivable as such rather than leave it to the reader to decide for himself whether customers' accounts are represented or others.

The various classes of accounts receivable, other than customers, should each be set out separately under proper sub-headings provided the amount thereof is sufficiently large to warrant the usefulness of this added information; if these amounts are not large all may be merged into one item,—Accounts Receivable—Others (or Sundry). Customers' accounts carrying credit balances (net) should be shown as a current liability either separately or combined with the Accounts Payable—Trade.

Loans advanced secured by accounts receivable,—a pledge thereof against such loans, are common at the present time, such

loans being made up to about eighty per cent. of the value of the accounts pledged. Even though these transactions often are in the form of actual sales, it is well to consider the case as a loan. Therefore, the accounts pledged may be carried as an asset, and the balance due the pledgee or lender may be set out as a liability. When such condition is encountered, the Accounts Receivable—Customers should be shown on the Balance Sheet divided between those pledged and those unpledged.

The handling of reserves for doubtful accounts receivable varies among accountants. The following treatment, however, is advocated:

1. If the reserve covers accounts specifically regarded as bad or doubtful, the amount thereof should be handled as a deduction from the accounts receivable.
2. If all bad or doubtful accounts have been written off the books, and the reserve provided represents merely a provision against contingencies, it would seem proper then to consider such a reserve as a pure appropriation of surplus, in which event its amount would be shown on the right side of the Balance Sheet.

Reserves for cash discounts may represent the following of a conservative policy upon the part of a concern setting them up, but since they do not become a charge at the time a sale is made, only when taken, their use would not seem to be exactly in order. Reserves covering trade discounts, freight, allowances, etc., properly may be deducted from the assets. It should be remembered that trade discounts ought always to be deducted when the charge is made upon the books.

Current Assets: Short Term Investments.—The classes of investments to be grouped hereunder represent securities held under a temporary disposal of surplus cash, or those acquired in payment of debts or otherwise, and held for realization at a suitable price; no question should exist as to their marketability, and the maturity dates thereof should not enter into consideration. These investments have no relation to the business whatever, and their disposal should be possible without an interference in any way with the earning capacity of the business, other than a loss of the income thereon.

If they represent investments more or less permanent, or a

proprietary or controlling interest in some other enterprise, they should be considered as a capital asset. The book value at which these securities are carried, as current assets, should not be far in excess of their market value. When the excess is small in amount, the true statement of the assets is not affected materially thereby; however, when a cost valuation is used under such a condition, it would be wise to indicate somewhere upon the Balance Sheet whatever depreciation in value actually does exist. Again, fluctuations in the value of marketable securities may be dealt with by the creation of a Reserve for Fluctuation in Investment account:

1. This being set up out of realized or estimated profits, on investments, or
2. By setting it up by means of a charge to Profit and Loss account. Such a reserve never should show a debit balance; the charges or credits thereto always should be sufficient so that by its use the asset will be maintained at market value, this being lower than cost.

Any securities pledged should be shown upon the Balance Sheet as such. Short term investments, if possible, should be shown upon the Balance Sheet by name.

Current Assets: Accrued Interest.—This item may be shown upon the Balance Sheet either as one amount or separate according to the assets responsible for such accrual.

Current Assets: Inventories.—Too much information concerning this item cannot be shown upon the Balance Sheet. The Balance Sheet of a manufacturing concern, usually, will group the inventories as:

1. Finished goods.
2. Goods in process.
3. Materials and supplies. This latter item well might include all supplies of a tangible nature rather than placing those of a general character under the caption of "Deferred Charges."

If any merchandise be pledged, the Balance Sheet should show such fact. Reserves provided against inventories to cover possible decline in value or interdepartmental profit should be deducted from the asset.

Goods out on consignment, if considerable in amount, should

be shown separately. Samples out may not be inventoried at all; if inventoried, state separately. Goods received upon consignment have no place upon the Balance Sheet; all advances, however, in connection therewith, should be stated separately.

The carrying charges of merchandise, storage, etc., are legitimate additions to the cost of goods on hand up to the point where the entire value of such goods equals their market value. Carrying charges either may be combined with the rest of the goods value or may be shown separately.

Accurate inventory valuations are of vital import to the securement of a correct Balance Sheet. Therefore, it may not be amiss here to include a few general remarks relative to inventory valuations, since this is a matter of considerable difficulty involving many important questions. Until an article either has been sold or exchanged, no profit should be considered thereon; a paper profit never may be realized.

In general, since a Balance Sheet should show the true financial condition of a going concern, it may be incorrect to value an inventory at actual cost in that actual cost may represent more or less than the market value; the result, therefore, would be either to overstate or understate the assets. However, actually to change a book valuation at cost to a market valuation is not in order, so far as the books are concerned, because the profit or loss thus set up never actually may be realized on account of further changes in market value. But since no credit shall be taken for profit until the latter is realized, whereas a possible loss in the disposal of what remains unsold should be provided against out of profits actually realized on sales already made, it is considered as good accounting where cost exceeds market to set up a reserve to bring the cost value down for Balance Sheet purposes; since this asset has been acquired only for the purpose of realization at a profit, and not to be held for the permanent uses of the company, a drop in the market price means a proportionately less return than otherwise would be the case. On the other hand, it would seem logical to write up inventory values as the market advances if, when the market drops, such values are written down; however, the practice is otherwise. To begin with, profits under any event are not yet realized, and if profit be taken on a written up valuation, the

market may fluctuate adversely before realization to the end that an actual loss may result; also, an understatement of profit not only delays a profit distribution, but at the same time it conserves values as against an overstatement which may operate disastrously. Hence, the accepted rule for valuing current assets, "cost or market, whichever is the lower." However, since the cost prices of inventory assets do not fluctuate to a great extent under normal business conditions, one may say, in general, that these items will be set up at their cost.

There are five essential elements in ascertaining correct profits with relation to inventories on hand:

1. The quantities on hand must be determined correctly. This may or may not be difficult. It will not be difficult where a plant can be closed down entirely until the inventory is taken; again, but little difficulty should be encountered where a perpetual inventory record is kept which is checked up and adjusted from time to time with the actual quantity on hand. The inventory count will entail considerable difficulty where the work involved consumes considerable time and where the plant cannot be shut down. Here a systematic plan must be laid out beforehand under which duplication will be prevented. Incoming stock not to be counted must be segregated; outgoing stock should be taken from that on hand but not yet counted. Bulk materials carried in piles must be more or less estimated unless some sort of a book inventory by quantities be kept in connection therewith. The apparent contents of a pile will be affected by moisture or by irregularities in the ground surface. To secure some degree of accuracy, the measurement of any such pile should be made by two persons independently of each other. Work in process cannot be inventoried satisfactorily unless some attempt has been made to record the labor and material put in and the finished product taken out, due consideration being given to the element of wastage. The quantity of scrap material on hand never can be valued with any degree of accuracy; and under all circumstances a liberal allowance should be made against overvaluation.
2. The actual cost of goods completed or in process of manu-

facture must be ascertained as accurately as possible. This point brings up the subject of cost accounting which cannot be treated in the present volume, it being a subject requiring separate study.

3. The clerical work in connection with (1) and (2) must be performed accurately.
4. Proper provision must be made in the valuations to take care of reductions in market prices whereby market price drops below cost.
5. Proper provision must be made for all stock which, for any reason, is apt to prove unsaleable.

Investments.—Long-term investments should be placed hereunder, as investments of general reserves, real estate not held for plant purposes, advances to constituent companies, etc. If these should be included among the current assets, it would be impossible to secure a clear view of actual facts. Securities may be carried at book value, but where book value is in excess of market value, as determined from reliable financial sources, such difference should be shown in some way. Securities pledged should be shown separately in some manner upon the Balance Sheet.

These permanent investments, in general, control some essential part of the activities carried on. The distinction between investments as current assets and those considered as capital or fixed assets is a most important one. The financial position of an enterprise may be placed in jeopardy in that in their securement it is necessary, usually, to withdraw a portion of the current assets from the general use of the business and, by so doing, these current assets are diverted from the purpose for which intended,—the rapid conversion from cash into saleable products and so back again into cash. Unless, in the first instance, the current assets are more than sufficient for all needs, the conversion of any portion thereof into assets of a permanent nature takes that much of the current assets out of current use which in turn means that either the operations must be reduced or the liabilities increased.

When an investment has been made to secure control of the operations of another business, the method of handling may be indicated about as follows:

1. If the interest owned is substantially the whole, the Balance Sheets of all such interests should be consolidated with that of the company so controlling into what is known as a Consolidated Balance Sheet (see post, Chap. 13).
2. If the interest owned is not substantial but still represents a controlling interest, the investment should be treated as an asset.

When an investment has been made to secure the right to use some connection or facilities held by another, needed under the present policy of activities, the valuation will be at cost rather than otherwise, assuming at least that such cost reflects the present value of such connections and facilities from the standpoint of use.

The special investment of funds set aside for the different reserves classed as appropriated surplus is common. Since the fluctuation in the value of these investments affects only the reserves in question, and since profits or losses cannot be determined definitely until the reserves are needed and the investments sold, it is usual to carry them at cost ignoring all fluctuations of a temporary nature and of a relatively small amount. Where such funds have been invested in the company's own securities rather than in those of some outside corporation, such investment, from the point of view of a Balance Sheet, should be eliminated from both the asset and the liability sides so far as the totals are concerned.

Sinking Fund.—The components of a sinking fund should be set out upon the Balance Sheet separately and whatever securities are there included should be described fully. If some of the company's own bonds have been purchased from the total amount outstanding, for the redemption of which the sinking fund was created, the amount thereof may be deducted from the total bonds shown as having been issued. When these bonds, however, have been cancelled, and no longer bear interest, the total amount outstanding should be reduced actually by such cancellations. The components of a sinking fund, usually, will be found to consist of cash, securities, and accrued interest.

Properties.—The items hereunder are variously grouped as "Property," and "Property and Plant." If the physical property consists of land, buildings and equipment, either of the

above terms would seem proper. If outside investments in real estate are found and are carried separately, the property pertaining specifically to the plant should be classed as "Plant Properties." Also, if no land and buildings are owned for plant purposes, only equipment remains, and this should be designated as "Equipment."

The basis of Balance Sheet valuation of each of these items should be indicated,—cost, cost less depreciation, reproduction cost appraised, or sound value appraised. If an appraised value affects the surplus by increasing it, the increase therein should be set out separately since distributable surplus does not exist thereunder; appreciation or inflation in property values does not represent distributable profit.

Since depreciation does not apply to land, except in rare cases, the depreciation reserves are connected, in general, only with the buildings and equipment. They should be deducted from the assets to which they apply, in detail or in total, and should not be carried among the liabilities on the right side of the Balance Sheet, unless the company be a public utility. In the latter event, it is probable that, by law, the reserves must be placed among the liabilities. Where no depreciation is shown or is to be taken, such fact should be set out in a carefully worded footnote; the same would be true if it is deemed that the depreciation provision is not adequate.

Land and land improvements represent either a fee ownership or the enjoyment of such properties under a lease. In the former event, the valuable life of expenditures made goes hand in hand with the life of the improvement; in the latter case, a limit exists equal to, more than, or less than, that life. Land improvements cover all expenditures that add a long term or permanent value and, in general, they are not subject to depreciation from wear and tear, although they may be subject to provision for abandonment or obsolescence; the exceptions here to the general rule may be set out as under:

1. Expenditures upon growing timber.
2. Expenditures related to mine development.

Expenditures relative to these exceptions must be considered especially with regard to the life of the property in relation to

which they have been incurred. Mining expenditures must be written off either over the term set for the exhaustion of the minerals or, if the life is less than such term, over the shorter period. Expenditures upon growing timber may be capitalized only to the extent that a fair certainty exists that the ultimate value secured upon sale will cover at least the original cost, later expenditures for care and upkeep and cost of marketing. Uncertain catastrophes incident to mining and timber operations, as fires and floods, are capital losses to be guarded against by the creation of special reserves out of profits previously earned.

Buildings and structures have a long life, as a rule, but one that some day must end; therefore, they are subject to regular depreciation.

All the permanent facilities required and used directly in any activity, as machinery, fixed tools, etc., must be kept up continuously and be replaced from time to time; therefore, they are subject to depreciation for obsolescence as well as for wear and tear.

Movable equipment, equipment continuously moved from place to place as demand for their use requires, have but little obsolescence, but heavy wear, tear, and loss which makes frequent replacement necessary. Either heavy depreciation there against must be provided, or all expenditures, including whatever amount is necessary to reduce the balance to inventory value, are written off as an operation cost; in the latter event, they are treated as working assets.

Furniture and fixtures represent an asset of little value except when actually in use, even though the estimated life may be fairly long. The carrying value thereof may be reduced year by year by a gradual reduction charge, as ofttimes is done, or better yet, the reduction may be abrupt in character the asset being written down to a nominal or breakup value as quickly as possible.

Patterns, drawings, dies, etc., are difficult of evaluation, but conservatism should prompt one to make, in connection therewith, liberal allowance for wear and tear and other waste due to operation. While in use, they may be assumed as being worth their cost, whereas, when use ceases, because of changes in design, they are worth little or nothing.

Good-will, Patents, etc.—These are intangible assets and should be shown separately upon the Balance Sheet as such. If a separation between the tangible and intangible assets cannot be made to the end that these items must be stated in combination with the tangibles, great care should be observed to make certain that one who reads will understand that such intangibles are actually included.

These intangible assets are very similar to one another. A patent is granted for a term of years, and the amount paid therefor, theoretically should be written off against the profits earned during those years. However, cognizance must be taken of the fact that something else may develop to change this attitude of consideration:

1. Before the original patent has expired, either a virtual monopoly may be built up or the business may be so prosperous that its original cost may be replaced by the reasonable value of the good-will.
2. During the life of the original patent, many others may be taken out, each representing a modification of some kind which has the effect of extending the life of the original patent in an improved form. The cost of these later patents may be relatively small as compared to the cost of the original one.

Good-will must be discussed rather fully in a later chapter concerned with mergers and consolidations. Therefore, but little need be said concerning this asset at the present moment. As long as the earnings of an enterprise equal those contemplated at date of purchase, one cannot well say that there has been any depreciation in its value or that any provision for such depreciation need be made. However, if the profits have dropped seriously, the value of the asset of good-will likewise has dropped, yet whether or not provision should be made for such reduction in value is a practical problem not easily solved entirely from a theoretical point of view; the profits may be so much reduced that, even though the value of good-will is questionable, it will not be practicable to make such provision. The value of good-will depends considerably upon profits earned, and the fluctuation therein is a result of, not a cause of, earning profits.

Franchises are either perpetual or for a fixed term. Where perpetual, the same considerations, in general, apply as relate to valuing good-will. Where only for a fixed term, a reasonable provision should be made each year covering the reduction in value, even though the actual amount thereof may not be ascertainable due to the fact that they may be renewable at the end of the present term.

Deferred Charges.—These items are classed variously as "Deferred Charges," "Deferred Debits," "Deferred Assets," and "Prepaid Expenses." The first two titles are preferable to the latter two in that the last two will not be appropriate under all conditions. In general, deferred charges are of two kinds:

1. Expenditures to be absorbed by future operations.
2. Items held in suspense awaiting final decision as to allocation.

Ofttimes, working funds, special deposits, and miscellaneous advances will be included hereunder.

Current Liabilities: Notes and Acceptances Payable.—Notes payable based upon loans should be shown separately from notes and acceptances payable to trade creditors. Secured obligations may be thus indicated although where specific property be pledged, a statement relative to the pledge will be shown in connection with the asset in question. It may be advisable, also, to summarize obligations by maturity dates.

Current Liabilities: Accounts Payable.—These should be grouped by classes,—trade creditors, advances, loans, etc. Credit balances in customers' accounts, where no debit balance with the same customers exist, should be shown as a current liability, usually included with the other trade accounts payable. Deductions on account of cash discounts which may be taken ought not to be considered. If any accounts payable be omitted, with their offsetting assets, which is of infrequent occurrence, a footnote should be included describing such.

Provision should be made always for all known liabilities, even where the exact amounts are not ascertainable. Some sort of approximation always can be made and, where possible, such items should be allocated as current liabilities; as a real liability exists, such items should not be set out as part of surplus or as a reserve.

Current Liabilities: Dividends Payable.—Dividends declared but not yet paid as of Balance Sheet date are current liabilities. Dividends on preferred capital stock should be handled as above if the date of the Balance Sheet is immediately prior to date of payment; otherwise, the amount thereof should be allocated as a reserve.

Current Liabilities: Wages, Taxes, and Interest Accrued.—Wages accrued represent either the actual or estimated amount of wages earned as a Balance Sheet date, but payable in the subsequent period. If wages are on hand unclaimed, their amount should be shown as "Amounts Payable," "Wages Payable," or "Unclaimed Wages."

Taxes accrued represent taxes accrued to date but not yet payable; if any are due and unpaid, such amount may be shown separately as "Taxes Payable," or be included with "Accounts Payable." Provision should be made for Federal income taxes under the heading of "Taxes Accrued," rather than allocating them elsewhere. If all accruals relating to taxes have not been provided for, a footnote should indicate such fact. "Taxes Paid in Advance," as an asset, should not be deducted from the liability of taxes accrued.

Interest accrued may be shown in total or separately (as Interest Accrued on Bonds and Interest Accrued on Notes Payable). Any interest that has matured but remains unpaid should be stated separately. Interest paid in advance (as on notes discounted) should not be deducted from the interest accrued.

Funded Debt.—Bonds, notes, or mortgages maturing in less than a year should be considered as current liabilities; and the same would be true of long-term securities which have matured but are unpaid or which will mature in a day or two. All items should be described fully, and the exact date or year of maturity should be set out carefully. Securities held in the treasury and in sinking funds would be deducted from the liabilities provided their book value is the same as their par value; if not, such deduction cannot be made and such securities would be carried as assets.

Deferred Credits.—This group of items represents just the opposite of deferred charges,—all receipts of income not yet earned, and receipts whose disposition has not yet been decided.

Advance collections on sales, unredeemed coupons, etc., are current liabilities in toto, not to be hereunder included.

Reserves.—Reserves for depreciation either may be deducted from the corresponding property item, or be included among the liabilities, the former method being preferable to the latter. In either event, as much detail as possible should be presented with reference thereto, rather than show in one lump sum.

Reserves for bad debts, doubtful or uncollectible accounts preferably are deducted from the corresponding asset item or items, although conditions may permit of otherwise handling them.

Reserves for sinking funds are shown properly under the heading of "Surplus," representing appropriated surplus. A reserve for contingencies should represent what the title suggests. A contingency being unknown, the reserve, therefore, has no relation to any known charge even of an undetermined amount.

Capital Stock.—Each class of capital stock should be shown separately upon the Balance Sheet at all times. Relative to each class full information should be shown as to number of shares authorized, issued, and outstanding, plus par value, if any. The fact that preferred stock is cumulative or non-cumulative should be indicated, as well as the dividend rate. Subscriptions to capital stock should be included under the head of Capital Stock, and the uncollected balance on subscriptions should be carried as an asset.

Stock of no par value should be set out as such, its carrying value being the consideration received therefor.

Surplus.—This term in its usual meaning represents earned surplus in contradistinction to capital or special surplus. The latter term refers to paid in capital in excess of the stated value of the capital stock, perhaps to donated capital, appreciation of intangible values, and appreciation of properties. Again, the term may be considered as indicating surplus available for distribution and held free from being used for any other purpose; care should be observed to prevent one from assuming this is the kind of surplus referred to unless such actually is the case.

Although it cannot be considered improper to show a deficit on the asset side of the Balance Sheet, if a capital surplus exists, an operating deficit should be deducted therefrom. Some ac-

countants will deduct a deficit from the capital stock to show actual net worth; this does not seem advisable.

Contingent Assets and Liabilities.—Contingent liabilities are of two types:

1. Those which are offset by corresponding contingent assets:
   a. Liabilities on account of notes and drafts discounted.
   b. Accommodation indorsements.
   c. Guarantees.
   d. Unused letters of credit.
2. Those which are not offset by corresponding contingent assets:
   a. Continuing guarantees of product.
   b. Legal or other claims.

Whenever a contingent liability is of a considerable amount, the Balance Sheet must disclose it:

1. As a footnote, or
2. Included in the body of the statement. Here the liability would be shown on the right side and the offsetting assets on the left side, the amounts thereof being included in the statement totals.

Capital Versus Revenue.—Some of the basic distinctions concerning capital and revenue are understood by the student already. However, herein, the subject will be considered, so far as possible, with reference to corporations. The successful operation of a corporation, whether viewed from the angle of an investor, an executive, or an accountant, depends upon certain principles of capitalization and operation. And one of the most important of these principles concerns the distinction to be made between transactions which have to do with the permanent plant,—or the capital transactions,—and those which relate to values which are continually in a state of change because of current operations,—or the revenue transactions.

The transactions concerned with the operation activity of a corporation, regardless of what they may be, are separable into two distinct groups:

1. Capital transactions. These relate to the acquisition and maintenance of the permanent plant or equipment with which the corporation operates. There is a fundamental similiarity here with that portion of the entire asset fund

designated as the capital assets, those available for the purchase of the permanent plant and other equipment.

2. Revenue transactions. These relate to the current operations, the values in which the corporation operates. There is a fundamental similiarity here with that portion of the entire asset fund designated as the current assets, those available for financing the current operations or turnover of the business.

Capital assets arise because cash or some other liquid asset is converted into the permanent assets needed by a corporation. The entire cost to a manufacturing corporation of acquiring land, erecting thereon a plant suitable to its needs, and equipping same, is a capital charge properly carried in the accounts as a capital asset; the same would be true for a trading corporation which purchases a piece of land and erects and equips a building thereon suitable to its purposes. In each instance, a new asset is acquired which is part of the permanent property to be used for the purpose of conducting the current operations for which the corporation was created.

Again, any expenditure which results either in acquiring an addition to, or an improvement of, the permanent plant of a corporation may be capitalized. The cost of all additional land secured for building purposes should be considered a capital asset; incidental costs relating to the purchase of the land,—as title investigation fees, survey fees, real estate agents' commissions, etc., are a necessary part of the purchase cost that should be capitalized even though not part of the initial property purchase cost. The same would be true of the direct costs of buildings and costs incidental thereto relative to architect's plans, supervision of construction, etc. Likewise, anything acquired to provide the facilities necessary for transacting business, as machinery, tools, fixtures, furniture, etc., are capital assets to be carried on the books at cost, such cost to be reduced by valuation account increases periodically by virtue of depreciation.

However, the capitalization of asset values may not always be as simple of determination as the above might suggest; consider the following:

1. A machine is purchased at a cost of $300.00, whereas, nor-

mally, its cost is $500.00. At what value should this asset be booked? If it be booked at the normal cost, a credit results which some consider as representing a profit. However, since such a handling creates merely a paper profit, if profit is what it is considered, which has no relation whatever to operation, the correct practice is to capitalize merely the actual cost. As a matter of fact, the opinion is ventured that no profit strictly has occurred, but merely a saving, and this, naturally, should find no expression upon the books.

2. One capital asset is replaced by another which performs the same service but which, because of certain existing conditions, as quality, quantity, etc., costs considerably more. Thus, a small typewriter costing $50.00, may be replaced by one costing $105.00, or a wooden pipe line may be replaced by a concrete or steel pipe line. The old value discarded properly represents a charge against income, whereas, the new value represents an addition to the capital plant; the result here is that the additional value represented by the difference between the cost of the old asset and the cost of the new one measures the net increase in the capital plant existing after the transaction compared with what such capital plant value was previous to the transaction.

All capital assets, except land, quite generally depreciate for one reason or another and, since this shrinkage in value is something which always accompanies the acquisition and use of capital assets for current operating purposes, such shrinkage becomes a proper charge against the income secured from such current operations. The subject of depreciation is not here considered.

Finally, as to the capital assets, no recognition should be given to fluctuations in market price, because no particular effect occurs therefrom against the corporation holding them, so long as they are used for the purpose acquired, and so long as they are maintained in their original condition. In other words, no profit thereon should be recognized unless actually realized, and all losses which might occur due to the final discarding of a capital asset should be provided against in advance by charges against earnings.

Revenue transactions relate to a corporation's activity in connection with acquiring, converting, and realizing upon the current assets, and also in connection with all the incidental operation elements which may arise thereunder. In other words, even though they deal with real elements in the form of current assets, they include all operating or trading activities considered to be of a profit and loss nature. The assets acquired as a result of revenue transactions are not held for the permanent uses of a corporation, but only to be realized upon at a profit.

Revenue transactions cover many things other than the securement of tangible asset values. Labor must be paid for, and consumable supplies and incidental services must be secured. A manufacturing corporation purchases raw materials. These are worked upon in the various stages of the manufacturing processes with the result that as progress is made toward the finished articles, labor and supplies are consumed in connection therewith. When the completed product emerges, it represents a composite of material, labor, and supplies and, when sold, for either cash or credit, it is presumed that value comes back in an amount sufficient to reimburse the corporation for all expenditures made plus a profit. It is net profit which is presumed to compensate the corporate entity for the use of both capital and current assets. The capital assets are not held for profit purposes; if profits are realized directly therefrom, it is a mere incidental matter representing the occasional disposal of a capital asset at a profit.

Statement of Profit and Loss Title.—It was stated above that one of the objects of keeping a set of books accurately upon sound accounting principles for a business enterprise is to permit its actual financial condition to be ascertained at any time. Such a condition is evidenced by the Balance Sheet which, for a corporate enterprise, has been discussed in more or less detail in the first portion of the present chapter. The second object of keeping a set of books accurately upon sound accounting principles for a business concern is to permit its operations to be so summarized that an intelligent presentation may be made of the causes responsible for the creation of the net worth or insolvency as displayed by the Balance Sheet, or the increase or decrease therein over its amount as of a prior date. Such

summarization is evidenced by the Statement of Profit and Loss which, for a corporate enterprise, particularly, will be discussed in more or less detail in the remaining portion of the present chapter.

Various titles are used to designate a statement of operations, the correct one to be used under any given set of conditions depending more or less upon the content of such a statement. The following are illustrative:

1. Statement of Income and Profit and Loss. This title appropriately applies to a statement for either a trading or a manufacturing enterprise in which are included all the operations, plus surplus changes.
2. Summary of Income and Profit and Loss. This title is proper for a summary form No. 1, above, in which are shown only major group totals.
3. Statement of Income and Capital Account. This title is proper for a sole trader or partnership concern; it shows, in addition to income, a summary of the capital account or accounts.
4. Statement of Profits and Income. This title is used in an earlier production by the writer for the purpose of specifically assisting the more elementary student to comprehend and remember the results to be secured by a logical grouping of items as concerns what has taken place during an elapsed period of time; further, theoretically, this title seems more accurate in its meaning than any other. However, since general practice does not recognize this title to any considerable extent, nothing more will be said thereon in the present volume.
5. Statement of Income. When a statement ends with setting out the net income, this title appears fairly accurate.
6. Statement of Profit and Loss. This is a general title which, among accountants, is assumed to be appropriate under perhaps all the conditions where any other title above indicated could be used.
7. Statement of Revenue and Expenses. This title is usable in connection with all enterprises not commercial.
8. Etc., as desired.

Since all these statements cover an elapsed period of time, the title should indicate such fact, as:

1. Statement of Profit and Loss
Year Ended December 31, 1921

2. Statement of Profit and Loss
January 1, 1921, to December 31, 1921

Further, just as the Balance Sheet is an estimate of value only,—an expression of one's opinion thereon,—the balance of the undistributed profits or losses must be considered only as an estimate.

Arrangement of Statement of Profit and Loss Items.—As stated in connection with the Balance Sheet, every statement should be prepared from the viewpoint of the layman readily understanding it. And in this connection, to a far greater extent than with the Balance Sheet, the running or report form of Statement of Profit and Loss presents a clearer idea of what has taken place than does the account form. In fact, most accountants of repute have adopted the running form for the Statement of Profit and Loss exclusively; therefore, none other need be considered.

The general outline form for any Statement of Profit and Loss is practically the same, but a great variation exists in the allocation thereon of specific items. Such variation as to the position of detail items depends upon two primary elements:

1. The theoretical training and ideas of the particular accountant who prepares the statement. Many accounting theories still are debatable, and any one accountant should not presume that his method of treatment is the only correct one; it may be for him but, in the mind of another who is at least his equal in intelligence, if not his superior therein, the former's treatment may be considered in error.
2. The case in hand may require a treatment of certain items in a way other than the usual one followed. The members of a certain association of manufacturers, for example, may be agreed upon a uniform way of handling cash discounts on purchases. It would not be well for an accountant preparing a Statement of Profit and Loss for the business of a member of this association to depart from the accepted practice therein. Pure theorists always take issue with

what they find; the practical accountant will govern himself primarily by the conditions encountered. Unless the issue be of major import, the latter will be loathe to tear down an accepted practice, because, by so doing, comparative statistics may be knocked away and prove useless. Again, expediency may dictate that it is impossible to produce from the accounts as found a Statement of Profit and Loss in as intelligent a form as might be desired.

A basic arrangement for a Statement of Profit and Loss, in running form, for either a trading or a manufacturing corporation, conforming practically to the arrangement suggested previously in an earlier volume, would be about as follows:

Gross Sales	Additional Income
Deductions from Sales	Gross Income
Net Sales	Deductions from Income
Cost of Goods Sold	Net Income
Gross Profit on Sales	Surplus Beginning of Period
Selling Expenses	Profit and Loss Credits
Selling Profit	Gross Surplus
General Expenses	Profit and Loss Debits
Profit from Operations	Surplus End of Period

This arrangement is such that the surplus at the end of the period as shown will support the item of Surplus at the end of the period as found upon the Balance Sheet.

Gross Sales.—This represents the gross business done during the reviewed period. In concerns other than the usual type of trading and manufacturing, the title of Gross Sales, to represent the gross business done during a certain period of time, seems in error; for example:

1. Professional practice. Since goods are not sold, only charges being made for services rendered, the caption representing gross business might better be Gross Earnings or Gross Revenue.
2. Business related to approval shipments. Gross charges against customers are designated correctly as Shipments Billed.
3. Business related to contract work. Hereunder, one should distinguish between contracts completed and uncompleted contracts:

   a. Completed contracts. Billings representing completed

work only may be designated as Completed Contracts Billed.

b. Uncompleted contracts. Billings representing completed portions of contracts not yet fully completed may be designated as Bills Rendered.

Only in trading and in manufacturing concerns does the title of Gross Sales, representing gross business, appear to be in order. Hereunder, the item would be composed of:

1. Charges to customers, or
2. Cash sales, or
3. Both charges to customers and cash sales.

Whenever a customer is billed in error, and this error later is corrected, the correction made should be reflected in the gross sales item.

Sales may be shown either in one lump total, or be set out by classes of goods or by departments. Departmental transfers are not sales to be reflected upon the Profit and Loss Statement.

Deductions from Sales.—In general, these deductions are of two kinds, or classes:

1. Usual:
   a. Returns.
   b. Allowances.
   c. Freight and express outward.
2. Unusual:
   a. Trade discounts. Included herein would be discounts granted a customer after he has purchased a specified quantity. A cash discount, the terms of which are such that if settlement is not made within a specified time, the discount will be given but interest will be charged, is a trade discount.
   b. Delivery charges. This deduction would occur where goods are sold delivered at a uniform price.
   c. Revenue or excise taxes. This is a deduction only when amount is based upon sales.
   d. Commissions. This is a most unusual deduction, but may be found in some classes of business.

Net Sales.—As ordinarily understood, this item needs no comment. If the deductions from sales be small in amount, the first item set out in the statement may be net sales. If the busi-

ness is one involving goods sent out upon approval, so that gross charges are designated against customers as Shipments Billed, the net sales item probably will be called only Sales.

Cost of Goods Sold; Cost of Manufacture and of Manufactured Product Sold.—The items to be used in compiling the section of the revenue statement captioned Cost of Goods Sold depend, basically, upon whether the concern is a trading or a manufacturing enterprise:

1. Trading enterprise:

   a. Usual set-out:

Inventory, January 1, 19—,		$ ¢
Purchases,	$ ¢	
Freight and Cartage Inward,	$ ¢	$ ¢
Cost of Goods Handled,		$ ¢
Inventory, December 31, 19—,		$ ¢
Cost of Goods Sold,		$ ¢

   b. Unusual set-out:

Purchases (plus freight and cartage inward),	$ ¢
Add: Decrease in Inventory (or Deduct: Increase in Inventory),	$ ¢
Cost of Goods Sold,	$ ¢

In a departmentalized business, the cost of goods sold may be set out for each department, as where the sales have been thus stated, provided the person for whom the statement is prepared wishes such a handling, or it is deemed desirable by the accountant.

2. Manufacturing enterprise. One cannot be dogmatic as to what constitutes the cost of goods sold in a manufacturing establishment, since accountants differ widely in their views upon the subject and these varying views must be given weight and serious consideration, especially under certain conditions. In general, this difference of opinion is based upon what a particular accountant wishes to have considered as elements of valuation as relates to the inventory of manufactured product. However, a typical outline of the items composing the cost of manufactured product sold would be about as below; in any particular case, the amount of detail shown upon the statement depends upon either the chart of accounts used or the analysis made of

the accounts actually in use. Likewise, it is customary in a manufacturing concern, at least, to prepare a separate statement showing the cost of goods sold, and carry into the Statement of Profit and Loss only the final figure thereon secured. Such a statement is titled Statement Showing Cost of Manufacture and Cost of Manufactured Product Sold. It was mentioned in the beginning portion of the present chapter as Exhibit C.

Cost of Manufacture:				
Unfinished Product, Inventory, January 1, 19—,				$ ¢
Raw Material:				
Inventory, January 1, 19—,			$ ¢	
Purchases,		$ ¢		
Freight and Cartage In,		$ ¢		
Duty,		$ ¢		
Marine Insurance,		$ ¢		
Purchase Department:				
Salaries and Wages,	$ ¢			
Supplies and Expenses,	$ ¢	$ ¢	$ ¢	
			$ ¢	
Deduct: Inventory, December 31, 19—,			$ ¢	$ ¢
Direct Labor,				$ ¢
Manufacturing Expenses:				
Superintendent and Foremen Salaries,			$ ¢	
Factory Office:				
Salaries and Wages,		$ ¢		
Supplies and Expenses,		$ ¢	$ ¢	
Receiving Department:				
Wages,		$ ¢		
Supplies and Expenses,		$ ¢	$ ¢	
Stores Department:				
Wages,		$ ¢		
Supplies and Expenses,		$ ¢	$ ¢	
Stock Department:				
Wages,		$ ¢		
Supplies and Expenses,		$ ¢	$ ¢	
Royalties Paid,			$ ¢	
Janitors, Watchmen, Elevator Operators,			$ ¢	
Heat, Light and Power:				
Wages,		$ ¢		
Fuel,		$ ¢		
Oil, Waste, etc.,		$ ¢		
Current,		$ ¢	$ ¢	

Repairs:			
Buildings,	$ ¢		
Machinery and Equipment,	$ ¢	$ ¢	
Insurance—Fire, Liability, etc. (factory),		$ ¢	
Taxes—Property (factory),		$ ¢	
Unemployed Time,		$ ¢	
Inspection,		$ ¢	
Defective Goods,		$ ¢	
Experimental Expenses,		$ ¢	
Infirmary,		$ ¢	
Sundries,		$ ¢	
Depreciation:			
Buildings,	$ ¢		
Machinery and Equipment,	$ ¢		
Patents,	$ ¢	$ ¢	
		$ ¢	
Deduct: Scrap Sales,		$ ¢	$ ¢
			$ ¢
Deduct: Unfinished Product Inventory, December 31, 19—,			$ ¢
Cost of Manufacture,			$ ¢
Add: Manufactured Product, January 1, 19—,			$ ¢
			$ ¢
Deduct: Manufactured Product, December 31, 19—,			$ ¢
Cost of Manufactured Product Sold, January 1, 19—, to December 31, 19—,			$ ¢

In an actual case, it is probable that, where the amount of detail to be shown upon the statement is as much as is set out above, certain groups thereof would be shown in total and the detail items of each such group would be presented in the form of a separate schedule.

Gross Profit on Sales.—No comment appears necessary beyond the fact that for a manufacturing company this item may be called Manufacturing Profit.

Selling Expenses.—The items under this caption would be about as follows:

Salaries of Sales Manager and Clerks.
Salaries of Salesmen.
Commissions of Salesmen.
Traveling Expenses of Salesmen.
Advertising.
Catalogues.
Customers' Entertainment.

Rent of Sales Offices.
Postage and Stationery.
Telephone and Telegraph.
Sundry Sales Office Expenses.

Selling Profit.—No comment appears necessary.

General Expenses.—These expenses are assumed to apply to the business as a whole, and frequently are designated as Administrative and General Expenses. The items under this caption would be about as follows:

Salaries of Officers.
Salaries of General Office Clerks.
Rent of General Office.
Postage, Stationery, and Printing.
Telephone and Telegraph.
Legal Services.
Public Accountants' Services.
Directors' Fees.
Traveling Expenses of Officers and General Office Clerks.
Corporation and Capital Stock Taxes.
Exchange and Collection Charges.
Dues and Subscriptions.
Contributions and Donations.
Sundry Office Expenses.

Selling and general expenses frequently are combined under one heading as where the items are relatively few in number or where the expense classification is more or less indefinite as to accuracy. If done, there will result no item of selling profit. However, for statistical purposes, at least, separate if possible.

Profit from Operations.—The profit secured from the regular operations of the business is represented by the above title. Numerous other captions or titles for this item are in use, but the above is deemed all-sufficient.

Additional Income.—The items hereunder included represent extraneous income secured from sources other than regular operations. An illustrative list would be as follows:

Cash Discounts on Purchases.
Interest on Bonds Owned.
Interest on Notes and Accounts Receivable.
Interest on Bank Balances.
Dividends on Stocks Owned.
Net Income from Real Estate.
Profit from Sale of Temporary Investments.
Profit from Foreign Exchange.
Royalties Received.

Commissions Received.
Profit from Sale of Material, etc.
Sundries.

The only item requiring comment seems to be Net Income from Real Estate. The real estate here included may represent either investment real estate or real estate held for operation purposes although not part of the plant operating unit. A manufacturing company or a mining company may own houses which are maintained to house the employees. The net income therefrom is treated in two different ways depending upon the attitude of the accountant:

1. As additional income. Here it must be assumed that such tenement investments are a mere collateral matter to produce additional income.
2. As a manufacturing element. Here it must be assumed that the housing of workmen is a manufacturing expense.

The decision of the question for any particular case would seem to hinge upon the exact facts involved and upon nothing else. If the housing activity is necessary primarily either to reduce labor turnover or to improve working conditions, then the logical conclusion would be to consider operating the housing property as a manufacturing element. It would be usual to show the details relative to the item, as total rentals and total operating expenses in detail. Although it would seem that income from property not held for investment, but for operation purposes relative to housing, may be handled in either way shown above, if the net result shows a loss thereon, the second method of handling seems preferable to the first one.

Gross Income.—This item requires no comment.

Deductions from Income.—These items represent the cost of securing capital and losses chargeable against the current period's income as, for example:

Cash Discounts on Sales.
Interest on Bonds Payable.
Interest on Notes and Accounts Payable.
Bad Notes and Accounts.
Amortization of Bond Discount and Expense.
Loss from Sale of Temporary Investments.
Loss from Foreign Exchange.
Net Loss from Real Estate.
Income Taxes.
Sundries.

Net Income and Surplus at Beginning of Period.—No comment seems necessary.

Profit and Loss Credits.—This group of items would cover the following:

Extraordinary profits from the sale or other disposal of the fixed and capital assets.

Discounts on the redemption of capital stock.

Items applicable to a prior period's operations representing surplus credit adjustments.

Gross Surplus.—No comment seems necessary.

Profit and Loss Debits.—These items represent the converse of those shown above under Profit and Loss Credits, as:

Extraordinary losses from the sale or other disposal of the fixed and capital assets.

Premiums on the redemption of capital stock.

Items applicable to a prior period's operations representing surplus debit adjustments.

Surplus at End of Period.—No comment is here necessary beyond the fact that this item should agree with the surplus shown upon the Balance Sheet prepared as of the end of the period covering which the Profit and Loss Statement has been drawn.

Comparative Statements; Statement Statistics.—The basic form of the statements above outlined may be deviated from whenever desirable; it is only suggestive at best. Comparative statements are highly desirable at times especially where, from one year to the next, no radical change has occurred in the character of the business or in the chart of accounts. Space in the present chapter does not permit of any discussion of such statements herein (See, post: Chap. 10).

In the preparation of statements, statistics often are included, as to averages per unit produced, averages per unit sold, and the ratio of cost, expenses, and profit to sales. These statistics are of considerable interpretative value to an executive. Space does not permit of a discussion of statistics in this volume; the reader is referred to the various books thereon now published.

Illustrative Problem and Solution

Problem.—The following is a Trial Balance of the General Ledger, as at December 31, 1920, of the Jones Manufacturing Corporation of New York City, which is a manufacturer of heavy machinery. Entries for

unexpired insurance, interest paid in advance, and depreciation charges have been made, the amounts therefor appearing in the Trial Balance. Note that in the working papers submitted as part of the solution, the surplus item in the Trial Balance, after closing, is made up of two amounts, —the surplus at the beginning of the year, and the net profit for the year transferred to Surplus account.

THE JONES MANUFACTURING CORPORATION

Trial Balance

December 31, 1920

(Before Closing)

Land,	$ 218,000.00	
Buildings,	180,000.00	
Reserve for Depreciation—Buildings,		$ 4,500.00
Machinery and Equipment,	86,000.00	
Reserve for Depreciation—Machinery and Equipt.		7,500.00
Furniture and Fixtures,	3,025.00	
Patents,	188,235.00	
Inventories—January 1, 1920:		
Manufactured Product,	404,000.00	
Unfinished Product,	69,476.00	
Material,	500,000.00	
Notes Receivable,	175,000.00	
Accounts Receivable,	1,525,000.00	
First National Bank,	184,500.00	
Petty Cash,	500.00	
Interest Paid in Advance,	550.00	
Unexpired Insurance,	250.00	
Bonds,		250,000.00
Notes Payable,		15,000.00
Accounts Payable,		661,995.00
Capital Stock,		800,000.00
Surplus,		907,408.00
Material Purchases,	2,905,250.00	
Direct Labor,	425,250.00	
Indirect Labor,	30,000.00	
Shop Supplies,	101,000.00	
Factory Expense,	10,000.00	
Heat, Light and Power,	39,000.00	
Freight and Cartage In,	1,000.00	
Insurance—Factory,	15,000.00	
Depreciation—Buildings,	4,500.00	
Depreciation—Machinery and Equipment,	7,500.00	
Depreciation—Patents,	11,765.00	
Depreciation—Furniture and Fixtures,	275.00	
Taxes—Factory,	2,650.00	

Advertising,	5,000.00	
Salesmens' Salaries,	130,000.00	
Salesmens' Traveling Expense,	7,000.00	
Insurance—Manufactured Product,	450.00	
Freight and Cartage Out,	500.00	
Miscellaneous Selling Expense,	3,000.00	
Sales,		4,750,250.00
Return Sales and Allowances,	8,000.00	
Officers' Salaries,	70,000.00	
Office Salaries,	20,000.00	
Stationery and Printing,	850.00	
Postage,	700.00	
General Expense,	1,500.00	
Legal Expense,	4,000.00	
Bad Debts Written Off,	4,000.00	
Interest,	2,500.00	
Discount on Sales,	95,005.00	
Discount on Purchases,		43,578.00
	$7,440,231.00	$7,440,231.00
Inventories, December 31, 1920:		
Manufactured Product,		$400,000.00
Unfinished Product,		75,000.00
Material on Hand,		450,000.00

Prepare the following:

Balance Sheet—Exhibit A.

Profit and Loss Statement—Exhibit B.

Statement of Cost of Manufacture and Cost of Manufactured Product Sold—Exhibit C.

In connection with the above, submit:

Working papers.

Solution of Problem.—This problem and solution are presented to review a number of elements related to statement preparation which should be well understood by the student who has reached this portion of his work but perhaps have been forgotten.

Working Papers.—Working papers closing a set of books are in general use in a large business for the preparation of the financial statements, because they permit of ascertaining the results of the main divisions of the operating end of the enterprise, as well as its financial condition, without requiring first the posting of adjusting and final closing entries. The use of proper working papers will prove the mechanical accuracy of the figures throughout, and the final closing Journal entries can be made directly from it. In the present illustration, all the usual adjustments, other than goods inventories are considered as having been entered upon the books. These usual adjustments will present no difficulty, and have been omitted; the method of booking involved is merely to charge and credit the proper accounts concerned.

The working papers presented below show the following information: Trial Balance (before closing).

THE JONES MANUFAC

WORKING PAPERS

December

Account	Trial Balance December 31, 1920 (Before Closing)		Adjustments and Inventories		Manufa Acco
Land	$218,000.00				
Buildings	180,000.00				
Reserve for Depreciation—Buildings		$4,500.00			
Machinery and Equipment	86,000.00				
Reserve for Depreciation—Machinery and Equipment		7,500.00			
Furniture and Fixtures	3,025.00				
Patents	188,235.00				
Inventories January 1, 1920:					
Manufactured Product	404,000.00			⑤$404,000.00	
Unfinished Product	69,476.00			③ 69,476.00	
Material	500,000.00			① 500,000.00	
Notes Receivable	175,000.00				
Accounts Receivable	1,525,000.00				
First National Bank	184,500.00				
Petty Cash	500.00				
Interest Paid in Advance	550,00				
Unexpired Insurance	250.00				
Bonds		250,000.00			
Notes Payable		15,000.00			
Accounts Payable		661,995.00			
Capital Stock		800,000.00			
Surplus		907,408.00			
Material Purchases	2,905,250.00		①$500,000.00	② 450,000.00	$2,955,250.00
Direct Labor	425,250.00				425,250.00
Indirect Labor	30,000.00				30,000.00
Shop Supplies	101,000.00				101,000.00
Factory Expense	10,000.00				10,000.00
Heat, Light and Power	39,000.00				39,000.00
Freight and Cartage In	1,000.00				1,000.00
Insurance—Factory	15,000.00				15,000.00
Depreciation—Buildings	4,500.00				4,500.00
Depreciation—Machinery and Equipment	7,500.00				7,500.00
Depreciation—Patents	11,765.00				11,765.00
Depreciation—Furniture and Fixtures	275.00				
Taxes—Factory	2,650.00				2,650.00
Advertising	5,000.00				
Salesmens' Salaries	130,000.00				
Salesmens' Traveling Expense	7,000.00				
Insurance—Manufactured Product	450.00				
Freight and Cartage Out	500,00				
Miscellaneous Selling Expense	3,000.00				
Sales		4,750,250.00			
Return Sales and Allowances	8,000.00				
(Carried Forward)	$7,241,676.00	$7,396,653.00	$500,000.00	$1,423,476.00	$3,602,915.00

TURING CORPORATION

Closing Books

31, 1920

cturing unt	Selling Account		Profit and Loss Account		Trial Balance December 31, 1920 (After Closing)	
					$218,000.00	
					180,000.00	
						$4,500.00
					86,000.00	
						7,500.00
					3,025.00	
					188,235.00	
					175,000.00	
					1,525,000.00	
					184,500.00	
					500.00	
					550.00	
					250.00	
						250,000.00
						15,000.00
						661,995.00
						800,000.00
						1,747,065.00
			$275.00			
	$5,000.00					
	130,000.00					
	7,000.00					
	450.00					
	500.00					
	3,000.00					
		$4,750,250.00				
	8,000.00					
	$153,950.00	$4,750,250.00	$275.00		$2,561,060.00	$3,486,060.00

THE JONES MANUFAC

WORKING PAPERS

December

Account	Trial Balance December 31, 1920 (Before Closing)		Adjustments and Inventories		Manufa Acco
(Brought Forward)	$7,241,676.00	$7,396,653.00	$500,000.00	$1,423,476.00	$3,602,915.00
Officers' Salaries	70,000.00				
Office Salaries	20,000.00				
Stationery and Printing	850.00				
Postage	700.00				
General Expense	1,500.00				
Legal Expense	4,000.00				
Bad Debts Written Off	4,000.00				
Interest	2,500.00				
Discount on Sales	95,005.00				
Discount on Purchases		43,578.00			
	7,440,231.00	7,440,231.00			
Inventories—December 31, 1920:					
Manufactured Product			(6) 400,000.00		
Unfinished Product			(4) 75,000.00		
Material on Hand			(2) 450,000.00		
Manufacturing Account:					
Unfinished Product, Inv't'y 1/1/20			(3) 69,476.00		69,476.00
Unfinished Product, Inv't'y 12/31/20				(4) 75,000.00	
Selling Account:					
Manufactured Product, Inv't'y 1/1/20			(5) 404,000.00		
Manufactured Product, Inv't'y 12/31/20				(6) 400,000.00	
			$1,898,476.00	$1,898,476.00	
Cost of Manufactured Product —To Selling					
					$3,672,391.00
Net Profit on Sales—To Profit and Loss					
Net Profit—To Surplus					

Surplus Account

Balance, December 31, 1920 (before closing),	$907,408.00
Profit for Year 1920,	839,657.00
Balance, December 31, 1920 (after closing),	$1,747,065.00

TURING CORPORATION

CLOSING BOOKS

31, 1920

cturing unt	Selling Account		Profit and Loss Account		Trial Balance December 31, 1920 (After Closing)	
	$153,950.00	$4,750,250.00	$ 275,00		$2,561,060.00	$3,486,060.00
			70,000.00			
			20,000.00			
			850.00			
			700.00			
			1,500.00			
			4,000.00			
			4,000.00			
			2,500.00			
			95,005.00			
				$43,578.00		
					400,000.00	
					75,000.00	
					450,000.00	
75,000.00						
	404,000.00					
		400,000.00				
3,597,391.00	3,597,391.00					
$3,672,391.00						
	994,909.00			994,909.00		
	$5,150,250.00	$5,150,250.00				
			839,657.00			
			$1,038,487.00	$1,038,487.00	$3,486,060.00	$3,486,060.00

Inventory adjustments (other adjustments already have been made).
Distribution of accounts:
Manufacturing.
Selling.
Administrative (Profit and Loss).

Trial Balance (after closing).

In connection with the above, the following adjusting entries are required. These have been keyed to the Inventory—Adjustments columns on the working sheets:

	Dr.	Cr.
(1)		
Material Purchases,	$500,000.00	
To—Material Inventory,		$500,000.00
To reverse Inventory of 1/1/20.		
(2)		
Material Inventory,	$450,000.00	
To—Material Purchases,		$450,000.00
To place on books Inventory of 12/31/20.		
(3)		
Manufacturing Account,	$69,476.00	
To—Unfinished Product Inventory,		$69,476.00
To reverse Inventory of 1/1/20.		
(4)		
Unfinished Product Inventory,	$75,000.00	
To—Manufacturing Account,		$75,000.00
To place on books Inventory of 12/31/20.		
(5)		
Selling Account,	$404,000.00	
To—Manufactured Product Inventory,		$404,000.00
To reverse Inventory of 1/1/20.		
(6)		
Manufactured Product Inventory,	$400,000.00	
To—Selling Account,		$400,000.00
To place on books Inventory of 12/31/20.		

With working papers constructed as above indicated, all items are readily traceable, especially the inventories. Closing entries may be made directly from items in the various columns without the need of first posting the adjusting entries. The preparation of the Balance Sheet and the Operating Statements, in technical form, is facilitated, as all the information necessary is given. The working papers are continued below.

Exhibit A

THE JONES MANUFACTURING CORPORATION

BALANCE SHEET

December 31, 1920

Assets

Fixed Assets:				
Land and Buildings:				
Land,		$218,000.00		
Buildings,	$180,000.00			
Less—Reserve for Depreciation,	4,500.00	175,500.00	$393,500.00	
Machinery and Equipment,		$86,000.00		
Less—Reserve for Depreciation,		7,500.00	78,500.00	
Furniture and Fixtures,			3,025.00	
Patents,			188,235.00	$663,260.00
Current Assets:				
Inventories:				
Manufactured Product,		$400,000.00		
Unfinished Product,		75,000.00		
Material,		450,000.00	$925,000.00	
Notes and Accounts Receivable:				
Notes Receivable,		$ 175,000.00		
Accounts Receivable,		1,525,000.00	1,700,000.00	
Cash:				
First National Bank,		$184,500.00		
Petty Cash,		500.00	185,000.00	2,810,000.00
Deferred Charges to Operation:				
Interest Paid in Advance,			$550.00	
Unexpired Insurance			250.00	800.00
				$3,474,060.00

Liabilities

Fixed Liabilities:				
Bonds,				$250,000.00
Current Liabilities:				
Notes Payable,			$ 15,000.00	
Accounts Payable,			661,995.00	676,995,00
				$926,995.00
Capital Stock and Surplus:				
Capital Stock			$800,000.00	
Surplus:				
Balance, January 1, 1920,		$907,408.00		
Add—Net Profits, January 1, 1920, to December 31, 1920,		839,657.00	1,747,065.0(	$2,547,065.00
				$3,474,060.00

THE JONES MANUFACTURING CORPORATION

PROFIT AND LOSS STATEMENT

January 1, 1920, to December 31, 1920

Exhibit B

Sales,			$4,750,250.00
Less—Return Sales and Allowances,			8,000.00
Net Sales,			$4,742,250.00
Deduct—Cost of Manufactured Product Sold,			3,601,391.00
Gross Profit on Sales,			$1,140,859.00
Deduct:			
Selling Expense:			
Advertising,		$ 5,000.00	
Salesmens' Salaries,		130,000.00	
Salesmens' Traveling Expense		7,000.00	
Insurance—Manufactured Product,		450.00	
Freight and Cartage—Out,		500.00	
Miscellaneous Selling Expense,		3,000.00	$145,950.00
Net Profit on Sales			$994,909.00
Deduct:			
General Expense:			
Officers' Salaries,		$70,000.00	
Office Salaries,		20,000.00	
Stationery and Printing,		850.00	
Postage,		700.00	
General Expense,		1,500.00	
Legal Expense,		4,000.00	
Depreciation—Furniture and Fixtures,		275.00	97,325.00
Net Profit on Operations,			$897,584.00
Deduct:			
Net Interest—Discount, Loss on Accounts Receivable:			
Interest on Notes and Accounts Payable,	$ 2,500.00		
Discount on Sales,	95,005.00	$97,505.00	
Less—Discount on Purchases,		43,578.00	
		$53,927.00	
Add—Bad Debts Written off,		4,000.00	$ 57,927.00
Net Profit—January 1, 1920, to December 31, 1920,			$839,657.00

THE JONES MANUFACTURING CORPORATION

Statement Showing Cost of Manufacture

and

Cost of Manufactured Product Sold

January 1, 1920, to December 31, 1920

Exhibit C

Cost of Manufacture:			
Unfinished Product, Inventory, January 1, 1920,			$ 69,476.00
Raw Material:			
Inventory, January 1, 1920,		$ 500,000.00	
Purchases,		2,905,250.00	
Freight and Cartage In,		1,000.00	
		$3,406,250.00	
Deduct—Inventory, December 31, 1920,		450,000.00	2,956,250.00
Direct Labor,			425,250.00
Manufacturing Expense:			
Indirect Labor,		$ 30,000.00	
Shop Supplies,		101,000.00	
Factory Expense,		10,000.00	
Heat, Light and Power,		39,000.00	
Insurance—Factory,		15,000.00	
Taxes,		2,650.00	
Depreciation:			
Buildings,	$ 4,500.00		
Machinery and Equipment,	7,500.00		
Patents,	11,765.00	23,765.00	221,415.00
			$3,672,391.00
Deduct—Unfinished Product, Inventory, December 31, 1920,			75,000.00
Cost of Manufacture,			$3,597,391.00
Add—Manufactured Product, Inventory, January 1, 1920,			404,000.00
			$4,001,391.00
Deduct—Manufactured Product, Inventory, December 31, 1920,			400,000.00
Cost of Manufactured Product Sold, January 1, 1920 to December 31, 1920,			$3,601,391.00

CHAPTER X

STATEMENT ANALYSIS: FOR CREDIT PURPOSES

Introduction.—The general term "statement analysis" is used as a title for the current two chapters rather than the more qualified term of "analysis of corporate statements" because, even though the corporate statement probably is the one most apt to be considered in a discussion of the present type, the basic principles primarily are the same regardless of whether a statement under analysis be that of a sole trader, a partnership, or a corporation.

From past study, it should be remembered that two primary statements are, or at least should be, prepared periodically for a business enterprise:

1. Balance Sheet.
2. Statement of Profit and Loss (Statement of Profits and Income).

Although one may be inclined to say that, in the present connection, the Balance Sheet is all important, it should not be forgotten that the Statement of Profit and Loss is both complementary and supplementary thereto; a Balance Sheet cannot be explained rightly unless accompanied by a Statement of Profit and Loss. A person may encounter one without the other and be required to pass judgment thereon, but this does not in any way refute the statement that both should be available.

In considering the purposes underlying statement analysis, two viewpoints present themselves:

1. Is there a credit purpose in mind, or
2. Is there an investment purpose in mind?

Although a certain similarity exists in analyzing a statement for either of these, the existent differences seem so prominent that the discussion of one purpose has been separated from a discussion of the other.

If a statement is being analyzed for credit purposes, it would

seem that one first ought to make a separation relative thereto as between credit sources. This would be about as follows:

1. The granting of credit by a bank:
   a. The bank in a relatively small community. Here the granting of credit depends upon the personal element, if not more, than upon the mercantile element.
   b. The bank in a large city. Here the personal element is further removed than under (a). Therefore, the granting of credit depends more upon the mercantile element than upon anything else,—upon the ratio of good current assets to current liabilities, cold figures from which working capital may be determined.
2. The granting of credit by a regular business concern. Here both the elements mentioned above are taken into consideration, because they have a direct bearing upon each case in hand.

However, let it be remembered that when the professional accountant, especially the C. P. A., is called upon to render judgment as to a credit risk, personal protection demands that he reach a decision upon nothing except cold monetary facts; he is not a prophet.

Credit.—Business is transacted largely upon a credit basis. This comprehends the advancement of values for a promise to make a return at a later date either of the values which have been advanced, or of money. Such an advancement of values is made upon the belief that the one to whom they are advanced, the vendee, for example, will meet promptly the obligations thereunder assumed; upon such belief, the vendee secures from the vendor the title, possession, and use of goods.

Because of the character of the present subject, the writer has taken the liberty of considering herein certain factors not purely of an accounting nature with the underlying idea that thereunder a more comprehensive understanding of the topic will result. Credit cannot be built up in a day; it may take years to secure a great credit reputation. But one misstep, from a lapse of judgment or from a lack of prudence, may destroy that reputation in less than a day. Since credit news travels rapidly, such destruction is apt to be national as well as local.

Personal Versus Mercantile Credit.—All credit is based fundamentally upon the following factors:

1. Personal credit. This is granted to individuals or concerns as such, depending properly upon the following:

    a. Intent or character. If a person has no intention of meeting a financial obligation when the latter falls due, he is deficient in morals and in character; he is dishonest. A man is truly dishonest if he intends to accept goods from another without paying the obligation arising thereunder. One who knowingly extends credit to such a person cannot, in any sense, be considered prudent. Character and intent are allied closely. Even though character influences often are forgotten in passing upon a credit risk, as would be the case of a practicing accountant passing judgment upon a statement, from the business man's point of view, it would seem in error not to consider character; a borrower's credit is affected by such practices as the following:

        i. Tricking his bank in any way.
        ii. Padding his accounts.
        iii. Kiting checks.
        iv. Having a suspicious fire.
        v. Giving customers short measure or weight.
        vi. Securing some one to carry his note or open account when he has pledged secretly his merchandise and book accounts.
        vii. Issuing dishonest statements.
        viii. Bad personal habits.
        ix. Engaging in some form of graft for a profit.

    b. Capacity or ability. The ability to make money is worth while as providing the means whereby a debt shall be paid upon maturity. It is a factor that ought not be dispensed with, from the business man's viewpoint, in passing judgment upon a credit risk. The amount of credit granted and its term should be only such as the income can meet normally. Ability alone, however, is a bad discovery in a credit risk. Ability and character go hand in hand. Character alone may command a certain amount of credit, but alone it cannot settle balances

owing another. The capacity to settle must accompany the intent to settle if unlimited credit is desired.

At best, in most cases, personal credit granting is necessarily unscientific for lack of exact data.

2. Mercantile credit. Mercantile credit is on a better basis than personal credit. Less exclusive emphasis is placed upon intent or character, and upon capacity or ability, than upon:
   a. Capital or property. Definite evidence of property and earnings should be secured, and statements should be prepared regularly for examination. The classes loaned to are manufacturers, wholesalers, jobbers, and retailers. As above indicated, the business man should not deem this factor all-sufficient in granting credit; one who has capital at hand in the beginning, but neither character nor ability may not have the capital at hand when the time arrives to make settlement. The lack of character and ability may cause the capital on hand at the moment credit is extended to be dissipated entirely when the settlement date arrives.
   b. Security or collateral. References should be utilized whenever a credit seeker is not well known; bank references are best. Personal credit may be secured by conditional bill of sale, by chattel mortgage, or by an assignment. However, even where security is offered, one should make certain that it is safe; something might be wrong with the security offered,—it might have been stolen or altered in some way or another.

No two credit risks are alike; two concerns may submit exactly the same type of statement and thereon, from the accountant's viewpoint, be entitled to the same amount of credit; but in some material way these two concerns are sure to be dissimilar. The elements of judgment and discrimination never should be forgotten.

The Credit Department and Credit Information.—Since credit is granted either by commercial banks or by mercantile concerns to their customers, it seems necessary to show wherein the two differ in methods as well as wherein they are similar.

The establishment of credit departments in American banks has been a slow process. This was due to the following:

1. Conservatism.
2. The lesser degree of indispensability of the loaning officers who used to constitute what might be called the credit department.
3. Most credit was granted to customers whom the officers could watch closely.

Modern conditions make the possession of such a department a necessity in the larger banks which purchase much outside paper or are called upon to give credit information to correspondents, and desirable for most banks.

In most respects the bank credit man functions like other credit men. But, if anything, he must play safer and not run the risks chanced at times by others, because the bank is using other people's money. He must know something of many lines of business, because his bank will be called upon to loan to individuals and concerns in varying lines of activity.

In either a trading or manufacturing establishment business operations follow a well-defined sequence:

1. Purchase of materials and supplies. This is the work of the purchasing department.
2. Storage. This is the work either of the stock or stores department.

3a. In a trading concern:
   a. Display of goods.

3b. In a manufacturing concern:
   a. Manufacturing operations.

4. Sale of goods:
   a. Sales department. Goods are sold upon either a cash or credit basis.
   b. Credit department. When a sale has been made upon a credit basis, this department passes upon the risk. In a small enterprise, a well-defined department may not be found, one man or two doing such work without the actual organization of a department for that purpose.

In the manufacturing or trading enterprise, the work of the credit department or credit man comprises the "cooling process," so to speak, through which the results of the sales department

activities dealing with credit sales should pass in a well regulated organization. This cooling process has the following as its objects:

1. The determination of the security of both the working capital which has been advanced to customers and the profits which are dependent thereon.
2. The granting of credit. The amount of credit to be granted a customer should not be determined by the sales department. The methods of the sales department look wholly to the making of sales, and if sales enthusiasm is hindered in any way by the idea that a sale cannot be closed unless the vendee's credit first has been inquired into, the selling of goods to reliable customers would suffer to a marked degree.

As a more or less secondary object, the credit department may be given the work of collecting the accounts past due. If the regular monthly billing does not draw forth the cash, the credit department receives the past due accounts from the bookkeeping department, and takes the steps necessary to collect thereon, usually being guided in this by the advice of attorneys.

Credit information concerning a risk is secured in two ways:

1. Directly. Information secured by the credit department itself from direct information:
   a. The prospective customer may submit information,—a formal statement plus oral or written representations.
   b. Information may be secured from references and others who know the prospect,—from banks and from the trade in answer to inquiries.
   c. Local credit men's associations may furnish information concerning a prospective customer.
   d. Information may be secured from the accounting department if former dealings have been had with the prospective customer.
2. Indirectly. Financial ratings plus general and special reports may be secured from the large credit agencies which are national in scope, as:
   a. R. G. Dun & Company.
   b. The Bradstreet Company.

These agencies collect information concerning the financial

ability of practically every person who seeks credit. The data is collected by local representatives, and cover a variety of subjects:

a. Manner in which one's business is conducted.
b. Details concerning the private lives of individuals in control of business concerns.
c. Information disclosed by newspaper reports and Court records concerning judgments, liens, assignments, bankruptcies, chattel mortgages, etc.

This information is reported periodically, and upon the basis thereof a specific amount is decided upon as the financial worth of each business investigated,—individual including firm, and corporation. And upon the basis of this financial worth a specific credit rating is determined. These ratings then are compiled and published in book form and yearly subscriptions are taken therefor, this involving the payment of an annual fee. Each subscriber may secure regular and special reports in addition to the above mentioned rating service and, upon the payment of special fees, may secure special service. These agencies, as a rule, maintain a collection department in various localities which is conducted by the local representative.

All the data covering each borrower should be sorted and be compiled in readily accessible form. Usually, all data on an individual borrower is filed in a single folder. The net result should be that the credit department will have on hand much accurate and up to date information for ready reference.

Borrowers' Statements.—Increasing numbers of credit grantors are demanding financial statements from prospective borrowers. Such statements are the backbone of the information on which banks purchase commercial paper. Less generally, but increasingly, especially in the larger cities, banks are requiring financial statements as a basis for making loans. The attempt by banks to secure paper eligible for rediscount with their Federal Reserve Bank is increasing the use of such statements, especially as concerns the larger loans. These statements are used more widely in banking than in the extension of mercantile credit, but no good reason exists for advocating a continuance of such practice; as far as possible, the granting of mercantile credit should be upon a scientific basis. It is important that credit

statements should be recent, not over six months old, if possible.

Credit information, in its best form, is presented by means of the two primary accounting statements:

1. Balance Sheet.
2. Statement of Profit and Loss.

These should be prepared regularly and in sufficient detail to prove intelligible. All individuals or concerns who seek credit will not supply both of these statements, but it would not be insisting too much to require them to do so.

These statements, sufficiently complete in detail and certified to by a qualified accountant, or very much incomplete and perhaps certified to by an unqualified practitioner, must be analyzed carefully by the credit department. At present, ideal statements are a rarity; in fact, they may be everything other than what is desired even though, as generally is known, the Federal Trade Commission, by the aid and assistance of representatives of the American Institute of Accountants, have evolved a most excellent form of Balance Sheet and Profit Loss Statement designed to secure uniformity in the matter of credit information.

The credit department analysis will include, in a broad way, the following:

1. Statement comparisons. One or more past periods will be compared in detail with the present.
2. The determination of the causes which underlie the results shown.
3. The determination of general business conditions which underlie the particular line of business of which the business under scrutiny is a unit therein.

The detailed analysis necessary, as concerns the items found upon such statements, will be given careful consideration later when each such item comes up for discussion.

As indicated already, ideal statements are uncommon, but whether ideal or not they must be studied for what they are worth. If not inclusive of sufficient information, this latter must be secured before credit can be granted intelligently. And if such information be not forthcoming, the only sensible thing to do is to refuse credit to the applicant.

Of the two statements mentioned, one finds the Balance Sheet

submitted alone rather than with its accompanying income statement. It may be in a most condensed form; usually, it is thus presented. It may be without a certificate of a reliable accountant; usually, that will be the case. Therefore, it seems that since the Balance Sheet may be the only statement submitted, it is logical to consider this first.

The Audited Balance Sheet.—Not only are credit grantors becoming stricter in demanding that prospective borrowers present periodical statements, but they are going further in that, more and more, would-be borrowers are advised to have their books of account audited regularly, and to have statements prepared therefrom, by professional accountants, particularly by a Certified Public Accountant, who should attach to the statements so prepared a certificate of audit.

For the protection of the public, the Certified Public Accountant works under a certificate or license granted by a State, and this license is presumptive evidence, until the contrary is proved, that the holder of such certificate has "a sound knowledge of general accounting theory and a broad practical training in the accounts of the numerous businesses in which the public accountant's services may be required." In other words, the holder of such a certificate is presumed to be thoroughly competent to do this kind of work. The holder of a membership in the American Institute of Accountants would be presumed, likewise, to be equally thoroughly competent to do this kind of work.

The value of a statement authenticated by a competent and impartial critic cannot be stressed too much. The certificate of a competent accountant represents the opinion of a disinterested party, who is assumed to know his business, concerning the condition of the enterprise under scrutiny rather than a mere compilation of figures prepared either by the concern itself or by an incompetent outsider.

Statements prepared by the concern itself are inclined, even without dishonest intention, to be most liberal as concerns the cash realization of some of the company's assets. Statements prepared by incompetent outsiders are apt to reflect the attitude of the officials of the concern for whom the work is being done, rather than being an unbiased disinterested opinion of conditions.

One of the first things to determine, therefore, is to notice if

the Balance Sheet has been certified to by a competent accountant. Next, one must ascertain the reputation of the accountant who prepared it. In this connection, the certificate need not necessarily be from a large firm of accountants, inasmuch as the small fellow may do just as good work as the large firm. Third, one should examine the certificate to ascertain its nature. The certificate of a competent practitioner should be sufficient to insure that the statement means what it seems to mean,—that it is technically correct; it does not guarantee, however, the exact truth of the facts since, at best, the latter is only an opinion. Any limitations in the certificate, frankly expressed or implied, should be noted carefully; thus, if an auditor specifies what he has done, it is fairly certain he has done nothing else.

The crucial point in any Balance Sheet presented for credit purposes usually is the inventory. The auditor may test this in various ways, as by footing sample pages, testing valuations, etc., but often this is not done. Auditors neither are appraisers nor valuers in the strict sense of the word, inasmuch as this task belongs to an appraisal company.

Credit and the Balance Sheet.—The payment of a financial obligation on due date depends upon having the right kind of assets at hand with which to make payment, usually cash. Since liabilities, as a rule, must be paid in cash, a deficiency in the amount of cash so required leans toward opening a condition of insolvency, which makes the credit risk thereunder, naturally, a poor one; a full liquidation under such circumstances, as a rule, will be impossible.

If credit is to be advanced, a solvent condition must be maintained and, in determining the existence or non-existence of such a condition, the properly prepared Balance Sheet is of marked importance. A merchant who files a Balance Sheet regularly with his banker is doing one of the best things possible toward strengthening his own credit; it is really more to the advantage of a merchant to file this statement with his banker than to have the latter request it.

The arrangement of the items upon a Balance Sheet depends more or less upon the ideas of the constructor toward bringing out the most salient points in connection therewith. In general, however, when a Balance Sheet is being prepared for credit pur-

poses, or is being recasted and analyzed by a credit man through a process of elimination in order to bring out prominently certain leading features concerning financial condition, the asset and liability items thereon are separated into two fundamental groupings:

1. Current (operating).
2. Capital (fixed or permanent).

The current items are of more importance to the creditor than the capital items and, therefore, require the most careful detailed discussion as against a summary discussion of those grouped under the heading of "capital." The operating items bear upon solvency and upon the liquidation of liabilities in the usual course of events; whereas, the permanent items are of secondary consideration in that, although connected prominently with current financing they are, to creditors, merely an indicator of secondary or reserve strength and security. The credit Balance Sheet should be prepared, preferably, in the account form under which the current assets are displayed in opposition to the current liabilities; such display makes possible a ready comparison between the relative values of the two totals. The difference between these two tables represents "working Capital" and, when analyzing a Balance Sheet for credit purposes, two of the first questions to be answered are:

1. What is the amount of the working capital?
2. What is the relation of the working capital to:
   a. The total capital?
   b. The needs of the business?

The probabilities as to solvency may be determined in their major import from an examination of the current assets as against current liabilities, as follows:

1. The relation of current assets to current liabilities. Credit men, ordinarily, look for a 2 to 1 ratio or condition relative to the current items; they desire to see, in other words, $2.00 of quick assets on hand with which to discharge $1.00 of current debt. If a Balance Sheet varies from this condition, the reason therefor must be determined. The above indicated ratio is not an absolute standard, being simply a working rule.
2. The convertibility of assets to a realized basis. If a forced

sale is necessary to secure the cash with which to pay obligations maturing and matured, the current assets, as inventories, must be sacrificed to a more or less extent.

3. The extent to which liabilities may be renewed. The capital assets which are not encumbered by specific liens, as a mortgage (liens falling due more than ninety days from date of the statement), are considered only as additional security available in an emergency.

Too much stress cannot be laid upon the importance of a proper analysis of the Balance Sheet. The Balance Sheet is a photograph of the business and, if not viewed correctly, the whole complexion of the risk is altered and the possibilities of use defeated.

The Problem of Current Financing.—Not all current assets can be used directly for the purpose of meeting maturing obligations, because, eventually, these latter must be paid in cash. The further back one goes from cash, as an asset, toward inventories of finished or raw product, as assets, the less available becomes the asset of cash for the purpose of meeting maturing liabilities and, the less available the cash, the less desirable becomes the risk for credit purposes.

Current liabilities mature within from sixty to ninety days. Normally, notes payable may be renewed in part, but too much reliance should not be placed upon this means of replenishing the cash fund needed for liquidation purposes; an abnormal condition will throw all estimates awry. One must always count upon the fact that, even under normal conditions, a large portion of the current liabilities must be paid when due.

Ordinarily, therefore, the keen business man will make use of a number of legitimate expedients to secure a current cash fund of the right size for the purposes of his organization. Of the methods used, the following three illustrate how current financing is accomplished:

1. The purchase of merchandise, materials, and supplies on a credit basis. This is the usual way of doing business even though it entails the loss of cash discounts which in turn amounts to borrowing funds at a heavy rate of interest. The idea here underlying is to use the values belonging to some one else to help conduct the business, as by purchasing

upon a sixty-day net basis and selling on a cash or ten-day basis. The amount of aid so received depends upon the quantities of goods found on the shelves awaiting sale as against the time they remain there.

2. Borrowing upon commercial paper. The liability arising therefrom, normally, may be carried, within a reasonable amount, for a longer period of time without a final settlement being necessary than the liability arising under accounts payable, because:
   a. Renewals thereof may be secured from time to time.
   b. Conversion thereof may be made upon maturity.

Nevertheless, the amount of such liability should not be too large because, if so, a dangerous condition exists. Regardless of the two possibilities above shown this dangerous tendency arises because:

a. Notes mature at definite times and some must then be paid even though a portion may be renewed or converted.
b. When notes mature, the possibility of renewal cannot well be measured because the holders have the privilege of calling for payment.
c. If notes are not paid promptly when called, they are subject to protest.
d. Notes carry interest.

3. Advancement of services by employees for current operations. If payday is a week later than the time at which the payroll is calculated, there exists an average continual advance by employees equal in amount to the payroll for two weeks. Part of such advance is absorbed by partly manufactured goods.

General Principles of Analysis—Further Discussion.—Every concern should finance its fixed assets from its fixed (capital) or slow liabilities and preferably from its capital (proprietorship element) alone; it should finance its quick assets from its quick liabilities and from its capital. In the extension of long-time credit, all factors with regard to the business should be investigated carefully; for purposes of extending short-time credit, such a thorough review is unnecessary.

As indicated already, the quick assets and liabilities are to be noted chiefly and be compared, the examiner attempting to

assure himself that the quick assets are adequately in excess of the quick liabilities; the quick assets must repay the loan. Practically all assets, as stated, are subject to shrinkage; the excess of quick assets over quick liabilities is necessary:

1. To take care of this shrinkage.
2. To provide for unexpected slowness in realizing upon the quick assets.
3. To cover unusual loss due to unfavorable business conditions.
4. To cover any possible contingent liabilities.
5. To provide for a factor of safety.

Opinions differ as to the ratio of quick assets to quick liabilities, especially since some businesses require more margin than others, and since it is dependent somewhat upon whether or not the concern under scrutiny does a seasonal business. As has been indicated, 2 to 1 is the usual ratio. Some safe concerns, dealing in very quickly moving staples, such as groceries or meats, may be given safely a ratio of 1½ to 1. One writer states that notes and accounts payable should be covered by cash, notes and accounts receivable, and that there should be as much merchandise besides. If cash, notes and accounts receivable be less than the quick liabilities named, the ratio should be at least 2¼ to 1; if more, the ratio safely may be less than 2 to 1,—that is, the merchandise need not equal the quick liabilities.

Loans are limited sometimes in amount by the rule that the loan should not exceed one-fourth to one-third of the excess of quick assets over quick liabilities. A more reasonable rule would seem to be to decide upon the ratio to be maintained between the quick assets and the quick liabilities, as to the case in hand, and then not loan more than will permit the retention of this ratio after the loan is made.

Turnover should be noted as a means of judging the activity of the business and its assets, and of comparing them with typical figures for similar businesses. Turnover is computed by dividing the average annual sales by the average inventory or stock on hand. Retail prices should be used in both cases, or cost prices should be used in both cases. The higher the turnover, the more active the business. Where annual sales are not

stated, they may be deduced roughly from the accounts and notes receivable in connection with the terms of credit usually given on sales.

After one ascertains that the ratio of current assets to current liabilities apparently is satisfactory, the differentiations of the report may be analyzed and compared to determine whether the satisfactory ratio will stand the acid test of scrutiny and criticism. The order of analysis follows personal preference but, as a rule, the assets are considered first, those of a current nature being scrutinized the most. However, the fixed or capital assets should not be forgotten because:

1. Of the amount of carrying charges, as interest, that they may involve.
2. Of the ultimate realizable value, as a source of secondary strength, that they may have.

Cash.—This current asset should mean exactly what the term indicates and nothing else. The amount of cash one should find must be large enough to balance the statement properly, divided as between cash on hand and cash on deposit. A large amount of cash is taken, generally, to indicate a healthy condition although, if too large, it might be cause to have business sagacity reflected adversely in that the excess amount over that which actually is required ought to be earning more interest than the small percentage, if any, allowed by banks upon deposits. Again, if a large sum of cash is noticed, one should ascertain whether or not it has been accumulated for definite expenditures in the near future,—as dividend distribution, salary payments, or even cash purchases in order to take advantage of a reduction in ordinary prices charged.

A continued small cash balance plus a large aggregate of outstanding obligations and sales indicate poor, if not reckless, financing. The amount of the cash fund is decidedly important from the viewpoint of current financing; maturing obligations eventually must be paid in cash, and if the cash fund proves to be inadequate disaster may not be far off, especially if a turn in the money market is at hand.

In some cases, a nominal cash item is shown due to the concern's practice of using a large portion of its available cash to retire outstanding obligations just prior to the date of the

Balance Sheet. Again, cases have been found where a concern has applied its cash to the reduction of its payables without an actual retirement of that indebtedness in the amount assumed; this merely is a bookkeeping transaction by which a reduction of an equivalent amount is made in both cash and payable items. Such practice cannot be condoned in any way because, when permitted, the submitted Balance Sheet does not show the actual condition of the business.

Business activity usually fluctuates seasonally. With a decrease in output, indicating the introduction of a period of lessening activity, there will be, normally, a decrease in the amount of cash required. And when output increases, notes and accounts payable increase proportionately with the result that there should be a corresponding increase in cash. When this fund is small, it still must be large enough, in general, to meet current requirements, and to do so.

Although a certain amount of cash may be secured by borrowing, the source is not reliable. And if borrowing is resorted to, care must be used not to overstep in waiting for the moment at which to borrow in order to save a trifle in interest; when the very last moment arrives, it may be impossible to secure funds by borrowings.

In determining upon the sufficiency of the cash fund, two points of major importance must be observed:

1. The time required within which to convert unrealized current assets into cash.
2. The exact maturity dates of outstanding obligations. The longer it takes to convert current assets into cash, and the quicker the liabilities mature, the larger must be the available cash fund.

Most commercial banks, in making loans to customers, endeavor to have the latter maintain a cash balance with them equal to about 20 per cent of the amount of the loans made. A nominal cash item, therefore, compared to notes payable due banks indicates that the banks of deposit are not being treated liberally in the way of balances.

One should ascertain whether the item of cash includes time certificates of deposit because, while these represent actual cash on deposit, they may be pledged for loans and such fact might

not be shown anywhere upon the face of the Balance Sheet. When so pledged, the funds represented by such certificates are tied up until the loans mature; although such a case is unusual, it should be borne in mind.

If possible, one should make sure the cash account does not include such items as demand notes, or I. O. U's, covering withdrawals, expenses or loans to officers or employees; such items are not readily available for the needs of the business. The same would be true of sums on deposit with enterprises in the process of liquidation.

Notes or Bills Receivable—Acceptances.—Notes or bills receivable may originate in two ways:

1. From customers, if primarily connected with trading.
2. From actual loans made for which negotiable paper has been received, if not directly connected with trading.

In either event, if the total be large, it is necessary to know of what it consists. A business in which long time credits are given, or one in which the working capital is less than it should be, are familiar examples in which the total notes or bills receivable are large. Contractors, dealers in lumber, fur, silk, automobiles, agricultural machinery, etc., will have, usually, a large portion of their current assets in the form of notes receivable,—instalment notes. Again, a large notes receivable item may indicate unfavorable business conditions prevailing in the company's locality. In general, a large amount thereof is an unfavorable indication; certainly, if the accounts receivable are large, there should be few notes receivable.

If this item is not to be regarded with suspicion, it must not contain questionable elements, as:

1. Advances to officers, employees, stockholders.
2. Notes renewed several times.
3. Notes covering unpaid stock subscriptions.
4. Dishonored paper.
5. Kited paper.
6. Notes due from subsidiary or affiliated interests.
7. Accommodation notes.
8. Hypothecated notes.

Notes to which the odium of the above elements is attached should be withdrawn from the current assets and be placed

among the slow assets if retained at all as assets. Many of these types of notes would prove uncollectible in case of failure.

Further, a certain allowance, usually, should be made, over and above that already calculated, for further depreciation of this item. This further allowance may not be indicated by writing down any actual figures, being merely borne in mind when judgment is formed concerning the net value of the company's receivables.

Short term notes are more desirable than long term notes. At times, notes receivable are secured by real estate or by some other collateral. When thus found, the impression arises that prompt collectibility is not possible; consequently, if the amount be large, a word of explanation from the customer would be in order.

Where companies sell their goods upon an acceptance basis, the acceptances received are available for two purposes:

1. For discount with their bankers.
2. For disposal in the open market.

Under such procedure, the concern's necessity of borrowing upon their own notes is eliminated. The discount or sale of such acceptances constitutes a contingent liability unless made "without recourse."

Accounts Receivable.—This item should not be excessive in amount, and there should be very little of them if notes receivable are taken largely. They should represent good live accounts as far as it is possible for human endeavor to so ascertain. Too often, in fact, where a set of books has been more or less incorrectly kept, it is found that this item has been juggled so that the increase in surplus as shown on the Balance Sheet will equal the amount of net profit per Statement of Profit and Loss.

In general, the following information should be secured from a scrutiny of this item:

1. Soundness. Have all doubtful accounts been eliminated, and are they due from customers for merchandise sold in the usual course of business, or are they due from others?
2. Relation of total amount to the total of the working assets.
3. Ratio of the total both to the total sales of the period and to the terms upon which goods are sold in the branch of

trade of which the case under review is a fair representative; the turnover must be correctly proportioned.

4. Conditions governing realization.
5. Proportion charged up for future delivery which, under adverse conditions and a break in prices, would prove useless as an asset.
6. Proportion pledged for loans. This is a sign that the applicant is hard pressed to secure credit.
7. Proportion due from affiliated concerns or from persons closely associated with the business.

When a large volume of open accounts receivable is noticed, one may believe, without error, that a loss will be suffered when it is attempted to realize upon the accounts. Therefore, under such condition, a reserve should be present to cover the amount of such probable loss; if such reserve be not present, the asset value of the accounts receivable may be considered, without hesitation, as being inflated.

The relation of the total amount of accounts receivable to the total of the working assets is of major importance in connection with the terms under which settlement is to be made in that such relationship affects the amount of the available cash fund. Accounts which cannot be liquidated except after the passage of a considerable period of time are not as desirable as those which may be liquidated within a short interval of time. In the instalment business, for example, the proportion of the accounts receivable in relation to the inventories will be relatively large, whereas, in a retail business conducted on a cash basis the proportion thereof as related to inventories should be decidedly small. In the first instance, the working capital needed will be relatively large, whereas, in the latter case it will be relatively small. Since a large amount of long time accounts may encumber the ease of securing cash, and a small amount of short time accounts may assist the ready securement of cash, a small amount of short time accounts may be more available, from the cash viewpoint, than a large amount of long time accounts. Large-sized inventories plus a large amount of accounts receivable indicate slow convertibility which, in turn, points out the need of a large amount of working capital.

Indebtedness due from affiliated concerns (which concerns

might be operating as branches—in the case of distributors, or as producers in allied lines—in the case of manufacturers) should not be included in the quick assets, because, while they may be liquidated in part from time to time, they are more or less of a permanent character (dependent upon the line of business), and frequently represent the investment made in the subsidiary or affiliated company. In the event of liquidation, these funds usually are not found to be of full realizable value.

Inventories: Materials, Supplies, and Merchandise.—The inventory item, usually, is the most important of all the current assets and, as a rule, constitutes the major portion thereof. This item always is considered as being a quick asset, but since, as a rule, it is an asset which moves the slowest of the usual current assets, one should question closely its ready convertibility. Before going further, consider the inventory of a manufacturing concern, as representing the most complicated type, and notice its components:

1. Raw materials. Many kinds of raw material may be used and most of it may be secured far in advance of the time at which it will be used.
2. Goods in process. This represents goods being fabricated but not yet completed, its value being composed of the cost of material and labor with perhaps a certain portion of the factory overhead.
3. Finished product. These are goods which are manufactured and ready for sale.
4. Miscellaneous.

One of the first things to observe relates to overstocking. This may or may not represent something which is indicative of undesirability:

1. Overstocking may be due to foresightedness in making large purchases in a favorable market, or to the fact that the company is distant from its source of supply, or because of seasonal demands.
2. Overstocking may be due to shortsightedness which indicates bad management in that the purchase prices are so high that a price decline will come later. If such condition exists, great care must be observed before passing favorably

upon the risk, because such an overstocking may be a menace rather than a help.

Again, where a concern is manufacturing machines of one sort or another, a large portion of the inventory may represent repair or replacement parts. Naturally, these are slow to realize cash from and harm, rather than support, the convertibility feature of the inventory. Inventories in the nature of specialties are not as desirable as those of staple value; the former require, usually, continued advertising in order to move them. Also, staple stocks with a ready market are more available for current purposes than raw stock which must be processed before being marketed. More depreciation must be allowed for luxuries, novelties, and seasonable goods than for staples.

Inventories should be valued at cost or market, whichever is lower. If market price at inventory date is less than cost, it is well to provide, also, for further shrinkage due to increased selling expenses, etc. Where market price is not readily determined, sales price may be taken and be reduced by the percentage of mark-up used in the business. Valuation accuracy is decidely important. The takers of the inventory and the methods used in taking it should be ascertained, if possible; and in this connection, the best evidence securable as to accuracy is the audit certificate of a competent accountant.

All slow stock should be depreciated heavily, and all unsalable stock either should be eliminated entirely from the inventory or be given a movable valuation. Inventory turnover is important; the credit examiner should be familiar with the customary turnover in the line of business represented by the concern whose statement is under the microscope. If goods are scattered in a number of places over the country, a most efficient main office organization is necessary to prepare the figures properly; more than ordinary care and system are necessary.

More than one plant, small and large, secure their desired ratio between current assets and current liabilities by inventory juggling, and this the would-be creditor cannot discover without great difficulty, if at all. Therefore, as mentioned above, the best evidence securable as to inventory accuracy is the audit certificate of a competent practitioner, a C. P. A., or member of the American Institute of Accountants.

The relation of the inventories to the entire current asset fund is most important. If the amount is large and out of proportion to the indicated needs of the enterprise, the reason therefor may be one of the following:

1. Speculative purchasing.
2. Overstocking (commented on above).
3. Inflation in values.

On the other hand, if the amount is small and out of proportion to the needs of the business, we have the earmarks of a hand-to-mouth policy. But in connection with the above two possibilities, it should be remembered that each particular line of business must be judged by the conditions thereunder existing rather than by general rules designed to cover all lines of business endeavor. If the amount of this asset is out of proportion to the required current asset fund, and consists of slow moving items, as illustrated above, the current financing of the business under survey must be considered as being weak until the contrary is proved by other conditions.

Consignment Accounts.—It is important to ascertain if there are any consignment accounts included among the accounts receivable or in the inventory item. Merchandise out on consignment is not properly an account receivable until the merchandise is sold so that title passes from the consignor. Merchandise out on consignment, not being under the direct control of the consignor company, is subject to incidental hazards; therefore, it should be carried under a separate classification so that the amount thereof may be taken into consideration separately.

Accrued Items As Current Assets.—Any item representing an accrued value, one not yet due to be paid, is a legitimate current asset so far as a group heading is concerned. Since it is only human nature for a business man to show all possible asset items upon his Balance Sheet, but eliminate therefrom all possible liability items, one must be most careful to hunt for the latter when criticizing a Balance Sheet. In other words, as concerns the topic now discussed, one should make sure that the accrued receivable items are not the only class of items included upon the statement; liability items of an accrued nature

should be found among the current liabilities if, among the current assets, there are found asset items of an accrued nature.

Deferred Charges As Current Assets.—These items represent amounts which at present are held in suspense as assets even though they are actually expense items later to be charged against income. The frequent inclusion of these items under the general heading of current assets, from a credit viewpoint, may be in error in that a portion of such items may have no direct connection whatsoever to the specific realization of cash. In other words, deferred charges may be grouped into two classes:

1. Those which to some extent may be realized in cash. A value here exists which, in the event of insolvency, may be used to liquidate a liability. Such would be the case of insurance paid in advance.
2. Those which may not be realized in cash. These items represent a heavy expenditure during one period which is not all consumed as an expense until the next or other subsequent periods. The value here existing is uncertain, as least from the Balance Sheet point of view, and conservative practice, in the determination of the value of a credit risk, discourages considering such assets items as having any value whatsoever.

Because of this two-way possibility, it is desirable to group deferred charges under a separate heading upon the Balance Sheet so that one may not be mislead in inflating the current asset values by including thereunder items which do not refer to the direct realization of cash.

Miscellaneous Items Considered As Current Assets.—Securities consisting of bonds, stocks, mortgages, and other commercial paper are good credit current assets provided they have a quick market value. If they are slow, being in the nature of a long-time investment rather than a temporary investment, they should not be considered as being current assets. The appearance of this item may indicate either a speculative tendency which is undesirable, or, it may indicate the investment of surplus funds which is desirable and which strengthens credit standing. In order to satisfy one's self as to this point, it is necessary to secure an itemized statement showing the contents of this

asset. Bonds or stocks of affiliated companies are not good credit assets. The relationship existing between the two concerns must be determined; one may have contingent liabilities or contractual relations with the other due to the ownership of such securities.

Bonds or stocks of the issuing company may be found among the current assets:

1. Treasury bonds. These are bonds which have been authorized and executed but are held in the company treasury. They are not current assets in any sense of the word and should not be shown as assets upon the Balance Sheet. They are analogous to signed promissory notes which have not been negotiated. They should be shown as a deduction from the authorized bond issue.
2. Unissued capital stock. This is not an asset item from any point of view. The right of a corporation to issue capital stock is not capital; therefore, the debit offset thereto, as per the ledger, cannot be an asset.
3. Treasury stock. This item does not represent an asset, only the retirement of capital stock so far as the outside is concerned. It should be shown as a deduction from the capital stock authorized.

Capital or Fixed Assets.—The relation of fixed assets to fixed liabilities is important but of only secondary interest in drawing a credit conclusion. Large values of these assets with no notes payable or other liability items requiring considerable fixed interest charges represent reserve financial strength which permits a current stringency in current financing to be relieved easily by borrowing:

1. Actual borrowing from creditors which contemplates the payment of fixed interest charges plus the repayment of principal at stated times.
2. Capital contributions. The method of securing funds by this means is superior to the first one above in that the two requirements incidental thereto, as indicated above, need not be considered.

In considering the item of land and buildings (real estate) the first point to be covered is ownership. Are the properties

owned in fee simple, or does title rest with realty holding companies, individuals, or others? Again, of what construction are the buildings? Are they in good operating condition and well adapted to the business, and for other than present use. Is a sufficient amount of insurance carried? Is there a sprinkler system installed? The question of depreciation is decidedly important, especially where a heavy investment in machinery is noticed.

Mortgages outstanding against such properties must be given attention, as well as the amount of unpaid taxes, special assessments, or other liens. Sometimes statements show only an equity in real estate,—the value of the property less the mortgages. This should not be in that the credit grantor should know the amount and maturity of the mortgage and the fixed interest charges. Further, there would be no use in presenting statements in detail if as to any one item only net equity should be set out as the only figure; if so, then the entire Balance Sheet could be set out as one capital item.

If an increase in value is noticed, one should determine if such increase is due to additions or improvements, or to revaluation. If a steady increase in valuation is noticed from year to year, it is well to know the company's policy in this matter. Commercial banks do not, in general, condone the policy of borrowing money to invest in fixed assets; it is their feeling that new additions, etc., should be financed either out of earnings or through increased capital investment.

Assets like good-will, patents, trademarks, leaseholds, etc., are of doubtful value and should either be eliminated entirely from consideration or be given only a mere nominal value.

Although considerable space might be used at this point in discussing certain things connected with fixed assets in relation to a credit risk, other than the above, these cursory remarks are deemed sufficient in that these separate items must be discussed in detail in the next chapter in connection with Balance Sheet analysis from an investment point of view.

Liability Analysis—In General.—As each asset item is examined, it would be well to look for and set up the liabilities which are not shown. If a Balance Sheet carries the audit certificate of a competent accountant, the credit examiner should

consider this as a most valuable safeguard against omissions of this character due to mistake or fraud.

If the Balance Sheet lacks such a certificate, inquiry concerning the possible omissions of liabilities should proceed along the following lines:

1. Purchases on credit may be represented in the inventories but not be offset on the books of account by the proper credit entries thereon. The liabilities offsetting such purchases must be paid long before the asset represented by the inventory figures can be realized in cash.
2. Payroll accrued.
3. Interest accrued.
4. Etc.

Notes or Bills Payable.—These should be only either for merchandise or for money borrowed. When the proportion is high, the item is important. If a concern purchases on account, the notes payable covering purchases should be small, at most. A merchant should not at the same time give notes for merchandise, and borrow upon his single name paper; the latter, normally, is supposed to permit him to pay cash and take discounts. The notes payable should be segregated into the classes thereof as has already been indicated previously.

Odd cents in the notes payable item should put the loaner on his inquiry; it may indicate that notes have been given for merchandise. The reason may be otherwise, however, as the odd cents may be due to the subtraction of interest unearned from face values, the latter being in round sums. If a renewal policy exists, the concern's credit and general business condition will determine if the note liabilities are able to be continued or will have to be taken up at once from current funds. The contingent liability on notes receivable discounted should be determined.

Accounts Payable.—This item should not be large if the notes payable be of considerable size, and vice versa. They should represent recent purchases. Inquiry should be made to ascertain if any collateral has been given to protect any of the payable items, since this would prejudice creditors. Inquiry should be made, also, to determine whether the greater portion of the accounts payable is due to one concern or are scattered

well. If the former condition is in evidence, one should ascertain if there be any chance of credit relations being severed in the near future with the business with which credit is localized; should this occur, disaster may come quickly. An analysis of the accounts payable as under:

1. Accounts less than thirty days past due,
2. Accounts from thirty to sixty days past due,
3. Accounts from sixty to ninety days past due,
4. Accounts ninety days or more past due,

will indicate whether the concern is falling behind in liquidating its accounts payable.

Capital or Fixed Liabilities.—Any liability which falls due within ninety days may well be classed as a current liability from the standpoint of credit granting. Therefore, in analyzing the capital liabilities, the analyst should determine if any of them are going to fall due in the near future, and if they will require payment at such time. Mortgages, bonds, etc., should show due dates and, if these due dates are current, one should make sure that adequate means are provided to pay or renew.

If any of these fixed liabilities will fall due in the near future, they are no longer fixed in character; they are decidedly of a current nature, unless provision has been made for renewal. When payment is made, the cash fund must be depleted thereunder in exactly the same manner as if these liabilities were of the ordinary current kind. In this particular, at least, a credit Balance Sheet must differ as to arrangement of items from the Balance Sheet of the ordinary kind.

The proprietorship element should not be too small as compared to all debts to outsiders. Bonded debt, in a sense, is intermediate, bondholders being, from one point of view, lenders and, from another point of view, often proprietors.

The Comparative Balance Sheet.—This statement is most useful in bringing to light either inaccuracies or fraud in setting out the financial condition of an enterprise. By its use, items may be compared one with another to the end that:

1. Important changes in condition will be disclosed.
2. An intelligible basis is secured by means of which the right kind of questions may be asked looking toward the discovery of important information.

Again, where a Statement of Profit and Loss has not been submitted, the profit or loss of the period just passed, as of the end of which the Balance Sheet has been prepared, may be determined by a comparison of Balance Sheets provided the drawings or dividend distributions of the past period are known.

In preparing the Comparative Balance Sheet for present purposes, one might do well to proceed about as follows:

1. Take a sheet of analysis paper and list thereon by years the assets and liabilities as shown by the Balance Sheets submitted:
   a. List the current assets first and show total.
   b. List the current liabilities directly thereunder and display total.
   c. Deduct the total of (b) from the total of (a), and bring down the resulting balance into the same column. This balance represents working capital.
   d. List the capital assets in the same column and show total.
   e. List the capital liabilities directly thereunder and display total.
   f. Deduct the total of (e) from the total of (d), and show resulting balance.
   g. Add (c) and (f) and show total. This represents the amount of net capital available for permanent purposes.
   h. List outstanding capital stock and the credit balances of any undistributed profits accounts, such as surplus and reserves, and secure total. This total should agree in amount with the accounting capital as shown at (g).

The comparative statement prepared as above, each succeeding year being in the column to the right of the preceding one, will enable a person to note quickly:

1. The relative importance or weight of individual items.
2. The fluctuations in working capital.
3. The net capital available for permanent purposes.

Again, such a statement will enable the credit analyst to calculate with ease increases and decreases from year to year. Too much emphasis cannot be placed upon following a logical procedure such as has been indicated above rather than to work in a hit or miss fashion when analyzing statements for credit purposes. A definite plan of attack closes most, if not all, of the

possible avenues looking toward misrepresentation and renders available for future reference the important results that have been deduced; the haphazard approach does not promote this efficiency and is to be deplored.

The Statement of Fund Application.—As an outgrowth of the Comparative Balance Sheet, the better to present the information therefrom obtained, the Statement of Fund Application is useful and valuable. However, the discussion of this statement is postponed until near the end of the next chapter the better to equalize the contents of these present two chapters.

The Income Statement.—Although this statement is exceedingly important, it is usually lacking. The loaner of short-term credit desires to see not assets alone,—the brick and mortar,—but earning power as well, with money coming in steadily enough both to meet his note and other just current claims. Net earnings are important in this connection, as property is to be valued chiefly as a means of earning; *i. e.*, according to its activity, and not merely something that may be put under the hammer, with losses, perhaps, all around.

An income statement should show gross sales, cost of goods sold (including cost of manufacture, if any), and resultant gross profits, deductions of expense, including all charges, such as depreciation, repairs, etc., and the resultant net profits from operation; to this any outside income would be added and any financial expense subtracted.

When this statement is lacking, the profit and loss outcome may be determined from the Comparative Balance Sheet, as has been indicated above.

CHAPTER XI

STATEMENT ANALYSIS (continued): FOR INVESTMENT PURPOSES

Introduction.—In the last chapter, certain principles were presented on analyzing a statement for credit purposes. In the present chapter, statement analysis is discussed further, this time primarily from the viewpoint of an investor. Investment contemplates placing funds so that the principal will be safe, and an interest return be assured. On the other hand, speculation may be defined as an "intelligent attempt to discount the future." In order to bring the present discussion within the confines of one chapter, the attention will be concentrated only upon the industrial enterprise, excluding all others, this classification comprehending those engaged in manufacturing, distribution and trading, and construction.

It is remarkable how persons, in general, who have labored years in accumulating funds, will place part, if not all, of these funds in various types of investments after only a few minutes of cursory deliberation. Because of this fact, whether the general market appears good or bad, many securities are for sale which are entirely out of line therewith, whose entire foundation of worth is a mere hallucination and whose flotation depends entirely upon the cupidity of human nature.

If investors, and even speculators, would base their decision to do or not to do upon results secured from careful, deliberate and cool analysis, the security markets would assume soon a character entirely different than they have at present.

Large Versus Small Scale Enterprises.—Present economic life leans toward specialization, the elimination of waste at all possible points. Therefore, the large scale enterprise is a necessity, its advantages being about as follows:

1. Ease in financing. From the financier's point of view, the small corporation is useless; its securities cannot be handled except for an exorbitant charge.

2. Location. Because of its financial strength the large corporation may choose its location as seems best, consistent with its market and source of raw material. The small corporation, too often, like Topsy "just growed," so far as locality is concerned. Even the best of small companies will suffer in competition with a corporation which has plants and distributing agencies in all parts of the country. A corporation operating only in one community will discover sooner or later that business is influenced more by local conditions than by those of national import.
3. Advertising. National advertising campaigns can be conducted by the large corporation, whereas, the small one, usually, is prohibited therefrom.
4. Improved and economical production methods. Large plants can take advantage of any discovery of an improvement in production processes tending either toward economy or increase in output.
5. Purchasing in large quantities results in a lower cost. Only large scale production and distribution will permit of this.
6. The highest priced brains can be hired, without dependence in manufacturing and distribution resting upon the life or ability of any one individual. Each part of the organization is given the advantages of the best practices of the others. Experimental and development work may be carried on extensively even though the cost be high.
7. Foreign trade may be developed beyond the point of greatest expectation of any small company.
8. Waste or by-products may be utilized to the best advantage in that large scale production will produce great quantities thereof to become the basis of a side-line endeavor.
9. Fire, flood, or strikes will not be apt to cripple a corporation having several plants.
10. A great variety of articles may be produced in many large industrial concerns to the end that the average demand will be more dependable, usually, than where a company produces only one article or a limited number of articles.

General Factors of Investment Importance.—Before passing on to a discussion of the specific factors involved in state-

ment analysis upon which an intelligent investment or speculation may be made, certain general factors may be mentioned which, although not securable from a statement scrutiny alone, nevertheless, are of marked import. These general factors are commented upon below in a summary manner:

1. Demand. Even though the industrial corporation, in general, has had no cause to promote a pessimistic attitude as to the amount of business done, fluctuations in demand will occur and may cause serious results. Therefore, certain questions pertaining to demand should be considered carefully and be answered satisfactorily. Needless to say, the good industrial proposition, when investigated, will permit these questions to be answered in the affirmative:
   a. Will sales continue and expand consistently?
   b. Does the business deal in a necessity? If it manufactures what may be classed as a luxury, one should be careful.
   c. Are sales made in large volume at a small profit?
   d. Is the business a steady one? Seasonal fluctuations are apt to be disastrous.
   e. Is style or fad eliminated in controlling gross receipts?
2. Diversification. The more diversified the activities of an industrial enterprise, the greater will be the opportunity to succeed. If sales are dependent upon one, or a few articles, a sharp drop in demand may spell disaster. Enterprising concerns are feeling out the market all the time, ascertaining how long it will last, its greatest possibilities, and what portion thereof can be taken care of keeping in mind other competitors; this information costs money to secure and only the larger companies can afford the price of such investigations. A diversified business is dependable; unforeseen circumstances count for naught, as time and effort have provided there against; in a period of depression, foresight will have provided for pushing something other than the standard article, perhaps something entirely new.
3. Integration. Great importance may or may not be attached to the control over permanently adequate sources of raw material; in some industries it is a most serious question

whereas, in others, the seriousness is not so pronounced. Consider the following possibilities:

a. Industries controlling raw materials in all stages of manufacture have a tremendous advantage during times when the cost of raw material is high. When this practice is followed, however, care must be observed not to have too much capital tied up therein; by so doing, the industrial becomes raw material poor.
b. If an industry can make favorable arrangements for securing raw materials as needed, the advantages of integration are unnecessary, because the control of raw materials is not indispensable.
c. Certain industries may find it impracticable to own or operate sources of raw materials, as a cotton mill, or a stock yard.
d. It is impossible for some industries to control raw material sources even if they desired to do so; the nature of the work done would be prohibitive. A detinning company cannot obtain unlimited quantities of scrap tin from any one company.
e. Some concerns combine their interests with others of a related nature in order to secure a type of integration, as well as a reconciliation of existing contract interests. A copper company producing sulphuric acid may combine with a chemical company.

4. Competition. As competition grows keener with the increase in manufacturing, the profits per dollar of gross sales will grow smaller; large profits invite competition, and competition destroys large profits.
5. Dividend policy. Comparatively few people have a sufficient breadth of vision to be willing to postpone an immediate pleasure for the sake of greater future enjoyment. Haste in declaring dividends often has proved disastrous. The credit of a corporation cannot be maintained by the declaration of unearned dividends. To the unsophisticated, dividends give the appearance of prosperity, but the trained analyst never should be guilty of making this mistake. Diligent attention to business coupled with the wise reinvestment of surplus earnings have been the means of plac-

ing some of the great industrials in the enviable position they occupy to-day. The long-range financial policy looking toward the conservation of earnings until stable dividends can be paid is more to be desired than the policy swayed by the babble of the mob.

6. Financial alliances. The right management whether or not by itself financially strong will command financial backing and, in turn, financial backing, if of sufficient strength, will carry through a corporation that, otherwise, would succumb. A number of companies are economic failures, not earning a fair interest return upon the capital risks involved, but still they are decidedly alive because of strong control and financial alliances.
7. Industrial relations. Freedom from labor troubles is one of the most important elements looking toward the success of an industrial enterprise. A corporation should be generous with its producers of business,—its workers; welfare work and profit-sharing are not only creditable but are business necessities. In judging of industrial securities from this angle, one should ascertain satisfactorily:
   a. Whether the company has the enthusiastic loyalty of its directors, officers, and employees.
   b. Whether the corporation shares its profits with its employees, or offers its securities to them on attractive terms so that they may become partners in the business.
8. Personnel management. The ability of corporate managers to increase sales, to lower costs, to improve the quality of the product, to direct policies, and to master the financial problems of the industries with which they are connected constitutes an important element in maintaining the standing of their securities; this, in turn, is dependent upon the personal equation. Corporate managers should be prepared for depression in times of prosperity; if they are optimistic only during times of great prosperity, one should be careful of looking with favor upon the securities of the companies these managers represent. Again, if a company has been recapitalized recently, it is of prime importance to know whether the management will remain the same as that which was responsible for the company's

success in the past, assuming the old management to consist of large caliber men. Many concerns have failed as a result of the retirement of its founders.

Publicity Through Published Statements.—Investment or speculation is not intelligently possible without there being at hand complete and frequent reports on earnings and reliable statements on financial condition, concerning the enterprise under consideration. If an industrial enterprise does not issue reliable and frequent information of the character indicated above, one should not be interested therein. Also, information should be available to the effect that the management has the benefit of the stockholders, as a whole, in mind. Continued publicity and conscientious responsibility are all important if an industrial proposition is to be considered at all as an investment.

If a corporation has its stock listed on the New York Stock Exchange, it is required to publish at least once a year an income statement and a Balance Sheet (consolidated, if the enterprise requires such). These statements must be published so that they will be in the hands of the stockholders at least fifteen days in advance of the annual meeting. It is desired, also, that quarterly or semi-annual reports be published in addition to the compulsory annual report; quarterly reports of earnings are much to be desired, and no reason exists, in general, for not having them prepared. If done, the stockholders will not be at the disadvantage in which they so often find themselves as compared with the company management, who are on the inside, as where reports come through only once a year.

Nearly all large corporations publish annual reports which are available upon request to the secretary. But since there exists a lack of uniformity in the requirements of present-day industrial accounting, many of these corporate statements are noteworthy for what they omit rather than for the information that may be secured from a study thereof.

In prosperous times, Balance Sheets are apt to be conservative. Hidden assets often are created through unwarranted reserves for depreciation and by the acquirement of property out of surplus earnings which does not appear upon the Balance Sheets. On the other hand, in times of adversity, corporate re-

ports often must be viewed with skepticism. As earnings become impaired, managers are inclined to skimp depreciation, maintenance, and reserves in order to make a creditable showing. Therefore, with the customary sequence of prosperity and depression, the interpretation of corporate statements usually must include a consideration of general business conditions plus the lack of uniformity in statement set-up and content.

Fire Insurance and Corporate Assets.—One important factor apt to be overlooked in analyzing corporate reports relates to fire insurance. In analyzing the Balance Sheet assets, one should ask himself the following pertinent questions and make certain the answers thereto are entirely satisfactory:

1. Is there any element underlying the case that is of more import than adequate fire insurance being in force?
2. If not, is there sufficient insurance in force?
3. Does the amount of insurance cover adequately fluctuations in values?
4. What would be the effect of a serious fire upon the securities concerning which an interest is manifested?

Fixed or Capital Assets.—Balance Sheet valuations covering the fixed or capital assets often are largely fictitious; in fact, arbitrary figures frequently are set down upon the left side of the Balance Sheet in such amounts as will offset the actual amount of outstanding stocks and bonds found listed on the right side. The overvaluation of obsolete fixed assets,—plant, machinery, and equipment,—has caused the wreck of many a promising business. Inflated valuations baffle successful analysis looking toward the determination of the real asset value, the amount of "water" therein contained, and whether or not the proper amount of depreciation is being charged regularly against earnings.

The discussion concerning specific fixed or capital assets separates these assets into two groupings:

1. Immovable fixed assets. These assets represent the real property elements.
2. Movable fixed assets. These assets represent the personal property elements.

Land.—Real property consists of land and buildings. Frequently, these two items are combined under the caption of "real

estate." The two items should be listed separately upon the Balance Sheet if a proper interpretation thereof is to be possible. Land, as a fixed asset, in general, is subject neither to depreciation nor to appreciation; buildings, on the other hand, are depreciating constantly. Again, the separation of the two items or values is essential for insurance purposes, and for the proper adjustment of fire losses should such losses occur.

Since land may consist of various items, the Balance Sheet figures thereof should be supported by full explanatory detail together with proper reference to documents supporting the analysis of the various items and the legitimacy of their existence. Full cost, with neither depreciation nor appreciation, is the valuation formula for land. Full cost contemplates complete cost in condition ready for use or, at least, up to full title date.

Since the purchase contract price, attorney's fees, broker's commissions, or a fair portion of the purchasing agent's salary, the costs of search and title guarantee (if these be borne by purchaser), notarial and recording fees, assumption of taxes owing at date of purchase, local improvement taxes and assessments (for sewer, water mains, curbing, paving), and costs of leveling, grading, filling and draining, are all legitimate charges enhancing the cost of land, the greatest care must be observed by the analyst in his scrutiny of the land item not to permit too many of these additional charges to be capitalized beyond reason because, thereby the land value may be inflated greatly, although not apparently so; inflations, particularly those on real property, are detrimental.

Buildings.—When buildings are erected by the concern itself, full cost may include not only the cost of materials and labor, plus a fair portion of the establishment overhead where supervision of construction is local, but all other expenses incurred directly in connection with construction. These latter expenses may include such items as architect's fees, for plans and supervision, costs of permits and licenses, interest on borrowed money and insurance during the construction period, costs of accidents and injuries to workmen during construction, costs of easements, damages, and strike costs. Again, in this connection, the greatest care must be observed by the analyst in his scrutiny of the

buildings item to make sure the value thereof has not been greatly inflated.

The valuation formula for buildings is full cost less depreciation. Where a number of buildings exist, a subsidiary building record is of value to show the separate cost of each item, and from this the total value is determined. Such a record plus a map showing location of properties, is valuable in case of fire loss.

In determining the depreciation of buildings, many things must be considered carefully. Not only must the depreciation of use,—wear, tear, and lapse of time,—be studied, but the factors of obsolescence and inadequacy must not be forgotten since they shorten the service life of the structures.

Depreciation rates for buildings, according to different authorities, cover a wide range. While some authoritative rates are available, no standard rates, unless compulsory, should be used without a careful study being made of local conditions.

Structures of a temporary nature should be charged at net cost (full cost less salvage value) against the product or the job for which they have been erected. Buildings owned as a freehold for life (a life interest in buildings) are not subject to depreciation, because the remainderman takes the building over in its condition as released by the party owning the life interest.

Machinery and Machine Tools.—The movable fixed assets are next to be considered. In general, these consist of those assets which are comprehended by the term "equipment," such as machinery and tools, furniture and fixtures, delivery equipment, patterns, lasts, dies, maps, drawings, electrotypes, ovens, furnaces, etc. The valuation of these items presents nothing new in principle, although many points relative to the application of the principles are important.

Machinery and tools, as an asset caption, include not only the assets ordinarily carried upon the ledger under the account of that name, but power machinery, power transmission, shafting, connections, electric transmission cables, and the like. The factor of depreciation is of marked import in the valuation of this asset. It is readily apparent that not only do the various pieces of machinery differ in the amount of depreciation thereon

within the same plant, but the same machines used in different plants will vary in the amount of depreciation thereon; even in the same factory two similar machines will not usually depreciate to the same amount in the same period of time.

Every machine and machine tool should be charged with its full cost, and should be valued at full cost less depreciation. Full cost is understood to include such items as invoice price, insurance during transit, freight, duty, drayage, and installation charges. In analyzing this asset, one should investigate thoroughly the method of valuation; one should look with skepticism upon unreasonable figures. Exercise care in eliminating from the account all intangible values such as the cost of rearranging the machinery upon the floor, as a general proposition.

Furniture and Fixtures.—The items included under this account may consist of the usual tables, desks, filing cabinets, book cases, typewriters, safes, chairs, counters, and the more unusual items of plumbing fixtures, show windows, partitions, shelving, etc. The asset may be valued either on the basis of cost less estimated depreciation or on the inventory basis. In using the depreciation account in connection with the first method of valuation, one should remember that the asset usually has but small, if any, residual or scrap value; scrap value in some cases is the value the asset has as kindling wood. Where a depreciation rate is used by means of which to determine the value of this asset, the rate should be exceedingly liberal.

When premises are leased and the terms of the lease require certain of the equipment to remain with the building after the lease expires, care must be observed to write off completely the items covered by the end of the lease period.

On the whole, this account contains a value which is more or less inflated, to the end that the wide-awake analyst always will discount to a marked degree the value shown under this caption.

Delivery Equipment.—This item includes all property, direct or auxiliary, used in connection with the delivery of goods both inward and outward. Horses, wagons, harness, motor trucks and cars, containers, etc., are familiar examples of this class of asset. In general, these assets are handled very much as are all the others of the equipment group. For the most part, valuation is

on the basis of cost less depreciation, but well may be by the application of the inventory method.

Where horses comprise a portion of the equipment, not only must depreciation due to wear and tear be reckoned, but the possibilities of accident, such as death and disablement, must be given consideration. Experience in each business, based upon the particular kind of work to be performed, and the conditions under which it is being performed, furnishes the only adequate basis of valuation.

Drawings, Models, Patterns, Etc.—Items such as patterns, lasts, molds, dies, drawings, electrotypes, wood cuts, forms, models, etc., comprising the last of the equipment assets to be considered, whenever possible, should be charged to the particular job for which they were made and should not be carried on the Balance Sheet as an asset. Naturally, this is not often possible since these items frequently can be used for successive production. At best, however, they are a treacherous and highly speculative asset requiring the greatest of care in order not to be carried at an inflated value.

Valuation should be on the basis of cost with a liberal depreciation running, at times, to 50, or even a higher, per cent. Again, valuation may be on the inventory basis. In general, whatever the method of valuation, one cannot be too ruthless in scaling the given valuation down to the lowest possible point.

Good-will.—This item often represents a baffling obstruction to the clear analysis of a corporate report in that it is merged upon the Balance Sheet repeatedly with the plant or property account. Arbitrarily, the intangible asset of good-will, representing supposedly the capitalization of profits from business secured, may be carried upon the Balance Sheet at any amount whatever. In fact, such an account as "plant, good-will, etc.," usually may be considered as consisting mostly, if not entirely, of the good-will item. In general, a corporation having good-will of actual value, is not ashamed to set the account up for what it actually represents.

Usually, good-will is considered an asset of diminishing value and, while examples might be given of many corporations whose good-will is constantly increasing, these same corporations probably will be found to be the most industrious in washing the

good-will account from their books. In other words, when a company needs its good-will asset the most in order to bolster up its Balance Sheet, it is probably worth nothing, and when it needs the asset the least, it is undoubtedly worth a considerable sum.

Patents, Trademarks, Etc.—Honestly expressed, patents, trademarks, brands and rights are legitimately assets but, generally, they are the tangible expression of an attempt to conceal the absence of assets of real value; they are too apt to represent an intangible something called "good-will" or "water." The patents that are valuable are those known as basic patents, these covering an entire process or a large idea instead of a minor detail.

When a patent, trademark, brand, or right is purchased by a corporation at a large but fair figure, the purchase price is the cost to be carried into the Balance Sheet under its true name. A patent is supposed to confer upon the patentee the exclusive right to make and sell the particular device described, but it does not undertake to stop infringement. Being issued for but seventeen years, with a remote possibility of renewal, patents are essentially a wasting asset to be written down yearly to the point of extinction when the legal period has expired. However, there is a possibility existent that the benefits from a patent will not expire at the time set for the expiration of the theoretical exclusive right, since such right may create good-will which partially, at least, will offset the effect of the expiration of the patent.

Trademarks, when purchased for cash value, properly may be set up as assets upon the books of account. But in the name of conservatism careful managers usually will wipe out gradually intangible asset values by annual charges against earnings. The intelligent investor is an advocate of principles of conservatism.

Treasury Stock and Bonds.—These items should appear upon the Balance Sheet as deductions from their respective accounts of capital stock and bonds payable, thus reducing the gross amounts thereof to the point that they will indicate the amounts now issued and outstanding. Never should these items be considered as current assets or as investments.

An advisable policy for an investor to follow is to inquire if

the treasury stock or bonds are being used as collateral; if so, such fact would give rise to the existence of a contingent liability.

Investments.—Securities should be analyzed item by item to ascertain whether or not they are worth the value shown therefor upon the books. Securities held as permanent investments properly may be carried at either original cost price or par, provided a reserve be set up to offset any reduction in value which may occur. Any appreciation in value had better not be booked, because a paper gain today may be a loss tomorrow; safety lies in listing assets at either cost or less.

The securities of subsidiary and affiliated companies held by the parent company require cautious examination and valuation, because the possibilities of concealment and fraud between the books of the holding company and the books of the subsidiary are almost unlimited. The only satisfactory method of analysis would seem to lie in the examination of the separate reports of each subsidiary corporation as well as that of the parent company:

1. Examine the report of each subsidiary as carefully as though its securities were the ones primarily under scrutiny.
2. Analyze with equal care the report of the parent company.
3. Analyze a consolidated report of all the companies, including the parent corporation.

Current Assets.—These assets, popularly called quick assets, are supposed to include only such as will soon become available in cash for the purpose of meeting debts which will become due in an equally short period of time. Every current asset item is open to question until absolutely verified.

Since this topic has been discussed at sufficient length in the previous chapter, as well as in the early part of this volume, it will not be dwelt upon further in the current one with the exception of the next two topics below.

Sinking and Other Special Funds.—Accumulations of profit set aside periodically to meet a fixed obligation maturing at a definite future date, as a bond issue, is a sinking fund. Such a fund, if in cash, accumulating in a corporation's treasury for a number of years, ofttimes is liable to prove to be a source of temptation to the officials. If kept at the disposal of the com-

pany during all the years intervening between the first payment into the fund and the maturity of the debt, more than one period of stringency and more than one time of unusual apparent speculative possibility will appear; then the cash in the fund may prove too great a temptation and its use be changed from its intended purpose. Payments into a sinking fund should be made to a trustee who shall act as an impartial custodian thereover; perhaps he will use the cash so paid in to purchase outstanding bonds in the open market, thereby reducing by this amount annually a portion of the outstanding debt. In any event, the sinking fund should represent cash, or securities purchased with the cash. If in cash, the location and guardianship should be known; if represented by securities, a schedule of the sinking fund assets should be available, with purchase and present market price.

It is common practice for corporations to establish insurance funds for the protection of their property against fire and other dangers. When established, the fund should consist of cash or of marketable securities. If the latter, a schedule of their content should be available.

Pension funds are set aside by some companies to provide pensions for employees who have grown old in service. As with other funds, the amount should be represented by cash or by marketable securities.

Insurance and pension funds are not rightly considered as free assets. They are offset in fact, if not on the books, by a probable loss in the case of the insurance fund and by a certain future liability in the case of the pension fund.

The so-called sinking funds, some truly titled and some not, cannot be too carefully analyzed regardless of their nature; they all involve, over a period of time, large sums of actual cash.

Bonded Indebtedness.—The only fixed or capital liability relates to bonded indebtedness. Many of the best industrial corporations have outstanding bond issues, but, as a rule, if the outstanding issue is large, the investor should proceed with caution; large bond issues often have proved disastrous to a promising industrial company. From the standpoint of solvency, an industrial concern depends upon the form of its capitalization rather than upon its amount. Stockholders, even cumulative

preferred stockholders, may be pacified or grimly be told to wait until the strength of the treasury justifies a return; bondholders will not wait. They demand their pound of flesh and become the source of control in case of reorganization.

Careful attention should be given to the final date of maturity and, should such date occur during the current year, the company's plans relative to the issue should be ascertained. Perhaps the issue will be refunded by the offering of another issue, by issuing short-time notes or debentures, or by issuing additional capital stock. Sometimes a bond issue contains a conversion clause which permits the conversion of the bonds into stock at definite periods. All such factors should be studied carefully with the end of determining satisfactorily the debt-paying ability of the company.

Current Liabilities.—If current liabilities are larger than current assets, a floating debt exists instead of what one expects to find,—an excess of current assets over current liabilities representing working capital. When a corporation is confronted with a floating debt, one may well adopt an attitude of skepticism toward it, on the possibility that a good investment proposition exists.

For further consideration of current liabilities, reference should be made to the previous chapter, and to the work in the earlier part of this volume, all of which have covered the topic sufficiently.

Capital Stock.—The investor should be thoroughly satisfied upon the following points with reference to the capital stock of the company in which he is interested:

1. Its authorized issue.
2. Its par value.
3. Amount of unissued stock in the treasury.
4. Dividend rate on preferred stock.
5. The cumulative feature of these dividends, and amount in arrears.
6. The retirement provisions and requirements of the preferred stock.

If, in comparing the statements of successive years, the capital stock item shows an increase, the analyst should determine whether this represents the securement of new funds or is merely

the result of a stock dividend declared from surplus and undivided profits.

The wording of stock certificates should be examined as carefully as the contents of a deed. Every word must be essential. Preferred stock should be preferred as to earnings and, in case of dissolution, as to distribution of assets. If the dividends are not cumulative, such fact should be known. If any of the preferred dividends due in the past have not been paid, the possibility of payment is perhaps the most important consideration to keep in mind if a purchase of stock is contemplated. Some preferred stocks participate in all profits with the common stock by the terms of the certificate and, unless the return on the preferred stock is specifically limited, the preferred shares equally with the common after the preferred dividend has been paid in full.

The book value of the common stock is a conventional measure in valuing securities. This is the theoretical value of the common stock as worked out from the Balance Sheet without any consideration being given to earning power. The liabilities, including the bonded debt and the preferred stock at par, are subtracted from the total asset fund, and the remainder divided by the number of common shares outstanding, gives the book value per share. The book value is exact only insofar as the accounts used are reliable and accurate. It is customary, and generally only fair, to disregard intangible asset accounts as good-will in computing book value. The inclusion of such items destroys the helpfulness of the calculation.

Changing the Capitalization Form.—If a large bond issue causes a burdensome drain upon a company's funds, a replacement of these bonds by common stock at a fair ratio of exchange is an act making for strength, in that necessary and periodic interest payments are turned into optional distributions of dividends.

A favored method which is designed to increase the proportion of stock to bonds, as well as to attract the needed capital, is to issue convertible bonds. If a convertible 5 per cent debenture bond is purchased at 80 and may be converted into stock at par, and the stock advances from 65 to 120, for example, the price of the bond will keep company with that of the stock because, as soon as the stock is over 80, a bondholder can profit by

exchanging the bonds for stock. The purchaser of convertible bonds should read carefully the text of his security; he may find that the attractive convertibility feature is qualified by an option of the company to retire these bonds at a limited figure.

Reserves.—No cash or other special asset need be represented by the amount placed in a reserve account. A corporation may have a reserve for dividends in the amount of a million dollars and yet not be able to pay a dividend requiring only half that amount of cash. The cash may be low and yet the reserve be bona fide, its amount, from the asset side of the Balance Sheet, being diffused through the assets as a whole.

Surplus.—Although a book or nominal surplus may be entirely bona fide, one should remember that financial strength depends more upon the amount of free working capital than upon anything else; seldom will surplus be available in cash assets because it does not necessarily represent anything definitely tangible any more than does the ordinary reserve account.

When the surplus item is shown upon the Balance Sheet correctly, it should be presented in two separate portions, so that one may not be misled into believing that non-operation surplus accumulations are operation surplus accumulations.

Income Statement—Margin of Safety—Average Profits.—Earnings represent the final measure of progress in all commercial enterprises. The income statement shows the trend of a business during a specified period of time with the gain or loss resultant from the activities thereof. The Profit and Loss Statement often is as lamentably incomplete as is the Balance Sheet, frequently being presented only in devitalized form. An income statement of the most promising appearance should be examined with an attitude of mind as skeptical as that of a "Down East" horse trader; but when it lacks definiteness and detail, it is almost impossible of intelligent interpretation. Although a lack of standardization prevents what should be possible in the way of a comparison of income statements, it is true, in general, that they are more easily comprehended than are Balance Sheets. One should examine the Statement of Profit and Loss in connection with the Balance Sheet pertaining thereto; it is both supplementary and complementary to the Balance Sheet.

Gross sales or earnings, representing total income from the

regular corporate operations before considering and making deductions for costs or expenses, compared year by year, will indicate whether the volume of a business is improving satisfactorily from period to period, and whether the sales are consistent or subject to violent fluctuations; when used with other figures, it is of marked importance in determining the trend of actual profit.

The net sales figure, too seldom available, may be a better measure to use than that of gross sales. The difference between gross sales and net sales in some lines is considerable, as where intercompany transactions and operations are involved; in such cases, it is obvious that the net sales figure is of such importance that, without it, certain valuable comparisons could not be made.

The ratio of gross profits to net sales should be compared one year with another to see whether there is an increasing or a decreasing control over results. The ratio of net profits to net sales for different years should be calculated and compared. Special profits and losses should be separated from those due to normal operations, and not be consolidated therewith. The interest item hereunder should show separately the charges covering short-time debt obligations, such as bank loans and accounts payable; if the Balance Sheet indicates a small amount of bank loans, while the income statement shows a large charge covering interest on short-time loans, it is probable that the company is in arrears in its payments for goods, and is losing substantial interest to its trade creditors. This fact may be evidence of weakness requiring special attention.

After the deductions from income have been taken care of, a corporation's income statement usually has several additional items in the nature of profit and loss charges and credits to absorb and set out. Finally, after all types of items have been considered, the profit or loss amount resulting must be transferred to the Surplus account and, in turn, this final item must be reconciled with the Balance Sheet.

The "margin of safety" test is useful not only in determining the strength of a corporation, but as a means of checking up other conclusions. The strength of a corporation may be estimated in a fair way by this test. The margin of safety is the proportion of net income remaining after all fixed charges have been paid. A company, for example, earning $10,000.00, and

having fixed charges amounting to $500.00, has left $9,500.00, or a margin of safety of 95 per cent; naturally, this concern is in a better condition than it would be if it had the same earnings and $9,500.00 fixed charges, leaving a margin of safety of only 5 per cent.

No figure given out to appeal to investors is more common or more deceptive than that of "average profits," say, for three, four, or five years. Net income for each of the years concerning which average profits are shown should be set forth if any dependence is to be placed upon the consistency of earning power. A business concerning which its management is not afraid to publish a report showing actual lean profits should be more attractive to the careful investor than the business publishing a statement containing only the always dubious mystery of "average profits."

Illustrative Problem and Solution.—In order to illustrate the application of some of the principles mentioned in the present chapter, the following C. P. A. problem and a solution thereof are submitted:

Problem.—John Adams, a capitalist, contemplates purchasing the stock of the American Grain Exporting Company, a corporation organized with a capital of $200,000.00, divided into 1,000 shares preferred stock and 1,000 shares common stock, par value $100.00 each, 6 per cent. dividends payable upon the preferred stock before any dividends are declared upon the common stock.

This stock has been offered to Mr. Adams at $60.00 per share for the preferred and $40.00 per share for the common. You are requested to audit the books of the company and give your opinion as to the value of the stock. You find the following accounts to be correct, covering a period of one year.

Cash,		$ 900.00
Accounts receivable:,		
Good,	$15,000.00	
Doubtful,	4,000.00	
Bad,	6,000.00	$ 25,000.00
Plant and machinery,		75,000.00
Horses and wagons,		4,000.00
Merchandise, inventory,		29,000.00
Good-will,		50,000.00
Furniture and fixtures,		2,000.00
Expenses,		3,000.00
Wages,		15,000.00
Purchases,		325,000.00
Claims and rebates,		8,000.00
Ordinary repairs,		9,000.00

Sales,		$260,400.00
Mortgage on plant,		25,000.00
Accounts payable,		42,000.00
Surplus,		18,500.00
Capital stock,		200,000.00
	$545,900.00	$545,900.00

Inventory submitted, $129,000.00 The company started business six years ago and built the plant and machinery and purchased the property pertaining to fixed capital. Write the report, commenting upon the advisability of the purchase and submit profit and loss statement and balance sheet, after closing the books.

Solution.—The solution to the above problem is given in the following letter with attached statements:

Mr. John Adams.
Dear Sir:

I have examined the accounts of the American Exporting Company, and the following is my opinion of the condition of this company and the value of its capital stock.

Accounts Receivable.—No reserve for doubtful accounts seems to have been established. The amount of the bad debts is 24 per cent of the total accounts receivable, a percentage so large that it is apparent the bad debts represent the accumulation of more than one year's activities. I have charged off the entire $6,000.00 bad accounts, one-half of the $4.000 00 doubtful accounts, and I have set up a reserve for bad debts in the amount of $1,500.00, or 10 per cent of the good accounts receivable so-called. The accounts receivable should be examined again.

Plant and Machinery.—No reserve for depreciation seems to have been set up against the plant and machinery. However, since the large repair item would seem to indicate that this asset is being maintained in good condition, I have set up a reserve for depreciation only in the amount of 5 per cent, calculated by the straight line method, equal to $22,500.00, of which $3,750.00 pertains to the current year.

Horses and Wagons.—This asset should be revalued at once, especially since it is probable the units thereof were not all purchased when the business was commenced; the setting up of a general reserve for depreciation may not be sufficient. I have set up a reserve for depreciation on the basis of 10 per cent, $2,400.00 in all, $400.00 pertaining to the current year.

Merchandise Inventory.—This item should be examined very carefully, especially since the ending amount is so much larger than the amount on hand at the beginning of the year. It may be that everything here is in order and that the large amount of purchases will explain the increase.

Good-will.—This item may or may not be correct; the chances are that it is incorrect. It is impossible to pass upon this item from an examination of the figures presented; the revenue accounts for a period of at least five years past must be scrutinized. The item of surplus does not represent what the profits have been in the past, because no information is deducible therefrom as to how much of the past profits have been drawn out of the

business in the form of dividends; if it were known what dividends had been drawn out in the past, one would be able to secure some idea as to what the previous profits were.

Furniture and Fixtures.—This asset should be revalued at once, since the setting up of a general reserve may not be sufficient. As in the case of the other fixed assets of a tangible nature, I have charged thereon an estimated amount to cover depreciation, on the basis of 10 per cent, $1,200.00 in all, $200.00 for the current year.

Expenses.—Since the figures cover only one year, this item has been charged entirely against the profits of the current year.

Wages.—See comments covering ''expenses'' above.

Purchases.—See comments covering ''expenses'' above, with the exception that, here, the amount has been adjusted in connection with the beginning and ending inventories.

Claims and Rebates.—See comments covering ''expenses'' above. The item is rather large in amount in view of the fact that the figures cover one year only. I am inclined to believe that the selling department requires overhauling in order to have the size of this item reduced in the future.

Ordinary Repairs.—This item has been charged entirely against the profits of the current year.

Sales.—The sales are too small considering the nominal capital of $200,000.00. The gross profit is only about 10.86 per cent on sales, a margin entirely too small upon which to work.

Mortgage on Plant.—Nothing need be said here, because the criticisms presented above are sufficiently severe to cause the showing of a loss for the current year, and the showing of a deficit in the final balance sheet (see below).

Accounts Payable.—The large size of this item may be due entirely to the large ending inventory on hand, but, as it stands, it is out of proportion to the good accounts receivable.

Capital Stock.—The entire authorized issue of both the preferred and common stock has been spread upon the books. No information is given as to whether or not all the dividends on preferred stock have been paid. Such information would be valuable only from the standpoint of determining what is the earning power of the corporation. Even if the preferred dividends are in arrears to a certain extent, such fact would not affect the existing liabilities inasmuch as you contemplate purchasing all the stock of the company.

Below are attached the following statements which I have prepared from the facts given me plus my criticisms above made:

1. Exhibit A—Balance Sheet.
2. Exhibit B—Profit and Loss Statement.
3. Exhibit C—Surplus Account, adjusted for the six years.

Although the reserves set up are exceedingly reasonable in amount, the current year shows a loss of $6,783.33, and the balance sheet a deficit of $16,700.00 The tangible assets, at the figures given, are worth $200,300.00,

but there against are liabilities of $67,000.00, which leaves a net worth of $133,300.00.

If you propose to purchase this company in order to liquidate it, the proposition would be a good speculation at the price asked, $100,000.00, provided you could realize therefrom an amount somewhere near the net worth shown just above.

If you propose to purchase this company in order to develop its business, proceed cautiously. Upon the facts presented, I cannot, rightly, estimate the real value of the stock. Should circumstances indicate that, under your direction, the business can be extended favorably, the price asked, $100,000.00, being considerably less than the apparent amount of net assets, would be a point in favor of making the purchase.

The above represents my opinion in the light of the facts as I have found them. It is impossible for me to be any more definite than I have been unless a further examination and investigation be made.

Respectfully submitted,

John Doe, C. P. A.

BALANCE SHEET

December 31, 19—

Assets and Deficit — Exhibit A

Current Assets:			
Cash,			$ 900.00
Accounts Receivable,		$17,000.00	
Less: Reserve for Bad Debts,		1,500.00	15,500.00
Inventory,			129,000.00
			$145,400.00
Fixed Assets:			
Plant and Machinery,	$75,000.00		
Less: Reserve for Depreciation,	22,500.00	$52,500.00	
Horses and Wagons,	$4,000.00		
Less: Reserve for Depreciation,	2,400.00	1,600.00	
Furniture and Fixtures,		800.00	54,900.00
Total Tangible Assets,			$200,300.00
Good-will,			50,000.00
Deficit,			16,700.00
			$267,000.00

Liabilities and Capital Stock

Current Liabilities:		
Accounts Payable,		$ 42,000.00
Fixed Liabilities:		
Mortgage Payable,		25,000.00
Total Liabilities,		$ 67,000.00
Capital Stock:		
Preferred,	$100,000.00	
Common,	100,000.00	200,000.00
		$267,000.00

PROFIT AND LOSS STATEMENT

Year Ended December 31, 19— Exhibit B

Gross Sales,		$260,400.00
Less: Claims and Rebates,		8,000.00
Net Sales,		$252,400.00
Deduct:		
Cost of Sales:		
Inventory, January 1, 19—,	$ 29,000.00	
Purchases,	325,000.00	
Total Goods Handled,	$354,000.00	
Inventory, December 31, 19—,	129,000.00	225,000.00
Gross Profit,		$27,400.00
Deduct:		
Sundry Expenses:		
Expenses,	$ 3,000.00	
Wages,	15,000.00	
Repairs,	9,000.00	
Depreciation:		
Plant and Machinery,	3,750.00	
Horses and Wagons,	400.00	
Furniture and Fixtures,	200.00	
Bad Debts (1/6 of $6,000.00),	1,000.00	
Doubtful Accounts (1/6 of $2,000.00),	333.33	
Reserve for Bad Debts,	1,500.00	34,183.33
Net Loss for Year,		$ 6,783.33

Surplus Account Exhibit C

Balance, January 1, 19—,		$18,500.00
Deduct:		
Debit Adjustments:		
Loss—Current Year,	$ 6,783.33	
Depreciation:		
Plant and Machinery (five years),	18,750.00	
Horses and Wagons (five years),	2,000.00	
Furniture and Fixtures (five years),	1,000.00	
Bad Debts,	5,000.00	
Doubtful Accounts Receivable (five years),	1,666.67	35,200.00
Deficit, December 31, 19—,		$16,700.00

Statement of Resources and Their Application.—At the close of the last chapter, the Comparative Balance Sheet was mentioned; the statement to be considered in the present section apparently is a logical outgrowth of the Comparative Balance Sheet, being designed to present to better advantage than is pos-

sible by means of the Comparative Balance Sheet itself the information thereon available.

This statement is known by more than one name, among which are:

1. Statement of Application of Funds.
2. Statement of Fund Application.
3. Statement of Application of Resources.
4. Statement of Resources and Their Application.

To the writer, the latter two titles more aptly reflect the content of such a statement than any one in which the word "fund" is used.

This type of statement has been used by some accountants for a number of years, but only recently has it come into more or less general use. It is apt to become even more popular, however, as time passes, when the professional accountant has reached a point, as some have, at which he realizes that there is more to his work than merely to prepare exhibits of what has been done and what are present conditions. Briefly, the advantages of such a statement would be about as follows:

1. It shows whether or not the correct rate of expenditures is being maintained as between the current and the fixed assets.
2. It shows whether working capital has been increased or decreased.
3. It shows whether difficulty in meeting maturing obligations is due to financial weakness or to the injudicious use of resources by means of which fixed capital is being increased at the expense of working capital.
4. It shows what has become of profits earned.

From the angle of this statement, changes in the financial condition of a business during a specified period of time are said to be due to two things:

1. Profits,—and dividends or drawings.
2. Sale of stocks and bonds.

Again, if the change in the financial status of an enterprise be analyzed properly, the analysis made should show:

1. The sources from which the assets have been increased during the period.
2. The application of new resources secured to:

a. Payment of dividends.
b. Increases in assets.
c. Decreases in liabilities.

Only by means of the Statement of Resources and Their Application is the above information made readily available. And, in accord with the above, this statement, however prepared, is divided into two portions or sections:

1. In one are shown the resources provided during the period from the various sources available.
2. In the other the disposal made of these additional resources is set out.

Naturally, when prepared correctly, one section will balance against the other.

The statement in no way is similar to that of a statement of cash receipts and disbursements, because items may be included therein which have not been received in cash and which have not been paid in cash. For example, if a person has $500.00 on deposit in a bank, he has an asset, a usable resource. If he takes $300.00 of this amount and purchases a small automobile, he is changing merely the form of a portion of the original asset held so that, for this portion, he has an asset of a different nature; his total accumulation of assets has not changed. On the other hand, instead of changing the form of a portion of his cash asset, this person might purchase his car upon his promise to pay for it some time in the future; by so doing, his accumulation of assets has increased over the total held in the beginning, this being caused by the use or consumption of a certain amount of his credit. To reacquire this credit, he must consume eventually a portion of his cash resources, but such consumption does not take place at the present moment; there is here the receipt of an item not paid for in cash. Again, bonds may be issued for properties; these represent asset sources though the resources are not in the form of cash, but in the form of fixed assets.

Illustrative Problem and Solution.—The better to show the application of the theory with which the student is confronted at the present moment, the following simple problem is given with certain variations in method of solution which attempt to set out the steps, if they may be called such, lying in between a

simple form of statement and the form that apparently is the generally accepted or preferred presentation.

Problem.—A comparative balance sheet of a certain enterprise at December 31, 1919, and December 31, 1920, is given below. Upon the basis thereof, interpret the changes that have taken place in the financial position of the company between the two dates and, so far as possible, indicate how they were effected.

BLANK MANUFACTURING COMPANY

Comparative Balance Sheet

December 31, 1919 and 1920

	December 31		Increase	Decrease
Assets	1920	1919		
Real estate,	$ 52,000.00	$ 50,000.00	$ 2,000.00	
Plant and machinery,	85,000.00	85,000.00		
Horses and wagons,	15,000.00	15,000.00		
Patents and good-will,	20,500.00	20,500.00		
Inventory,	65,000.00	49,000.00	16,000.00	
Accounts Recd.,	33,000.00	35,000.00		$ 2,000.00
Cash in bank,	21,150.00	22,000.00		850.00
Agency investment,	15,000.00		15,000.00	
	$306,650.00	$276,500.00	$33,000.00	$ 2,850.00
Net increase in assets,				30,150.00
			$33,000.00	$33,000.00

	December 31		Increase	Decrease
Liabilities and Capital	1920	1919		
Capital stock,	$200,000.00	$200,000.00		
Creditors,	17,000.00	16,000.00	$ 1,000.00	
Bills payable,		30,000.00		$30,000.00
Mortgage,	25,000.00		25,000.00	
Reserves for Depr.:				
Plant and machinery,	8,500.00		8,500.00	
Horses and wagons,	2,250.00		2,250.00	
Surplus available,	53,900.00	30,500.00	23,400.00	
	$306,650.00	$276,500.00	$60,150.00	$30,000.00
Net increase in liabilities and capital,				30,150.00
			$60,150.00	$60,150.00

General Solution Comments.—The Comparative Balance Sheet exhibits the increases and decreases of the present period over the past period relative to the financial condition as of the end of the present period as compared with that as of the end of the past period. These changes which

have taken place in the financial condition of a business during a specified period of time are expressed upon the Comparative Balance Sheet about as follows:

1. Factors contributing to wealth increase:
   a. Asset increases.
   b. Liability (and capital) decreases.
2. Factors contributing to wealth decreases:
   a. Asset decreases.
   b. Liability (and capital) increases.

Upon the basis of the above, a simple statement of summaries could be prepared, which is similar, in part, to the Statement of Profit Determination under single entry, as under:

Increase in assets,		$33,000.00
Add: Decrease in liabilities,		30,000.00
		$63,000.00
Deduct:		
Decrease in assets,	$ 2,850.00	
Add: Increase in liabilities,	36,750.00	39,600.00
Net profit transferred to surplus,		$23,400.00

The above simple statement is useless from an informational viewpoint; it does not set out specifically what has become of the profits earned, plus what has happened to the resources on hand at the beginning of the period.

Since a statement is desired which will be of more informational value than the above, one turns to the Statement of Resources and Their Application as a satisfactory solution of the problem. Three possible types of this statement will be considered, the development thereof proceeding from what may be considered not only an elementary form but one unintelligible to the average individual, into the second type that is somewhat better and ending with the kind that, beyond doubt, should represent the accepted form.

First Solution.—In form, the first type of statement is as simple to prepare as the arithmetical summary presented just above. It is arranged in account form, the increase in assets plus the decrease in liabilities offsetting the decrease in assets plus the increase in liabilities. The adjustment of capital depends upon whether an increase or decrease is noticed. The figures thereof come from the increase and decrease columns of the Comparative Balance Sheet; the latter is the basis for preparing any type of this statement. The first form of the Statement of Resources and Their Application is shown below:

BLANK MANUFACTURING COMPANY

Statement of Resources and Their Application During Year Ended December 31, 1920

Resources:			Application of Resources:	
Decrease in Assets (Consumption)			Increase in Assets:	
Those of Prior Period:			Those of Prior Period:	
Accounts Rec.,	$2,000.00		Real Estate,	$2,000.00
Cash,	850.00	$2,850.000	Merchandise,	16,000.00
				$18,000.00

Increase in Liabilities:						
(Credit Consumed):				New Assets:		
Those of Prior Period:				Agency Investment,	$15,000.00	$33,000.00
Accounts Payable,			$1,000.00			
				Decrease in Liabilities:		
New Liabilities:				Those of Prior Period:		
Mortgage Pay.,		$25,000.00		Bills Payable,		$30,000.00
Reinvestment of Prior Period Profit:						
Reserves,	$10,750.00					
Surplus,	23,400.00	34,150.00	60,150.00			
			$63,000.00			$63,000.00

Second Solution.—The second form of statement shown below requires but scant explanation. Note how its arrangement is practically the running form of the statement shown above in the first solution, except for the allocation of the current asset items. The student should study the first form of statement, tracing its development from the summary arithmetical expedient already criticized, and then compare its composition and technique of construction with the second form below.

The arrangement of the second statement is more to be desired than that of the first type since therein a separation is made between the current and the fixed assets the better to calculate the increase or decrease in working capital, and because its form is understood more readily than the one submitted under the first solution.

BLANK MANUFACTURING COMPANY

Statement of Resources and Their Application During Year Ended December 31, 1920

Resources Provided:		
Increase in Liabilities:		
(1) Those of Prior Period:		
Accounts Payable,		$ 1,000.00
(2) New Liabilities:		
Mortgage Payable,		25,000.00
(3) Reinvestment of Prior Period Profit:		
Appropriated for Reserves,	$10,750.00	
Transferred to Surplus,	23,400.00	34,150.00
		$60,150.00
Resources Applied:		
Increase in Fixed Assets:		
(1) Those of Prior Period:		
Real Estate,	$ 2,000.00	
(2) New Assets:		
Agency Investment,	15,000.00	$17,000.00

Decrease in Liabilities:			
(1) Those of Prior Period:			
Bills Payable,			30,000.00
Increase (Net) in Current Assets:			
(1) Those of Prior Period:			
Merchandise,		$16,000.00	
Deduct (Decreases):			
Accounts Receivable,	$2,000.00		
Cash,	850.00	2,850.00	13,150.00
			$60,150.00

Third Solution.—In compiling the third type or form of this statement, one commences with the resources which have been provided by the profits of the period under review. Then the reserve provisions for the year must be written back, *i.e.*, added to the net profit. If a business has made a gross profit of $5,000.00, and has expenses of $3,000.00 (excluding depreciation), the profit has provided $2,000.00 in new resources, although the net profit would be much less. In fact, all mere book entries of like character must be written back; however, items like discount on stock and bonds, organization expense, and prepaid interest and insurance which are on the books, being carried as deferred charges (current assets), do not affect the cash or available resources. Prepaid interest, prepaid insurance, and prepaid rent are related to cash and available resources because they are concerned with working capital.

An increase in a fixed liability upon the Comparative Balance Sheet represents resources provided, whereas, an increase in a current liability does not do so; changes in the current liabilities only affect working capital. When a net decrease is noted in working capital and in deferred charges, such net decrease represents resources provided. If a loss shows up after the reserves are adjusted, this should be placed as a deduction from resources provided.

The statement prepared in accord with the theory of the third solution is shown below, being accompanied by a supporting exhibit prepared to show the increase or decrease in working capital. The third solution by far presents the accepted form for a Statement of Resources and Their Application.

BLANK MANUFACTURING COMPANY

Statement of Resources and Their Application During Year Ended

December 31, 1920

Resources Provided:	
1. Surplus net profits for year ended December 31, 1920, as per Statement of Profit and Loss,	$23,400.00
2. Provision for reserve,	10,750.00
3. Mortgage payable,	25,000.00
Total resources provided,	$59,150.00

Which Were Applied in the Following Manner:

1. Expenditures for real estate,	$ 2,000.00
2. Investment in or advance to agency,	15,000.00
3. Increase (net) in working capital, as summarized below,	42,150.00
	$59,150.00

Summary of Working Capital

December 31

Assets:	1920	1919	Increase	Decrease
Inventory,	$ 65,000.00	$ 49,000.00	$16,000.00	
Accounts Receivable,	33,000.00	35,000.00		$ 2,000.00
Cash in Bank,	21,150.00	22,000.00		850.00
	$119,150.00	$106,000.00	$16,000.00	$ 2,850.00
Net Increase,				13,150.00
			$16,000.00	$16,000.00
Liabilities:				
Creditors,	$17,000.00	$16,000.00	$1,000.00	
Bills Payable,		30,000.00		$30,000.00
	$17,000.00	$46,000.00	$ 1,000.00	$30,000.00
Net Decrease,			29,000.00	
			$30,000.00	$30,000.00
Net Working Capital,	$102,150.00	$60,000.00	$42,150.00	
Net Increase in Working Capital (as above)			$42,150.00	

CHAPTER XII

MERGERS VERSUS CONSOLIDATIONS

Corporate Combinations.—At the present time, corporate combinations are met with everywhere, but especially in the industrial, transportation, and public utility fields. Competition among business enterprises of the same type is said to be an ideal theoretical economic condition, because thereunder no one concern can raise prices to an unreasonable degree; if any one company attempted to do so, others of a similar type would furnish the same goods at a reasonable price.

This point of view, however, relates solely to the purchaser, omitting the producer entirely. Although the purchaser may be protected by circumscribing the producer in the manner indicated, at the same time the latter may be made to suffer in an unwarranted manner,—as where the supply of a certain product exceeds the demand therefor. Under this condition, some concerns will be unable to dispose of their products at normal prices; hence, prices will drop to a lower level, and this lowered rate will attach itself to all concerns making that same line of product. Since prices at this lower level cannot produce a reasonable profit, certain concerns within the particular group must suffer actual loss, whereas others will fail completely. Only after a sufficient number of concerns have failed to the end that normal conditions again are in order can the suffering survivors increase prices so as to eliminate the continuance of taking a loss.

When prices reach the old level, all would be well, provided they are kept there. However, in order to recuperate from the former losses, these survivors are apt to make prices soar. Naturally, new competition is invited, with the result that sooner or later the bottom again drops out and another period of depression is in full swing.

This upward and downward trend of prosperity needed some sort of control. The first step toward the accomplishment of

this end was an attempt to have competitors become parties to an agreement:

1. The so-called "gentlemen's agreement," under which territory was divided, output restricted, or prices maintained in a uniform manner.
2. The pooling of interests looking toward a pro rata distribution of profits among the members of the pool.

Although the basic idea here apparently was laudable, unfortunately it was carried so far that prices were increased unreasonably as before.

More or less public hostility developed toward such combinations to the end that the Sherman Anti-Trust Law was enacted. This law looked toward:

1. The regulation of prices, and
2. The prevention of monopoly.

However, the act, apparently, took no notice of the fact that unless a monopoly:

1. Controlled the sources of its raw material supply, or
2. Was a natural monopoly, it would invite competition.

The field within which combinations may be formed and their formation have been limited to a marked degree through the effectiveness of both the above act and other laws designed to prohibit or control business combinations which supposedly were not operated in harmony with the public welfare. Nevertheless, since so many advantages accrue to a combination of business interests, and since many types of corporate combinations do exist at present, and will come into existence in the future, the present topic should be of considerable interest to the prospective accountant. And this seems true even though some business combinations have been declared as violating the anti-trust laws, and even though it is questionable whether or not certain others are operating contrary to these laws.

Advantages of Corporate Combination.—The simplest form of combination represents the formation of a partnership by two competing sole traders. However, when an accountant refers to a combination of business interests it is unusual for him to think of anything except a combination of corporations.

The advantages of practically all combinations, small or large, may be set out about as follows:

1. The elimination of competition and the securement of larger profits through securing a partial monopoly and keeping sales prices at a higher level.
2. Economies looking toward expense elimination:
   a. Two concerns operated separately must each have a separate selling and administrative organization. When these two concerns combine in some way, it may be possible to eliminate the entire selling and administrative organization of one unit.
   b. Each unit in the combination may be enabled to specialize, to the end that it can confine itself to the product it can make best or most economically. This tends to give the public more satisfactory service than otherwise would be the case, at the same time eliminating duplication in manufacturing and equipment.
   c. When specialization in product results, the opportunity may present itself to use expensive and highly specialized machinery more constantly; this prevents such machinery possibly lying idle part of the time, thereby causing a loss.
   d. The combination will not require as much working capital as the amount necessary were each unit operating separately. The stock of finished goods carried by sizes and pattern numbers will be much less in a combination than where each unit operates separately.
   e. Improved marketing facilities. The field of operation where companies function separately is much more limited than where the separate units are combined. The combination has a broader view of the field and better ability to judge of possible demand than each unit would have if operating separately.
   f. Business managers, through combination, secure greater facilities for dealing with labor than where no combination exists.
   g. Through combination, the best brains and experience in each of the combined plants is made available for dealing with the problems confronting each plant unit. Likewise, if necessary, the combination can go out and hire the best men obtainable, since the cost thereof will not

have to be borne directly by any one company; it will be distributed over all the units combined.

h. Better use of by-products.

3. Better facilities will be at hand for borrowing and obtaining additional capital.

Combination Methods.—The various ways by means of which corporate combinations may be created are about as follows:

1. Those of scant accounting importance.
   a. Gentlemen's agreements. In the majority of states, until near the end of last century, it was illegal for one corporation to hold stock in another corporation with the end in view of thereby controlling its activities and operations. Because of such illegality, certain expedients were attempted to circumvent the intent of the law. The first known step in this direction was an attempt to secure a combination of companies through a mutual agreement of those persons interested in the welfare of the separate units. This method of combination has nothing of accounting interest, inasmuch as the individual units or their accounting were not affected.
   b. Pooling agreements. The next step in the direction of combination was known as the "pool." This, also, was a form of association based upon a mutual or gentlemen's agreement. Its object, in general, was to stabilize prices either by restricting output or by dividing the selling territories. This type of combination worked nicely when times were good, but when hard times approached the combination broke down; when most needed as a means of securing cooperation, it became unworkable and dissolution thereof followed. This method of combination has nothing of accounting interest, since the individual units or their accounting are not affected.
   c. Interlocking directorates. The next step in the development of corporate combinations looked toward a more stable form of administration than that indicated above, with the result that the trust form of organization came into existence. In the beginning, this method of combination took the form of a managing board of trustees.

The companies in the combination deposited their capital stocks with these trustees and received trust certificates in exchange. Eventually, even though this form of combination proved greatly superior to the pooling form, court decisions caused these trusts to be dissolved. As an outgrowth of the trust idea, that of the interlocking directorates came into being. Hereunder, stockholders in two or more of the combining companies either had themselves or trusted employees elected as members of the board of directors of all the companies. To all intents and purposes, each company is separate and independent from each of the others, whereas in fact their management practically may be one and the same. Again, neither each individual company nor their accounting is affected by this method of combination.

d. Lease of property. Sometimes leases are used as a combination means. Inasmuch as the subject of leases has been discussed sufficiently in previous chapters, nothing further need be considered at this point.

2. Those of considerable accounting importance. In brief, these combination methods may be set out about as under:
   a. Mergers.
   b. Consolidations (when of considerable size, sometimes called amalgamations).
   c. Parent companies.
   d. Holding companies.

   In view of the fact that these latter four methods comprise the remaining discussion of the present chapter, and that of the next one, nothing further need be mentioned in respect thereof at the present moment.

Merger Versus Consolidation—General.—Popularly, the terms combination, merger, consolidation, trust, and holding company refer to one and the same thing. In fact, relatively few business men are able to distinguish clearly between these terms. Again, laws are not uniform even in this regard; in New Jersey, for example, the term "merger" practically is synonymous with "consolidation," whereas in New York a clear-cut distinction is made between the two. Because of this lack of uniformity,

which borders upon confusion, the accounting problems often presented in the various C. P. A. examinations are in no way in agreement as to the terms used. If a problem is picked which states that it relates to a merger, the chances are that it really concerns a consolidation of interests, so far as the actual accounting involved is concerned.

Basically, from an accounting point of view, which, in general, is in accord with that held in legal and financial circles, a merger takes place when an *existing* corporation buys or takes over the assets and business of one or more other companies, the latter completely merging their identity into that of the vendee corporation. In other words, in a merger one or more concerns is absorbed by an existing company. On the other hand, when a *new* corporation is formed to take over the assets and business of one or more concerns, the identities of the vendor company or companies being lost or fused in that of the new vendee corporation, a consolidation takes place.

In the case of a merger, the absorbing company already is an existing entity, whereas in the case of a consolidation the absorbing company first must be chartered before the combination can be consummated. In both instances, however, physical properties primarily are dealt with and it seems to be that, because of this fact, a confusion is apt to result in that the two ofttimes are referred to under the caption of "merger." This ought not to be the case, inasmuch as, from an accounting viewpoint, each will require a different set of accounts, either at the inception of the organization or continuously thereafter. But in either event, the new organization acquires the net assets of all the others which, thereafter, are dissolved.

In certain accounting texts, a distinction is made at variance with the above, about as follows:

1. Combination by purchase. This corresponds practically to that covered above by the term "merger."
2. Merger. This corresponds to that covered above by the term "consolidation."

The use of the method by consolidation is not mentioned. The writer believes, however, that the distinctions indicated in the first portion of the present section are those to be followed in accord with the correctness of the terms used.

Merger Versus Consolidation—New York.—Under the Stock Corporation Law of New York, section 58, the merging of stock corporations is permitted. This section reads about as follows:

> Any corporation lawfully owning all of the stock of any other corporation organized for and engaged in business similar or incidental to that of the possessor corporation may merge such other corporation with it and be possessed of all estate, property, rights, privileges and franchises of such other corporation.

In the case of a merger, it is seen that all of the stock of the subsidiary company must be owned by the possessor company. In other words, there must exist a cross ownership of stock before a merger may be consummated. This cross ownership of stock is further emphasized by the fact that to effect such a merger, the possessor corporation must file in the office of the Secretary of State, under its common seal, a certificate of such ownership.

On the other hand, a consolidation is seen to differ from a merger in that:

> Any two, or more, corporations organized for the purpose of carrying on any kind of business of the same or similar nature which a corporation organized under the Business Corporations Law might carry on, may consolidate into a single corporation.

Therefore, in case of a consolidation, no cross ownership of stock is necessary.

These requirements under the laws of New York do not differ materially from those presented under the general consideration of mergers and consolidations:

1. Merger.
    a. Similarity. An existing corporation is to be the absorbing company.
    b. Dissimilarity. In general, so long as an existing concern becomes the absorbing element, the cross ownership of stock is immaterial; in New York, a cross ownership of stock is vitally important, under the law. No merger can be consummated without such cross ownership of stock.

2. Consolidation.
   a. Similarity. A new corporation is to be the absorbing company.
   b. Dissimilarity. None.

The precaution to observe in each particular instance should be in conformity to what has been indicated above. Mere words or terms used should not be taken for face value.

Illustrative Merger Problem—General.—

Problem.—The Successful Mining Company has made an agreement to purchase the assets of another company, subject to the liabilities, for $1,000,000.00, not including the cash asset. Payment is to be made: cash, one-half; stock, one-half. Par value of the stock is $100.00. The balance sheet of the vendor company is as follows:

Assets	
Cash,	$ 347.60
Accounts receivable,	14,200.25
Ore on dump,	5,807.00
Mine,	700,428.00
	$720,782.85

Liabilities	
Bank loans,	$ 32,500.00
Accounts payable,	28,370.40
Capital,	500,000.00
Surplus,	159,912.45
	$720,782.85

The vendee corporation neither has the cash nor the unissued capital stock with which to pay for the properties. It has applied, therefore, for authority, and has received authority, to increase its capital stock to the requisite amount needed for this purpose. Further, the needed amount has been sold at par.

Required:
1. Entries on books of the vendor company.
2. Entries on books of the Successful Mining Company.

Solution.—There is here, apparently, a clear case of merger, as generally understood if interpreted in the light of the previous discussion. However, if one looks at a merger as involving "an entirely new company, the latter requiring a new charter to be issued to it," as some believe, this problem, beyond doubt, would fall under the grouping of "a combination by simple purchase." In fact, in accord with the manner in which the present subject has been developed, a merger and a purchase practically are the same, unless the New York law be applied.

The accounting entries for a merger depend upon which set of books is under scrutiny. In this particular case, it is necessary to be concerned

first with those of the vendee company. As to the vendor company, one is interested in the closing entries required. These do not differ materially from those which have been shown covering the sale of a partnership business to a corporation.

Entries on the books of the vendor company. The first entry relates to charging the Successful Mining Company with the assets turned over to it:

Successful Mining Company,	$720,435.25	
To—Accounts Receivable,		$ 14,200.25
Ore on Dump,		5,807.00
Mine,		700,428.00
To record transfer of above assets (state date) to above company, in accord with contract of purchase and sale, and resolution of stockholders, minute book, p. ——		

The second entry relates to the transfer of the liabilities of the vendor company to the Successful Mining Company. This requirement conforms to the usual agreement entered into in case of a merger:

Bank Loans,	$32,500.00	
Accounts Payable,	28,370.40	
To—Successful Mining Company,		$60,870.40
To record assumption of payment of above liabilities on part of the above company, as part payment for the assets already set out above; being in accord with contract of purchase and sale, and resolution of stockholders, minute book, p.——.		

The next step relates to a reconciliation of the purchase price with the actual recorded net value of the properties and assets taken over. The net value booked, as above, is $659,564.85. The purchase price agreed upon is $1,000,000.00. The difference between these two values is $340,-435.15, representing excess of purchase price over net values as carried. This difference must be brought upon the books by an appropriate entry. In this connection it would be proper, beyond doubt, to open a Good-will account (good-will in relation to consolidations will be discussed later), but since this is a mining company it would seem to be more logical to consider that the Successful Mining Company values the mine being taken over at the difference between the net value of all the *other* assets acquired and the $1,000,000.00 given for the property as a whole:

Successful Mining Company,	$340,435.15	
To—Surplus,		$340,435.15

The booking could be made by means of two entries, if desired, rather than the above one, as follows: first, a charge to the Mine account and a credit to Surplus account; second, a charge to the vendee company and a

credit to the Mine account. The labor thereunder seems somewhat unnecessary, and the entry as indicated is sufficient so long as care is taken to make the explanation thereof entirely intelligible.

The account with the Successful Mining Company on the books of the vendor concern now contains a debit balance of $1,000,000.00. This account will be cancelled when the stock and the cash are received. The transaction then is closed.

Successful Mining Company Stock,	$500,000.00	
Cash,	500,000.00	
To—Successful Mining Company,		$1,000,000.00
To record receipt of 5,000 shares of the stock of the Successful Mining Company plus cash in final payment for all the assets of this company as per contract of purchase and sale and stockholders' resolution, minute book, p.——.		

As a final step, the books of the vendor company must be closed out. When the above entries have been made, a trial balance of the vendor's books will be as follows:

Cash,	$ 500,347.60	
Successful Mining Company Stock,	500,000.00	
Capital Stock,		$ 500,000.00
Surplus,		500,347.60
	$1,000,347.60	$1,000,347.60

Therefore, an entry must be made closing the accounts as above shown, because the stockholders will receive the stock of the Successful Mining Company plus the cash on hand.

Entries on the books of the vendee company. Before the Successful Mining Company can carry through this deal, it must acquire the necessary stock and cash with which to do so. Therefore, as soon as the necessary authority has been secured for increasing its capital stock, an entry would be made about as follows:

Subscriptions to Capital Stock,	$1,000,000.00	
To—Capital Stock,		$1,000,000.00
To record subscriptions to the 10,000 shares of the capital stock of this company, in accord with minutes of stockholders' meeting, minute book, p. ——, and per articles. This entry is the first one made, on the assumption that subscriptions were received prior to date of booking same.		

The next entry relates to the receipt of cash from subscriptions:

Cash,	$500,000.00	
To—Subscriptions to Capital Stock,		$500,000.00
To record cash received in full payment for 5,000 shares of this company.		

When this cash is received, the deal may be carried through at once.

The next entry covers the recording of the purchase made:

Accounts Receivable,	$ 14,200.25	
Ore on Dump,	5,807.00	
Mine,	1,040,863.15	
To—Bank Loans,		$ 32,500.00
Accounts Payable,		28,370.40
Vendor Account,		1,000,000.00
To record purchase from Vendor Company of the above assets subject to the above liabilities for a consideration of $1,000-000.00, as per contract dated ——, and minutes of stockholders, p. ——.		

As indicated already, it is assumed the mine was valued at the difference between the net value of all the *other* assets acquired and the $1,000,000.00 given for the property as a whole.

The last step involves the entry necessary to discharge the liability relative to the purchase:

Vendor Account,	$1,000,000.00	
To—Cash,		$500,000.00
Subscriptions to Capital Stock,		500,000.00

In the entries given above for the books of the vendee, it is assumed that the new assets and new liabilities taken over merely have been added to those already on the books. Often, however, it is desirable to carry separate accounts for the assets taken over in order that thereby the successfulness of the new properties may be the better kept track of separately from those of the old enterprise. The same reason, naturally, is not so important as concerns the liabilities although, at times, some special item or items should be treated separately.

Illustrative Merger Problem—New York.—In order to illustrate the method of a merger as applied to a problem in accord with the laws of New York, the following A. I. A. problem is used, and a solution presented. It is a most excellent problem illustrative of the principles set out above; the solution presented is not official in any way, being merely the writer's interpretation.

Problem.—The following items appear on the balance sheet of the American Pin Company, June 30, 1912: land, buildings, equipment, etc., $335,000.00; capital stock of the Bronx Pin Ticket Company, par, $50,000.00; cost, $57,400.00; patents, $15,000.00; working and trading assets, $37,500.00; cash, $10,000.00; accounts receivable, $32,000.00; due from Bronx Pin Ticket Company, $375.82; deferred assets, $1,500.00; first-mortgage 6 per cent. gold bonds payable, due 1922, $100,000.00; taxes accrued, $3,250.00; salaries and wages accrued, $4,327.82; accounts payable, $123,749.83; notes payable and interest, $80,125.00; interest accrued on first mortgage bonds payable, $2,500.00; reserve for depreciation of building and equipment, $35,000.00; preferred capital stock outstanding, $75,000.00; common capital stock outstanding, $50,000.00; profit and loss surplus, $14,823.17.

The American Pin Company having acquired all the capital stock of the Bronx Pin Ticket Company, the balance sheet of which appears below, it is proposed to merge the two companies as of July 1, 1912:

Assets—Land, buildings, and equipment, etc., $260,000.00; capital stock of the Blauser Pin Tray Company carried at par, $35,000.00; patents, $22,625.00; working and trading assets, $10,000.00; cash, $10,365.27; accounts receivable, $37,943.86; sinking fund, $3,236.92; deferred charges to expense, $1,200.00.

Liabilities and capital—First mortgage 5 per cent. gold bonds payable, due 1925, $50,000.00; taxes accrued, $2,750.00; salaries and wages accrued, $3,147.83; due to creditors, $144,720.30; due to American Pin Company, $375.82; notes payable and interest, $31,372.53; interest accrued on first mortgage bonds payable, $1,250.00; reserve for depreciation of plant and equipment, $27,500.00; common capital stock outstanding, $50,000 00; profit and loss surplus, $69,254.57.

Prepare:

(a) The entries on the books of the American Pin Company.

(b) The entries on the books of the Bronx Pin Ticket Company.

(c) Balance sheet of the American Pin Company after the merger.

Solution.—The first step would seem to be to prepare a consolidated Trial Balance of the two sets of books, since this will show:

1. The situation with regard to the individual companies.
2. The effect of the merger.

Hence, such Trial Balance should be presented before taking up the specific requirements of the problem. It follows:

AMERICAN PIN CO.

CONSOLIDATED TRIAL BALANCE (WORKING SHEET)

June 30, 1912

Debits	American Pin Company	Bronx Pin Ticket Company	Total	Eliminate	Consolidated Trial Balance
Land, buildings, equipment,	$335,000.00	$260,000.00	$595,000.00		$595,000:00
Bronx Pin Ticket Company Stock, $50,000 par,	57,400.00		57,400.00	①$57,400.00	

Patents,	15,000.00	22,625.00	37,625.00		37,625.00
Working and trading assets,	37,500.00	10,000.00	47,500.00		47,500.00
Cash,	10,000.00	10,365.27	20,365.27		20,365.27
Accounts receivable,	32,000.00	37,943.86	69,943.86		69,943.86
Due from Bronx Pin Ticket Company,	375.82		375.82	② 375.82	
Deferred assets,	1,500.00	1,200.00	2,700.00		2,700.00
Blauser Pin Tray Company Stock, at par,		35,000.00	35,000.00		35,000.00
Sinking fund,		3,236.92	3,236.92		3,236.92
Total Debits,	$488,775.82	$380,371.05	$869,146.87	$57,775.82	$811,371.05
Credits					
First Mortgage 6 per cent gold bonds, due 1922,	$100,000.00		$100,000.00		$100,000.00
Taxes accrued,	3,250.00	$ 2,750.00	6,000.00		6,000.00
Salaries and wages accrued,	4,327.82	3,147.83	7,475.65		7,475.65
Accounts payable,	123,749.83	144,720.30	268,470.13		268,470.13
Notes payable and interest.	80,125.00	31,372.53	111,497.53		111,497.53
Interest accrued on bonds payable,	2,500.00	1,250.00	3,750.00		3,750.00
Reserve for depreciation of buildings and equipment,	35,000.00	27,500.00	62,500.00		62,500.00
Preferred capital stock outstanding,	75,000.00		75,000.00		75,000.00
Common capital stock outstanding,	50,000.00	50,000.00	100,000.00	①$50,000.00	50,000.00
Profit and loss surplus,	14,823.17	69,254.57	84,077.74	① 7,400.00	76,677.74
First mortgage 5 per cent gold bonds, due 1925,		50,000.00	50,000.00		50,000.00
Due American Pin Company,		375.82	375.82	② 375.82	
Total Credits,	$488,775.82	$380,371.05	$869,146.87	$57,775.82	$811,371.05

The entire capital stock of the Bronx Pin Ticket Company was owned by the American Pin Company and, hence, carried on the books of the latter as an asset. Since the ownership of this stock made the merger possible, legally, with the result that the accounts could be merged, it is necessary to eliminate the stock asset from the books of the American Pin Company in order to take up thereon the assets and liabilities of the Bronx Pin Ticket Company. Further, accounts between the two companies should not be carried as assets and liabilities; hence, these items must be eliminated.

The capital stock of the Bronx Pin Ticket Company is carried on the books of the American Pin Company at $57,400.00 whereas, par is $50,000.00. The former amount is to be eliminated from both sides of the consolidated Trial Balance. Since the common capital stock of the Bronx Pin Ticket Company outstanding is $50,000.00, whereas, the cost was $57,400.00, the $50,000.00 will be eliminated from the common capital stock outstanding, and the difference, $7,400.00, which from the point of view of the merger becomes a surplus decrease, should be treated as such. Again, previous to the merger, the Bronx Pin Ticket Company owed the American Pin Company $375.82, on open account. In the merger of the two companies, this amount must be eliminated, since it is impossible for a company to owe itself money. On the basis of the consolidated Trial Balance, the required entries may be prepared.

Requirement (a). Entries on the books of the American Pin Company. These entries are set up in summary form, rather than in detail, in order to conserve both time and space.

Sundry Assets,	$379,995.23	
Accounts Receivable (due from Bronx Co.),	375.82	
To—Sundry Liabilities,		$261,116 48
Bronx Pin Ticket Co. (capital stock),		50,000.00
Profit and Loss Surplus,		69,254.57
To record assets, liabilities, reserves, capital, and surplus of the Bronx Pin Ticket Company per merger terms as of 7/1/12.		
Accounts Payable (Bronx Co.),	$375.82	
To—Accounts Receivable (Bronx Co.),		$375.82
To eliminate offsetting accounts after merger.		
Bronx Pin Ticket Company (capital stock),	$50,000.00	
Profit and Loss Surplus,	7,400.00	
To—Bronx Pin Ticket Company (capital stock-asset),		$57,400.00
To eliminate offsetting accounts after merger relative to capital stock.		

Requirement (b). Entries on the books of the Bronx Pin Ticket Company, to close the books.

American Pin Company,	$380,371.05	
To—Sundry Assets,		$380,371.05
To close asset accounts to the American Pin Company, per merger terms as of 7/1/12.		
Sundry Liabilities,	$261,116.48	
Capital Stock,	50,000.00	
Profit and Loss Surplus,	69,254.57	
To—American Pin Company,		$380,371.05
To close the liability accounts, to American Pin Company, per merger terms as of 7/1/12.		

Requirement (c). Balance Sheet of the American Pin Company after the merger, as of July 1, 1912:

AMERICAN PIN COMPANY

BALANCE SHEET

July 1, 1912

Assets

Capital Assets:		
Land, Buildings, and Equipment,	$595,000.00	
Less—Reserve for Depreciation,	62,500.00	$532,500.00
Patents,		37,625.00
Sinking Fund,		3,236.92
Blauser Pin Tray Company Stock,		35,000.00
Total Capital Assets,		$608,361.92

Current Assets:			
Accounts Receivable,		$ 69,943.86	
Working and Trading Assets,		47,500.00	
Cash,		20,365.27	
		$137,809.13	
Deferred Charges,		2,700.00	$140,509.13
Total Assets,			$748,871.05
Liabilities			
Capital Liabilities:			
6 per cent Bonds Payable, 1922,			$100,000.00
5 per cent Bonds Payable, 1925,			50,000.00
Total Capital Liabilities,			$150,000.00
Current Liabilities:			
Notes Payable and Interest,		$111,497.53	
Accounts Payable,		268,470.13	
Bond Interest Accrued,	$3,750.00		
Taxes Accrued,	6,000.00		
Salaries and Wages Accrued,	7,475.65	17,225.65	$397,193.31
Capital Stock and Surplus:			
Capital Stock Preferred,	$75,000.00		
Capital Stock Common,	50,000.00	$125,000.00	
Surplus,		76,677.74	$201,677.74
Total Liabilities,			$748,871.05

Basis of Consolidation—Preliminary Investigation.—When a merger or consolidation is contemplated, it is advisable to secure the services of an outsider,—a promoter,—in order that an acceptable basis eventually may be presented under which the change may be made. In this connection, a disinterested outsider is a useful man. Since each of the interested parties is bound to have a most exaggerated idea of the value and importance of his own particular plant, as related to the others contemplating coming into the combination, no one but a stranger will stand much chance of bringing each such interested party to a reasonable level on which the negotiations can continue successfully. This outsider will negotiate separately with each unit and will keep from each one the terms he has made with each of the others.

Naturally, from the standpoint of the combination, it is necessary to calculate, upon some fair basis, the value of each unit coming into the combination. In other words, conditions must

be investigated to the end that an equalization thereof, as between each incoming plant, will be secured. In this connection, two possibilities present themselves as the basis of the proposed merger or consolidation. These two possibilities are best presented in the form of questions, to each of which a proper answer must be secured:

1. Should the value of the net assets of each plant be used as a basis of fixing the ratio of exchange in stock or in cash, or should the earnings of each plant over a period of years be used instead?
2. What relative value should be assigned to net assets as compared to net earnings over a period of years?

One plant may have a large amount of assets but may not be able to show large earnings; on the other hand, a plant with a small amount of assets may show large earnings. Naturally, the first plant will be averse to a basis established on earnings; and the second plant will demur against a basis of exchange computed on net assets.

In seeking for the truthful and correct answers to these questions, an accountant often is called upon to give his ideas as to the proper basis of combination. These ideas he crystallizes into the form of statements after he has made a detailed examination of the case under review. In general, as a guide in making such investigation, he will endeavor consciously or unconsciously to keep certain things or points in mind. These may be outlined roughly about as follows:

1. Where the basis of exchange is to be computed on net asset values.
   a. If possible, an appraisal of properties should be made:
      i. By a regular appraisal company, preferably, or
      ii. By a committee.
   b. If an appraisal is not possible, the deductions to be made must be drawn exclusively from facts collected in connection with a careful audit, to the end that the valuation of each plant plus the equipment therein contained will be as correct as possible. Special consideration must be given particularly to capital additions:
      i. Capital additions, in order to be retained as such, must

(1) Represent actual plant values, or
(2) Increase plant capacity, or
(3) Reduce production costs.

ii. Capital additions in each plant must be handled in a uniform manner, especially as concerns
(1) Relative age of the property and equipment in use, and
(2) Depreciation.
(a) It must be ample.
(b) It must be calculated in a uniform way.
(c) Differing elements must be made uniform.
(d) Differing conditions must be reconciled.

2. Where the basis of exchange is to be computed on net earnings over a period of years.
a. How many years' profit should be averaged—two, three, four, or five?
b. Earnings as against expenses.
i. Each business must have its earning power computed for a uniform period of time, and preferably the same period of time. This period should be at least three years in length if it be possible to make it such.
ii. Depreciation must be considered as indicated above.
iii. Revenue expenses must not be capitalized. Therefore, capital additions must be examined as indicated above.
iv. In the matter of production costs.
(1) Where all units are engaged in similar work, they should be determined in a uniform way.
(2) Where the units are engaged in dissimilar work, they must be reduced to a uniform basis.
(3) Labor and overhead items must be apportioned in a uniform manner.
(4) Selling and administrative expenses are not part of production cost.
v. In the matter of inventories.
(1) The methods of inventory-taking must be uniform.

(2) Due allowance must be made for old and obsolete materials.

(3) Extensions must be checked carefully and parties taking same must certify to correctness.

vi. In the matter of sales.

(1) Sales in behalf of a subsequent period should be eliminated because they inflate profits of the current period.

(2) Consignments-out and sales to branches are not sales.

vii. Extraordinary profits and losses must be eliminated.

viii. Interest on money loaned should not be included.

3. Where good-will enters into consideration.

a. The basis for calculating the value of good-will will be anything agreed to by the parties interested. Of the many possible ways, two are of interest at this moment (further discussion of good-will is reserved to a later section).

i. Based upon profits. A certain number of years' net profits, varying from one to five, and even more, is purchased. A fair basis, at times, is found to consist of the purchase of a certain number of years' average profits; as, two years, calculated for a period of from three to five years.

ii. Based upon excess profits. This contemplates determining the average profits for such line of business. When this has been done, the excess, equal to the differences between the actual profits and the average, is capitalized upon some arbitrary basis, anywhere from 5 per cent up.

4. Where a partnership is a party to the combination.

a. Attention must be directed specifically to items which are handled differently under partnership accounting as compared to their handling under conditions of corporate accounting.

i. Salaries. Amounts representing salaries paid by

corporations for work of a similar kind should be included in the Profit and Loss account.

ii. Drawings and interest on investment are not to be considered in determining earning capacity.

The above illustrates, in general, some of the things concerning which the accountant must be familiar when confronted by a merger or consolidation problem. The list is by no means complete, as this is not a book on auditing.

Consolidation Capitalization.—The word "capitalization" is used with a wide scope of meaning; its application herein will conform to use as at the time a corporation is formed, when it refers to the face or par value of the stocks which the corporation is authorized to issue.

Three different bases of capitalization may be used:

1. Earning power.
2. Actual cost of property.
3. Cost of reproducing property.

Of these three, the first two by far seem to be the most common. In many instances, earning capacity coupled with the valuation of the tangible assets has been found satisfactory. Yet some of the largest corporations apparently are capitalized on the earning power basis, or on some variation of it.

Capitalization on the Basis of Earning Power.—This basis of capitalization is built upon the fact that a corporation can earn either:

1. An unusually high rate of dividends on the actual investment, or
2. The usual rate of dividends on a proportionately higher amount of investment. This point is kept in mind by many corporations for the reason that it makes possible the sale of a large amount of stock.

It is not considered good financing to make the capitalization of a company only equal to the value of its tangible assets on the assumption that any sum over that value is water. A business man who does not, on the average, earn considerably more than the usual rate of interest on the actual cost of his plant would feel that he ought to go out of business and invest his money in securities. If earning capacity exists, the difference between cost of plant and earning capacity, whether it is ab-

sorbed in patents or in good-will or in some other asset, is just as legitimate an asset as merchandise, though, naturally, much more difficult to appraise.

Capitalization does not, necessarily, bear any relation to dividends paid. As long as the dividends are honestly earned and properly accounted for, it makes no difference whether the capital is $500,000.00, based on earning power, or $100,000.00 based on actual property investment. If $25,000.00 is earned during the year, the rate of return will be 25 per cent, if based on actual property investment, or 5 per cent, if based on earning capacity. The amount of dividends earned, however, is the same in either case; it makes no difference which capitalization is used. If stock contains water the dividend rate will be affected; therefore, the more important thing here is "dividends." In the final analysis, the most important feature is the relation between cash dividends taken out and investment. Dividends as percentages of capital stock have but little meaning.

Earning capacity is uppermost in the minds of those who have the combination idea under consideration. If this were not so, a combination would not materialize. Naturally, the economies resulting from combination should increase earnings greatly beyond the point reached when each unit was operating separately; this means, therefore, that past earnings may in no way indicate the possibilities for the securement of future earnings.

Means Used For Paying Off Interests.—In general, the methods used for paying off the interests coming into a proposed combination will depend upon:

1. The nature of the business.
2. The attitude of those who are interested in the combination.
3. The enthusiasm displayed by the promoter.

The possibilities, however, will involve a combination of some of the following:

1. Bonds.
    a. For net assets—not advised, as fixed charges will be high.
    b. For tangible assets.
    c. For fixed assets.
2. Preferred stock.
    a. For net assets.
    b. For intangible assets.

   c. For working capital.
3. Common stock.
   a. For good-will.
   b. For the additional profits expected as the result of the combination.
4. Cash.
   a. Seldom used except to take up odd amounts remaining overdue to use of one of the above bases.

Illustrative Methods of Determining Capitalization—Good-will.—When a business is paid for in the stock of the acquiring company, the amount of stock to be given must be determined upon an equitable basis. And as was indicated above, two elements of importance must be taken into consideration in this connection:

1. Fair value of the net assets from the viewpoint of a going concern.
2. Earning capacity.

In discussing this topic further, it seems expedient at this point to make a division as follows:

1. Issue of one class of stock.
2. Issue of two classes of stock.

The first consideration below will be where one class of stock is used only.

After the net assets have been valued upon what is considered to be a fair basis, whether by appraisal or by ordinary mutual agreement, stock of an equal amount in par value should be allotted therefor as the purchase price. Next, the earning power must be determined in order to issue more stock. In this connection, it is necessary first to separate earning power into two portions:

1. Normal earning power, or normal rate of return. This must be done by agreement, after which the rate will be applied against the stock set aside for the net assets, to determine the annual dividend return therefrom or thereon.
2. Excess earning power. The remainder of the net earnings, after eliminating dividends as in (1), covering net assets, is used as a basis for calculating what amount of stock shall be given for this excess earning power. The asset value created by such excess earnings is called "good-will," inas-

much as the new company has taken over a concern which is established. Under such a condition, the good-will asset must be legitimate; hence, stock may be issued for it.

The valuation of the good-will asset for stock allotment has been indicated above, but is recapitulated here, as to methods of valuation, as follows:

1. Certain number of years' purchase of total profits, preferably the average of a number of years, in order that normal conditions may be approached.
2. Certain number of years' purchase of total profits in excess of the agreed-upon normal rate. Again, preferably, the average of a number of years should be taken, rather than that of the last two or so.
3. Capitalization of gross income.
4. Capitalization so that each unit will receive the same earnings after the combination as before. From the original profits of each concern there would be deducted the agreed dividend rate on net assets. The remainder then is capitalized at the agreed dividend rate. To this result would be added the capital allotted previously in order to determine the total capital. And, at the agreed rate of return, the income upon the total capital, as above, will equal the same amount as before the combination.

Methods (2) and (4) are preferred to (1) and (3), in that the distribution seems more equitable thereunder.

Illustrative Problem.—Consider the following C. P. A. problem and the writer's solution as illustrative of the preferred methods above indicated.

Brown & Jones are extensive dealers in plumbers' supplies, and are located in Philadelphia; Smith & Rogers are conducting a similar business in Pittsburg, and James Watterson, of Harrisburg, Pa., is a manufacturer of an improved valve and nozzle as well as several other articles, all of which are used in the plumbing trade.

The territory covered by Brown & Jones and by Smith & Rogers overlaps to some extent, and causes a sharp competition. They are both extensive customers of Watterson.

Brown & Jones have assets consisting of cash accounts and merchandise amounting to $218,380.00, and store fixtures, etc., worth $4,500.00. Their liabilities, consisting of current accounts for purchases are $7,629.40, of which $2,468.00 is owing to Watterson. During the past three years their business was: Gross, $739,555.30, $850,417.84, and $1,016,228.54, respectively, while the net profits were for the same years: $49,411.20, $63,619.12, and $85,342.90.

Smith & Rogers have quick assets of $195,620.30 and fixtures valued at $6,300.00. Their liabilities are: Bank loans, $40,000.00; bills payable for merchandise, $24,673.00, all in favor of Watterson; accounts payable, $18,794.28, of which they owe to Watterson, $6,287.40. During the past three years their gross business was $535,260.18, $601,341.74, and $567,-214.96, and the net profits before payment of interest on loans were $46,-317.46, $47,934.68, and $39,184.72.

James Watterson has quick assets of $108,496.54, a plant comprising real estate, buildings and equipment worth $76,453.83, clear of encumbrances. His liabilities consist of accounts payable $26,465.34. His sales for the past three years were $204,186.32, $230,419.28, and $248,781.20, and his net profits were $30,847.15, $35,620.96, and $42,208.41.

These three concerns are desirous of consolidating their business, and want to form a corporation for that purpose. You are asked to prepare an equitable plan for the acquisition of these properties under which payment will be made in stock of the new company. In doing this, show specifically the valuation you place upon each business and your method of arriving thereat, together with your reasons therefor.

Prepare a balance sheet showing the assets and liabilities of the new company.

Solution 1.—This solution follows the first method shown above, based upon a two years' purchase of the average profits for the three years concerning which the actual profits are given. The solution, so far as capitalization is concerned, is contained in the following working statement. Further, the Balance Sheet showing the assets and liabilities of the new company may be prepared readily from the facts shown in this working statement.

Solution No. 1—Working Statement

Debits	Brown & Jones	Smith & Rogers	James Watterson	Total	Eliminate	Net Total
Quick Assets,	$218,380.00	$195,620.30	$75,068.14	$489,068.44		$489,068.44
Due from Brown & Jones,			2,468.00	2,468.00	$ 2,468.00	
Due from Smith & Rogers,			30,960.40	30,960.40	30,960.40	
Plant and Property,			6,453.83	76,453.83		76,453.83
Fixtures,	4,500.00	6,300.00		10,800.00		10,800.00
Total Debits,	$222,880.00	$201,920.30	$184,950.37	$609,750.67	$33,428.40	$576,322.27
Credits						
Bank Loans,		$ 40,000.00		$ 40,000.00		$ 40,000.00
Bills Payable—Due Watterson,		24,673.00		24,673.00	$24,673.00	
Accounts Payable—Regular,	$ 5,161.40	12,506.88	$26,465.34	44,133.62		44,133.62
Accounts Payable—Due Watterson,	2,468.00	6,287.40		8,755.40	8,755.40	
Capital,	215,250.60	118,453.02	158,485.03	492,188.65		492,188.65
Total Credits,	$222,880.00	$291,920.30	$184,950.37	$609,750.67	$33,428.40	$576,322.27
Net Profits—Last Three Years:						
First Year,	$ 49,411.20	$ 46,317.46	$ 30,847.15	$126,575.81		
Second Year,	63,619.12	47,934.68	35,620.96	147,174.76		
Third Year,	85,342.90	39,184.72	42,208.41	166,736.03		
Total Profits,	$198,373.22	$133,436.86	$108,676.52	$440,486.60		

Average per Year,	$ 66,124.41	$ 44,478.95	$ 36,225.51	$146,828.87
Good-will—Two Years' Purchase,	$132,248.82	$ 88,957.90	$ 72,451.02	$293,657.74
Net Assets (as above),				$492,188.65
Good-will (as above),				293,657.74
Anticipated Capitalization,				$785,846.39

Solution 2.—The first solution cannot be called a logical one inasmuch as no consideration at all is given to normal profits. In the present solution, normal profits are deducted at once. The normal rate of profit assumed as agreed upon is taken as 8 per cent. In the examination room the first solution probably would be the only one possible inasmuch as therein no assumptions ought to be made; the facts given in a problem should be used as they stand. In solutions 2 and 3, certain assumptions must be made since the problem is incomplete as to information given.

Solution No. 2—Working Statement

	Brown & Jones	Smith & Rogers	James Watterson	Total
Invested Capital, per previous working statement,	$215,250.60	$118,453.02	$158,485.03	$492,188.65
Normal Profit, 8 per cent on invested capital,	$ 17,220.05	$ 9,476.24	$ 12,678.80	$ 39,375.09
Average Profits per Year, per previous working statement,	$66,124.41	$44,478.95	$36,225.51	$146,828.87
Normal Profit (as above),	17,220.05	9,476.24	12,678.80	39,375.09
Profits in Excess of Normal	$48,904.36	$35,002.71	$23,546.71	$107,453.78
Two Years' Purchase, representing Good-will,	$97,808.72	$70,005.42	$47,093.42	$214,907.56
Net Assets, per previous working statement,				$492,188.65
Good-will (as above),				214,907.56
Anticipated Capitalization,				$707,096.21

Solution 3.—The third method of capitalization, that of capitalizing gross income, cannot well be illustrated by the problem in hand unless a certain assumption be made relative to the income capitalization. This will be 20 per cent. The proposed capitalization is $1,226,331.65.

	B & J	S & R	J. W.	Total
Net assets and capital,	$215,250.60	$118,453.02	$158,485.03	$492,188.65
Average yearly income,	66,124.41	44,478.95	36,225.51	146,828.87
Profit percentage,	30.719%	37.549%	22.857%	
		Distribution of Stock		
Net assets,	$215,250.60	$118,453.02	$158,485.03	$ 492,188.65
Income at 20 per cent	330,622.00	222,394.00	181,127.00	734,143.00
Total,	$545,872.60	$340,847.02	$339,612.03	$1,226,331.65

Since the total income is $146,828.87, as a yearly average, the rate of income will be 11.973 per cent. This would be distributed about as under:

Brown & Jones,	11.973% of	$ 545,872.60	$ 65,357.32	
Smith & Rogers,	11.973% of	340,847.02	40,809.81	(discrepancy
J. Watterson,	11.973% of	339,612.03	40,661.74	adjusted here)
		$1,226,331.65	$146,828.87	

The result upon the income hereunder as compared to previously operating alone, might be shown as follows:

	Previous	Contemplated	Decrease	Increase
Brown & Jones,	$ 66,124.41	$ 65,357.32	$ 767.09	
Smith & Rogers,	44,478.95	40,809.81	3,669.14	
J. Watterson,	36,225.51	40,661.74		$4,436.23
	$146,828.87	$146,828.87	$4,436.23	$4,436.23

Naturally, hereunder, certain objections are noticed, especially in that, by operating alone, two of the concerns will make more than under the new order of things.

Solution 4.—Assume, again, that 8 per cent is a normal profit return. In the first place, stock will be allotted for net assets as before:

B & J	S & R	J. W.	Total
$215,250.60	$118,543.02	$158,485.03	$492,188.65

Next, the further calculation will be about as follows:

	Brown & Jones	Smith & Rogers	James Watterson	Total
Average yr. profits,	$66,124.41	$44,478.95	$36,225.51	$146,828.87
Normal profit—8 per cent on net assets,	17,220.05	9,476.24	12,678.80	39,375.09
Balance, to be capitalized,	$48,904.36	$35.002.71	$23,546.71	$107,453.78
Capitalized at 8 per cent,	$611,304.50	$437,533.80	$294,333.88	$1,343,172.18
Capital for net assets,	215,250.60	118,453.02	158,485.03	492,188.65
Total capital,	$826,555.10	$555,986.82	$452,818.91	$1,835,360.83
8 per cent return	$ 66,124.41	$ 44,478.95	$ 36,225.51	$ 146,828.87

Hereunder, the return will be the same after the merger as before. Hence, duplication of profits will be avoided and the objections of solution No. 3 are eliminated.

Under the above four solutions or methods of determining capitalization, the issue of only one class of capital stock has been contemplated; hence, only one rate of return has been used. However, it would seem to be more in order to find that where a combination is proposed, two classes of stock will be issued,—preferred and common,—preferred stock being issued for net assets and common stock for the so-called good-will.

Where two classes of stock are in order, it would seem that two general methods exist in determining capitalization:

1. Capitalize good-will at an agreed rate on basis of total profits. This method is subject to criticism in the same way as the third one above explained.
2. Capitalize the excess profits after dividends upon the preferred stock have been considered. This would seem to be the preferable method. It is illustrated in connection with the following C.P.A. problem and solution.

Problem.—A company is incorporated to purchase by an issue of preferred and common capital stock three concerns, A, B and C, doing the

same class of business. It is found that the assets (by actual valuation), the liabilities, and the average annual net profits of each concern for the past five years, are as follows:

	A	B	C
Assets as valued,	$100,000	$60,000	$150,000
Liabilities,	30,000	20,000	50,000
Annual net profits, average, five years,	10,000	15,000	8,000

It is required to know what amount of stock of the new company should be allotted to each concern as equitable compensation for net assets and good-will, and the matter is referred to you for report. What should be the amount of the capital stock of the new company, and how should it be apportioned to A, B and C?

Solution.—Before presenting a tabulated solution to the above problem, two assumptions must be made, about as follows:

1. Assume the preferred stock to be issued at 6 per cent.
2. Assume the capitalization of good-will to be on the basis of 20 per cent.

Determination of Net Assets—Preferred Stock

	A	B	C	Total
Assets as valued,	$100,000	$60,000	$150,000	$310,000
Liabilities,	30,000	20,000	50,000	100,000
Net assets, for which preferred stock to be issued,	$ 70,000	$40,000	$100,000	$210,000

Capitalization of Excess Profits—Common Stock

	A	B	C	Total
Average annual net profits,	$10,000	$15,000	$8,000	$33,000
Preferred dividends—6 per cent,	4,200	2,400	6,000	12,600
Excess remainder,	$ 5,800	$12,600	$2,000	$20,400
Capitalization of remainder at 20 per cent,	$29,000	$63,000	$10,000	$102,000

A study of the above tabulation will show that 6 per cent dividends upon the preferred stock and 20 per cent on the common stock will provide the same income after as before. As a matter of fact, after the preferred dividends of 6 per cent have been deducted, the capitalization basis of the remaining average income matters not, since the proportion will be the same.

Summary of Stock Allottment

	A	B	C	Total
Preferred stock,	$70,000	$ 40,000	$100,000	$210,000
Common stock,	29,000	63,000	10,000	102,000
Total,	$99,000	$103,000	$110,000	$312,000

Illustrative Consolidation Problem—General Entries.—To illustrate the general book entries covering a consolidation, the following problem and solution are offered:

Problem.—The Smith Manufacturing Company, the Jones Manufacturing Company, and F. McDonald, Inc., amalgamate their interests on January 1, 1920, and organize the Consolidated Manufacturing Company, with an authorized capital stock of $2,000,000.00, divided into 20,000 shares, par value $100.00.

The individual balance sheets of each respective firm, taken to represent the exact and true condition of affairs at that date are as follows:

SMITH MANUFACTURING COMPANY

Assets			
Plant and machinery,		$ 50,000.00	
Real Estate and buildings,		40,000.00	
Furniture and equipment,		20,000.00	
Horses and trucks,		10,000.00	$120,000.00
Inventories:			
Raw material,	$19,000.00		
Finished goods,	32,000.00		
Supplies,	4,000.00	$ 55,000.00	
Bills receivable,		9,000.00	
Accounts receivable,		12,000.00	
Cash,		7,000.00	83,000.00
			$203,000.00
Liabilities			
Mortgage on plant (5 per cent interest),		$ 25,000.00	
Bills payable,		14,000.00	
Accounts payable,		24,000.00	$ 63,000.00
Capital and Surplus			
Capital stock,		$125,000.00	
Surplus,		15,000.00	140,000.00
			$203,000.00

JONES MANUFACTURING COMPANY

Assets		
Plant, equipment and machinery,	$100,000.00	
Real estate and buildings,	250,000.00	
Horses and wagons,	18,000.00	
Office equipment,	2,000.00	$370,000.00
Inventory of finished goods, materials, goods in process, and supplies,	$118,000.00	
Bills receivable,	22,000.00	
Accounts receivable,	119,000.00	
Loans receivable,	16,000.00	
Cash,	30,000.00	305,000.00
		$675,000.00

Liabilities

Mortgage on buildings,	$100,000.00	
Interest accrued on above,	1,125.00	$101,125.00
Bank loans,	$ 14,500.00	
Bills payable,	67,275.00	
Accounts payable,	47,100.00	128,875.00
Dividends payable,		30,000.00
Capital stock,	$300,000.00	
Surplus,	87,000.00	387,000.00
Reserve for depreciations,	$ 22,500.00	
Reserve for bad debts,	5,500.00	28,000.00
		$675,000.00

F. McDONALD, INCORPORATED

Assets

Plant and machinery,	$ 75,000.00	
Inventories,	76,500.00	
Accounts receivable,	82,500.00	
Cash,	66,000.00	$300,000.00

Liabilities

Accounts payable,		$111,000.00
Capital,	$150,000.00	
Surplus,	39,000.00	189,000.00
		$300,000.00

The average yearly net profits of each respective firm, for a period of five years, have been as follows:

Smith Manufacturing Company,	$ 19,020.00
Jones Manufacturing Company,	47,400.00
F. McDonald. Incorporated,	15,120.00
	$81,540.00

Of the total capitalization, $1,600,000.00 is to be issued to the incorporators for the properties and good-will to be sold to the new company after the assumption of all liabilities of each respective firm; $400,000.00 to be offered for sale to the public.

The 16,000 shares issued and outstanding with the vendors are to be allocated among them as follows:

a. Each vendor firm to receive an amount of stock equal to its net assets (including cash).

b. Each vendor firm to receive also additional stock equal to its net earnings, capitalized at 6 per cent, after deducting from the amount to be capitalized 6 per cent of its original capital.

c. Such stock as is then unalloted to be divided equally, all firms share and share alike.

Requirements:

a. Closing entries for the books of the Jones Manufacturing Company.

b. Opening entries for the books of the Consolidated Manufacturing Company.

c. Opening balance sheet of the Consolidated Manufacturing Company.

d. Statement showing the amount of stock each firm is to receive.

Solution—No comment concerning this solution is deemed necessary inasmuch as the presentation is believed sufficiently self-explanatory.

Requirement (a)

Consolidated Manufacturing Company (vendee),	$1,165,000.00	
To—Plant, equipment and machinery,		$100,000.00
Real estate,		250,000.00
Horses and wagons,		18,000.00
Office equipment,		2,000.00
Inventory,		118,000.00
Bills receivable,		22,000.00
Accounts receivable,		119,000.00
Loans receivable,		16,000.00
Cash,		30,000.00
Good-will,		490,000.00
To record sale of above assets, plus good-will to Consolidated Manufacturing Company, as per bill of sale on file, dated 1/1/20.		
Mortgage on buildings,	100,000.00	
Interest accrued on mortgage,	1,125.00	
Bank loans,	14,500.00	
Bills payable,	67,275.00	
Accounts payable,	47,100.00	
Dividends payable,	30,000.00	
To—Consolidated Manufacturing Co. (vendee),		$260,000.00
To close and transfer all liability accounts of this company to the Consolidated Manufacturing Company taken by latter in part consideration for the assets purchased.		
Reserve for depreciation,	$22,500.00	
Reserve for bad debts,	5,500.00	
To—Consolidated Manufacturing Co. (vendee),		$28,000.00
To transfer above reserves.		
Consolidated Manufacturing Co. (stock),	$877,000.00	
To—Consolidated Manufacturing Co. (vendee),		$877,000.00

	Debit	Credit
To record receipt of 4,900 shares of the capital stock of the Consolidated Manufacturing Co., in final payment for assets transferred.		
Good-will,	$490,000.00	
To—Surplus,		$490,000.00
To close.		
Capital stock,	$300,000.00	
Surplus,	577,000.00	
To—Consolidated Manufacturing Co. (stock),		$877,000.00
To record distribution of stock in Consolidated Manufacturing Co. to stockholders of this Company in exchange for stock of this company held by them.		

Requirement (b)

CONSOLIDATED MANUFACTURING COMPANY

Incorporated under the laws of the

State of.............., with an

Authorized Capital of

$2,000,000.00

Divided into 20,000 shares of $100, par

	Debit	Credit
Subscriptions to capital stock,	$1,600,000.00	
Unsubscribed capital stock,	400,000.00	
To—Capital stock,		$2,000,000.00
To record authorized issue, and subscription to 16,000 shares.		
Plant, good-will and sundry assets,	$2,062,000.00	
To—Sundry vendors,		$2,062,000.00
To record the transfer to this company of all right, title, and interest of above vendors in all assets set out in bill of sale under date of 1/1/20.		
Sundry vendors,	$434,000.00	
To—Sundry liabilities,		$434,000.00
To record assumption by this company of the above as set out in said bill of sale.		
Sundry vendors,	$28,000.00	

To—Reserve for depreciation,		$22,500.00
Reserve for bad debts,		5,500.00
To record reserves transferrea to offset valuations of assets as booked above to which reserves apply.		
Sundry vendors,	$1,600,000.00	
To—Subscriptions to capital stock,		$1,600,000.00
To record payment and cancellation of subscription by transfer of above mentioned assets.		
Plant and machinery,	$225,000.00	
Real estate,	290,000.00	
Horses and wagons,	28,000.00	
Furniture and equipment,	22,000.00	
Inventories (per detail schedule),	249,500.00	
Bills receivable,	31,000.00	
Accounts receivable,	213,500.00	
Loans receivable,	16,000.00	
Cash,	103,000.00	
Good-will,	884,000.00	
To—Plant, good-will and sundry assets,		$2,062,000.00
To spread above assets upon the books in detail.		
Sundry liabilities,	$434,000.00	
To—Mortgage payable,		$125,000.00
Bills payable,		81,275.00
Accounts payable,		182,100.00
Bank loans,		14,500.00
Interest accrued on mortgage,		1,125.00
Dividend of Jones Co.—payable,		$30,000.00
To raise above liability accounts on books in detail.		

Requirement (c)

CONSOLIDATED MANUFACTURING COMPANY

Balance Sheet

January 1, 1920

Assets

Real estate,	$290,000.00	
Plant and machinery,	225,000.00	
Furniture and equipment,	22,000.00	
Horses and wagons,	28,000.00	
	$565,000.00	
Less: Reserve for Depreciation,	22,500.00	$ 542,500.00
Inventories,	$249,500.00	

Bills Receivable,	$ 31,000.00		
Accounts Receivable,	213,500.00		
	$244,500.00		
Less: Reserve for Bad Debts,	5,500.00	239,000.00	
Loans Receivable,		16,000.00	
Cash,		103,000.00	607,000.00
Good-will,			884,000.00
			$2,034,000.00

Liabilities

Mortgage Payable,		$ 125,000.00
Bills Payable,	$ 81,275.00	
Accounts Payable,	182,100.00	
Bank Loans,	14,500.00	
Jones Company, Dividend Payable,	30,000.00	
Interest Accrued,	1,125.00	309,000.00
Capital Stock Authorized,	$2,000,000.00	
Less: Unissued,	400,000.00	1,600,000.00
		$2,034,000.00

Requirement (d)

	Smith	Jones	McDonald
Net assets,	$140,000.00	$387,000.00	$189,000.00
Good-will,	192,000.00	490,000.00	102,000.00
One-third stock remaining unallotted,	33,333.33	33,333.33	33,333.34
Total,	$365,333.33	$910,333.33	$324,333.34

Summary:	
Smith,	$ 365,333.33
Jones,	910,333.33
McDonald,	324,333.34
Total,	$1,600,000.00

CHAPTER XIII

PARENT VERSUS HOLDING COMPANIES; CONSOLIDATED STATEMENTS

Introduction.—Accounting principles are fixed and constant, whereas, as time passes, new forms of business develop, each of which has certain features peculiar to itself. And because of these peculiarities, the general principles of accounting must be applied thereto in such a manner that the financial statements adopted will present a clear-cut picture and record not disturbed by any of the unusual items encountered. Naturally, the method of application depends upon the conditions encountered in any particular case, and the type of development reflected therein. This is true especially as to consolidated statements; these cannot be understood properly without clearly comprehending the nature of the organization or organizations the results of whose operations and activities are set forth best in statements designated as "consolidated."

In the last chapter an attempt was made to formulate clearly a distinction between a merger and a consolidation, each of which has features peculiar to itself; consolidated statements are not concerned with these two types of organization. Two other classes were mentioned above concerning which nothing as yet has been said,—the parent company and the holding company. It is in connection with these latter two that consolidated statements are used. Therefore, as a point of commencement for the work of the present chapter, it seems necessary first to distinguish between a parent company and a holding company, a distinction more financial than legal, and one not always understood. To this end, it appears appropriate to summarize briefly the distinctions drawn already and to add thereto the information necessary to secure the proper viewpoint relative to the accounting principles used in this chapter; by so doing, confusion ought not to

result as to understanding the exact place in corporate accounting at which consolidated statements may appear.

Mergers and Consolidations Versus Parent and Holding Companies.—In accord with the idea mentioned in the introduction above, the following information is presented in outline form:

1. Mergers and consolidations.
   a. In general.
      i. Physical properties are dealt with. This comprehends that the plants and other property plus the liabilities of the merging or consolidating companies are taken over. The new organization acquires the net assets of all the other companies, after which the latter are dissolved.
   b. Merger.
      i. The complete amalgamation of the constituent companies into a single corporation, the latter being one of the constituent companies. No new corporation is formed. One company acquires title to the property of another company.
   c. Consolidation.
      i. The complete amalgamation of the constituent companies into a new corporation formed for the purpose of taking over the net assets and businesses of the constituent companies.
2. Parent and holding companies.
   a. In general.
      i. The constituent companies are controlled through the purchase of sufficient stock so that control will be secured through a majority vote in the stockholders' meetings. Each controlled company, as in the past, retains its separate corporate existence and operates as a distinct organization.
   b. Parent company.
      i. Both properties and securities are dealt with. A parent company arises because of one of two things:
         (1) It organizes a new subsidiary corporation

which is controlled through ownership of a majority of the voting stock, or

(2) It purchases the stock of one or more corporations, which thereby become its subsidiaries.

ii. A parent company is an operating company doing business under its own name; each subsidiary company, also, does business under its own name in lines allied to those of the parent company. Example: In the problem previously discussed, that of the American Pin Company and the Bronx Pin Ticket Company, before the merger was consummated, there existed an example of a parent company organization, in that the American Pin Company was an operating company and at the same time held the controlling interest in the stock of the Bronx Pin Ticket Company, its subsidiary. The Bronx Pin Ticket Company did business under its own name.

c. Holding company.

i. Only securities are dealt with.

ii. A holding company is not an operating company. Its principal assets are the stocks of the corporations it controls through ownership of a majority of the voting stock. Under this method, a holding company is the financial organization and the subsidiaries are manufacturing or selling organizations. In general, it may be said that the only assets a holding company has, other than the stock of subsidiaries, would be cash and office equipment; it may not even have the asset of office equipment if it uses the office of one of its subsidiaries as a place of business.

Parent Company Accounting.—Once more it seems desirable to return to the illustration made use of above. When the American Pin Company purchased all of the stock of the Bronx Pin Ticket Company, how was the purchase thereof recorded on the books of the American Pin Company? The purchase of all the stock of the Bronx Pin Ticket Company had the effect of

purchasing that company, but the fact remains that this actually did not happen. The Bronx Pin Ticket Company retained its separate identity, carried on business under its own name, and operated with a separate organization. Therefore, so far as the American Pin Company was concerned, the only entry required on its books would be relative to the stock purchase:

Bronx Pin Ticket Company—Capital Stock,	$57,400.00	
To—Whatever Accounts Required Credit for Payment,		57,400.00

The stock purchased would be taken up at the price actually paid therefor, since such price is presumed to represent the actual value of the purchased stock.

Holding Company Accounting.—If the American Pin Company did not operate its own manufacturing plant, but merely purchased the stock of the Bronx Pin Ticket Company in order to control the latter and, if the stock of the American Pin Company were owned by the officers of the Bronx Pin Ticket Company, a clear case of a holding company would exist. The accounting entries required to reflect this stock ownership upon the books of the American Pin Company would be exactly the same as those shown above. But, as already indicated, a marked difference would exist between the Balance Sheets. The items of plant, machinery, equipment, accounts receivable, and even cash, as shown on a parent company's Balance Sheet would not be found upon the Balance Sheet of a holding company.

However, certain accounts are peculiar to a holding company as will be noticed later, particularly in connection with Consolidated Balance Sheets; these result from intercompany transactions:

1. Assets.
    - a. Investments in subsidiaries.
    - b. Advances to subsidiaries.
2. Liabilities.
    - a. Advances from subsidiaries.

Again, from the standpoint of the subsidiary company, in agreement with the above, the following accounts may appear:

1. Assets.
    - a. Advances to holding company.

2. Liabilities.
    a. Advances from holding company.

    Outside of these possible changes, the accounts of the subsidiary would remain as before. There would be, however, a change required on the Stock Ledger, looking toward recording the transfer of shares from one set of stockholders to another.

If one considers a clear case of a holding company, the latter being merely a financial organization, without any manufacturing or selling activity, the holding company's chief source of income would be from the dividends of the subsidiaries. Its principal expenses would be on account of its administrative staff. Sometimes, these expenses must be paid by the subsidiaries being prorated among them as cost of services rendered by the holding company to the subsidiaries.

The holding company's investment in its subsidiaries is one which practically has the character of a fixed asset, because of the concentration of control. A holding company exists to own and control one or more subsidiaries and operate through it or them. Again, if this controlling interest is to be sold, it must almost necessarily be sold in one lump; to retain a large holding without retaining control might be disastrous, and if a sale were attempted through the regular market channels at one time the market would be demoralized if a market could be found therefor.

In the discussion of the holding company down to this point, a clear case of a holding company has been assumed, namely, one that has purchased *all* the stock of its subsidiaries, and which operates entirely as a financial organization. In practice, however, in states where the law permits holding companies, when holding company accounting is mentioned, one has in mind a set of conditions usually somewhat at variance with the above idea. Mention must be made of such fact at this time in order that the proper viewpoint may be secured for the discussion of consolidated statements, in order that the latter eventually may be prepared properly. The points at variance with the above discussion may be indicated about as follows:

1. Only a preponderating portion of the stock of the under-

lying companies is held by the so-called holding company.

2. The so-called holding company may be an operating company in which event it is not entirely a financial organization.

But in any event, the pure holding company, or the hybrid, completely controls the others, known as underlying or subsidiary companies, to the end that, because it can elect whatever directors and officers it chooses, it can dictate the policy to be pursued. Likewise, the principles of accounting involved in the discussion that follows remain the same whether working with one form or with the other. In other words, the term "holding company" as contemplated herein in connection with consolidated statements, is used in the more general sense as referring to any type of combination in which one corporation exercises stock control over other corporations.

One corporation may hold the stock of another corporation and, in turn, this other corporation may hold the stock of a third. As a matter of fact, no limit exists as to the extent of these holdings except that set out in the certificate of incorporation or in the law. Regardless of the number of inter-ownerships, this holding function is a positive one just so long as each holding corporation controls a majority of the outstanding capital stock of the other or others. There may be, or there may not be, a minority interest, an interest held by outsiders. If so, these outsiders, concerning whom more will be said later, have little, if any, power in management; but they are entitled to proportionate dividend rights.

Consolidation of Balance Sheets Versus Consolidated Balance Sheets.—When a proposition is fomented looking toward the consolidation of several companies, it is necessary first to secure a sort of bird's-eye view of the assets and liabilities to be involved. This is accomplished by gathering them together in a simple way into the form of a Balance Sheet, such statement being titled a "Consolidation of the Balance Sheets of Companies X, Y, Z," as on a certain date. The method of compiling this Balance Sheet is a simple one involving merely the gathering into one amount the assets and liabilities of each of the consolidating units. If X, Y, and Z have each a capital

stock of $500,000.00, for example, the capital stock of the three companies combined, naturally, will be $1,500,000.00. In other words, the promoter of the combination desires to know how the consolidation will work out and what the probable condition of the contemplated combination will be; therefore, he totals all the items on each individual Balance Sheet into a combined statement which, when completed, shows the condition of the companies as if they were consolidated. As an illustration of this, note the compilation of the "total" column amounts in the working sheets for the illustrative problems later in the present chapter.

On the other hand, a Consolidated Balance Sheet is prepared periodically after the combination has been formed to reflect the financial position of the whole group of affiliated companies considered as a whole,—the exact status of the assets which the owners of the stock control, and of the liabilities that eventually must be met out of the assets. The subsequent portion of this chapter is devoted to a discussion of the Consolidated Balance Sheet, primarily. It is plain that the effect of this procedure is to substitute the net assets of each subsidiary in lieu of the asset of investment in subsidiary company or companies, to the end that the Consolidated Balance Sheet contains only actual property and debts due from or to outsiders.

Law and Accounting as Related to Consolidated Statements.—Under the law, the ownership of the stock of a company does not mean ownership of its assets. If Jones owns stock in a corporation, he has no rights in its assets beyond an equitable one. He can transfer all or part of his holdings to some one else, but he cannot ask the corporation whose stock he holds to redeem it and give back to him the assets he handed over to the company in exchange therefor. Likewise, if Jones should be replaced by a corporation, the latter would be in no better a position relative to what has been mentioned above than Jones; the company holding the stock, replacing Jones, would be in the same position as a stockholder as was Jones.

Again, no stockholder has any right to corporate profits, beyond his equitable right thereto as already indicated, until after the board of directors has declared a dividend. This is true regardless of the manner in which the surplus has been

accumulated. Therefore, from the viewpoint of a stockholder, he cannot consider anything as income from corporate holdings until he has been actually given the right thereto by board action. This is true whether the stockholder owns 1 per cent or 100 per cent of the outstanding capital stock.

As a result of the above, under the law, if a Balance Sheet be prepared of the stockholder's business, such statement should be prepared in conformity to the ideas expressed in the last two paragraphs.

However, from the accounting viewpoint, any statement should present facts in the clearest possible way and, as a result, an accountant, unless absolutely prohibited by law from so doing, may, and should, go beyond the legal boundaries as recorded and make use of methods which he knows are correct according to accounting principles. The time eventually will come when the law must recognize established custom or practice, provided this is sufficiently well established as a matter of public opinion. If the accountant, therefore, uses correct principles and methods in his work, it matters but little whether current legal opinions support or do not support him.

Therefore, although consolidated statements have no basis under present laws, accountants are justified in preparing them since they are in accord with the established principles of his science, and are not absolutely prohibited by law.

A financial statement must express the truth in so far as is humanly possible, whether it pertains to financial condition or to operation. And since the usual types of these statements do not truly state the facts which are of interest and of importance to the stockholders in organizations of the holding company type, an accountant must present this information so that the facts will be disclosed properly. Legally, each subsidiary organization is separate and distinct from that of each other subsidiary organization and from the holding company which controls all of them. Practically, however, from the viewpoint of the holding company stockholders, this legal separation amounts to but little. The holding company stockholders care nothing at all about the relation existing either between the various subsidiaries or between the subsidiaries and the holding company. To them, the holding company plus its subsidiaries con-

stitutes one group, and to them, the relation this group has to outsiders alone is of primary importance. Therefore, since the usual forms of the Balance Sheet and of the Profit and Loss Statement are deficient in showing the exact relation existing between the group of companies and the outside world (creditors, bondholders, and minority stockholders), these statements must be prepared in such a manner that the indicated deficiency will be eliminated. Hence, the Consolidated Balance Sheet and Consolidated Income Statement.

Information Not Disclosed Except By Use of Consolidated Statements.—If a Balance Sheet and Statement of Profit and Loss be prepared in usual form for the holding company only, as alone from the books of the holding company, nothing would be indicated therein beyond its own particular activities, plus dividends received from the subsidiaries and interest earned on bonds of the subsidiaries. From the standpoint of the group as a unit, many items of importance would not be disclosed by such statements, as:

1. One subsidiary may have no business whatsoever of a profitable nature, whereas, another may have plenty of profitable business, each of these two possibilities being due to manipulation by the holding company.
2. The holding company might hide its own losses by covering them up with dividends received from the subsidiaries.
3. The holding company might do a profitable business, but one or more subsidiaries might have continued operation losses.
4. Dividends received by the holding company from a subsidiary may in no way represent income; they may have been declared out of capital.
5. The holding company may have received no dividends from a subsidiary, because of non-action by the directors, even though the subsidiary may have had a most profitable year.
6. Inter-company transactions may be large in amount, yet from the viewpoint of the group as a whole, they may represent nothing actually in the way of either receivables or payables.
7. The holding company may take up the dividends from

profitable subsidiaries and forget taking up losses suffered by the unprofitable subsidiaries.

Since all of these factors are not in accord with accounting principles, their non-recognition in statement preparation may cause a statement to be misleading if not actually fraudulent. The effect thereof would be seen in the market fluctuation of the price of the stock of the holding company. As to any one of these possibilities of misstatement, the law actually may not be violated even though, as a result thereof, the general public easily might be defrauded.

As a final point under this section, it seems well to crystallize the conditions under which such statement would be used:

1. The Consolidated Balance Sheet is a Balance Sheet of the holding company only when the latter owns the entire capital stock of its subsidiaries.
2. It should never be used unless it presents a more correct picture of facts than does the regular Balance Sheet of the holding company.
3. If the holding company has a controlling interest in the subsidiaries, the Consolidated Balance Sheet usually will be the better way by means of which to show financial condition.
4. If the holding company has no controlling interest in the subsidiaries, its use is questionable since the holding company may not control the policies of the subsidiaries.

Carrying Investments at Actual Value.—Since a holding company is a stockholder in its subsidiary companies, it has, as such stockholder, an undivided interest in the net assets of its subsidiaries equal to the amount of its stock holdings. Such investments should be carried at actual worth.

If such investments be carried at cost, conservatism will result provided such cost is equal to actual value. Although cost and value may be in agreement at the time of purchase, the two will never be in agreement for any length of time; value is a fluctuating quantity, going up and down as conditions change. If value drops, cost will be too high; if value increases, cost will be too low.

If the value of such an investment depreciates, the cost could be scaled down to the same level, and no one then well could

say, theoretically at least, that conservatism is not practiced. However, upon what basis shall the scaling be made? One person's word may be as good as another's, with the result that the ultimate value decided upon will not be the same if persons with differing qualifications have this task entrusted to them.

But assume that the persons entrusted with such revaluation are qualified for the task in a general way. What difficulties might they encounter which will hinder them in digging out the actual truth? Suppose they decide to revalue upon the basis of the market price of the stock. What might occur? Every one knows that market values are affected by many outside conditions in no way related to actual facts. If, then, the market value of a particular stock is taken as a basis for revaluation, such revaluation may be absolutely incorrect.

Again, suppose these men realize the possible fallacy indicated above, and, as a result, attempt a revaluation based upon actual conditions. They may be thwarted in their efforts in this direction because of the physical impossibility of performance.

If investments are carried at cost, another disadvantage may result, not indicated above, in that even though the holding company Balance Sheet may disclose the truth insofar as concerns the amount of its capital invested in subsidiaries, the holding company earning account may be at fault in that therein the entire earnings upon such capital may not be shown. In other words, if the accumulated surplus of a subsidiary company is not fully distributed as dividends, the appreciation of such subsidiary company's stock value due to an increase in surplus will not be taken up on the books of the holding company, the result being that the latter's true earnings will be understated.

Lastly, even though the revaluation method be resorted to, further complications might develop. Suppose the subsidiary company has been successful and has accumulated a goodly amount of undistributed profit subsequent to the time the holding company acquired its stock holdings in the subsidiary. How much of such undistributed earnings should be taken up in revaluing the stock holdings? This again may be subject to the criticism of being a personal revaluation rather than one based upon actual fact. Also, if at a later date the subsidiary company surplus is wiped out, the directors of the holding company

may be guilty of having paid dividends out of capital. Increasing the investment must be offset by an increase of surplus, and dividends are paid from surplus. Too great care, therefore, cannot be exercised in preparing consolidated statements.

Inter-company Accounts.—In order to prepare a Consolidated Balance Sheet, all the relations of the constituent companies with each other must be eliminated. If a person has a dollar, it makes no difference, so far as an account with himself is concerned, as to what pocket holds that dollar; but if he has an account for each pocket, he must be careful to record the transfer correctly from one pocket to another. In other words, if Holding Company owes Subsidiary Company $10,000.00, this fact is of no importance from the standpoint of the enterprise as a whole; what was formerly a debt owing by H Company to S Company loses its value when the accounts of the two companies are brought together.

Capital stock, bonds, accounts receivable, accounts payable, notes receivable, notes payable, interest receivable, interest payable, intercompany sales, rent, loans and advances, are examples of accounts that may require elimination in preparing a Consolidated Balance Sheet, to the end that the relation of the enterprise as a whole with outside sources will remain. Any form of Balance Sheet which does not eliminate such intercompany accounts, as indicated already, is greatly misleading in that it does not show the relationship of the unit as a whole to the outside public.

Inter-company Sales.—One particularly interesting feature in connection with inter-company transactions relates to inter-company sales. Frequently, when subsidiaries carry on business as separate entities, they deal and contract with each other as independent enterprises, and sales and transfers between companies are common. Naturally, profits are booked on these transactions which, from the standpoint of the organization as a whole are not profits at all, and must, from that point of view, be eliminated in order that the inventories may be carried at a value that is not inflated. A simple example to illustrate the principles involved is given below:

Problem.—A holding company has subsidiaries consisting of three manufacturing units: Steel mill, tube mill, and bearing factory. The steel mill

puts into process materials in the amount of $300,000.00 at cost; the labor and expense added amount to $200,000.00; the steel mill sales to the tube mill, at market price, amount to $350,000.00, upon which there is a book profit of $60,000.00. The tube mill places these materials into process and adds thereto labor and expense in the amount of $200,000.00; the tube mill sales to the bearing factory amount, at market price, to $500,000.00 upon which there is a book profit to the tube mill of $75,000.00. The bearing factory puts these materials into process and adds thereto labor and expense in the amount of $100,000.00. Upon the basis of the above figures, calculate the establishment inventory at cost.

Solution.—

	Book Values	Eliminate	Net Cost
Steel Mill:			
Purchases from outside,	$300,000.00		$300,000.00
Labor and expense added,	200,000.00		200,000.00
Total cost,	$500,000.00		$500,000.00
Sales to tube mill,	290,000.00		290,000.00
Stock on hand,	$210,000.00		$210,000.00
Book profits, sales to tube mill,	$ 60,000.00	$60,000.00	
Tube Mill:			
Purchases from steel mill,	$350,000.00	$60,000.00	$290,000.00
Labor and expense added,	200,000.00		200,000.00
Total cost,	$550,000.00	$60,000.00	$490,000.00
Sales to bearing factory,	425,000.00(a)	46,325.00	378,675.00
Stock on hand,	$125,000.00	$13,675.00	$111,325.00
Book profits, sales to bearing factory,	$ 75,000.00	$75,000.00	
Bearing Factory:			
Purchases from tube mill,	$500,000.00	$88,675.00	$411,325.00
Labor and expense added,	100,000.00		100,000.00
Total cost,	$600,000.00	$88,675.00	$511,325.00
Inventory Summary:			
Steel Mill,			$210,000.00
Tube Mill,			111,325.00
Bearing Factory,			511,325.00
Total,			$832,650.00

Comment:

(a) Note that 10.9 per cent of the book cost of goods made by the tube mill is because of the profit of the steel mill, and hence not a true cost to the tube mill. ($60,000.00 is 10.9 per cent of $550,000.00). Further will be said concerning intercompany profits under the section of "minority interests."

Profits Earned Prior to Date of Purchase.—The surplus of a subsidiary company accrued prior to the date upon which this company is purchased by a holding company should not be combined with the surplus accrued subsequent to such date, for inclusion upon the Consolidated Balance Sheet. In general, the surplus of a corporation represents the balance of earnings that have accumulated from operations, and which have not been paid out to stockholders. Since a surplus accumulates only as the result of operations, the holding company, prior to its organization, cannot have earned any surplus. Hence, in its consolidated Surplus account, the holding company should carry only the surplus accumulated subsequent to the date upon which the controlling ownership of the subsidiaries was acquired.

Again, since the amount paid by the holding company for the subsidiary company capital stock represents the former's estimate of its equity in the subsidiary company, which is said to be represented by its capital stock and surplus at the moment of the take-over, the value of the capital stock of the subsidiary company must be eliminated from consideration by the holding company; further, the capital stock and surplus must be eliminated from the summarization of the books of the subsidiary company. The Surplus account, after such absorption, cannot appear again as a surplus item upon the Consolidated Balance Sheet.

Further, the subsidiary company's surplus as of the take-over date becomes capitalized to the end that, if distributed as dividends, it must be considered in the holding company accounts as reducing the investment accounts. It is entirely improper to accord an income treatment thereto.

Premium and Discount on Investments.—When a holding company purchases the capital stock of another company, the price paid is assumed to represent the former's estimate of the value of the equity in the subsidiary company's assets. This price may be greater or less than the combined capital stock and surplus of the subsidiary company:

1. If greater. The difference, generally, is assumed to represent the value of the subsidiary company's good-will or other assets not found upon its Balance Sheet. If these items were in evidence thereon, it would be natural to

assume that the cost of the capital stock to the holding company would be equal to the sum of the capital and surplus of the subsidiary company.

2. If less. The difference, generally, is assumed to represent the amount at which the assets of the subsidiary company are overvalued upon its books. In many instances, this difference is buried in the property accounts. Overvaluation may be due to a deficiency in the depreciation reserves.

The above presents the usual viewpoint. However, it seems necessary to indicate other possible interpretations:

1. If the purchase has been made at a premium. Hereunder, such premium may represent:
   a. Good-will (as before).
   b. Accumulated surplus assets.
   c. Discount upon the securities of the holding company issued in payment for securities in the subsidiary company.
2. If the purchase has been made at a discount:
   a. Good-will inflation.
   b. Capital surplus, where actual value at least is par, and outside conditions responsible for the discount.
   c. Set off against premium, where a number of subsidiaries are taken over, some at a premium and others at a discount.
   d. Set off against subsidiary company deficit, where the latter is present. Often it is because of a deficit that the purchase can be made at a discount.

Good-will on the Consolidated Balance Sheet.—Good-will upon the Consolidated Balance Sheet may be said to be the algebraic sum of the good-will items purchased from the subsidiaries by the holding company. If the price paid in cash or stock for the stock of another company exceeds the sum of the par value of the purchased stock plus its proportion of surplus, the excess represents the amount to be charged to the Good-will account upon the Consolidated Balance Sheet. No one can say that a holding company would be willing to pay more for a controlling interest in a constituent company than the latter is worth. The excess paid, therefore, justly may be considered as having been given for good-will.

Again, if a purchase price is paid which is less than the Balance Sheet of the subsidiary shows as at the date of the purchase, one can assume, with reason, that the Balance Sheet figures of the subsidiary are inflated; the discount involved, as a rule, would be a credit to the Good-will account upon the consolidated statement. If, now, one should encounter a condition under which the total credits to Good-will account exceed total charges, a rarity, the excess credit had better be sent to an account which, by its title, will show the amount as not being available for dividend purposes. Such an account might be a "capital surplus" account, or it might be a valuation account since its effect is merely to offset an inflation in the asset values.

The good-will elements thus far considered above relate to purchase only, that which arises at the time a purchase is made, by charging the excess of purchase price over the book value of the capital stock of the companies bought. Another separate and distinct angle of the good-will question arises in connection with the good-will items on the Balance Sheets of each of the subsidiary companies as at the moment they were absorbed by the holding company. These, as was noticed in the last section, are merged frequently with other items of a miscellaneous character under the title of "property." As an example of the handling of good-will, consider the following simple problem and solution.

Problem.—The H Corporation purchased all the capital stock outstanding of the S1, S2, and S3 corporations. The following facts are ascertained concerning these companies purchased:

Company	Good-will	Capital Stock	Surplus	Paid by H
S1	$20,000.00	$100,000.00	$14,000.00	$120,000.00
S2	10,000.00	30,000.00	4,000.00	40,000.00
S3	none	50,000.00	16,000.00	62,000.00

Calculate the amount of good-will to be placed upon the Consolidated Balance Sheet.

Solution.—In solving this problem, it would not seem unwise to take the facts as shown above in scheduled form, rewrite them and set out the conclusions drawn therefrom in separate columns at the right.

Company	Good-will	Capital Stock	Surplus	Price Paid	Price Over	Price Under
S1	$20,000	$100,000	$14,000	$120,000	$6,000	
S2	10,000	30,000	4,000	40,000	6,000	
S3	none	50,000	16,000	62,000		$4,000

Now that the facts are all together, it is a fairly simple matter to determine the good-will item for the Consolidated Balance Sheet:

Debits:		
S1,	$20,000.00	
S1,	6,000.00	$26,000.00
S2,	$10,000.00	
S2,	6,000.00	16,000.00
Total,		$42,000.00
Credits:		
S3,		4,000.00
Balance,		$38,000.00

The Consolidated Balance Sheet will contain an item of good-will in the amount of $38,000.00.

Minority Interests in General.—As a general proposition, when a Consolidated Balance Sheet is to be prepared, the holding company in question holds only a controlling interest in its subsidiaries rather than owning all the outstanding shares of stock. Therefore, there usually will be minority stockholders who have a certain interest in the subsidiary or subsidiaries in which they hold stock. Naturally, as a result, these persons should not be forgotten when the consolidated statement is prepared; they own a portion of the stock of the subsidiaries and a portion of their surplus. And as to the surplus, the portion owned is exactly equal to the percentage their holdings to the total outstanding capital stock of the subsidiaries in which they are interested. This minority interest in the capital should be set out in the Consolidated Balance Sheet directly below the item of capital stock issued and outstanding, as follows:

Minority Stockholders' Interest in Capital Stock of Affiliated Companies		
Capital Stock (par value),	$ ¢	
Surplus,	$ ¢	$ ¢

If the minority interests in a subsidiary company amount to any size, a separate statement should be prepared thereof to support the Consolidated Balance Sheet of the enterprise as a whole.

Inter-company Sales and Minority Interests.—The principle to apply in connection with inter-company sales was noted briefly in an earlier section. Further elaboration seems necessary in relation to minority interests.

If the holding company and its subsidiaries are regarded as

one enterprise, it is a simple accounting principle that sales from one unit to another should have in them no element of profit. If this principle be not followed, profits will be anticipated and inventories inflated. However, a complication arises where the interests of minority stockholders are concerned. If they are interested only in one of the subsidiaries, they have no interest in the enterprise as a whole. If sales are made by the subsidiary in which they are interested to other subsidiaries, they feel rightfully that such sales should be made at a fair profit; if not, they are being mistreated. On account of this fact, the system required to handle inter-company sales, in order to meet two differing points of view:

1. That of the enterprise as a whole, and
2. That of minority interests, must of necessity be decidedly elaborate and complicated. All sales must be booked at both cost and selling prices. When so done:

1. A Consolidated Balance Sheet may be prepared showing all inventories at actual cost, and
2. Statements may be prepared for each subsidiary company in which cognizance will be taken of profits on inter-company transactions.

Where minority interests are concerned, and inventories include inter-company profits, the amount of such profit may be offset on the Consolidated Balance Sheet by a reserve of an equal amount. But if all the goods sold between the subsidiaries have been disposed of by the purchasing subsidiary, this reserve is unnecessary; costs and sales will not be correct, but the gross profit will be correct.

Another point of interest in the matter of inter-company sales relates to sales of material from one subsidiary to another for purposes of construction. From the viewpoint of the undertaking as a whole, this must be on a cost basis, containing no element of inter-company profit, even though the purchasing subsidiary paid another subsidiary for the materials on a cost plus profit basis. The amount of profit involved must be determined as accurately as possible in order that it may be deducted from the construction account in the Consolidated Balance Sheet; this deduction may be made by means of a reserve set up from the consolidated profit.

Alternate Form of Consolidated Balance Sheet.—The usual form of the Consolidated Balance Sheet, prepared as will be illustrated in a subsequent section, beyond doubt is the best way in which a holding company should set out its accounts for statement purposes; however, it is not the only method that may be used. It is possible for the holding company to carry on its Balance Sheet its investment in a subsidiary merely as such, and support this item as thereon shown in either one of two ways:

1. Attach a Balance Sheet of the subsidiary company to that of the holding company, or
2. Summarize the financial position of the subsidiary in concrete form directly on the face of the holding company Balance Sheet. The following example illustrates the point:

Investment in the S1 Manufacturing Company (65 per cent Interest),		$325,000.00
Accounted for as follows:		
Land, Buildings, Machinery, Equipment,	$250,000.00	
Good-will,	100,000.00	
Inventories, Accounts and Notes Receivable, Cash and Other Current Assets,	300,000.00	
Total,	$650,000.00	
Deduct:		
Current Liabilities,	$150,000.00	
Balance, Net Assets,	$500,000.00	
65 per cent Interest (as above),	$325,000.00	

Whether or not one or the other of the above methods should be used in preference to the usual technical form of statement is, as one writer on accounting has said, "largely, but within limits, a matter of individual preference." No one can deny that such a statement does show facts and, therefore, so long as this be true, it may be permissible to use it. However, since accountants on the whole lean toward the technical form of Consolidated Balance Sheet as herein discussed, nothing further need be said concerning these possible alternate methods indicated above.

Consolidated Income Statement—Content.—Basically, the same general principles must be pursued in preparing a Consolidated Income Statement, the object of which is to set forth the operating results of all the related companies as a unit in their relations to outsiders. The two following points contain the substance of the entire proposition:

1. Profits transferred from a subsidiary company to the holding company, by way of dividends, are ignored.
2. Earnings, expenses, etc., of all subsidiaries are combined and set out as if all were one company.

Illustrative Problems—Consolidation Balance Sheets.—In concluding the discussion of this chapter, the following graded problems and solutions are included to illustrate the principles mentioned above. It is believed that a careful study of the solutions submitted will assist materially in eliminating from the mind of the student much of the so-called apparent difficulty veiling and obscuring this type of problem.

Problem 1.—The H Company, as of December 31, 1920, has the following balance sheet:

Assets:	
Fixed assets,	$ 65,000.00
Investments:	
Miscellaneous,	19,000.00
S1 Company:	
Capital stock,	50,000.00
Premium on capital stock,	500.00
Current assets,	24,650.00
Total assets,	$159,150.00
Liabilities:	
Capital stock,	$100,000.00
Fixed liabilities,	50,000.00
Current liabilities,	512.50
Depreciation reserve,	637.50
Surplus,	8,000.00
Total liabilities,	$159,150.00

As of the same date, the S1 Company, a subsidiary of the H Company, has the following balance sheet:

Assets:	
Fixed assets,	$ 50,000.00
Investments—miscellaneous,	48,000.00
Current assets,	2,483.68
Due from S2 Company,	727.80
Total assets,	$101,211.48
Liabilities:	
Capital stock,	$ 55,000.00
Fixed liabilities,	42,000.00
Current liabilities,	850.00
Depreciation reserve,	997.24
Surplus,	2,364.24
Total liabilities,	$101,211.48

Likewise, as of the same date, the S2 Company, a branch of the S1 Company, has the following balance sheet:

Assets:	
Current assets,	$650.00
Liabilities:	
Current liabilities,	$ 22.20
Due S1 Company,	627.80
Total liabilities,	$650.00

Prepare consolidated balance sheet as of December 31, 1920.

Solution to Problem 1.—The first point to notice is that, as between the S1 Company and the S2 Company, there is a home office and a branch. Therefore, the home office control on the branch books should be in agreement with the branch control on the home office books. In other words, a controlling account over S2 Company should be found upon the books of the S1 Company, and this control should be in exact agreement with a controlling account upon the books of S2 Company over its relationship with the S1 Company; the two sets of books should articulate one with the other. However, such is not the case at present and, before proceeding further, the two sets of records must be placed into agreement, one with the other. If the branch records are correct, and one must here assume that they are, as well as those of the home office, the difference between the two controls, beyond doubt, represents cash in transit, or some other current asset in transit, between the branch office and the home office as of the date of the balance sheets. The following adjusting entry will suffice for the books of S1:

Current Assets,	$100.00	
To—Due from S2 Company,		$100.00

If, in this particular case, the item in question is cash, the charge should not be made to the regular Cash account, since items in transit cannot be considered as having been received.

Consider a moment a principle of branch accounting which is applied in preparing a Consolidated Balance Sheet, since branch accounting should be familiar to the student. If, in the present case, a Balance Sheet were to be prepared combining the values displayed upon both the books of the main office S1, and of the branch office S2, one would proceed in accord with the elementary principles of branch accounting by combining into one statement the various asset and liability items now shown separately and eliminating thereby, as a natural result, the controlling account as carried on each set of books. In this connection, the student is referred, also, to the elementary discussion underlying the operation of a private Ledger; commence with the completed solution relating to the opening of a private Ledger and assume that it is no longer to be used. Make the entries necessary to incorporate upon the general Ledger the information that was taken therefrom and placed in the private Ledger. When the schedule of entries is complete, note the cancellation and elimination of the two controlling accounts. As the solution of the present problem proceeds, notice the use of the same principle of elimination; it may be seen, also, in the solutions of each of the other problems included herein. This

principle is the most elementary one in preparing a working sheet covering the set up of a Consolidated Balance Sheet.

After the adjusting entry mentioned above has been placed upon the books of the S1 Company, the Consolidated Balance Sheet called for may be prepared readily. It appears in the last column of the following working sheet. This sheet should be studied carefully in order to fix in mind the simple basic principle to which reference has been made; otherwise, the solutions of the problems that follow may not be comprehended.

Problem 1—Working Sheet

Assets	H	S1	S2	Total	Eliminate	Consolidated Balance Sheet
Fixed Assets,	$65,000.00	$50,000.00		$115,000.00		$115,000.00
Investments:						
Miscellaneous,	19,000.00	48,000.00		67,000.00		67,000.00
S1 Company:						
Capital Stock,	50,000.00			50,000.00	①$50,000.00	
Premium on Capital Stock,	500.00			500.00		500.00
Current Assets,	24,650.00	2,583.68	$650.00	27,883.68		27,883.68
Due from S2 Company,		627.80		627.80	② 627.80	
Totals,	$159,150.00	$101,211.48	$650.00	$261,011.48	$50,627.80	$210,383.68
Liabilities						
Capital Stock,	$100,000.00	$55,000.00		$155,000.00	①$50,000.00	$105,000.00
Fixed Liabilities	50,000.00	42,000.00		92,000.00		92,000.00
Current Liabilities,	512.50	850.00	$22.20	1,384.70		1,384.70
Depreciation Reserve,	637.50	997.24		1,634.74		1,634.74
Surplus,	8,000.00	2,364.24		10,364.24		10,364.24
Due S1 Company,			627.80	627.80	② 627.80	
Totals,	$159,150.00	$101,211.48	$650.00	$261,011.48	$50,627.80	$210,383.68

The technical form of Consolidated Balance Sheet, based upon the above working sheet, has not been presented. It contains nothing of interest beyond the figures shown in the last column of the working sheet except as to the item of Premium on Capital Stock, $500.00. This item would be shown upon the technical form of statement in either one of the following two ways, preference being in favor of the first one:

1. As goodwill. If all the stock of a subsidiary is not owned by the holding company, this method of treatment predominates.
2. As a deduction from the consolidated surplus.

Problem 2.—The following problem and its solution are intended to indicate the usual items requiring elimination in the preparation of a Consolidated Balance Sheet. Likewise, the method is given of calculating the item of good-will therein to be contained. The better for the purpose in hand, all items are shown in lump sums except those to which special attention is directed.

The H Company owns the stock of two operating companies, S1 and S2 Just after the holding company purchased the stock of S1 and S2, the balance sheets of the three were as follows:

Debits	H	S1	S2
Fixed assets,		$116,950.00	$129,740.00
Investments:			
Bonds of affiliated companies,		50,000.00	
Bonds of other companies,		10,000.00	
Stocks of affiliated companies (cost),	$500,000.00		
Sundry current assets,	100,000.00	81,791.00	119,680.00
Demand notes of affiliated companies,		5,000.00	
Advances to affiliated companies,			10,000.00
Accrued interest:			
Bonds of affiliated companies,		1,500.00	
Bonds of other companies,		300.00	
Totals,	$600,000.00	$265,541.00	$259,420.00

Credits	H	S1	S2
Capital stock:			
Preferred,	$300,000.00	$100,000.00	
Common,	200,000.00	100,000.00	$ 50,000.00
Bonds:			
Held by affiliated companies,			50,000.00
Held by others,	100,000.00		100,000.00
Interest on bonds:			
Held by affiliated companies,			1,500.00
Held by others,			3,000.00
Notes payable:			
Held by affiliated companies,			5,000.00
Held by others,		2,000.00	10,000.00
Advances payable:			
Affiliated companies,		10,000.00	
Sundry current liabilities,		15,300.00	9,345.00
Surplus:			
Reserved:			
Depreciation,			11,300.00
Bad debts,		1,035.00	637.00
Bond redemption,			7,500.00
Free:			
Available for dividends,		37,206.00	11,138.00
Totals,	$600,000.00	$265,541.00	$259,420.00

Required:

Consolidated balance sheet.

Solution to Problem 2.—The solution of the above simple problem requires no comment beyond a study of the following working sheet, since the items to be eliminated have been carefully earmarked. Note the calculation of the good-will item. The Consolidated Balance Sheet is found in the last column of the working sheet.

Problem 2—Working Sheet

Assets	H	S1	S2	Total	Eliminate	Add	Consolidated Balance Sheet
Fixed assets,		$116,950.00	$129,740.00	$246,690.00			$246,690.00
Investments:							
Bonds of affiliated companies,		50,000.00		50,000.00	$50,000.00		
Bonds of other companies,		10,000.00		10,000.00			10,000.00
Stocks of affiliated companies,	$500,000.00			500,000.00	500,000.00		
Good-will,						*$250,000.00	250,000.00
Sundry current assets,	100,000.00	81,791.00	119,680.00	301,471.00			301,471.00
Demand notes of affiliated companies,		5,000.00		5,000.00	5,000.00		
Advances to affiliated companies,			10,000.00	10,000.00	10,000.00		
Accrued interest:							
Bonds of affiliated companies,		1,500.00		1,500.00	1,500.00		
Bonds of other companies,		300.00		300.00			300.00
Totals,	$600,000.00	$265,541.00	$259,420.00	$1,124,961.00	$566,500.00	$250,000.00	$808,461.00
Liabilities							
Capital stock:							
Preferred,	$300,000.00	$100,000.00		$400,000.00	$100,000.00		$300,000.00
Common,	200,000.00	100,000.00	$50,000.00	350,000.00	150,000.00		200,000.00
Bonds:							
Held by affiliated companies,			50,000.00	50,000.00	50,000.00		
Held by others,	100,000.00		100,000.00	200,000.00			200,000.00
Interest on bonds:							
Held by affiliated companies,			1,500.00	1,500.00	1,500.00		
Held by others,			3,000.00	3,000.00			3,000.00
Notes payable:							
Held by affiliated companies,			5,000.00	5,000.00	5,000.00		
Held by others,		2,000.00	10,000.00	12,000.00			12,000.00
Advances payable:							
Affiliated companies,		10,000.00		10,000.00	10,000.00		
Sundry current liabilities,		15,300.00	9,345.00	24,645.00			24,645.00
Surplus:							
Reserved:							
Depreciation,			11,300.00	11,300.00			11,300.00
Bad debts,		1,035.00	637.00	1,672.00			1,672.00
Bond redemption,			7,500.00	7,500.00			7,500.00
Free:							
Available for dividends,		37,206.00	11,138.00	48,344.00			48,344.00
Totals,	$600,000.00	$265,541.00	$259,420.00	$1,124,961.00	$316,500.00		$808,461.00

(*) Determination of Good-will

Assets taken over:			
S1,		$265,541.00	
S2,		259,420.00	
Total book value of assets,			$524,961.00
Liabilities assumed (toward outsiders):			
S1,		$ 27,300.00	
S2,		178,845.00	
Total book value of liabilities,			206,145.00
Excess of assets taken over against liabilities assumed,			$318,816.00
Less:			
Surplus included in assets (purchased):			
Reserved:			
S1,	$ 1,035.00		
S2,	19,437.00	$ 20,472.00	
Free and available:			
S1,	$37,206.00		
S2,	11,138.00	48,344.00	
Total Surplus,			$ 68,816.00
Balance, net asset values, not subject to dividends,			$250,000.00
Prices paid for net asset values,			500,000.00
Balance, representing good-will, being the excess of price paid over book value of assets not subject to dividends,			$250,000.00

Problem 3.—Although the following problem and its solution furnish a third illustration of the preparation of a simple form of a Consolidated Balance Sheet, their use herein at this point is primarily to illustrate the calculation and setting out of the interest of the minority stockholders.

The H Company, as of December 31, 1920, acquired 90 per cent of S1 Company stock at par and 100 per cent of S2 Company stock at 95. In each case, the H Company took up these investments into its accounts at the figures given.

On December 31, 1920, after the absorption, the balance sheets of these companies were as follows:

Assets	H	S1	S2
Fixed assets,	$ 850,000.00	$210,000.00	$ 48,000.00
Investments:			
S1 Company (par),	90,000.00		
S2 Company (95),	47,500.00		
Current assets,	240,000.00	65,000.00	88,000.00
Deficit,			20,000.00
Total,	$1,227,500.00	$275,000.00	$156,000.00
Liabilities			
Capital stock,	$1,000,000.00	$100,000.00	$ 50,000.00
Fixed liabilities,	25,000.00	50,000.00	25,000.00
Current liabilities,	2,500.00	50,000.00	81,000.00
Surplus,	200,000.00	75,000.00	
Total,	$1,227,500.00	$275,000.00	$156,000.00

Prepare a consolidated balance sheet.

(1)

Problem 3—Consolidated Working Sheet

Assets	H	S1	S2	Total	Eliminate	Add	Consolidated Balance Sheet
Fixed assets,	$850,000.00	$210,000.00	$48,000.00	$1,108,000.00			$1,108,000.00
Investments:							
S1 Company (par) 90%,	90,000.00			90,000.00	$90,000.00		
S2 Company (95) 100%,	47,500.00			47,500.00	47,500.00		
Current assets,	240,000.00	65,000.00	88,000.00	393,000.00			393,000.00
Deficit,			20,000.00				
Totals,	$1,227,500.00	$275,000.00	$156,000.00	$1,638,500.00	$137,500.00		$1,501,000.00
Liabilities							
Capital stock,	$1,000,000.00	$100,000.00	$50,000.00	$1,150,000.00	$140,000.00		$1,010,000.00
Fixed liabilities,	25,000.00	50,000.00	25,000.00	100,000.00			100,000.00
Current liabilities,	2,500.00	50,000.00	81,000.00	133,500.00			133,500.00
Surplus,	200,000.00	75,000.00		255,000.00		$2,500.00	257,500.00
Totals,	$1,227,500.00	$275,000.00	$156,000.00	$1,638,500.00	$140,000.00	$2,500.00	$1,501,000.00

(2)

Calculation of Minority Stockholders' Interest

Capital stock:	
S1 Company:	
10 per cent of $100,000.00,	$10,000.00
S2 Company:	
None,	None
Surplus:	
S1 Company:	
10 per cent of $75,000.00,	7,500.00
S2 Company:	
None,	None
Total,	$17,500.00

(3)

Company H and Affiliated Companies

Consolidated Balance Sheet

as at December 31, 1920

Assets		Liabilities		
Fixed Assets,	$1,108,000.00	Fixed Liabilities,		$100,000.00
Current Assets,	393,000.00	Current Liabilities,		133,500.00
		Minority Stockholders' Interest:		
		Capital Stock (S1),	$10,000.00	
		Surplus,	7,500.00	17,500.00
		Company H:		
		Capital Stock,		1,000,000.00
		Surplus,		250,000.00
Total,	$1,501,000.00	Total,		$1,501,000.00

Solution to Problem 3.—The solution to this problem is presented in the following three portions:

1. Consolidated working sheet.
2. Calculation of minority stockholders' interest.
3. Consolidated balance sheet.

Problem 4.—The following C. P. A. problem has been selected as the basis for presenting the final illustration of the preparation of a Consolidated Balance Sheet.

The Jones Investment Company on June 30, 1915 obtained a controlling interest in three operating companies, viz., A Co., B Co., and C Co.

The Balance Sheets of the four companies as at June 30, 1916 are as follows:

Debits	Jones Investment Co.	A Co.	B Co.	C Co.
Investments in other companies:				
A Co.—60 per cent interest (Cost $900,000.00),	$1,000,000.00			
B Co.—75 per cent interest at cost,	600,000.00			
C Co.—80 per cent interest at cost	400,000.00			
Advances to A Co.,	100,000.00			
Advances to C Co.,	50,000.00			
Cash,	50,000.00	$ 100,000.00	$ 10,000.00	$ 50,000.00
Accts. Receivable,		100,000.00	50,000.00	100,000.00
Inventories,		200,000.00	100,000.00	50,000.00
Plant,		1,000,000.00	600,000.00	400,000.00
Deficit,			40,000.00	
Total Debits,	$2,200,000.00	$1,400,000.00	$800,000.00	$600,000.00
Credits				
Capital Stock,	$2,000,000.00	$1,000,000.00	$800,000.00	$400,000.00
Jones Investment Co.,		100,000.00		50,000.00
Surplus,	200,000.00	300,000.00		150,000.00
Total Credits,	$2,200,000.00	$1,400,000.00	$800,000.00	$600,000.00
The Surplus and Deficit Accounts as shown above may be analyzed as follows:				
Balance to June 30, 1915,	$100,000.00	$200,000.00	$4,000.00	$100,000.00
Surplus Income 6 Months to Dec. 31, 1915,		180,000.00	46,000.00	25,000.00

Six Months to June 30, 1916,	217,500.00	220,000.00	40,000.00*	25,000.00
Increase in value of A Co. Stock,	100,000.00			
Dividends paid Jan. 1916,	217,500.00*	300,000.00*	50,000.00*	
Balance June 30, 1916,	$200,000.00	$300,000.00	$ 40,000.00*	$150,000.00

*Debits indicated.

Prepare a consolidated Balance Sheet of the four companies as at June 30, 1916.

A Statement of the Consolidated Earnings and Surplus Account for the year to June 30, 1916 is not required, but may be submitted if desired.

In preparing the Balance Sheet the following additional facts should be considered:

1. The holding Company has no other source of income than the dividends from the subsidiaries, which have been taken on to its books when received.
2. In accordance with a resolution of the Board of Directors of the Jones Investment Company the following entry was made on the holding company books at June 30, 1916.

Dr. Investment in A Co.,	$100,000.00
Cr. Surplus,	100,000.00

3. The inventories of the A Co. includes $100,000.00 of stock purchased from B Company in 1916. The cost of these goods to the B Company was $90,000.00.
4. Part of the plant of the C Company was built by the A Company in September and October, 1915 at a cost of $80,000.00. For this work the A Company charged the C Company $95,000.00.
5. In February 1916, part of the equipment of the B Company which was carried on the books at the cost price of $50,000.00, was destroyed by fire. The only entry that has been made in respect to this loss was to credit the Plant Account with the salvage of $5,000.00.

Solution to Problem 4.—The first step would seem to be to prepare a working sheet and thereon spread the figures insofar as they may be obtained from the problem itself, namely, down through the ''total'' column (see working sheet below).

The second step would be to prepare a schedule of adjusting entries in accord with the facts as given, and then spread these upon the working sheet in the columns provided therefor, keying such inclusion back against the schedule. These adjusting entries are as follows:

1. Surplus,	$100,000.00	
To—Investment in A Company,		$100,000.00
To write down the increase in the value of the A Company holdings.		

	Dr.	Cr.
2. Surplus,	$10,000.00	
To—Inventories,		$10,000.00
To write down the inventory of A Company to the extent of the difference between $100,000.00 and $90,000.00.		
3. Surplus,	$15,000.00	
To—Plant,		$15,000.00
To write down the value of C Company plant built by A Company from $95,000.00 to $80,000.00.		
4. Surplus,	$45,000.00	
To—Plant,		$45,000.00
To write down the value of the B Company equipment. Cost of the equipment was $50,000.00 (as destroyed) whereas, only $5,000.00 has as yet been written off.		
5. Good-will,	$177,000.00	
B Company Investment,	3,000.00	
To—A Company Investment,		$180,000.00
To record the good-will for the Consolidated Balance Sheet. Same is computed as below in separate schedule.		

Calculation of Good-will

		Book Value	Cost	Difference Good-will
A Company investment (60 per cent),		$720,000.00	$900,000.00	$180,000.00
Capital stock,	$1,000,000.00			
Surplus 6/30/15,	200,000.00			
Total,	$1,200,000.00			
B Company investment (75 per cent)		603,000.00	600,000.00	(*)3,000 00
Capital stock,	$800,000.00			
Surplus 6/30/15,	4,000.00			
Total,	$804,000.00			
C Company investment (80 per cent),		400,000.00	400,000.00	None
Capital stock,	$400,000.00			
Surplus 6/30/15,	100,000.00			
Total,	$500,000.00			
Total,		$1,723,000.00	$1,900,000.00	$177,000.00

After these adjusting entries have been included upon the working statement, the next step contemplates the eliminations to be made on account of intercompany transactions. The debit eliminations seem self-explanatory, requiring no further comment. On the credit side, the first elimination relates to the $150,000.00 item of Jones Investment Company; no question arises as to the amount thereof. The next elimination

relates to capital stock; there is here a minority stockholders' interest which must be considered, as below:

Capital stock of Jones Investment Company,			$2,000,000.00
Add: Minority interest in capital stock of subsidiaries:			
A—40 per cent of	$1,000,000.00, or,	$400,000.00	
B—25 per cent of	800,000.00, or,	200,000.00	
C—20 per cent of	400,000.00, or,	80,000.00	680,000.00
Total capital stock for Consolidated Balance Sheet,			$2,680,000.00

$4,200,000.00 less $2,680,000.00 equals $1,520,000.00, the amount of the elimination.

Since only one item now remains which requires adjustment, that of surplus, the quickest and easiest way to complete the working sheet is to balance up the elimination and Balance Sheet columns by splitting the item of surplus as shown in the "total" column. The working sheet now is completed; the Consolidated Balance Sheet is found in the last column.

However, the better to illustrate the technical form of such statement, especially in connection with the determination of minority stockholders' interest in capital stock and suplus, it is necessary to go a trifle further and present the Consolidated Balance Sheet in technical form. But before this can be done, it is necessary to determine the interest of the minority stockholders in the surplus. This may be done as follows:

	A	B	C
1. Surplus balance 6/30/15,	$200,000.00	$ 4,000.00	$100,000.00
2. Add: Income 6 months to 12/31/15,	180,000.00	46,000.00	25,000.00
3. Balance, Surplus at 12/31/15,	$380,000.00	$50,000.00	$125,000.00
4. Less: Profit of A on plant for C,	15,000.00		
5. Balance adjusted as on 12/31/15,	$365,000.00	$50,000.00	$125,000.00
6. Less: Dividend paid on 1/1/16,	300,000.00	50,000.00	
7. Balance adjusted as on 1/1/16,	$ 65,000.00		$125,000.00
8. Increase (or *decrease) in surplus 6/30–12/31 (#1–7, above),	*$135,000.00	*$4,000.00	$25,000.00
9. Add: Income (or *loss) 6 mo. to 6/30/16,	220,000.00	*40,000.00	25,000.00
10. Balance,	$ 85,000.00	*$44,000.00	$50,000.00
11. Less:			
Profit of B on sales to A,		10,000.00	
Fire loss of B not on books,		45,000.00	
12. Balance adjusted as on 6/30/16,	$85,000.00	*$95,000.00	$50,000.00
13. Increase (or *decrease) in surplus 12/31/15–6/30/16,	$220,000.00	*$95,000.00	$25,000.00
14. Increase (or *decrease) in surplus 6/30/15–6/30/16,	$ 85,000 00	*$99,000.00	$50,000.00
15. Distribution of increase:			
Jones Investment Company,	(60%) $51,000.00	(75%) *$74,250.00	(80%) $40,000.00
Minority stockholders' interest,	(40%) 34,000.00	(25%) *24,750.00	(20%) 10,000.00
As above (14),	$85,000.00	*$99,000.00	$50,000.00

JONES INVESTMENT COMPANY

Consolidated Balance Sheet

June 30, 1916

Assets

Current Assets:		
Cash,	$210,000.00	
Accounts Receivable,	250,000.00	$460,000.00
Inventories,		340,000.00
Total Current Assets,		$800,000.00
Capital Assets:		
Plant,		$1,940,000.00
Good-will,		177,000.00
		$2,917,000.00

Liabilities

Minority Interest in Subsidiary Companies:				
Capital Stock:				
A Company (40 per cent),		$400,000.00		
B Company (25 per cent),		200,000.00		
C Company (20 per cent),		80,000.00	$680,000.00	
Surplus:				
Balance, June 30, 1915,		$101,000.00		
Add— Profit for Year,		19,250.00	120,250.00	$800,250.00
Jones Investment Company Interest:				
Capital Stock,				2,000.000.00
Surplus:				
Balance, June 30, 1915,			$100,000.00	
Add— Profit from Dividends,		$217,500.00		
Increase in Surplus:				
A Company,	$51,000.00			
C Company,	40,000.00			
Total,	$91,000.00			
Less: Decrease in Surplus:				
B Company,	74,250.00	16,750.00	234,250.00	
			$334,250.00	
Less—Dividends Paid,			217,500.00	
Balance, June 30, 1916,				116,750.00
				$2,917,000.00

JONES INVESTMENT COMPANY

CONSOLIDATED WORKING SHEET

Debits	Jones Investment Company	A Co.	B Co.	C Co.	Total	Adjustments Dr.	Adjustments Cr.	Total	Eliminate	Consolidated Balance Sheet
Investments in Other Companies:										
A Co.—60 per cent—cost $900,000.00,	$1,000,000.00				$1,000,000.00		① $100,000.00 ⑤ 180,000.00	$ 720,000.00	$ 720,000.00	
B Co.—75 per cent—cost,	600,000.00				600,000.00	⑤ $3,000.00		603,000.00	603,000.00	
C Co.—80 per cent—cost,	400,000.00				400,000.00			400,000.00	400,000.00	
Advances to A Company,	100,000.00				100,000.00			100,000.00	100,000.00	
Advances to C Company,	50,000.00				50,000.00			50,000.00	50,000.00	
Cash,	50,000 00	$ 100,000.00	$ 10,000.00	$ 50,000.00	210,000.00			210,000.00		$ 210,000.00
Accounts Receivable,		100,000.00	50,000.00	100,000.00	250,000.00			250,000.00		250,000.00
Inventories,		200,000.00	100,000.00	50,000.00	350,000.00		② 10,000.00	340,000.00		340,000.00
Plant.		1,000,000.00	600,000.00	400,000.00	2,000,000.00		③ 15,000.00 ④ 45,000.00	1,940,000.00		1,940,000.00
Good-will,						⑤ 177,000.00		177,000.00		177,000.00
Totals,	$2,200,000.00	$1,400,000.00	$760,000.00	$600,000.00	$4,960,000.00	$180,000.00	$350,000.00	$4,790,000.00	$1,873,000.00	$2,917,000.00
Credits										
Capital Stock,	$2,000,000.00	$1,000,000.00	$800,000,00	$400,000.00	$4,200,000.00			$4,200,000.00	$1,520,000.00	$2,680,000.00
Jones Investment Company,		100,000.00		50,000.00	150,000.00			150,000.00	150,000.00	
Surplus,	200,000.00	300,000.00	*40,000.00	150,000.00	610,000.00	① $100,000.00 ② 10,000.00 ③ 15,000.00 ④ 45,000.00		440,000.00	203,000.00	237,000.00
Totals.	$2,200,000.00	$1,400,000.00	$760,000.00	$600,000.00	$4,960,000.00	$350,000.00	$350,000.00	$4,790,000.00	$1,873,000.00	$2,917,000.00

* Debit.

CHAPTER XIV

FIDUCIARY STATEMENTS

Introduction.—Before indicating the purpose of this chapter, the term "estate" must be defined. Webster states that the word refers to "the degree, nature and quality of interest to which one is lawfully entitled as to the ownership or use of property; the rights held by one in regard to things, as an absolute estate, a conditional estate, etc." An analysis of this definition, in the light of the purposes of the present and of the next two chapters, produces the following:

1. Assets and the claims thereagainst properly chargeable comprise the subject matter of an estate.
2. The condition of an individual or of an organization determines how these assets and claims (properties) come into contact with accounting.
3. The condition referred to in (2) above, in which present interest is centered, is caused by one of the following:
    a. The decease of a person, or
    b. The incompetency of an individual or of an organization to hold, to administer, or to distribute the estate for the benefit of those therein interested.

Likewise, the term "fiduciary accounting" must be understood clearly. When an agent accounts to his principal, as does a consignee to his consignor, a fiduciary relationship exists, a relationship under which one person is charged with the administration and management of at least part, if not all, of the affairs of another. Further examples, in part, are as follows:

1. A guardian charged with the management of the affairs of a ward.
2. A lunacy commission charged with the management of the estate of one who, under the law, has been declared mentally incompetent.
3. An executor under a will charged with administering and

distributing the estate of a decedent in accord with the provisions of the will.

4. An administrator appointed by a court to administer a decedent's estate where the latter died without making a will.
5. An assignee or receiver charged with administering properties entrusted to his care.

Fiduciary accounting, therefore, describes the accounting incident to the administration of estates, such administration being imposed by a position of trust or confidence. As developed in this and in the next two chapters, the term, conforming to the divisions set out above, comprehends the following:

1. Accounting for solvent estates.
   a. Those of decedents.
2. Accounting for insolvent estates.
   a. Those which are only financially embarrassed.
   b. Those which are actually bankrupt.

Naturally, all phases of fiduciary accounting are not covered by the above outline, but the above is deemed sufficient for the purpose of illustrating the accounting principles now to be considered.

In his previous work on consignments, the student probably noticed that the consignee, by virtue of having control of property belonging to another, exercised certain rights thereagainst which often supplanted those of the actual proprietor. The discussion at the present time is concerned further with the acts, and the accounting revolving around such acts, of those who are charged with the responsibility of an estate which actually belongs to another. One will find that the prerogatives of these persons, like those of consignees, often replace those of the actual owners.

The purpose of the present chapter is to discuss briefly some of the accounting procedures and statements necessary or required for recording and setting out in a comprehensive manner, at least theoretically, the financial transactions relative to the administration of the estate of a deceased person.

The writer, primarily, has devoted space to a restatement of principles concerning which there will be no dispute, plus a consideration of some of the principles in force within only one

jurisdiction. Local laws are at variance, and the prospective accountant must recognize that herein generalization has been the attitude of the writer.

Further Definitions, Terms, and Distinctions.—For the purposes of the present chapter, the following definition of the term "estate" is more satisfactory than the former one of Webster: "One's entire property or possessions—property left over after death—assets over liabilities, etc."

A "will" is a person's solemn declaration in written legal form, signed by such person (the testator) in the presence of witnesses, whereby he disposes in whole or in part of the property of which he shall be possessed at the time of death. A will is revocable during life. The testator, after death, is referred to variously as the testator, the deceased, or the decedent. One who dies leaving no will is said to have died intestate. An addition to, or qualification of, a will is called a codicil; this, as Blackstone said: "May add to, take from, explain, alter, confirm, republish or revive any will with which it may be incorporated." A codicil need not be physically attached to the will, but must, by its language, identify itself with the will it is intended to supplement.

An heir is one entitled by law to succeed to the real estate of a person dying intestate or leaving property undisposed of by will. Personal property, unless an heirloom, does not descend to heirs, but is distributed, as by the administrator, after the payment of all just debts, funeral and testamentary expenses, among the next of kin in order of relationship. One to whom real estate is bequeathed by will is called a devisee; one to whom personal property is left is called a legatee. An heirloom is a movable chattel which, by virtue of its special relationship to the estate, descends to the heir with the lands.

An executor is a testator's personal representative named in his last will and testament to execute or carry out its provisions as concerns the testator's personal estate. If a woman be named for carrying out these duties, she is called an executrix. An executor must be duly approved by the court (Surrogate, Probate or Orphans', as the case may be) having jurisdiction where the decedent last was domiciled.

If a person die intestate, or if no one be named in the will as

executor, or if the executor named in the will dies or cannot qualify, the power of appointing someone to administer the estate of the decedent vests in the Court, and the one so appointed, who may be either husband, widow, child or next of kin, is called the administrator or administratrix. If the Court has to appoint an administrator, because the will of the decedent makes no provision therefor, the person so appointed is known as an administrator with the will annexed. Hereunder, in the case of an administrator (excepting one with the will annexed), the law of descent in the particular jurisdiction or locality governs the settlement of estate affairs, and the distribution of the remaining assets.

A trustee is one who holds legal title to property subject to an obligation to apply such property in accord with the terms of a trust for a beneficiary, or cestui que trust. In the case of a decedent's estate, the trustee is named in the will, as a general proposition. The beneficiaries of an estate are those who share in the property of a decedent, either by virtue of a will or because of their relationship to the decedent. Property given in trust is known as principal. The earnings from such principal during the trust period are called income. The trustee may have the above duties in addition to those of an executor or administrator. A trustee must use great care in connection with properties under his control. All funds in his possession must be invested and reinvested with care, subject to Court approval. Court approval governs asset distribution unless the will provides therefor. An Equity or Probate Court is one of competent jurisdiction.

In the administration of a decedent's estate, there exist estate assets which must be safeguarded carefully. These are subject to liabilities as proved in Court plus the costs of administration. Such administration is carried through by an executor or by an administrator under guidance of the Court. The estate of a decedent, therefore, is seen to be safeguarded carefully by the Court in order that the interests of creditors may be protected and that the desires and intent of the testator may be carried out; if such intent on the part of the decedent be absent, the Court must see that the local statutory provisions, which govern where no will exists, are given full effect.

Courts of Competent Jurisdiction.—The Courts having jurisdiction over the making proof of wills (called probating), the management and settlement of estates, the guardianship of orphans, insane persons, and incompetents, in general, are known as Probate Courts. In New York the Court with jurisdiction in these matters is called the Surrogate (one who acts for another) Court. In Pennsylvania, and a few other states, the designation given is that of Orphans' Court. In Kentucky, and in a few of the southern and eastern states jurisdiction vests in the County Court of each County.

Where necessary, New York practice will provide the material of the present discussion, since it is both excellent and complete.

Duties of an Executor or Administrator.—Since the duties of these two persons practically are the same, the difference between them being merely the manner in which the appointments were made, it seems sufficient to set out but one schedule of illustrative duties. Such duties are prescribed mainly by statute. Briefly, they may be set out as follows:

1. See that the deceased is properly buried, the funeral expenses to be those that are necessary and reasonable considering the social status of the decedent.
2. Have the will probated and take out letters testamentary, paying such expenses as are necessary for the cost of probate and the securing of certified copies of the proceedings. If the will be contested, the executor must require the parties to be benefited by the will to secure him against the suit costs in case of failure.
3. Prepare an inventory of all the personal property of the estate, have this inventory appraised, and file same with the Surrogate Court.
4. Realize, collect, and conserve the estate assets.
5. Advertise for claims against the estate.
6. Pay the debts in order of precedence as established by law or by the Court.
7. Distribute the balance of the property according to the terms of the will, setting aside any trust funds called for by the will.
8. Convert the surplus of the personal estate, if any, into cash

and distribute this cash among the next of kin in accord with the statutes of distribution.

9. Keep such accounts as will show how the estate has been administered.
10. Account to the Court of his appointment, whenever called upon, presenting a report showing the receipts and disbursements, and the balance available for distribution, in accord with the Court's order.
11. Apply for discharge upon a final accounting within the time prescribed by statute for the completion of the administration.

Will Admitted to Record or Probate.—A will may be said to be admitted to record when it has been duly probated, *i. e.*, established by the testimony of subscribing witnesses, or such of them as are alive, and letters testamentary ordered and decreed. A copy of the order so made is recorded in the state and county in which the will was admitted to probate. The following steps usually are involved in the admission of a will to probate:

1. Filing of a petition asking the Court to admit the will to probate.
2. Notification of all interested persons that on a day certain the will is to be considered.
3. Hearing or trial at which proof of the will's legality must be offered.
4. Court decision as to whether or not the will offered for probate is valid.

Letters testamentary refers to an instrument issuing from a Court of competent jurisdiction authorizing the executor to take charge of and administer a testator's estate. If a person dies intestate, the instrument in writing, issued by the Court to the administrator authorizing him to administer the intestate estate is designated as letters of administration. If a will exists, but no one has been named therein as executor, the instrument referred to above authorizing a person to administer the estate would be known as the letters of administration with will attached. A bond can be required of the executor or administrator by the Court, although in the case of an executorship the testator may

state no bond shall be required, in which event the Court will not request one.

Estate Assets.—The first duty of an executor is to collect the assets (personal property) of the estate with which he is charged and file an inventory thereof with the Court. Some states require the inventory to be filed, as in New York; others permit the filing, and others are silent on the point. Whatever the law may be in any particular state, it is safe practice to prepare an inventory and file it with the Court, because the inventory prima facie fixes the number and the value of the estate assets. In such case, should anyone dispute the inventory, the burden of proof rests on this other, not on the executor as would be the case where no inventory is filed.

The inventory in most states should include only personal property of the deceased, because the real property passes without the intervention of the executor. The inventory items would be valued by appraisers appointed by the Court who, under oath, the oath being inserted in the statement of the inventory, will appraise the assets honestly and impartially to the best of their knowledge and ability, stating each item in detail with the value thereof in dollars and cents, distinctly, in figures opposite to the articles respectively.

Unless the law of the executor's state specifically requires him to file with the inventory a list of the debts due by the deceased, such debts should not be mentioned.

The New York statute requires the written appointment of two disinterested appraisers who are appointed upon application of the executor or administrator and states that the "following personal property shall be included in the inventory:

1. Leases for years; lands held by the deceased from year to year; and estates held by him for the life of another person.
2. The interest remaining in him, at the time of his death, in a term of years after the expiration of any estate for years therein, granted by him or any other person.
3. The interest in lands devised to an executor for a term of years for the payment of debts.
4. Things annexed to the freehold, or to any building for the

purpose of trade or manufacture, and not fixed into the wall of a house so as to be essential to its support.

5. The crops growing on the land of the deceased at the time of his death.
6. Every kind of produce raised annually by labor and cultivation, except growing grass and fruit ungathered.
7. Rent reserved to the deceased which had accrued at the time of his death.
8. Debts secured by mortgages, bonds, notes, or bills; accounts, money, and bank bills, or other circulating medium, things in action, and stock in any corporation or joint-stock association.
9. Goods, wares, merchandise, utensils, furniture, cattle, provisions, moneys unpaid on contracts for the sale of lands, and every other species of personal property not hereinafter excepted. Things annexed to the freehold, or to a building, shall not go to the executor, but shall descend with the freehold to the heirs or devisees, except such fixtures as are mentioned in the fourth sub-division of this section. The right of an heir to any property, not enumerated in this section, which by the common law would descend to him, is not impaired by the general terms of this section.

"The inventory must contain a particular statement of all bonds, mortgages, notes and other securities for the payment of money belonging to the deceased, known to the executor or administrator; with the name of the debtor in each security, the date, the sum originally payable; the indorsements thereon, if any, with their dates and the sum which, in the judgment of the appraisers, is collectible on each security; and of all moneys, whether in specie or bank bills, or other circulating medium belonging to the deceased, which have come to the hands of the executor or administrator, and if none have come to his hands, the fact shall be stated in the inventory.

"Duplicates of the inventory must be made and signed by the appraisers, one of which must be retained by the executor or administrator, and the other returned to the surrogate within three months from the date of the letters. On returning such inventory, the executor or administrator must take and subscribe

an oath, indorsed upon or annexed to the inventory, stating that the inventory is in all respects just and true, that it contains a true statement of all the personal property of the deceased which has come to his knowledge, and particularly of all money, bank bills and other circulating medium belonging to the deceased, and of all just claims of the deceased against him, according to the best of his knowledge."

The duplicate of the inventory retained by the executor or administrator becomes the basis for the accounts he keeps.

Again, in New York, if a man dies leaving a widow or minor child or children, certain articles are not to be deemed assets, but must be included and stated in the inventory of the estate without being appraised:

1. One sewing machine, and stoves put up or kept for use by his family.
2. Family pictures and school books, and books not exceeding the value of fifty dollars which were part of the family library.
3. Certain animals, and all necessary provisions and fuel to keep the surviving members of the family sixty days.
4. Certain articles of furniture and equipment, as wearing apparel, beds, clothing, ornaments, not exceeding $150.00 in value.
5. Sundry household items as furniture, provisions, etc., in the discretion of the appraisers, to the value not exceeding $150.00.

If a married woman die, leaving surviving her a husband, or a minor child or children, the same articles and personal property shall be set apart by the appraisers with the same effect for the benefit of such husband, or minor child or children.

Certain exceptions are found in every state, and as to them the state laws must be studied carefully.

In conclusion, it should be noted the items to be inventoried will vary somewhat under the laws of the different states, but in every case all property coming into the custody of the executor or administrator should be inventoried and appraised. Care should be observed not to overstate values, for if the amount realized be less than the amount appraised, it may appear that

the executor or administrator has been careless. This inventory, as said above, becomes the basis for the executor's or administrator's accounts and the basis upon which he must account to the Court.

Collection and Care of Assets.—After the inventory is filed, the executor or administrator should proceed at once to secure possession of the estate assets. If he believes certain assets are in possession of persons who refuse to deliver them to him, he should commence "discovery proceedings" to secure them.

An executor or administrator is responsible for the preservation of the estate assets in his possession, and to this end he must exercise the same care toward them that an ordinarily prudent man would exercise in the care of his own property of a similar nature under similar business conditions.

He should deposit cash belonging to the estate in a reputable bank, doing so in the name of the estate, as "The Estate of A, by B, Executor," and he should be careful never to mingle his own funds with those of the estate. In general, he is to collect and distribute estate cash, not to invest it.

All payments should be made by check, and duplicate receipts should be secured for each such payment, one for the Court, and one to be retained by himself. In New York, every payment of twenty dollars or more must be covered by a properly receipted voucher. Items not exceeding twenty dollars in amount must be supported by his own uncontradicted oath, stating positively the fact of payment, and specifying when and to whom payment was made. The total amount of such allowed items shall not exceed $500.00.

Estate Debts.—In New York, the executor or administrator, at any time after the granting of his letters, may insert a notice once a week for six months in such newspaper or newspapers printed in the county as the Surrogate directs, requiring all persons having claims against the deceased to exhibit the same, with the vouchers therefor, to him, at a place to be specified in the notice, at or before a day therein named, which must be at least six months from the day of the first publication of the notice. Satisfactory vouchers may be required in support of any claim presented and the affidavit of the claimant that the claim is justly due, that no payments have been made thereon, and

that there are no offsets against the same to the knowledge of the claimant.

If a suit be brought on a claim which is not presented to the executor or administrator within six months from the first publication of such notice, the latter shall not be chargeable for any assets or moneys that he may have paid in satisfaction of any lawful claims, or of any legacies, or in making distribution to the next of kin before such suit was commenced.

It is presumed that after a lapse of six months all claims will have been presented, and the executor or administrator may thereafter pay all proved claims, and distribute any remaining balance.

States may differ as to particulars covering the above points, but the underlying plan is similar everywhere; namely, that claims must be presented after published notice, within a certain period of time, and that after the lapse of such time the executor or administrator may assume all estate debts have been proved and act accordingly.

In New York, every executor and administrator must proceed with diligence to pay the debts of the deceased according to the following order:

1. Debts entitled to a preference under the laws of the United States.
2. Taxes assessed on the property of the deceased previous to his death.
3. Judgments docketed, and decrees entered against the deceased according to the priority thereof respectively.
4. All recognizances, bonds, sealed instruments, notes, bills and unliquidated demands, and accounts.

Preference shall not be given in the payment of a debt over other debts of the same class, except those specified in the third class. A debt due and payable shall not be entitled to a preference over debts not due.

Estate Bookkeeping.—The bookkeeping necessary to record properly the financial transactions of an executor or administrator of an estate depends chiefly upon the nature and upon the value of the property of which he assumes control and the terms and provisions of the will or wishes of the decedent, so far as they can be ascertained. While the accounting forms and meth-

ods to be used may be prescribed by law, no special system of bookkeeping is necessary and the executor is at liberty to keep his books in any manner he likes, provided that at all times he can make a proper accounting therefrom in conformity with legal requirements underlying the presentation of the financial facts relative to the estate. The legal requirements govern the contents of the statements, not their form.

Reports to the Court always must be accompanied by vouchers; and receipts and disbursements of principal must be shown clearly separated from those of income. The estate books should be arranged so that these particulars may be recorded easily and the resultant facts ascertained readily. For an ordinary estate, the following records would be illustrative:

1. Journal. The opening entries in this record should be the appraiser's report; the assets would be debited, the liabilities credited, and an account with the estate credited for the balance in order to place the books in equilibrium. Subsequent entries would consist of all items other than cash, as revenues, expenses, etc., separated carefully as to principal and income. Further, the Journal may be used as a memorandum book for the entry of any important facts that take place during the period of administration.
2. Cash Book. This record may be ruled about as follows:

Debit side:	Credit side:
Date	Date
Explanation	Explanation
Total	Checks
Principal Receipts	Number
Income Receipts	Amount
Deposits	Income Debts
	Principal Debts

3. Ledger. This record should contain all the real and nominal accounts of the estate differentiated as above indicated, and the accounts with heirs, beneficiaries, annuitants, etc., showing amounts paid and due them from income and principal.
4. Bank account (with accompanying check book, pass book and bank statements).
5. Duplicate vouchers.

figures comprising the estate inventory as shown by the

In a small estate, double entry books of account sometimes are not used. The estate assets and liabilities are set out in inventory form, only the cash transactions being entered upon the books of account. For such an estate, the following might be sufficient:

1. Asset inventory.
2. Liability inventory.
3. Bank account (with accompanying check book, pass book, and bank statements).
4. Duplicate vouchers.
5. Cash book.

Even though the above simple method of keeping estate accounts may be used in perhaps the majority of cases, no one well can say that the records would not be kept to better advantage by using the double entry principle. In fact, there is no reason why an executor or administrator should not keep his records by double entry. To do so, means greater convenience, and permits of their being audited readily. In the case where a trusteeship enters into consideration,—where property is held by one as trustee for the benefit of another (the cestui que trust) for a term of years,—double entry records always should be used.

Such accounts should be opened in the Ledger as will facilitate the preparation of the schedules to be furnished when accounting to the Court. Ledger explanations should be complete and full as to details, so that the accounting may be made directly from the face of the Ledger without need of referring to any other data. The Ledger would be opened by Journal entry debiting the Inventory and crediting the Estate or Corpus account. Each asset mentioned in the inventory will be given a separate account, the value therefor being the amount entered in the appraisal inventory as filed in Court.

As the assets are converted into cash, the Cash account will be charged and the particular asset account credited. If an asset realizes more than the appraised value, the excess should be credited to a separate account as Increase of Principal (or Corpus). This account is an adjunct of the estate account and provides a means of accounting for increases in asset values and for any assets discovered after the original inventory was pre-

pared. If an asset realizes less than the appraised value, the difference between sales price and inventory value should be charged to a special account as Decrease of Principal (or Corpus). This account, also, is part of the estate account and forms the basis of a separate schedule. Administration expenses may be chargeable to a Testamentary Expenses account, and a separation must be made between those chargeable against principal and those chargeable against income.

As liabilities are liquidated by cash payments, the liability accounts are debited and cash credited. Income as collected should be credited to a special income account, this being the basis of a separate schedule. A personal account would be opened for each legatee to which are charged all advances made. Each legatee account is credited with the amount of the legacy, the estate account being charged. After the legal time has elapsed during which the presentation of claims of creditors may be made, if the estate be solvent, the legatees may be paid the amounts coming to them under the will. If there be no will, the distribution will be made to the heirs-at-law or to the next-of-kin, in accordance with the governing statute. Legatees' payments form a separate schedule.

Principal (Corpus) Versus Income.—It was noted above that the two essential elements in the accounting of executors are:

1. Principal (corpus).
2. Income.

The principal is represented, with but few exceptions, by the original inventory of the estate plus subsequent increases therein as governed by the law specifying what is principal. The total of these amounts is subject to deduction for all decreases in principal due to sales of assets for less than their appraised value, and for all legitimate expenses of administration and debts chargeable against principal.

Income is represented, with but few exceptions, by the increases in the estate subsequent to the death of the decedent. It is difficult sometimes to determine whether any particular amount of cash received is to be credited to principal or to income. The distinction is especially important where the element of trusteeship enters into the problem. And to this end,

some space will be devoted later to this important topic,—to a discussion of some of the various questions in accounting arising out of this legal relation,—specifically, the relation of life tenant and remainderman.

Executor's Accounting to the Court.—The executor or administrator prepares a final statement for judicial settlement, in which are shown the items and amounts chargeable to him, the disbursements therefrom, and the remaining balance. The form of such accounting, where statutes or Courts permit, is a simple one called "charge and discharge." In New York, such an accounting is considerably more elaborate, being decidedly cumbersome, seemingly, as compared to the simple charge and discharge method.

In New York, judicial settlement of the account of an executor or administrator may be compelled by the Surrogate under the following cases:

1. After the expiration of a year from the time letters were issued.
2. Where letters issued have been revoked, or where, for any reason, powers have been revoked.
3. Etc.

Executors and administrators must make and file a report with the jurisdictive Court at least once a year and, as before stated, these reports must be made in approved form.

An executor or administrator may file, as in the office of the Surrogate, an account for the purpose of disclosing his acts, the amount of funds in his hands, and the condition of the estate, without there being a judicial settlement. Such an accounting is termed an intermediate accounting. In New York, an executor or administrator, at any time, voluntarily may file an intermediate account, and the vouchers in support thereof; further, under certain specific cases, the Surrogate may, in his discretion, make an order, requiring an intermediate account to be rendered.

A judicial settlement may be required in New York of an executor or administrator after a year has expired, after letters have been revoked, etc. The form of judicial settlement statement used in New York consists of a number of schedules, lettered from A to G, inclusive, which are summarized in a portion

of the report. In sum and substance, such statement is as follows:

Schedules

A. 1. Personal property sold and particulars of sale.
 2. Debts of decedent collected.
 3. Moneys received for interest, rents, dividends, etc.
B. 1. Statement showing debts uncollected and reasons therefor.
 2. Statement of property remaining unsold.
 3. Statement showing increase or decrease in value of property.
C. Moneys paid for funeral and testamentary expenses.
D. Payment to creditors of claims allowed.
E. Moneys paid to legatees, widow, or next of kin.
F. Names and addresses of persons entitled as legatees
G. Miscellaneous expenses—statements of executors as to facts, etc.

Skeleton Form of Report

The body of the report should read substantially as follows:

I charge myself:		
With amount of inventory,		$ ¢
With increase, as per schedule A,		$ ¢
With income as per schedule A,		$ ¢
Total charges,		$ ¢
I credit myself:		
With funeral and testamentary expenses paid as per schedule C,	$ ¢	
With payments to creditors as per schedule D,	$ ¢	
With legacies paid as per schedule E,	$ ¢	
With commissions and other charges deducted as per schedule F,	$ ¢	
Total credits,		$ ¢
Balance (Undistributed assets on hand):		
Debts uncollected,	$ ¢	
Property unsold,	$ ¢	$ ¢

Commissions.—Executors and administrators, and trustees are compensated for their trouble in administering the work under their charge. It may be that such compensation is left to the discretion of the Court, or it may be that the matter is regulated by statute. In New York, executors are allowed 5 per cent on the first $1,000.00, 2½ per cent on the next $10,000.00, and 1 per cent on the balance of the total estate received and distributed. This would be over and above expenses. If there be more than one executor, the amount would be apportioned among them on the basis of service rendered.

In the matter of computing commissions, the following formula is illustrative:

1. Beginning inventory plus increase therein equals gross principal received.
2. Gross principal received less losses equals net principal received.
3. Net principal received plus gross income received equals total estate received and distributed.

It is on this last amount that the commission should be computed. Again, instead of computing the percentages as shown above, where the estate received and distributed exceeds $11,000.00, the following short cut calculation may be used:

1. One per cent of the amount received and distributed plus $190.00.

Final Duties.—After the final accounting has been approved, all Ledger accounts but cash and those representing assets on hand must be closed into the estate account. The total undistributed assets on hand equals the credit in the estate account.

The annual report must be made as required for fiduciaries under the Federal Income Tax Law. The executor or administrator before paying off the legacies should protect himself as regards inheritance taxes. These taxes follow the property, but the executor or administrator is liable for their collection. If a legatee does not pay him the amount assessed, he should hold out same when paying over the legacy.

Illustrative Problem—Application of Double Entry Principles.—The following problem illustrates the double entry principle applied to a set of executor's transactions. The entries are self-explanatory. The Ledger accounts are omitted as being unnecessary.

Problem.—John Smith died July 1, 1919, leaving an estate which consisted of the following:

Cash on hand,	$ 1,000.00
Bank overdraft,	2,625.00
Loan to Theodore Brown,	30,000.00
Interest at 6 per cent, payable January 1 and July 1.	
Interest paid to January 1, 1919.	
Life insurance policy,	5,000.00
$1,200.00 was borrowed upon this policy four years ago.	
No interest has ever been paid on this loan.	
Preferred stock of the Automatic Drill Press Co.,	100,000.00

First mortgage 5 per cent bonds of the Southern Alcohol Distilleries,	286,000.00
Interest is payable March 1 and Sept. 1.	
Sundry liabilities,	11,000.00

The accrued interest upon the loans and bonds has not been included above. A cash dividend upon the stock in the Automatic Drill Press Company was declared prior to the death of John Smith but was not received until afterward.

Its amount was,	$10,000.00
The funeral expenses were,	1,100.00

The will provided that the net income was to be paid to Smith's widow.

The interest due July 1, 1919, on the loan to Theodore Brown was received July 2, 1919. The insurance policy was collected on August 1, 1919, the amount of the loan plus accrued interest being deducted therefrom in settlement. The bonds were sold on October 1, for $295,000.00. All the liabilities were paid, and the income collected up to and including December 31, 1920, was paid over to the widow of Smith.

Draft all entries necessary to give expression to the above transactions.

Solution to Problem.—The entries for the above transactions are as follows:

Cash on hand,			$ 1,000.00	
Loan to Theodore Brown,			30,000.00	
Life insurance policy:				
Face value,		$5,000.00		
Less Loan made,	$1,200.00			
Accrued interest 7/1/15-8/1/19	240.00	1,440.00	3,560.00	
Preferred stock, Automatic Drill Press Co.,			100,000.00	
First mtge. 5 per cent bonds—Southern Alcohol Distilleries,			286,000.00	
Dividend account—Automatic D. P. Co.,			10,000.00	
Accrued interest:				
Loan to Theodore Brown,			900.00	
First mtge. bonds,			4,766.67	
To—Bank overdraft,				$ 2,625.00
Sundry liabilities,				11,000.00
Estate of John Smith,				422,601.67
To record assets and liabilities as at Smith's death, July 1, 1919, as shown by detailed inventory on file.				
Cash,			$900.00	
To—Accrued interest, Loan to T. Brown,				$900.00
To record receipt of interest on loan to Brown on July 2, 1919.				
Funeral expenses,			$1,100.00	
To—Cash,				$1,100.00
To record funeral expenses paid.				

Cash,	$10,000.00	
To—Dividend account, Automatic D. P. Co.,		$10,000.00
To record dividend received.		
Bank overdraft,	$2,625.00	
To—Cash,		$2,625.00
To record payment of above liability.		
Cash,	$7,150.00	
To—Accrued interest, first mtge. bonds,		$4,766.67
Interest received,		2,383.33
To record receipt of interest due on September 1.		
Buyer of first mtge. 5 per cent bonds—So. Alcohol Dist.,	$296,191.67	
To—First mtge. 5 per cent bonds—So. Alcohol Dist.,		$295,000.00
Interest received,		1,191.67
To record sale on October 1, of all bonds on hand for $295,000.00 plus accrued interest to date.		
Cash,	$296,191.67	
To—Buyer of first mtge. 5 per cent bonds—So. Alcohol Dist.,		$296,191.67
To record cash received from sale of above bonds.		
First mtge. 5 per cent bonds—So. Alcohol Distilleries,	$9,000.00	
To—Profit on realization of assets,		$9,000.00
To record transfer of profit from sale of bonds to a separate profit account.		
Interest on life insurance loan,	$ 6.00	
Cash,	3,554.00	
To—Life insurance policy,		$3,560.00
To record payment of insurance policy. The interest charge above is 6 per cent on the loan of $1,200.00, for 1 month, from July 1, 1919, to August 1, 1919.		
Interest received,	$3,575.00	
To—Income account,		$3,575.00
To record transfer of income items to a separate income account.		
Income account,	$3,575.00	
To—Cash,		$3,575.00
To record payment to widow of all income collected to December 31, 1920.		

Sundry liabilities,	$11,000.00	
To—Cash,		$11,000.00
To record payment of sundry liabilities.		
Estate of John Smith,	$1,106.00	
To—Funeral expenses,		$1,100.00
Interest on life insurance loan,		6.00
To close.		
Profit on realization of assets,	$9,000.00	
To—Estate of John Smith,		$9,000.00
To close.		

Illustrative Problem—Charge and Discharge Statement with Schedules.—The following C. P. A. problem and solution illustrates the more technical form of charge and discharge statement with accompanying schedules as required in New York.

Problem.—John Doe died January 15, 19—, leaving a small estate, and in his will made Richard Roe his executor. The will provided that a legacy of $5,000.00 should be paid to Mary Doe, sister of the testator, and that the residuary estate should go to testator's wife and two daughters, share and share alike.

The estate consisted of the following:

Cash in Dime Savings Bank,	$ 348.50
One month's salary (due testator from his employer),	250.00
10 Union Pacific Railroad Company's first mortgage 5 per cent gold bonds of $1,000.00 each,	10,000.00
One first income bond, Central Railroad of Georgia,	1,000.00
Demand note of John Smith,	100.00

At his death the testator owed two months' rent $50.00, Acker, Merrall & Condit, household supplies, $81.50.

The appraiser appointed by the surrogate inventoried all securities and accounts due the estate at their face value.

The executor received $348.50 from the Dime Savings Bank, with $14.25 interest. He sold the Union Pacific bonds at 102 and two months' interest, the Central of Georgia income bond for $875.00 flat, and paid M. J. Senior, undertaker, $541.00 for funeral expenses, Arnold, Constable & Co., $185.00 for mourning apparel of widow and children. He also paid for legal and other expenses incidental to the probating of the will, $125.00. John Smith was bankrupt, and his note proved to be worthless. The executor deducted his commission and distributed the funds of the estate according to the terms of the will.

From the above statement of facts prepare:

a. The executor's inventory of the estate.

b. The executor's summary statement and schedules for presentation to the surrogate's court in final accounting.

c. A statement of the amount of commissions to which the executor is entitled.

d. A statement of the amount paid to each beneficiary.

Solution to Problem:

Copy of the inventory of the Estate of John Doe, who died January 15, 19—, filed ——, 19—

	Nominal Value	Appraised Value
Cash in Dime Savings Bank,	$ 348.50	$ 348.50
One month's salary due testator from employer	250.00	250.00
10 Union Pacific Railway Company first mortgage 5 per cent gold bonds of $1,000.00 each, par value,	10,000.00	10,000.00
1 First income bond, Central Railroad of Georgia,	1,000.00	1,000.00
Demand note of John Smith,	100.00	100.00
	$11,698.50	$11,698.50

Schedule A

Inventory		Realized	Profit
	Debts collected:		
$ 348.50	Cash in Dime Savings Bank,	$ 348.50	
250.00	Salary collected, 1 month,	250.00	
	Sales of property:		
10,000.00	10 Union Pacific Railroad bonds at 102 and interest (interest below),	10,200.00	$200.00
1,000.00	1 First income bond, Central Railroad of Georgia, at 87 1/2 flat,	875.00	
$11,598.50		$11,673.50	$200.00
	Income received:		
	Deposit in Dime Savings Bank,	14.25	
	Union Pacific Railroad bonds, 2 months, at 5 per cent on $10,000,	83.33	
		$11,771.08	

(Signed) Richard Roe, Executor,
Estate of John Doe, deceased.

Schedule B

Debts not collected:		
Demand note of John Smith, uncollected as maker is bankrupt, and note considered worthless		$100.00
Loss on realization of inventory values:		
Appraised value of First income bond of Central Railroad of Georgia,	$1,000.00	
Amount realized,	875.00	$125.00
		$225.00

(Signed) Richard Roe, Executor,
Estate of John Doe, Deceased

Schedule C

Funeral expenses:	
Undertaker's bill, M. J. Senior,	$541.00
Other expenses:	
Probate expenses,	125.00
	$666.00

(Signed) RICHARD ROE, Executor,
ESTATE OF JOHN DOE, Deceased.

Schedule D

Money paid creditors:	
Rent, two months,	$50.00
Household supplies, Acker, Merrall & Condit,	81.50
	$131.50

(Signed) RICHARD ROE, Executor,
ESTATE OF JOHN DOE, Deceased.

Schedule E

Payments to legatees:		
Money advanced widow and children,		$ 185.00
Mary Doe, sister, bequest,		5,000.00
Widow, 1/3 residuary estate, per will,	$1,826.95	
Daughter, 1/3 residuary estate, per will,	1,826.96	
Daughter, 1/3 residuary estate, per will,	1,826.96	5,480.87
		$10,665.87

(Signed) RICHARD ROE, Executor,
ESTATE OF JOHN DOE, Deceased.

Schedule F

Names and addresses of beneficiaries (not given in problem).

Schedule G

Other facts relating to the estate:			
Richard Roe, executor for commission,			$307.71
Estate principal, per inventory,		$11,698.50	
Increase-Sale of Union Pacific Railroad bonds,		200.00	
Total charge account of principal,		$11,898.50	
Deduct:			
Debts not collected, Schedule B,	$100.00		
Loss on sale of First income bond Central Railroad of Georgia,	125.00	225.00	
Net principal received,		$11,673.50	
Income received,		97.58	
		$11,771.08	

Commissions:

5 per cent on first,	$ 1,000.00	$ 50.00
$2\frac{1}{2}$ on next,	10,000.00	250.00
1 per cent on balance,	771.08	7.71
	$11,771.08	$307.71

(Signed) RICHARD ROE, Executor,
ESTATE OF JOHN DOE, Deceased.

Summary Statement of the Executor Richard Roe, of the Estate of John Doe, who died January 15, 19—, filed ————, 19—,

I, Richard Roe, Executor, charge myself as follows:		
Amount of inventory,		$11,698.50
Increase, as shown in Schedule A,		200.00
		$11,898.50
I credit myself as follows:		
Losses, as shown in Schedule B,	$225.00	
Expenses, as shown in Schedule C,	666.00	
Creditors' payments, as shown in Schedule D,	$131.50	1,022.50
Showing balance of principal,		$10,876.00
As to income, I charge myself with:		
Income received, that is, interest, as shown in Schedule A,		97.58
Leaving net value of estate,		$10,973.58
I credit myself with:		
Advances and final payments made to legatees in accordance with terms of the will, as shown in Schedule E,		$10,665.87
Commissions deducted by myself, as shown in Schedule G,		307.71
		$10,973.58

The said schedules, which are severally signed by me, are part of this account.

Respectfully submitted,
RICHARD ROE, Executor.

Comment:

1. Technical phraseology of the legal form has been omitted.
2. The information found in the question as worded is somewhat insufficient to work out an absolutely intelligent solution so far as the proper apportionment of sums between capital and income is concerned. A more or less arbitrary treatment of certain items has been followed; for example, it is possible to treat the $185.00 advanced to the widow and children for mourning apparel as falling under Schedule C instead of in Schedule E. But without further information, the item seems correct as placed.

Trusts.—A trust is a right of property, real or personal, held by one party for the benefit of another. These two parties are designated as follows:

1. Trustee: the person who holds.
2. Beneficiary: the one for whose benefit the right is held. This person is known, also, as the cestui que trust.

As a rule, three persons are concerned in a trust:

1. The one who created it. This is the owner who held, originally, both legal and equitable title to the right in question.
2. The trustee to whom the legal title is given.
3. The beneficiary who has the equitable rights to the benefits of the property.

The right of the beneficiary is in the trust, the obligation of the trustee results from the trust, and the right held is the subject matter of the trust. No one alone is the trust; but together they constitute the trust.

The law fixes firmly the rights and liabilities, or duties, of the parties to a trust. The relation of an agent to his principal savors of a trust, but this relationship, as well as many other legal relationships, in whole, are not in exact agreement therewith. Even though a fiduciary relationship exists between an agent and his principal, such relationship is not of the same type as that of a trustee to his beneficiary. An agent acts for a principal, binding the latter; a trustee, when he acts, only binds himself.

Trusts may be classified in a number of ways, of which the following are illustrative:

1. Active as opposed to passive (or dry).
2. Executed as contrary to executory.
3. Express as against implied.
4. For value versus voluntary.

In an active trust, the trustee has some duty to perform. In a passive trust, the trustee is not bound to the performance of any duty; by force of such a trust, merely the legal title to some right rests in the trustee. An executed trust is one fully declared so that nothing further need be done to make it complete. An executory trust requires some further act to complete the intention of the creator; for example, A conveys in trust

to B, to convey to C. An express trust is created by an express voluntary act of the creator; if the subject matter be real estate, the trust must be created in writing. A trust for value is one based upon a valuable consideration as distinguished from one created out of the goodness of heart.

Duties of Trustees.—Anyone can be a trustee, but no one should be who is not capable of making a valid contract. Corporations, known as trust companies, hold themselves out to the public as ready to act as trustees. If a trust be created, but for some reason or other there is no trustee selected, a Court of Equity will appoint some one to act in that capacity.

The powers of a trustee are all sufficient to carry out the purposes for which the trust was created. When one accepts such office, he must carry out the trust, except when relieved from so doing either by all the beneficiaries or by returning all the property to the Court. A trustee is in duty bound to carry out the trust in the manner prescribed, using the property entrusted to his care and governing his actions in relation thereto as would a prudent man under like circumstances, exercising due diligence. He cannot make personal profit out of the trust property, and he must be careful not to mingle trust properties with his own.

Trustees' acts always are subject to supervision by a Court of Equity. For that reason, he should keep accounts of the trust estate and he should be prepared to render an accounting whenever required to do so. His accounts must be kept in such a way that no obscurities are therein seen. If anything is found to be of a doubtful nature, he will be held accountable therefor. He is charged with the trust estate and he is held liable therefor until he has discharged himself properly therefrom.

Relation Between Work of Executor, Administrator, and Trustee.—An executor or administrator is a court officer; a trustee is not a court officer. A trustee disposes of definite property in a specific way; an executor or administrator disposes of general property in a general way. A trust may be created by a living person as well as under a will. But the accounting in connection with either viewpoint is essentially the same.

The basic principle to remember is that, under any one of the three, some person is charged with certain properties and he must account to a Court therefor by means of properly kept

records in order that he may discharge himself eventually from the personal liability assumed when he charged himself with their values.

Another point to remember is that an executor or administrator may act, also, as trustee. When this is the case the executor or administrator should be careful to discharge himself from properties over which he acts as executor or administrator before he charges himself with them as trustee.

Life Tenant Versus Remainderman.—The last three sections of this chapter revolve around the distinctions between principal and income. And these distinctions must of necessity be those which affect the rights of a life tenant as against those of a remainderman. They arise primarily in investment accounting in cases where the funds out of which a life tenant's income is to be paid have been invested in securities after the decedent's death.

In the last analysis, however, it should be remembered that regardless of technical differentiations as between principal and income, the intent of the testator is all important, this being the governing factor. If the Court can ascertain what such intent was, the will will be interpreted in accord therewith regardless of whether such intent does or does not conform to scientific distinctions.

A life tenant is a person who for his natural life enjoys, or persons who for their natural lives enjoy, or for a specified period or periods, or until the happening of an event or events, the net income or real or personal estate, or both. A life tenant is entitled to enjoy only the net income from property or investments, or both, for a specified period, usually for his natural life.

A remainderman is a person in whom an estate shall absolutely vest, on the termination of the rights of the life tenant. Herein the term includes any person or persons in whom property shall vest, on the termination of the rights of the life tenant therein.

It is usual and best, where a life estate is created in personalty, or partly in personalty and partly in realty, to appoint a trustee to hold and manage the estate during the life tenancy, and on the termination of the life tenancy to convey, or transfer and deliver, the then principal of the estate to the remainderman.

Whether there is a trustee or no trustee (in the latter case as

where an estate is created as to realty, a trustee is not absolutely necessary to hold the realty for the period of enjoyment of the life tenant, because the latter cannot sell and convey the whole estate without the remainderman joining in the conveyance) the rights as to the enjoyment of the estate of the life tenant and remainderman are governed by the same general legal principles, except as to the question of estate management. If there be a trustee, management vests in the latter; where there is none, and there is no specified restriction as to such estate management, the management vests in the life tenant during his period of enjoyment.

Even though the management of an estate is in a life tenant, he cannot lease the estate beyond the time of his own enjoyment and he cannot encumber more than his own interest unless he is given express authority so to do.

A widow's dower in her deceased husband's realty, the courtesy of a widower in his deceased wife's realty, and homestead rights of a widow and minor children in a deceased husband's and father's realty are life estates or estates for years created by operation of law; all other life estates or estates for years exist only by express provisions under instruments given when the grantor is living or under wills.

A life tenant, during the continuance of his interest in a trust estate, is entitled to enjoy the exact legal net income of the estate, and nothing more or less. The remainderman, on the termination of the life estate, is to receive the exact legal principal of the estate, and nothing more or less. Therefore, a trustee must keep his accounts so that all items of income will be shown separately from all legal items of principal, and must prorate items legally between principal and income when such apportionment is required by law or by Court order. This distinction at times may be difficult to maintain, yet the trustee must keep his accounts legally accurate, not merely accurate as to amounts of items but accurate in conformity to the rules of law.

The rights of beneficiaries in a trust estate are governed basically by the express terms of the instrument or will creating the trust, so far as such terms are within the law; and where there are no proper and express terms, the general rules of law control. The general rules of law will control, also, where by

reason of changed conditions, the express terms can no longer be carried out. In all cases of doubt, the trustee, for his own protection, should go to Court and have the Court pass upon the matter. If the trustee should overpay the life tenant during the trust, or on the termination of the trust should overpay the remainderman, he may be held personally liable even though he may have acted in entire good faith in distinguishing between items chargeable or credited to income or chargeable or credited to principal in his trust accounts. The trustee must know his accounts are correct in principle and in detail; otherwise, he is liable.

Distinctions Relating to Income.—In distinguishing between principal and income, the following two general rules are advanced:

1. Be governed basically by the distinction followed in mercantile accounting between capital charges and revenue charges.
2. Know the local law when working on any specific case.

Ordinary costs and expenses in the routine administration of the trust estate should be paid out of income. Such expenditure does not add to the value of the property or assets of the trust estate.

Illustrative income distinctions are indicated below:

1. Rent of safety deposit boxes in which to keep estate securities and papers.
2. Express charges on securities sold which have to be forwarded, or which have to be forwarded for collection.
3. Transfer tax when sale of securities is liable to such tax.
4. Cost of forwarding and collecting interest coupons and notes.
5. Postage and stationery for use in connection with business matters concerning the trust.
6. Attorney's fees in connection with services affecting the trust estate and not involving the existence of the trust or title to trust assets.
7. Commissions of agents employed to collect rents from trust realty.
8. Services of accountants, bookkeepers and clerks engaged in attending to trust business.

9. Services of workmen engaged in caring for and repairing trust properties.
10. Court costs in connection with hearing and auditing annual or interim accounts of trustee filed with Court.
11. Planting, caring for, harvesting, selling and shipping crops, where land is cultivated by trustee.
12. Caring for and feeding cattle, etc., and the cost of selling and shipping the increase of live stock, cattle and sheep of the trust estate.
13. Commissions of trustee from time to time at the legal rate on disbursements of income of trust estate. This does not include perhaps commissions on disbursements of principal.
14. Cost of repairs upon realty improvements. If the life tenant should die before such payments are made, the cost should be borne, nevertheless, by him because the remainderman is entitled to receive the premises free of any charges imposed thereon by the life tenant.
15. Annual general taxes assessed and due and payable against the real and personal property of the estate, and any annual special taxes for sprinkling or other purposes not considered as being improvements. If there is no income out of which they can be paid, the trustee must advance the payment temporarily out of the principal. Taxes never should be allowed to become delinquent. Subsequently, when a net income has been produced, the advance out of principal should be restored.
16. When the life tenant dies during any current taxable year, his estate should be charged with an amount proportionate to the time he has enjoyed the estate income during that year. This is true whether taxes are payable before or after the death of the life tenant.
17. When directed, the trustee must insure; otherwise, he may insure, as against fire and wind storm. All insurance premiums paid are chargeable against income. If insurance is collected, and the trustee does not deem it advisable to restore the destroyed property, as where improvements are destroyed, the proceeds so collected belong to the principal of the estate.
18. Rents payable after the death of the deceased, and due to

him whether partly or practically entirely for a period of time prior to date of death are collectible in favor of the life tenant pro rata. Subsequent rents are considered as income. During the continuance of the life tenancy the life tenant is entitled to the net rents accruing to the date of his death, and the lost rent is adjustable to the date of his death, so that his legal representative will receive any amount accrued and not collected by the trustee at the death of the life tenant, or collected and not disbursed by the trustee. Rent accrues from day to day in favor of the life tenant.

19. The trustee, out of the income of the trust estate, must keep all properties in as good order as when the same came to the trustee under the instrument or will creating the trust, without deterioration except ordinary wear and tear. Material depreciation affects the estate principal.
20. Interest payment on mortgages which encumber estate properties are chargeable against income.
21. If a trustee holds corporate stock for a life tenant and remainderman, dividends declared out of current earnings and out of undivided profits and surplus earned during the existence of the trust belong to the life tenant as income. If a dividend declared and paid is unusually large, the trustee is at once put on inquiry to ascertain if part thereof does not accrue to the estate corpus. The separation may be hard to determine, and when so, the Court should be appealed to for guidance, as to how the particular dividend shall be credited, in whole or in part, to income or corpus, or both. It makes no difference whether the dividends be all cash, or all corporate securities, or part of each.
22. When corporate stock is sold, and where the corporate capital, undivided profits, and surplus at the time of sale are larger than the amount at the beginning of the trust, it is assumed a higher price was realized for the stock than would have been the case had there not been this increase; and a fair proportion of the proceeds of the sale, representing the increase in surplus and undivided profits in respect of the shares sold, should be considered as accumulated earnings belonging to the estate income; the remaining por-

tion is part of corpus. On this point, the trustee should seek Court advice.

23. Generally, all interest collections on demand and on secured principal notes, or on bonds, held at par as an investment, as collected should be treated as income. When a note is bequeathed, its value is its face value plus interest accrued and unpaid at decedent's death. This value is estate corpus. Therefore, when the first interest payment is made and collected, such payment should be apportioned so that estate income will receive the earnings since the testator's death and the taking effect of the bequest. The other part of the earning should be credited to corpus.

Distinctions Relating to Principal (Corpus).—Similarly, illustrative corpus distinctions are indicated below:

1. Delinquent taxes where the trustee is authorized to purchase property for the estate. The trustee either must see that no delinquent taxes exist, or must retain the necessary amount to cover them out of the purchase price. When taxes are delinquent, it is assumed the purchase price will be lessened by their amount.
2. All taxes which are a lien on the estate as at the death of the devisor. Such payments will be made out of the personalty. This is sort of an exception to the general rule that one who enjoys the current income of an estate should pay the current taxes.
3. Where the life tenant dies during any current taxable year, the remainderman should assume an amount proportionate to the time the life tenant has not enjoyed the estate income. This is true whether taxes are payable before or after death of the life tenant.
4. Special improvement taxes where the question has been adjudicated by proper Court proceedings or where the Court orders same to be paid wholly or in part out of principal. Otherwise, payment shall be made from income. It may be that the will contains a provision covering the point.
5. Rents due and unpaid owed to the deceased at the time of death are part of the principal estate.
6. Natural wear and tear of a trust estate. Natural depreciation affects the principal and finally falls upon the remain-

derman. Natural depreciation is unavoidable, and neither the trustee nor the life tenant can be held therefor. Such decrease will not appear in the trustee's accounts until the sale of the particular asset or assets affected.

7. Collections by a trustee on account or in full of the principal of notes or bonds held by the trustee at par, should be credited to corpus, being merely a change of assets from one form to another. If any of the collected proceeds represent accrued interest, the amount representing accrued interest should be credited to income.
8. Attorneys' fees and costs for removal of trustees and for the appointment of successors are chargeable against principal, as being incurred in preserving the integrity of the trust as a whole. The same would be true of attorneys' fees and costs concerned with protecting the estate assets. Again, the same would be true where attorneys' fees and costs are incurred in connection with having the terms of a will or trust instrument interpreted, where such terms are uncertain.
9. Commissions paid an agent to purchase an investment of realty or personalty out of corpus funds are regarded as adding to the cost of the property purchased and are chargeable against the principal of the estate. The same is true when commissions are paid to an agent who sells realty or personalty held as part of the corpus of the estate. Other purchase and sales expenses which do not come under the head of mere administration costs may be considered as chargeable against corpus.
10. Where a trustee is empowered to encumber property by a mortgage, the proceeds of the mortgage note principal should be considered as estate principal. Interest payments on such mortgage are chargeable against income. Payments to reduce the principal of the mortgage are chargeable against corpus.
11. Corporate dividends declared out of undivided profits or surplus earned before the existence of the trust, and dividends declared out of profits by appreciation of property owned by the corporation at the time of creating the trust

belong to the remainderman as corpus (dividends out of property appreciation can only come about by sale).

12. When corporate stock is sold, and where the corporate capital, undivided profits, and surplus at the time of sale practically aggregate the amount at the beginning of the trust, all the sales proceeds should be considered as corpus.
13. At times, as in California, corporate directors may assess corporate shares after they are full paid, to help meet corporate debts. Such assessments are chargeable against estate corpus.

CHAPTER XV

FIDUCIARY STATEMENTS (CONTINUED)

Introduction.—In the last chapter certain principles were discussed related to the accounting procedures and statements made use of in administering the estates of decedents. That topic, however, revolved around the death of an individual, this being necessary before a decedent's estate could come into existence.

The inability of an individual, or an organization (a partnership or corporation) to meet financial obligations when due might constitute excellent grounds for the intervention of a disinterested party who will take over the custodianship of properties and dispose of them in accord with certain legal rules or instructions received from a Court.

When there is insufficient property on hand, at a fair valuation, with which, or out of which, a person can pay his debts, such person is said to be insolvent. Such a condition is interesting to an accountant because thereunder certain forms of statements or exhibits either are required or useful; these statements or exhibits never are used in any other connection. Briefly, these statements are:

1. Receivership and bankruptcy statements.
2. Statement of affairs with accompanying deficiency account.
3. Statement of realization and liquidation.

A discussion of the first two forms the content of the present chapter, whereas, a discussion of the last will be considered in the next chapter.

Insolvency Versus Bankruptcy.—When an individual or an organization is said to be insolvent, two possibilities as to meaning present themselves:

1. Is the individual or organization only financially embarrassed? This means merely that, in the usual course of

business, the assets have become tied up in some way or another to the end that they are not available with which to meet current maturing obligations, as payrolls, notes, taxes, etc. In this instance, the value of the assets is not less than the gross amount of the liabilities. Legally, the business or individual is insolvent; commercially, insolvency is not present, because there exists only a temporary inability to pay debts. It might be possible, of course, that these unpaid obligations will be reduced to judgments, the latter to be satisfied by a levy upon, and a taking of, available property. In this event, the operation of, say, the business, will cease. But it is just as possible that something can be done to avoid reducing these obligations to judgments. By hustling around, money may be borrowed with which to meet payrolls, or the banks and other creditors may renew the notes outstanding. By such legitimate manipulation, the period of stringency may be passed safely to the end that within a short time funds will be collected from regular sources with which to meet the debts.

2. Is the individual or organization in a condition where the value of the assets on hand is less than the gross amount of the liabilities? This condition would seem to be that of true insolvency; it is in accord with the type of insolvency contemplated under the National Bankruptcy Act. To be actually insolvent, the assets of an individual or an organization, other than cash funds, must be considered. Many individuals and organizations, if called upon to pay their debts at a specified moment of time could not do so. If all the depositors of a bank should demand, at a specified moment, the total sums they have therein deposited, the bank would not be able to pay them; still, one could not say that, because of this reason alone, the bank was insolvent. Insolvency is a situation applied to a debtor who, being pressed for payment, presents, say, a Balance Sheet which, when given the fairest possible estimate, would show assets, when turned into cash, insufficient to pay the liabilities.

Insolvency, therefore, is better defined as that condition of an

individual, a partnership, or a corporation in which the assets taken at the best and fairest estimate possible will not pay the liabilities. The National Bankruptcy Act defines the term along the following lines: "A person shall be deemed insolvent . . . whenever the aggregate of his property, exclusive of any property which he may have conveyed, transferred, concealed, or removed, or permitted to be concealed or removed, with intent to defraud, hinder or delay his creditors, shall not, at a fair valuation be sufficient to pay his debts." This definition emphasizes the economic viewpoint—actual insolvency.

Insolvency and bankruptcy are not synonymous terms. An insolvent is not a bankrupt; he becomes such only upon adjudication by a Court of proper jurisdiction growing out of an action brought before such Court either by himself or by his creditors to have him declared a bankrupt.

Equity Receiverships.—These are possible because the relief granted by a Court of ordinary jurisdiction is inadequate. In general, an equity receivership is not securable as a matter of course, inasmuch as it is considered as interferring in the exercise of one's right of private property. Hence, its creation will be granted only after strict examination with due regard to the attitude of the petitioner as reflected in his answer. Jurisdiction over an equity receivership is vested in:

1. Courts of equity.
2. Federal courts.

The varying general possibilities under which an equity receivership may be created, are about as follows:

1. Solvent concerns (partnerships and corporations).
   a. Voluntary dissolution.
   b. Involuntary dissolution.
2. Insolvent concerns (partnerships and corporations).
   a. Voluntary dissolution.
   b. Involuntary dissolution.
3. Disputes between creditors and debtors.
4. Disputes between vendors and vendees.
5. Disputes between covenantors and covenantees.
6. Misuse or waste of assets by partners or corporate officers.

7. Disputes arising under probate or administration.
8. Etc.

In New York, and in certain other states the statutes cover the creation of receiverships. But even hereunder the creation lies within the discretion of the Court. In New York, a Court of Equity is the Court of competent jurisdiction for receivership creation. Further, under the New York statutes, the varying other possibilities under which a receivership may be created are about as follows:

1. When a mortgage is foreclosed under a condition where the property value involved is not sufficient to meet the mortgage obligation.
2. Incumbrance of property income. If income, rent, and profits are not mortgaged, and a concern is insolvent, a receivership will be created without question.
3. Certain dissolution or reorganization proceedings.

Federal statutes, also, cover the matter of receiverships, and these receiverships should be differentiated carefully from those covered by local statutes. Federal receivership proceedings are under the jurisdiction of the U. S. District Court of the district within which is located the main office of the concern in question. And where property is found in part within other districts, the administration thereof falls to the lot of the local district Court subject to the control of the Court located in the district containing the concern's main office. These subsidiary proceedings are called ancillary proceedings. Individuals, partnerships, and corporations, if insolvent or bankrupt, may come into the federal Courts. Federal receiverships are known as chancery receiverships.

Procedure in Event of Financial Embarrassment.—When an individual or organization shows evidence of an incapacity to manage affairs satisfactorily, it is logical that some disinterested person from the outside should be secured to act in a fiduciary role for protecting the rights of all parties interested. This person may be appointed in either one of two ways:

1. By a Court of competent jurisdiction, federal or state.
2. By the debtor with the consent of his creditors, without the intervention of the Court.

If the individual or organization is solvent, yet unable to meet

its current obligations, and wishes to avoid bankruptcy proceedings, two possible courses of procedure are open which agree with what has been stated above:

1. a. Apply to a Court of Equity for the appointment of a receiver in equity. Such a procedure is an involuntary one on the part of the principal in that the creditors will make application for the appointment.

   b. Apply to a Court of Equity for the appointment of a person who will take charge of the business and realize all he can out of it for the benefit of the creditors. The person appointed under these circumstances is an assignee, in that the principal makes application therefor and assigns for the benefit of the creditors. However, it must be remembered that under a manipulation of this kind, the creditors may institute bankruptcy proceedings immediately, and thereby defeat the purpose the principal had in mind. Such a procedure is a voluntary one on the part of the principal as distinguished from the involuntary one mentioned above.

2. If the principal and his creditors get together by agreement without the intervention of a Court, and agree to continue the business or to close out the assets and pay off as much of the liabilities as possible, appointing someone as a fiduciary to carry out their wishes to this extent, the person so appointed is known as a friendly trustee.

Assignments in Favor of Creditors.—In every state insolvency laws exist which may be taken advantage of by an insolvent in that he can apply to the Court for the appointment of an assignee to liquidate affairs for the interest of all creditors. At the present time, in most states, and under federal statutes as well, it is illegal to make an assignment for the benefit of only certain creditors. An assignment may cover all, or only a portion, of the debtor's assets.

The assignee takes over these assets in trust, with the purpose in mind of applying either the actual property or the proceeds secured from the sale of such property to the payment of the debts in question (some or all), and to return to the debtor any excess remaining after such application. When an assignment is in order, the assignee secures such a control over the

properties assigned that both the assigning party and the unsecured creditors cannot in any way reach it.

The assignee works under Court direction, realizing upon the assets placed in his care, and paying off creditors in the order of preference and accounting to the Court relative to his custodianship by means of certain schedules. These insolvency laws might operate to the benefit of all concerned, but seldom are they made use of because of the existence of the National Bankruptcy Act.

Effect of National Bankruptcy Act upon Assignments.—Under the Constitution of the U. S., "Congress shall have power to establish uniform laws on the subject of bankruptcy throughout the United States." Congress has exercised this right by passing several different laws, the one in force at present being the law of 1898 plus its several amendments. The several states are not prohibited from passing legislation concerning bankruptcy, but any state law on this subject must not conflict with the federal law. Therefore, if advantage is taken of the insolvency laws of any state, the insolvent may be forced into bankruptcy under the federal law. Because of this fact, if an assignment is made under a state law, without the consent of the creditors, the latter, because of the superiority of jurisdiction of the federal statutes, may invoke the aid of the national law, throw the insolvent into bankruptcy and, thereby, defeat the latter's purpose.

Upon any point at which no conflict exists between Federal and state jurisdiction, the state insolvency laws govern. Therefore, the state laws are enforced only where the provisions of the federal act have not been invoked. Because of the conflict in jurisdiction, the state law is practically inactive, except where all parties agree to be governed by the state statute.

To the debtor, the advantage of the federal law lies in the fact that thereunder, if he has been only unfortunate and not fraudulent, he may, by being adjudicated a bankrupt:

1. Be discharged from all his past debts and thereby be given a fresh start to build up new credit with the satisfaction of knowing that as soon as he secures a little money it will not be taken to make good an old claim.
2. The creditors thereunder have the advantage of sharing

alike (those who are unsecured) with no one securing an undue advantage by fraud or unfairness.

On the other hand, the usual state insolvency law is merely a compilation of rules and regulations covering the distribution of the estate of an insolvent after assignment.

Bankruptcy; Receiver Versus Trustee in Bankruptcy.—When an individual or an organization is insolvent, *i. e.,*—when assets are less than debts, the debtor may seek voluntary bankruptcy proceedings, or the creditors may seek involuntary bankruptcy proceedings. If voluntary, the debtor files a petition in a district Court of the U. S., setting out therein the number and amount of his debts and the amount of his property. The creditors are then notified, and copies of this petition are given them. From this point on, the procedure of voluntary and involuntary bankruptcy is practically the same. In urgent cases, the Court will appoint some one to take charge of the estate until the regular trustee in bankruptcy has qualified. This person is called a receiver in bankruptcy.

This receiver is charged with protecting and caring for the property of the debtor until such time as the creditors can get together and appoint a trustee or trustees in bankruptcy. The receiver in bankruptcy, therefore, is seen to have duties different from those of a receiver in equity. He merely cares for the property, and his activities relating thereto depend entirely upon the instructions he receives from the Court. He does not operate the business, nor does he realize upon the assets and liquidate the liabilities; only when assets are of a perishable nature, and with the consent of the Court, will he realize upon the assets.

Any insolvent person may file a bankruptcy petition on his own account by asking the Court to adjudge him a bankrupt. The amount owed by such a person is immaterial. Voluntary proceedings, as a rule, are infrequent, except when one is hard pressed by creditors, because the expense involved is rather heavy.

Involuntary bankruptcy may be brought about by a creditor if the debts of a debtor are not less than $1,000.00, and an act of bankruptcy has been committed. The Bankruptcy Act points out that the following are acts of bankruptcy:

1. To convey, transfer, conceal, or remove, or to permit to be

concealed or removed, any part of his property with intent to hinder, delay, or defraud his creditors or any of them.

2. To transfer while insolvent any portion of his property to one or more creditors with intent to prefer such creditors over his other creditors.
3. To suffer or permit, while insolvent, any creditor to obtain a preference through legal proceedings, and not have vacated or discharged such preference at least five days before a sale or final disposition of any property affected by such preference.
4. To make a general assignment for the benefit of his creditors, or being insolvent to apply for a receiver or a trustee for his property, or to have had a receiver or a trustee put in charge of his property because of insolvency.
5. To have admitted in writing his inability to pay his debts and his willingness to be adjudged a bankrupt on that ground.

One who has committed any such act of bankruptcy is liable to have filed against him a petition asking he be adjudged bankrupt at any time within four months thereafter.

Bankruptcy proceedings may be brought by any one or more creditors when the alleged bankrupt owes not less than $500.00, if the total number of creditors is less than twelve. If there are twelve or more, three or more must join in bringing the proceedings, and their claims must aggregate more than $500.00.

Bankruptcy proceedings may be brought against any natural person, other than a wage-earner or a person engaged chiefly in farming. They may be brought against an unincorporated company and against any corporation whose debts amount to $1,000.00 or more. However, a municipal corporation, a railroad, an insurance company, or a bank cannot have bankruptcy proceedings instituted against them for reasons of public policy. If any one of these corporations becomes insolvent, the creditors may apply to a Court of Equity to have a receiver appointed to take charge of the assets and the business on behalf of the creditors.

Trustees in Bankruptcy.—As soon as the creditors have appointed a trustee, or trustees (there may be three of them), the latter must proceed immediately to realize upon the assets and

to liquidate the liabilities. When this activity has been completed, or at intervals during the realization and liquidation process, the trustees may be required to render an accounting to the Court. This will be discussed at a later time in the next chapter.

H. C. Bentley, C. P. A., in his "Science of Accounts," a book now out of print, has discussed so well the appointment and duties of a trustee in bankruptcy, pages 275-277, that the writer takes the liberty of introducing a quotation therefrom at this point:

When an individual, partnership or business corporation has been adjudged a bankrupt, the creditors at their first meeting after the adjudication (date of entry of the decree) should appoint one or more trustees, as may be required. In case they do not exercise this privilege, the court will appoint. The first meeting referred to above must be held not less than ten nor more than thirty days after the adjudication, at the county seat of the county in which the bankrupt had his principal place of business.

The trustee in bankruptcy must account for all moneys belonging to the bankrupt concern which may be received by him; collect and reduce to money the property of the bankrupt; deposit all moneys received by him as such trustee in a bank designated by the court; disburse the funds only by check; lay before the final meeting of the creditors detailed statements of the administration of the estate; make final reports and file final accounts with the referee fifteen days before the day fixed for the final meeting of the creditors, and pay dividends within ten days after they are declared by the referee. He must also report to the court, in writing, the condition of the estate and the amount of money on hand, together with such other details as may be required by the court, within the first two months after his appointment and every two months thereafter, unless otherwise ordered by the court. (The court refers to the bankruptcy court in which proceedings are pending, and may include the referee,—the direct representative of the court of their appointment for handling the many details that otherwise would have to be handled by a judge.)

It is customary for the trustee to compile, or have compiled, a statement of affairs and a deficiency statement, ... as soon as possible after his appointment. From these two statements the court, the trustee, and any other persons at interest, may gain a fair idea of the probable results from liquidation. It is not compulsory on the trustee to have such statements compiled, but it is usually done as a matter of good practice.

The only statement actually required by the court must be furnished by the bankrupt himself within ten days after the adjudication if an involuntary bankrupt, and consists of a schedule of his property showing the amount and kind of property, the location thereof, and its money value in detail; a list of creditors with their addresses, the amount due each of them, the consideration thereof, the security held by them, if any; and a claim for such exemptions as the bankrupt may be entitled to. This report must be rendered in triplicate.

In the above quoted paragraphs, mention is made of two separate statements:

1. The statement required by the Court to be filed by the bankrupt himself.
2. The statement of affairs and accompanying deficiency account, customary but not required by the Court.

A consideration of these two statements brings one to the discussion comprising the latter portion of this chapter.

Content of Bankruptcy Statements.—In bankruptcy proceedings, the only statement actually required by the Court must be furnished by the bankrupt himself:

1. Within ten days after an involuntary bankrupt has been adjudicated a bankrupt, and
2. If a voluntary bankrupt, with the petition.

This statement takes a prescribed form which has been set forth by the bankruptcy law. The schedules required are for the purpose of setting forth the different classes of debts and creditors, and whether they are preferred, fully-secured, or partly-secured, the amount and kind of each property of the bankrupt and its location and money value in detail, and a claim for the exemptions to which the bankrupt may be entitled. Three copies of this report must be submitted. These statements in no way are presented in such an accounting form that they will show clearly the aggregate of all debts and the result upon the unsecured creditors. It seems that the Courts have departed as little as possible in all matters of accounts from the simplest and most primitive; advances in accounting procedure have not been taken advantage of by them.

Content of Schedule A.—The bankruptcy schedules are divided into two parts:

1. Schedule A. This schedule is subdivided into five sections,

in which are shown the bankrupt's debts, and the order in which they rank; each subdivision must be signed by the bankrupt.

2. Schedule B. This schedule is subdivided into six sections, in which are shown the bankrupt's assets; each subdivision must be signed by the bankrupt.

The contents of schedule A, covering debts, are indicated below:

Subdivision 1.—Herein there must be set out in detail the creditors to be paid in full—the preferred creditors, their names and residence (if residence is not known, such fact must be stated), where and when the debt was contracted, the nature of such debt and its consideration, its amount, and proper reference to the books of account (as Ledger). The order of preference for such debts is as follows:

a. Taxes and debts due and owing to the U. S.
b. Taxes due and owing to the State, or to any county, district, or municipality thereof.
c. Wages due workmen, clerks, or servants, in an amount not to exceed $300.00 each, earned within three months before filing the petition.
d. Other debts preferred.

Subdivision 2.—This subdivision shows creditors holding securities, particulars concerning securities held, their dates, and when given; these facts are to be set out under the names of the creditors involved. Also, there must be shown the particulars concerning each debt, whether same was contracted as partner or joint contractor with any other person, and if so, with whom, residences (if not known, fact to be stated), value of securities, and amount of the debts.

Subdivision 3.—This subdivision shows the unsecured creditors, their names and residences (if latter unknown, fact to be stated), when and where the obligations were contracted, nature and consideration of the debt, and whether any judgment, bond, bill of exchange, or promissory note, etc., and amount. When name and residence, or either, of any drawer, maker, indorser, or holder of any bill or note, etc., are unknown, such fact must be shown, and also the name and residence of the last holder known to the debtor. The debt due each creditor must be stated

in full, and any claim by way of set-off stated in the property schedule.

Subdivision 4.—This shows the liabilities on notes or bills discounted which ought to be paid by the drawers, makers, acceptors, or indorsers, the names of holders so far as is known and their residence (if unknown, fact must be stated), place where contracted, nature of liability, whether same was contracted as partner or joint contractor, or with any other person, and if so, with whom, and amount. The dates of the notes or bills, and when due, with names, residence, and business or occupation of the drawers, makers, or acceptors thereof are to be set out under the names of the holders. If names of holders are not known, the name of the last holder known to debtor should be stated, and his business and place of residence and the same particulars as to notes or bills on which the debtor is liable as indorser.

Subdivision 5.—This sets forth the accommodation paper, the names of holders, residences (if not known, fact to be shown), names and residences of persons accommodated, place where contracted, nature of liability and amount.

Content of Schedule B.—The content of schedule B, covering the assets, is as follows:

Subdivision 1.—This subdivision sets out the real estate owned or held by the debtor, indicating in detail the location and description thereof, the encumbrances thereon, if any, the dates thereof, particulars relating thereto, and the estimated value.

Subdivision 2.—This sets out the personal property of the bankrupt, the value of each class being shown in order as follows:

a. Cash on hand.
b. Bills of exchange, promissory notes, or securities of any description (each to be set out separately).
c. Stock in trade.
d. Household goods and furniture, household stores, wearing apparel and ornaments of the person.
e. Books, prints and pictures.
f. Horses, cows, sheep and other animals (number of each).
g. Carriages and other vehicles.

h. Farming stock and implements of husbandry.
i. Shipping and shares in vessels.
k. Machinery, fixtures, apparatus and tools used in business, with the place where each is situated.
l. Patents, copyrights and trademarks.
m. Goods or personal property of any other description, with the place where each is situated.

Subdivision 3.—This sets out the choses in action, as indicated below:

a. Debts due petitioner on open account.
b. Stocks in incorporated companies, interest in joint stock companies, and negotiable bonds.
c. Policies of insurance.
d. Unliquidated claims of every nature, with their estimated value.
e. Deposits of money in banking institutions and elsewhere.

Subdivision 4.—This states the property in reversion, remainder or expectancy, including property held in trust for the debtor or subject to any power or right to dispose of or to charge. Other items to be included are:

a. All property heretofore conveyed for benefit of creditors, with amount realized thereon.
b. All sums paid to counsel, and to whom, for services rendered or to be rendered in the bankruptcy proceedings.

Subdivision 5.—This is a statement of all property claimed to be exempt:

a. Military uniforms, arms, and equipment.
b. Property claimed to be exempted by state laws, its valuation, whether real or personal, its description and present use. The state statute referred to should be indicated, as well as the total value thereunder exempt.

Subdivision 6.—This is a list of books, papers, deeds and writings relating to bankrupt's business and estate. If these are in the hands of some one other than the petitioner, their names must be given, and the reasons why they are so held.

Summary of Schedules A and B.—This summary is made after the schedules have been prepared. It would appear as follows:

Summary of Debts and Assets

Schedule A

Subdivision 1.	a.	Taxes and debts due United States,	$ ¢
	b.	Taxes due states, counties, districts, and municipalities,	$ ¢
	c.	Wages,	$ ¢
	d.	Other debts preferred by law,	$ ¢
Subdivision 2.		Secured claims,	$ ¢
Subdivision 3.		Unsecured claims,	$ ¢
Subdivision 4.		Notes and bills which ought to be paid by other parties thereto,	$ ¢
Subdivision 5.		Accommodation paper,	$ ¢
		Schedule A, Total,	$ ¢

Schedule B

Subdivision 1.		Real estate,	$ ¢
Subdivision 2.	a.	Cash on hand,	$ ¢
	b.	Bills, promissory notes, and securities,	$ ¢
	c.	Stock in trade,	$ ¢
	d.	Household goods, etc.,	$ ¢
	e.	Books, prints, and pictures,	$ ¢
	f.	Horses, cows, and other animals,	$ ¢
	g.	Carriages and other vehicles,	$ ¢
	h.	Farming stock and other implements,	$ ¢
	i.	Shipping and shares in vessels,	$ ¢
	k.	Machinery, tools, etc.,	$ ¢
	l.	Patents, copyrights, and trademarks,	$ ¢
	m.	Other personal property,	$ ¢
Subdivision 3.	a.	Debts due on open accounts,	$ ¢
	b.	Stocks, negotiable bonds, etc.,	$ ¢
	c.	Policies of insurance,	$ ¢
	d.	Unliquidated claims,	$ ¢
	e.	Deposits of money in bank and elsewhere,	$ ¢
Subdivision 4.		Property in reversion, remainder, trust, etc.,	$ ¢
Subdivision 5.		Property claimed to be exempted,	$ ¢
Subdivision 6.		Books, deeds, and papers,	$ ¢
		Schedule B, Total,	$ ¢

Illustrative Problem: Receivership.—A malting company was placed in the hands of a receiver in bankruptcy.

The assets inventoried by the receiver were:	
Accounts receivable,	$218,477.15
Grain and products in malt house,	29,359.74
Total, representing nominal capital,	$247,836.89

An order of the court was entered instructing the receiver to continue the operation of the business. After the receiver had operated the business

two months, a settlement was effected, and the receiver was discharged by the court, the bankrupt company resuming business.

The receiver's books of the bankrupt company's accounts showed at the date of his discharge:

Collections on account of the accounts receivable, inventoried above, $10,097.60; also, that in trade the receiver had made gross sales to the amount of $114,806.62; his grain purchases were $110,786.61; manufacturing expenses $7,279.07; selling expenses $7,956.97; receiver's charges $1,000.00; discounts, shortages and merchandise returned on sales accounts $1,370.85; on hand in grain and products $51,005.62; he has collected in cash on receiver's sales $65,448.83; he owes on open account $5,237.52; borrowed from banks $46,251.10.

Prepare trading statement showing profit or loss from receiver's operations, and prepare final balance sheet from the face of the receiver's accounts of the bankrupt company at the close of his receivership.

Solution to Problem.—The only important point to keep in mind in the solving of this problem is the fact that the so-called receiver is acting in two capacities:

1. Liquidating the old business.
2. Trading.

Hence, it is necessary to keep the two sets of transactions as separate, one from the other, as is possible. Outside of this one point, this problem seems lacking entirely in sufficient information to be considered of much worth. And because of this lack of information, the only separation here possible relates to the accounts receivable.

The first step would seem to be to prepare a Trial Balance of the accounts so that therefrom the statements called for may be prepared. This is given below with information as to how certain of the items therein were determined:

Cash ($10,097.60 plus $65,448.83 plus $46,251.10 minus ($7,279.07 plus $7,956.97 plus $105,549.09 plus $1,000.00)),	$ 12.40	
Accounts receivable:		
Old ($218,477.15 minus $10,097.60),	208,379.55	
New ($113,435.77 minus $65,448.83),	47,986.94	
Inventory (grain at beginning),	29,359.74	
Purchases,	110,786.61	
Manufacturing expense,	7,279.07	
Selling expense,	7,956.97	
Receiver's expense,	1,000.00	
Bank loan,		$ 46,251.10
Accounts payable,		5,237.52
Sales,		114,806.62
Sales returns, allowances, etc.,	1,370.85	
Estate capital account,		247,836.89
Totals,	$412,761.28	$412,761.28

The second step would be to prepare the trading statement as required; this is shown below:

Trading Statement

Gross Sales,		$114,806.62	
Less: Returns, Allowances, etc.,		1,370.85	
Net Sales,			$113,435.77
Less:			
Cost of Sales:			
Inventory, Beginning,	$ 29,359.74		
Purchases,	110,786.61		
	$140,146.35		
Inventory, End,	51,005.62	$ 89,140.73	
Manufacturing Expense,		7,279.07	
Selling Expense,		7,956.97	104,376.77
Profit from Trading,			$9,059.00

Profit and Loss Statement

Profit from Trading (as above),	$9,059.00
Less:	
Receiver's Expenses,	1,000.00
Net Profit from Receiver's Operations	$8,059.00

Balance Sheet

Assets

Accounts Receivable:		
Old,	$208,379.55	
New,	47,986.94	$256,366.49
Grain and Products on Hand,		51,005.62
Cash,		12.40
Total,		$307,384.51

Liabilities

Bank Loan,	$ 46,251.10	
Accounts Payable,	5,237.52	$ 51,488.62
Estate Capital Account, Beginning Balance,	$247,836.89	
Net Profit from Receiver's Operations,	8,059.00	255,895.89
Total		$307,384.51

Statement of Affairs with Accompanying Deficiency Account.—The second statement made mention of above, as covered by the title of this present section, is next to be discussed and, in this connection, from a double point of view:

1. Financial embarrassment, as where creditors cannot be paid promptly even though assets exceed liabilities.

2. Insolvency due to the fact that the liabilities exceed the assets.
   a. An individual or organization may be able to pay current obligations in the immediate present and perhaps during the near future, but because liabilities exceed assets, a time will not be far remote in which the obligations cannot be paid due to exhaustion of assets.
   b. An individual or organization going through bankruptcy. In each of the above cases, impending or actual insolvency is seen. And under each of these circumstances it is necessary to secure more capital, to reorganize in some way as by a change of personnel, or to dissolve entirely. Regardless of the remedy, the creditors and proprietors are vitally interested, especially as to the relation of available asset values against liabilities.

Both classes of persons interested must have the financial condition of the activity so displayed that they can see clearly the probable outcome of the reorganization or the probable proceeds resulting from realization. And in this connection, the creditors' claims are of first importance as to the order in which they will be met and the percentages thereof to be paid. If an individual or an organization be insolvent, no principal, under the law, can take precedence over any creditor in the distribution of the assets. Likewise, where bankruptcy either is trying to be avoided,—as by the appointment of a friendly trustee,—or is actually contemplated, it is necessary to compare the original financial position with the possible realizable position.

For such purpose, the usual Balance Sheet is entirely inadequate, the reasons therefor being about as under:

1. Since the possibility exists that the assets are not to be continued in use by the activity, at least wholly, those not to be thus continued must be sold at whatever can be procured for them. A Balance Sheet cannot indicate what will be the amount of this estimated realization.
2. When assets are sold at a forced sale, they will produce much less than the booked value, i. e., the value at which a going concern is entitled to carry them; a shrinkage is bound to result. A Balance Sheet cannot point out what the amount of such shrinkage may be.

3. A Balance Sheet does not show whether or not any of the assets are held as security by any of the creditors; it does not indicate whether any particular creditors must be paid before other creditors; and it does not present the amount of the net free assets out of which the unsecured creditors may expect payment.

It is apparent, therefore, that a special form of statement must be prepared to set out the facts necessary in accord with the above requirements. And the basic statement for this purpose, to which reference has been made already, which will present the proper viewpoint of conditions, and be a proper basis for accounting, is the Statement of Affairs, supplemented by a schedule showing the causes of insolvency variously called a Deficiency Account or Deficiency Statement.

Strictly speaking, a Statement of Affairs presents the assets and liabilities of a business brought to a balance by:

1. Deficiency, if the liabilities exceed the assets.
2. Capital or surplus, if the assets exceed the liabilities.

It would be prepared, in whole or in part, from information secured from sources other than books of double entry. Therefore, such a statement might be prepared from books kept by single entry, or from facts that have no reference to any books of account. However, as commonly used, the term refers to a statement of the type mentioned above in the present chapter relating to an insolvent estate.

As soon as possession of the books has been secured, a Balance Sheet will be prepared therefrom in the usual way. And with this as a basis, one is in a position to prepare the Statement of Affairs. The assets then will be appraised by competent parties, at least three in number, and with this information, plus claims which have come in from creditors in the meantime, the receiver, the trustee, the assignee, or the creditors, from the prepared Statement of Affairs, will be able to form a just opinion as to how much may be expected to be realized from the assets upon forced sale and just how much of the liabilities may be met.

In preparing this statement, it is customary to follow the English form thereof. The English Boards of Trade and the English Bankruptcy Laws have required such a statement for years, plus

that of the Deficiency account. The English form of statement places the liabilities on the left side and the assets and deficiency on the right; liabilities, ordinarily, will exceed assets, and in bankruptcy proceedings the liabilities must be presented first.

When preparing such a statement for an individual or for a partnership, one should remember to include therein their personal estates, as to assets and liabilities, because these estates become liable for business debts. In a sole proprietorship, personal and business creditors are upon the same basis since the proprietor in the capacity of a person is in no way different from himself in the capacity of proprietor. In a partnership, although the business is not an equity separate and distinct from those who compose it, one must keep in mind the rule of law as regards the marshalling of assets. Briefly, the doctrine is stated as follows: "Marshalling assets is such an arrangement of funds as will enable the parties having equities therein to receive their due proportions, notwithstanding the intervening interests of particular persons to prior satisfaction out of a portion of the funds. This doctrine grows out of the principle that a party having two funds to satisfy his demand shall not, by his election, disappoint a party who has only one fund." In other words, the personal creditors of partners must be satisfied out of the personal assets and firm creditors out of the firm assets. Any excess from any one of the personal estates of the partners is available for the satisfaction of the claims of the partnership creditors.

Illustrative Problem: Statement of Affairs and Deficiency Account.—Problems of this type have been playing a fairly prominent part in accounting examinations; hence, even though limited in application, so far as the average accountant is concerned, a typical problem with its solution have been included at this point.

Problem.—The American Contracting Co. is unable to meet its obligations, and is forced into liquidation. At the time the receiver takes charge of its affairs the following trial balance is prepared from the company's books:

Cash,	$ 500.00	
Land and buildings,	10,000.00	
Mortgage on land and buildings,		$ 8,000.00
Plant and equipment,	20,000.00	
Creditors,		59,400.00

Completed contract accounts (losses),	18,000.00	
Capital,		50,000.00
Uncompleted contract accounts (outlay),	30,000.00	
Securities acquired in settlements,	15,000.00	
Debtors' accounts for completed contracts,	6,000.00	
Expenses,	6,500.00	
Inventory of materials,	2,000.00	
Profit and loss (deficiency),	9,400.00	
	$117,400.00	$117,400.00

The sureties on the unfinished contracts estimate that a further outlay of $20,000.00 will be required to complete the work and realize the contract price of $40,000.00, and their offer to take over the materials on hand for $1,500.00, as part of said cost, is accepted by the receiver. Of the securities acquired $5,000.00 is pledged to secure $11,000.00 due creditors, and $10,000.00 is pledged to secure $9,000.00 due creditors. The company owes for taxes on real estate $100.00 and for salaries and wages of employees $1,200.00, which sums do not appear on the books. The company has discounted customers' notes for $3,000.00, of which subsequent advices indicate that $1,000.00 will be dishonored, and a debtor owing $1,500.00 on unsecured account has failed and disappeared. It is estimated that the amount realized on land and buildings will be sufficient to satisfy the mortgage only, and that plant and equipment will realize only 6 per cent of the book value.

Prepare a statement of affairs and deficiency account. (C. P. A.—Md.).

Solution to Problem.—In the solution of this problem, the following comments should be kept in mind:

1. The problem states that "plant and equipment will realize only 6 per cent of the book value." Undoubtedly, there has been a misprint in that the 6 per cent should be 60 per cent. No matter how old a fixed asset may be, it ought to produce at least 60 per cent of its book value upon a forced sale if such book value represents actual cost.

2. The handling of the item of taxes requires some explanation. Taxes are of two kinds:

   a. Personal property taxes: These always are a preferential claim to be deducted from the assets in the same manner as are salaries and wages.

   b. Real property taxes: These are a lien against the fixed asset to be paid from the proceeds secured from the forced sale of such asset. They would be paid first, and any deficiency in favor of the mortgagee would be paid with the other unsecured creditors when allowed by the Court.

The solution follows:

THE AMERICAN CONTRACTING COMPANY

Statement of Affairs

as at ——————

Exhibit "A"

Liabilities	Book Value	Expected to Rank	(Amount)
Preferred Claims:			
Salaries and Wages of Employees,	$1,200.00	$1,200.00	
Deducted Contra from Estimated Realizable Value of Assets not Liened,		1,200.00	
Fully Secured Claims of Creditors:			
Total,	9,000.00	$9,000.00	
Deducted Contra from Assets Liened,		9,000.00	
Partially Secured Claims of Creditors:			
Total Creditors,	11,000.00	$11,000.00	
Less—Assets Liened Contra,		5,000.00	
Balance Unsecured,			$6,000.00
Mortgage on Land and Building,	8,000.00		
Add—Taxes on Land and Building,	100.00	$8,100.00	
Less—Assets Liened Contra,		8,000.00	
Balance Unsecured,			100.00
Unsecured Claims of Creditors,			
Total Creditors,	$39,400.00		39,400.00
Note Receivable Discounted, dishonored when matured,	1,000.00		1,000.00

Assets	Book Value	(Amount)	Estimated to Realize
Cash	$ 500.00		$ 500.00
Debtors:			
Good,	4,500.00		4,500.00
Bad,	1,500.00		
Securities,	15,000.00	$15,000.00	
Held by Fully Secured Creditors—Contra,		$9,000.00	
Held by Partially Secured Creditors—Contra,		5,000.00	
Total Deducted Contra,		$14,000.00	1,000.00
Materials,	2,000.00		1,500.00
Land and Buildings,	10,000.00	$8,000.00	
Liability for Mortgage—Principal—Contra,		$8,000.00	
Liability for Mortgage—Taxes—Contra,		100.00	
Total Deducted Contra,		$8,100.00	
Deficiency in Above, Unsecured Claim—Contra,		$100.00	
Plant and Equipment,	20,000.00		12,000.00
Uncompleted Contracts,	30,000.00	$40,000.00	
Collectible by Sureties for Further Outlay to Complete,		20,000.00	
Balance, Collectible by Am. Contracting Co.,			20,000.00
Completed Contracts:			
Losses Thereunder,	18,000.00		

		Balance, Realizable Asset Values Estimated, free from liens,	$39,500.00
		Less—Preferred Claims: Salaries and Wages,	1,200.00
		Balance, Available for Distribution Upon Unsecured Claims, equal to 82 per cent thereof but subject to the expenses and commissions incidental to liquidation,	$38,300.00
		Deficiency, as per Deficiency Account,	8,200.00
	$46,500.00		$46,500.00

THE AMERICAN CONTRACTING COMPANY

DEFICIENCY ACCOUNT

as at ———

Exhibit "B"

Estimated Shrinkage in Asset Values, because of Liquidation:			Losses to be Suffered by Stockholders:	
Land and Buildings,	$2,000.00		Capital Investment,	$50,000.00
Plant and Equipment,	8,000.00			
Materials,	500.00			
Uncompleted Contracts,	10,000.00		Losses to be Suffered by Unsecured Creditors:	
Debtors,	1,500.00	$22,000.00	18 per cent of Claims, as per Deficiency of Statement of Affairs,	8,200.00
Liability of Note Receivable Discounted, dishonored,		1,000.00		
Other Losses:				
Completed Contracts,	$18,000.00			
Expenses of Period,	6,500.00			
Profit and Loss Account Deficit Balance,	9,400.00			
Taxes on Real Estate,	100.00			
Salaries and Wages,	1,200.00	35,200.00		
		$58,200.00		$58,200.00

CHAPTER XVI

FIDUCIARY STATEMENTS (CONTINUED)

Introduction.—In the last chapter the conditions underlying insolvency and bankruptcy were discussed. In addition, the following matters were presented:

1. The schedules and summary by means of which the liabilities and assets of bankrupts must be presented to the Court.
2. The Statement of Affairs and accompanying Deficiency Account used to indicate:
   a. Probable realizable financial position: the Statement of Affairs.
   b. Reasons for insolvency: the Deficiency account.

In the present chapter, two further subjects of importance, relative to fiduciary accounting, will be discussed:

1. The procedures necessary to keep the actual accounts of a trusteeship.
2. The statements used to present the results of such trusteeship.

Basic Distinctions Reviewed.—Certain basic definitions in part already referred to must be reviewed with the idea of remembering them in connection with the work of the present chapter:

1. Trustee. A person to whom the property of another has been conveyed either to be held by him or to be managed by him for this other person.
2. Friendly trustee. A trustee may be appointed by the court, or he may be appointed by agreement between the proprietors and the creditors; in the latter case, he is a "friendly trustee."
3. Receiver. Two kinds of trustees are appointed by the Court:

a. One who is appointed by a bankruptcy Court, and who follows a person temporarily appointed thereby to preserve the estate until he (the trustee) has been appointed. The person who has thus been appointed temporarily is known as a "receiver in bankruptcy."

b. One who is appointed by a Court of Equity when an assignment has been made for the benefit of the creditors. This person is known as a "receiver in equity." In short, when a "receiver" is spoken of, the receiver in equity is probably the type to which reference is made.

Receivership Accounting.—The accounting for receivers in bankruptcy is simple, in that such a receiver is appointed only temporarily, does not operate the business, and does not liquidate; he merely holds the assets until a trustee is appointed.

The accounting for a trustee in bankruptcy is not so simple as the accounting for a receiver in bankruptcy, but is much simpler than the accounting for a receiver in equity. His accounting covers the realization of the assets and the liquidation of the liabilities; infrequently, he will keep account only of receipts and disbursements.

The accounting for a trustee in equity should follow along the same basis or lines as the accounting made use of under normal conditions of operation; in fact, it will be no more complex than the latter.

Transactions prior to the trusteeship should be distinguished clearly from those taking place subsequent thereto. The reasons therefor may be enumerated about as follows:

1. Receivership in equity. The activities of the trustee must be set forth clearly in order that they may be known definitely.
2. Receivership or trusteeship in bankruptcy.
   a. The result of the activities thereof must be set forth clearly in order that they may be known definitely.
   b. The assets as at the time of insolvency must be ascertained because these represent a fund out of which the liabilities must be paid, subject only to the necessary expenses of the asset realization activity.

A list, therefore, should be prepared, as at the beginning of the trusteeship, of the assets and liabilities, of the estate. The list of assets may be made up in accord with the values expressed upon the books of account, or the values may be included at their appraisal worth for realization purposes if the trusteeship is such as to require this,—as where the realization is to proceed.

The liabilities to be considered in this type of estate accounting are of two kinds:

1. Outside creditors' liabilities. These are fixed definitely by the publishing of a required notice setting a specified length of time during which such claims may be presented and proved. The period of time may be governed by the Court, being extended thereby from time to time but when once ended it may be assumed that the liabilities to be met are only those which have been proved.
2. Liabilities incurred by the trustee. These would take precedence over those existing at the moment of insolvency because incurred to protect the original creditors; they could not have been incurred if these subsequent creditors had rights and equities no better than those of the original creditors.

Therefore, the two classes of liabilities must be earmarked clearly.

The law is silent as to the manner in which a receiver or trustee shall keep his accounts. Basically, he must charge himself with what he takes over and credit himself with that which is disposed of by himself. The old books may be continued or new ones may be used. In either event, the identity of the original items must be preserved so that confusion will not result as between the claims of different rank. Again, after the assets have been appraised, the resulting shrinkages should be written off against the capital; likewise, the other nominal elements should be written off there against. The purpose here contemplated is to express upon the books eventually only the inventory value of the assets plus the liabilities.

Realization and Liquidation.—When the assets of an estate, business or otherwise, are converted into cash, and this cash is

applied, after the costs of the conversion have been deducted, to liquidating the claims against such estate, a "realization and liquidation" has taken place. In the case of a receivership or trusteeship, three degrees of possibility exist relative to the activities incident thereto:

1. The affairs may be wound up fully, a complete piecemeal realization of its assets being involved.
2. The affairs may be wound up fully but, instead of a piecemeal realization of the assets, the enterprise is sold as a going concern.
3. The affairs may be wound up partially and, also, be partially continued in a going manner so that, eventually, the enterprise will be restored to its owners in a healthy condition. This is a common occurrence and would arise where a friendly trusteeship comes into existence.

The first two possibilities do not differ materially one from the other, for the present purpose, in the accounting required, and therefore may be referred to as a "simple realization and liquidation." The third possibility differs greatly from the other two, and therefore must be considered separately; it involves something more than a simple realization and liquidation.

In describing the procedures made use of in connection with the present type of fiduciary accounting, a division is indicated along the lines mentioned immediately above:

1. The simple realization and liquidation.
2. The realization and liquidation accompanied by activities of trading or operation.

Simple Realization and Liquidation.—This may involve one of two elements already mentioned:

1. The element of insolvency, as where a concern is bankrupt and must be wound up fully for the benefit of creditors.
2. The element of mere dissolution, as where a partnership is to be dissolved, the firm, for some reason or other, going out of business.

In either event, two methods present themselves as to the manner in which the accounts may be carried upon the books thereunder:

1. Keep them uniform as nearly as possible with those pre-

viously kept. As assets are converted into cash, the Cash account will be debited and the asset accounts affected will be credited. As cash payments are made to creditors, the Cash account is credited and the liability accounts affected are debited. When all the assets have been realized upon, a balance remaining in any asset account represents a realization loss, whereas a remaining balance in any liability account represents a loss to creditors. The closing of the accounts remaining open depends upon whether the business is that of a sole trader, a partnership, or a corporation:

a. Sole trader. Close remaining open accounts into proprietor's Capital account.

b. Partnership. Charge losses against the partners' Capital accounts in the proportions in which they share profits and losses.

c. Corporation. Debit the Capital Stock account for the shares of capital stock turned in by the stockholders for cancellation, and close the remaining accounts through Surplus account.

The losses due to realization, therefore, are chargeable to the Capital account of a sole trader, to the Capital accounts of the partners, and to the Surplus account of a corporation. The balances remaining in the liability accounts, if the realization is conducted at a loss, in the case of a sole trader, will equal in amount the debit balance remaining in his Capital account; in the case of a partnership, the amount of the unliquidated liabilities will offset the debit balances remaining in the partners' Capital accounts; and in a corporation these unliquidated liabilities will be offset by a debit balance in the Surplus account.

2. The assets and liabilities may be consolidated in an account titled "Realization and Liquidation." The operation of this account probably has been described in the students' work in connection with partnerships. If used, the account is debited with the amounts of the various assets, the respective asset accounts being credited; it is credited with the liabilities, the respective liability accounts being debited. The balance of the account, if a debit, shows the amount by

which the asset values exceed the liabilities; and if the balance is a credit, such credit indicates the deficiency by which the liabilities are greater than the assets. If some cash is on hand, the item may be either included or excluded from the account; it may be excluded because it is in its ultimate realizable form. It is advisable, however, to include the item and then immediately make an entry to take it therefrom, as under:

Trustee's Cash Account,	$ ¢	
To—Realization and Liquidation Account,		$ ¢

The detail accounts receivable and payable should be carried in their respective subsidiary Ledgers, the total amounts thereof only being shown in the Realization and Liquidation account as controls over such subsidiary Ledgers. As cash is received from the realization of assets, the Trustee's Cash account would be charged and the Realization and Liquidation account credited. As liabilities are liquidated, the Realization and Liquidation account is charged and the Trustee's Cash account is credited. When expenses of realization are paid, the same entry would be made, as just above. When the realization and liquidation has been completed, the balance in the account of that name shows the net profit or loss resulting from the realization; usually, the balance will indicate a loss.

It is not usually desirable to show such losses or profits, under either case, in a Profit and Loss account. It should be remembered that the latter account shows the results of the operation of a business. In this winding-up process no business operation is contemplated; therefore, the results of such wind-up should not be entered in that summary account, but in what is known as a Realization and Liquidation account. When a partnership is dissolved, for example, the wind-up may continue for a long period of time, for months.

Under either the first or second cases described above, it would be customary to present the results of the trusteeship in the form of a statement, this being titled "Statement of Realization and Liquidation." This statement will be described later after certain other matters have been considered.

Realization and Liquidation Accompanied By Activities of Trading or Operation.—Under this possibility, the procedure outlined above in the last section would be supplemented by the addition and maintenance of ordinary trading accounts. These latter would be kept entirely separate, perhaps in a distinct set of records or, as is more often the case, by using the Realization and Liquidation account as already shown plus a list of accounts arising because of the added activity.

Again, for example, suppose a business has become merely financially embarrassed, without being actually insolvent as contemplated under the bankruptcy act. The creditors are informed of the existing conditions and are asked to render whatever assistance they can. As a rule, the creditors will rise to the occasion in order to protect their interests. If so, some outsider, perhaps one of the creditors, will assume charge of affairs. As a trustee, this outsider is in exactly the same position as one who is going to discontinue business except that he is going to operate the concern, convert some of its assets into cash, and liquidate the claims of creditors. When this purpose has been accomplished, the business will be returned to its proprietors. Hereunder, are two distinct propositions over which control must be kept:

1. The realization and liquidation proper.
2. The operations of the trustee.

The result of each, if possible, should be secured separately, although it may not be so done as where only the combined result is set out.

Since the goods inventory must be used by this added activity, one of the first things to do would be to credit its amount to the Realization and Liquidation account and charge a properly earmarked inventory account therewith.

The result of this added activity should be set forth, preferably, in a regular Profit and Loss account, and the balance thereof carried over into the Realization and Liquidation account therein to be combined with the result of the regular realization and liquidation. Periodically, statements would be prepared to show the net results both as to the realization and liquidation proper and as to the added activity; these statements may be prepared either separately or be consolidated into one with

separate sections which would correspond to the separate statements, and at the end of which would be shown in summary form the combined result of each section. Frequently, a Balance Sheet will be submitted in addition.

Statement of Realization and Liquidation.—This statement has been referred to above from time to time in connection with the two types of fiduciary accounting described. It is necessary now to consider this statement briefly in order to round out the theoretical discussion of the present chapter and to lead up properly to the illustrative problems solved herein.

Basically, the statement covers the transactions incident to the liquidation, being arranged in such a manner as to acquaint the reader thereof with their nature. In fact, it is prepared exactly along the lines indicated in the discussion above concerned with "simple realization and liquidation."

When a simple realization and liquidation is contemplated, the statement is not difficult to prepare. Its sections coincide with the groupings of the items found within the Realization and Liquidation account, if the latter be used. Because of this similarity, it was deemed unnecessary to present a form of such account as part of the previous discussion.

The statement often is referred to as an account since, usually it appears in account form but, naturally, it is not an account in the strict meaning of the term. If the Statement of Affairs is an estimate or prophecy,—what it is hoped may be done,—the Realization and Liquidation statement (or account) becomes the test by means of which the accuracy therein displayed is measured. For a simple realization and liquidation, the form thereof would be about as follows:

FIRM OF BLANK BROTHERS

Realization and Liquidation Account as of ——

Assets to be Realized Upon:	Liabilities to be Discharged:
In detail.	In detail.
Additional Assets Discovered:	Additional Liabilities Discovered:
In detail.	In detail.
Liabilities Discharged:	Proceeds from Realization of Assets:
In detail.	In detail.
Liabilities not Discharged:	Assets not Realized Upon.
In detail.	In detail.

Expenses of Realization and Liquidation:	
In detail.	
Balance, (if debit) Net Profit on Realization and Liquidation.	Balance, (if credit) Net Loss on Realization and Liquidation.

Scrutiny of this statement will show that, if properly prepared, one can trace, for example, any asset from its original amount down through its increase or decrease during liquidation, proceeds from the sale thereof, and resulting profit or loss thereon.

When a realization and liquidation is accompanied by activities of trading or operation, the situation encountered is an awkward one to handle if clearness is desired. The statement prepared under this condition may assume either one of the two following forms, the writer's preference being the second one.

The first form suggested is similar to the one shown above with its scope slightly extended. A comparison of the two forms, one with the other, will show wherein exists the difference between them. The first type of statement, showing section headings only, is given below:

FIRM OF BLANK BROTHERS

Realization and Liquidation Account as of ——

Assets to be Realized Upon.	Liabilities to be Discharged.
Additional Assets Discovered.	Additional Liabilities Discovered.
Liabilities Discharged.	Proceeds from Realization of Assets.
Supplementary Charges.	Supplementary Credits.
Liabilities not Discharged.	Assets not Realized Upon.
Net Profit on Realization and Liquidation.	Net Loss on Realization and Liquidation.

Although the above form is the one usually made use of, seemingly it violates certain principles of accounting in its set-up in that the trustee is chargeable thereon with dissimilar elements at one and the same time, as with both profits and losses. To avoid this criticism, the statement may be prepared so that an absolute divorce is made between the realization of the original estate and the operations of the trustee. Two separate results are secured thereunder:

1. Loss on realization and liquidation.
2. Profit on the trading activities of the trustee.

The determination of each of these results becomes the province

of separate sections of the statement. And these two results are brought together in a third portion of the statement in summary form, the resulting balance therein being the net profit (or loss) of the trusteeship period. It is believed that this method of solution follows more accurately the practical way in which an actual receivership is carried out than does the method indicated by the pro forma statement to which reference already has been made. A form of this type of statement is not submitted at this point, because it is made use of in the solution of the second problem following.

Illustrative Problems and Solutions.—In concluding the discussion of the present chapter, three problems are given, each of which is solved in accord with the principles advanced above. The first problem illustrates the closing process involved in handling a simple realization and liquidation upon the books; it is out of this simple process that the Statement of Realization and Liquidation has been evolved.

The second and third problems illustrate the Statement of Realization and Liquidation where the activity is accompanied by trading or operation. Since the statement is much more difficult to prepare under this second type of realization activity,—where a rehabilitation is contemplated of a concern financially embarrassed,—than under the first type or simple realization process, two problems are solved instead of just one.

Problem 1.—On May 14, 1920, a fire destroyed the premises at 936 Osgood Street, rented by John Smith and used by him as a clothing store. His stock of merchandise and the store equipment, together with a Ford delivery wagon kept in a rear shed, were insured for $1,500.00. With the exception of the Ford and the office safe, everything was either totally destroyed or rendered comparatively useless by fire and water.

Because of the fire and the small amount of insurance carried, Mr. Smith practically was ruined and, in order to avoid bankruptcy proceedings, he called his creditors together, showed them the condition of his affairs, and then left the matter entirely in their hands for disposition. The creditors agreed that the business should be wound up under the direction of a trustee appointed by themselves. The latter was directed to collect the money from the insurance company, realize upon the salvaged stock and effects, collect what he could of the outstanding debts, pay the expenses incidental to winding up the business, and distribute the balance pro rata among the creditors. The agreement was signed by the debtor and his creditors on both accounts and notes payable, and the trustee then took possession.

The books were taken from the safe and were written up to and including May 20, after which the following statement was prepared therefrom:

JOHN SMITH

Statement of Assets and Liabilities as of May 20, 1920

Assets

Cash on Deposit,			$ 579.80
Merchandise,			6,230.25
Notes Receivable,			406.58
No. 1,	$200.00		
No. 2,	206.58		
Total (as above),	$406.58		
Accounts Receivable,			1,475.85
A. Roth,	$286.20		
B. Walker,	227.80		
C. Sobel,	689.85		
D. Anthony,	70.50		
E. Worms,	201.50		
Total (as above),	$1,475.85		
Total Current Assets,			$8,692.48
Automobile,		$140.00	
Store and Office Equipment,		513.00	653.00
Total Assets,			$9,345.48

Liabilities and Capital

Notes Payable,		$1,315.00
Ross Brothers,	$ 815.00	
Bentley Sidle Co.,	500.00	
Total (as above),	$1,315.00	
Accounts Payable,		4,962.80
A. Henry,	$ 360.00	
C. Krafer,	140.00	
B. Cohn,	640.50	
D. Currie,	740.00	
Mordant Co.,	1,875.00	
Cable Co.,	1,207.10	
Total (as above),	$4,962.80	
Total Liabilities,		$6,277.80
John Smith, Capital,		3,067.68
Total Liabilities and Capital,		$9,345.48

The wind up of the business was concluded on May 31, and the transactions of the trustee from May 20 to May 31 were as follows:

1. Wrote each debtor offering to settle at a discount of 10 per cent, a receipt in full to be given for a return settlement.
2. Received from the insurance company amount of insurance in full

which was pro-rated as follows: merchandise, $1,117.00; store and office equipment, $383.00.

3. Advertised sale of damaged stock and effects by auction. Paid therefor to the local papers, $122.50.
4. Received of A. Roth, $257.58, and from C. Sobel, $620.87, both in full of account.
5. Sold the auto to S. Korrin for $50.00, and the safe to A. Sorensen for $90.00, for which cash was received.
6. Received from B. Walker sight draft on the City Bank for $205.00 in full discharge of account. Drew on E. Worms, at his request, and allowed him a discount of $20.15. It was ascertained that D. Anthony had left the city with nothing but debts behind, whereabouts unknown.
7. The auction sale netted $500.25. The auctioneer turned in his check for $450.25, he deducting $50.00 for his charges. Proceeds were prorated as follows: merchandise, $460.25; store and office equipment, $40.00.
8. Paid for clerk hire, $30.00; and for signs, hand-bills, and expenses incidental to auction sale, $46.90.
9. Discounted the notes receivable with City Bank receiving $360.00 net.
10. Paid the liabilities to creditors pro rata with the cash on hand after deducting fees and expenses of trustee in the amount of $328.77, and closed the remaining accounts.

Make entries in journal form necessary to cover the above.

Solution to Problem 1.—The entries in journal form, covering the requirements of the above problem, are given below. It is assumed that, at the time of the take over, the Ledger account balances were in agreement with the amounts found upon the statement.

	Dr.	Cr.
1. Cash on Deposit,	$1,500.00	
To—Merchandise,		$1,117.00
Store and Office Equipment,		383.00
To record cash received from insurance company.		
2. Realization and Liquidation Account,	$122.50	
To—Cash on Deposit,		$122.50
Advertising bills paid.		
3. Cash on Deposit,	$1,264.80	
Realization and Liquidation Account,	211.05	
To—Accounts Receivable,		$1,475.85
Collections as follows:		

	Cash	Discount
A. Roth,	$ 257.58	$28.62
B. Sobel,	620.87	68.98
C. Walker,	205.00	22.80
D. Worms,	181.35	20.15
E. Anthony,	Bad Debt	70.50
	$1,264.80	$211.05
	211.05	
Total,	$1,475.85	

4. Cash on Deposit,	$140.00	
Realization and Liquidation Account,	90.00	
To—Automobile,		$140.00
Store and office Equipment,		90.00
Cash collected from sale of above assets.		
5. Cash on Deposit,	$450.25	
Realization and Liquidation Account,	50.00	
To—Merchandise,		$460.25
Store and Office Equipment,		40.00
Receipts from auction sale, $50.00 being auctioneer's charges.		
6. Realization and Liquidation Account,	$76.90	
To—Cash on Deposit,		$76.90
Expenses paid.		
7. Cash on Deposit,	$360.00	
Realization and Liquidation Account,	46.58	
To—Notes Receivable,		$406.58
Notes discounted.		
8. Realization and Liquidation Account,	$328.77	
To—Cash on Deposit,		$328.77
Charges and expenses of trustee.		

At this point the realization entries have been completed. It remains now only for the trustee to pay off the debts, he having $3,766.68 on hand with which to do so, this being sufficient to pay $.60 on the dollar.

	Total	60 per cent		
9. Accounts Payable,			$4,962.80	
A. Henry,	$ 360.00	$ 216.00		
C. Krafer,	140.00	84.00		
B. Cohn,	640.50	384.30		
D. Currie,	740.00	444.00		
Mordant Co.,	1,875.20	1,125.12		
Cable Co.,	1,207.10	724.26		
Total,	$4,962.80	$2,977.68		
Notes Payable,			$1,315.00	
Ross Bros.,	$815.00	$489.00		
Bentley S. Co.,	500.00	300.00		
Total,	$1,315.00	$3,766.68		
To—Cash on Deposit,				$3,766.68
Realization and Liquidation Account				2,511.12
10. Realization and Liquidation Account,			$4,653.00	
To—Merchandise,				$4,653.00
To close.				
11. John Smith, Capital,			$3,067.68	
To—Realization and Liquidation Account,				$3,067.68
To close.				

Illustrative Problem 2.—Although this is one of the earlier C. P. A. problems and, because of its type, has been used by certain others for illustrative

purposes, the problem is so well adapted as an illustration of the application of present principles that the writer has made use of it again; however, it is believed that the method of solution adopted does not conflict in any way with those already propounded by others.

The affairs of Peter Post, a manufacturer, were in a very critical condition, for although he had an unimpaired investment of $62,500.00, and his books showed a clear increase of $6,022.00, he owed his trade creditors $25,289.00 and had only $265.00 in cash and $4,062.00 in receivable book accounts on which to rely for funds. The rest of his business estate was tied up in the following chattels, which he had acquired in an effort to keep pace with a business growth that had outrun his capital: Machinery and tools, $31,497.00; raw materials, $18,838.00; partly made goods, $31,562.00, and finished wares, $7,587.00. It was also necessary, in order to continue operations, to have immediate cash for pay rolls and incidental expenses.

A meeting of his principal creditors was called and as it appeared that the business was well established, profitable and had a sure and growing market, they decided to advance him $6,000.00 in cash for immediate needs and extend his credit in a sufficient amount to permit of the purchase of necessary materials and generally to continue operations till the present stock of materials could be made up and realized on.

In order to insure the proper application of the funds and credit so provided, a trustee was appointed to administer the finances till the creditors' claims were satisfied, at which time the control would revert to the proprietor.

The subsequent operations under the trusteeship were as follows: Cash paid for labor, $15,725.00; for expenses, $5,430.00; for additional tools, $750.00; purchases on book account, charged to materials, $6,300.00, to expenses, $15,000.00; sales on book account, $72,300.00; loss on collection of book debts, $380.00; personal drawing of Peter Post, $3,500.00.

The unliquidated values at the close of the trusteeship were as follows: Inventory of raw materials, $5,000.00; finished wares, $27,900.00; accounts receivable outstanding, $3,382.00, and accounts payable, $89.00.

Prepare with due regard to the grouping, order and arrangement of the items, as best calculated clearly to display the facts, (a) realization and liquidation account, (b) trustee's cash account, (c) balance sheet of business as restored to Peter Post.

Solution to Problem 2—It would seem that the first thing to do in commencing the solution of this problem is to prepare a Balance Sheet for Peter Post as at the moment his affairs were turned over to the trustee. By so doing, a definite point of commencement is secured from which to proceed. This statement is as follows:

PETER POST

Balance Sheet as of ——

(Date when affairs turned over to trustees)

Assets

Cash,	$ 265.00
Accounts receivable,	4,062.00

Finished wares,		7,587.00
Partly made goods,		31,562.00
Raw materials,		18,838.00
Machinery and tools,		31,497.00
		$93,811.00

Liabilities

Trade creditors,		$25,289.00
Capital,	$62,500.00	
Surplus,	6,022.00	68,522.00
		$93,811.00

The next step, which contemplates the first requirement of the problem, is to prepare the Realization and Liquidation account. It is presented on page 533.

The second requirement of the problem is to prepare the trustee's Cash account. This means exactly what the term "Cash account" implies,—a record of the receipts and disbursements of cash, in this case, as made by the trustee. The opening balance represents the cash turned over by the estate to the trustee. Originally, as per the first section of the Realization and Liquidation account, this amount is shown as an asset to be realized upon. When turned over to the trustee, it is an asset realized, being shown as such; the Cash account follows:

Trustee's Cash Account

19—		19—	
Balance taken over,	$ 265.00	Materials,	$ 6,300.00
Loan from trade creditors,	6,000.00	Labor,	15,725.00
Accounts receivable,	72,600.00	Expenses,	20,430.00
		Tools,	750.00
		Accounts payable (includes loan from creditors of $6,000.00),	31,200.00
		Drawings,	3,500.00
		Balance,	960.00
	$78,865.00		$78,865.00
Balance,	$ 960.00		

The third and last requirement of the problem is to prepare a Balance Sheet of the business as restored to Peter Post. Although the ordinary simple account form of statement would be sufficient for the purpose, the comparative form of statement seems more desirable in that by such use one may secure a ready comparison between the two Balance Sheets, one just before, and one just after, the trusteeship. The Comparative Balance Sheet is shown on page 534.

TRUSTEE FOR PETER POST

REALIZATION AND LIQUIDATION ACCOUNT

———— to ————

Part I

Realization and Liquidation

Assets to be Realized:		Liabilities to be Liquidated:	
Cash,	$ 265.00	Trade Creditors,	$25,289.00
Accounts Receivable,	4,062.00		
Finished Wares,	7,587.00		
Partly Made Goods,	31,562.00		
Raw Materials,	18,838.00		
Machinery and Tools,	31,497.00		
Total.	$93,811.00		
Liabilities Liquidated:		Assets Realized:	
Trade Creditors,	$25,289.00	Cash,	$ 265.00
		Accounts Receivable,	3,682.00
		Finished Wares,	7,587.00
		Partly Made Goods,	31,562.00
		Raw Materials,	18,838.00
		Total,	$61,934.00
		Assets Returned to Peter Post:	
		Machinery and Tools,	$31,497.00
		Balance, Loss on Realization and Liquidation (See Summary),	$380.00
Total,	$119,100.00	Total,	$119,100.00

Part II

Statement of Trustee's Trading

Inventories—Beginning:		Sales,	$72,300.00
Finished Wares,	$ 7,587.00		
Partly Made Goods,	31,562.00		
Raw Materials,	18,838.00		
Total,	$57,987.00		
Purchases:		Inventories—Ending:	
Raw Materials,	$ 6,300.00	Finished Wares,	$27,900.00
Labor,	15,725.00	Raw Materials,	5,000.00
Expenses,	20,430.00	Total,	$32,900.00
Total,	$42,455.00		
Balance, Profit on Trading:			
See (Summary),	$4,758.00		
Total,	$105,200.00	Total,	$105,200.00

Part III

Summary Statement—Parts I and II

Loss on Realization and Liquidation (See above),	$ 380.00	Profit on Trustee's Trading (See above),	$4,758.00
Balance, Net Profit on Trusteeship,	4,378.00		
Total,	$4,758.00	Total,	$4,758.00

PETER POST

COMPARATIVE BALANCE SHEET

as of ———

Assets	End	Beginning	Increase	Decrease
Cash,	$ 960.00	$ 265.00	$ 695.00	
Accounts Receivable,	3,382.00	4,062.00		$ 680.00
Finished Wares,	27,900.00	7,587.00	20,313.00	
Partly Made Goods,		31,562.00		31,562.00
Raw Materials,	5,000.00	18,838.00		13,838.00
Machinery and Tools,	32,247.00	31,497.00	750.00	
Total Assets,	$69,489.00	$93,811.00	$21,758.00	$46,080.00
Net Decrease in Assets,			24,322.00	
			$46,080.00	$46,080.00
Liabilities and Capital				
Trade Creditors,	$ 89.00	$25,289.00		$25,200.00
Capital Account, Peter Post,	62,500.00	62,500.00		
Surplus,	6,900.00	6,022.00	$878.00	
Total Liabilities and Capital,	$69,489.00	$93,811.00	$878.00	$25,200.00
Net Decrease in Liabilities and Capital,			24,322.00	
			$25,200.00	$25,200.00

Analysis of Net Worth of Peter Post

Capital, Beginning of Trusteeship,		$62,500.00
Add— Initial Surplus,		6,022.00
Balance, Net Worth Beginning of Trusteeship,		$68,522.00
Add— Net Profit on Trusteeship,	$4,378.00	
Less— Drawings,	3,500.00	878.00
Balance, Net Worth End of Trusteeship,		$69,400.00

Problem 3.—Messrs. Green & Sharp, having given the firm notes to a friendly company as an accommodation, became embarrassed through failure of payee and appointed a trustee to realize and liquidate. The following is a statement of their condition, January 1, 19—.

Assets

Cash on hand and in bank,	$ 500.00
Stock of goods,	20,000.00
Real estate,	25,000.00
Bills receivable,	5,000.00
Book debts receivable (includes accommodation account of payee, $58,000.00),	62,000.00
	$112,500.00

Liabilities

Mortgage on real estate,	$ 5,000.00
Mortgage interest accrued to January 1, 19—,	250.00
Taxes,	375.00
Book debts payable (includes accommodation paper of payee, $58,000.00),	61,550.00
Bills payable,	1,000.00
H. Maxwell, special partner,	10,000.00
S. Green, capital,	20,325.00
J. Sharp, capital,	14,000.00
	$112,500.00

The following is a memorandum of the trustee's transactions for the ensuing year:

Purchases to complete contract orders,	$ 70,000.00
Sales for year for cash,	108,000.00
Uncollected accounts	2,000.00
Stock of goods on hand, December 31,	10,000.00

Bills receivable collected at a loss of $600.C0

Book debts receivable, collected $3,600.00; balance lost.

Received 75 per cent in full settlement of accommodation notes, and paid cash on account of same $48,000.00, giving renewal notes for $10,000.00.

The legal fees, interest and petty expenses paid on account of accommodation paper were $2,400.00.

The following payments also were made:

Mortgage, with interest, and one year's interest accrued to December 31, taxes, bills payable, and book accounts payable; clerk hire, wages, and other business expenses, with allowance of $100.00 per month to each of the partners, one vear's interest at 6 per cent to special partner, interest on Green's surplus capital ($6,325.00) one year at 6 per cent, and trustee's fee of $5,000.00,—in all, $10,000.00.

The special partner had an interest of 1/10, and the general partners shared alike in the residue of the net profits and losses.

On January 1, of the next year, the estate reverted to the firm.

Requirements of the problem:

1. Trustee's realization and liquidation account.
2. Balance sheet at termination of trust.
3. Partners' accounts.

Solution to Problem 3.—There is illustrated in this problem the risk incurred by exchanging negotiable paper as a friendly accommodation. By so doing, the business credit of Messrs. Green and Sharp was impaired seriously to the extent that affairs had to be placed in the hands of a trustee. The latter, in addition to realizing upon the assets and liquidating the liabilities, carried on the trading activity by buying and selling goods for cash, giving renewal notes, etc.

Since the opening statement of condition of the firm is given, as at the commencement of the trusteeship, nothing further in connection therewith need be done, as a first step in the solution, except perhaps as concerns a revamping of the partners' Capital accounts. As these latter concern the partners only, the trustee is not interested in the individual amounts thereof. Likewise, since the trustee has no title to the real estate, the item has not been considered as having been turned over to the trustee.

The first requirement of the problem is to prepare the trustee's Realization and Liquidation account. Although, in this connection, more than one form of statement may be used, the one selected is similar to that offered in the solution of problem No. 2, above, in that it is believed that this type of statement is subject to the least amount of criticism in comparison with the others. This account is shown on the following page.

TRUSTEE FOR MESSRS. GREEN & SHARP

Realization and Liquidation Account

January 1, 19—, to December 31, 19—

Part I

Realization and Liquidation

Assets to be Realized:		**Liabilities to be Liquidated:**	
Cash,	$ 500.00	Mortgage Payable,	$5,000.00
Merchandise,	20,000.00	Interest on Mortgage,	250.00
Bills Receivable,	5,000.00	Bills Payable,	1,000.00
Accommodation Paper,	58,000.00	Liability—Accommodation Paper,	58,000.00
Accounts Receivable,	4,000.00	Accounts Payable,	3,550.00
		Taxes,	375.00
Total,	$87,500.00	Total,	$68,175.00
Liabilities Liquidated:		**Assets Realized:**	
Mortgage Payable,	$ 5,000.00	Cash,	$500.00
Interest on Mortgage,	250.00	Merchandise,	20,000.00
Bills Payable,	1,000.00	Bills Receivable,	4,400.00
Liability—Accommodation Paper,	48,000.00	Accommodation Paper,	43,500.00
Accounts Payable,	3,550.00	Accounts Receivable,	3,600.00
Taxes,	375.00		
Total,	$58,175.00	Total,	$72,000.00
Liabilities Returned:		**Assets Returned:**	
Renewal Note,	$10,000.00	None,	None
		Balance, Loss on Realization and Liquidation,	$15,500.00
Total,	$155,675.00	Total,	$155,675.00

Part II

Statement of Trustee's Trading

Inventories—Beginning:		**Sales:**	
Merchandise,	$20,000.00	Total,	$110,000.0
Purchases:		**Inventories—Ending:**	
Merchandise,	$70,000.00	Merchandise,	$10,000.00
Clerk Hire, Wagons, etc.,	1,620.50		
Interest on Mortgage to 12/31,	250.00		
Legal Fees, etc.,	2,400.00		
Trustee's Commission,	5,000.00		
Total,	$79,270.50	Total,	$10,000.00
Balance, Profit on Trading,	$20,729.50		
Total,	$120.000.00	Total,	$120,000.00

Part III

Summary of Parts I and II

Loss on Realization and Liquidation,	$15,500.00	Profit on Trustee's Trading,	$20,729.50
Balance, Net Profit on Trusteeship	5,229.50		
Total,	$20,729.50	Total	$20,729.50

The second requirement of the problem is to prepare a Balance Sheet as at the termination of the trust. This is given below in comparative form. Before this Balance Sheet can be prepared, it is necessary to determine the cash balance on Dec. 31, 19—. Therefore, although not required by the problem, the trustee's Cash account is shown below next following the Balance Sheet.

MESSRS. GREEN & SHARP

COMPARATIVE BALANCE SHEET

as of

December 31, 19—, and January 1, 19—

Assets	December 31, 19—	January 1, 19—	Increase	Decrease
Cash,	$19,175.00	$ 500.00	$18,675.00	
Merchandise,	10,000.00	20,000.00		$10,000.00
Bills Receivable,		5,000.00		5,000.00
Accommodation Papers,		58,000.00		58,000.00
Accounts Receivable,	2,000.00	4,000.00		2,000.00
Real Estate,	25,000.00	25,000.00		
Total Assets,	$56,175.00	$112,500.00	$18,675.00	$75,000.00
Net Decrease in Assets,			56,325.00	
			$75,000.00	$75,000.00
Liabilities and Capital				
Mortgage,		$ 5,000.00		$ 5,000.00
Mortgage Interest Accrued,		250.00		250.00
Bills Payable,		1,000.00		1,000.00
Liability—Accommodation Paper,	$10,000.00	58,000.00		48,000.00
Accounts Payable,		3,550.00		3,550.00
Taxes Accrued,		375.00		375.00
Total Liabilities,	$10,000.00	$68,175.00		$58,175.00
Capital, Combined,	46,175.00	44,325.00	$1,850.00	
Total Liabilities and Capital,	$56,175.00	$112,500.00	$ 1,850.00	$58,175.00
Net Decrease in Liabilities and Capital,			56,325.00	
			$58,175.00	$58,175.00

TRUSTEE FOR MESSRS. GREEN & SHARP

Cash Account

January 1, 19— —December 31, 19—

Balance, January 1, 19—, taken over			$500.00
Add:			
Receipts During Year:			
Cash Sales,		$108,000.00	
Bills Receivable,		4,400.00	
Accounts Receivable:			
Old Accounts,	$ 3,600.00		
Accommodation Paper,	43,500.00	$47,100.00	$159,500.00
Total Cash to be Accounted For			$160,000.00
Deduct:			
Disbursements During Year:			
Merchandise Purchases,		$70,000.00	
Mortgage,	$5,000.00		
Mortgage Interest (two years at 5 per cent),	500.00	5,500.00	
Taxes,		375.00	
Bills Payable,		1,000.00	
Accounts Payable:			
Old Accounts,	$ 3,550.00		
Accommodation Paper,	48,000.00	51,550.00	
Legal Fees and Expenses,	$2,400.00		
Clerk Hire and Wages,	1,620.50		
Trustee's Commission,	5,000.00	9,020.50	
Allowances:			
S. Green,	$1,200.00		
J. Sharp,	1,200.00	2,400.00	
Interest on Capital:			
H. Maxwell,	$600.00		
S. Green (surplus capital),	379.50	979.50	$140,825.00
Balance, December 31, 19—,			$19,175.00

The third requirement of the problem is to present the partners' Capital accounts. These are given below in tabulated form. Again, although not required by the problem, but the better to comprehend the Capital accounts as set out, a Profit and Loss Appropriation Statement is shown, this being given next below the Capital accounts.

MESSRS. GREEN & SHARP

ANALYSIS OF PARTNERS' CAPITAL ACCOUNTS

	Together	Green	Sharp	Maxwell
Balances, January 1, 19—,	$44,325.00	$20,325.00	$14,000.00	$10,000.00
Add—Interest 1 year @ 6 per cent (Green on $6,325.00 excess),	979.50	379.50		600.00
Profit for the year:				
10 per cent of $1,850.00,	185.00			185.00
50 per cent of Remainder,	1,665.00	832.50	832.50	
Total Credits,	$47,154.50	$21,537.00	$14,832.50	$10,785.00
Deduct—Payments of Interest on Capital,	979.50	379.50		600.00
Balances, December 31, 19— (See Balance Sheet),	$46,175.00	$21,157.50	$14,832.50	$10,185.00

Profit and Loss Appropriation

Allowance to Partners:			Net Profit on Trusteeship,	$5,229.50
S. Green—twelve mo. @ $100.00,	$1,200.00			
J. Sharp—twelve mo. @ $100.00,	1,200.00	$2,400.00		
Interest on Capital:				
S. Green—6 per cent on $6,325.00,	$379.50			
H. Maxwell—6 per cent on $10,000.00,	600.00	979.50		
Balance, Available for Distribution:				
H. Maxwell—10 per cent,	$185.00			
S. Green—50 per cent of remainder,	832.50			
J. Sharp—50 per cent of remainder,	832.50	1,850.00		
Total,		$5,229.50	Total,	$5,229.50

QUESTIONS AND PROBLEMS

Comment:

1. Unless otherwise indicated, all questions and problems have been taken from C. P. A. examinations.
2. Exceptions to the above are indicated thus:
    a. American Institute of Accountants (A. I. A.)
    b. Other than C. P. A. or A. I. A. (*).

QUESTIONS ON CHAPTER I

Twenty Questions, Five Problems

1. Define the following:
    a. Bookkeeping.
    b. Double-entry bookkeeping.
    c. Accounting.
    d. Auditing.
    e. Internal check.
2. Define the following:
    a. Account.
    b. Account stated.
    c. Suspense account.
    d. Nominal accounts.
    e. Real accounts.
3. Define the following:
    a. Personal accounts.
    b. Impersonal accounts.
    c. Mixed accounts.
    d. Major accounts.
    e. Subsidiary accounts.
4. Define the following:
    a. Current account.
    b. Collective accounts.
    c. Summary accounts.
    d. Specific accounts.
    e. Controlling accounts.
5. Define the following:
    a. Debit.
    b. Credit.
    c. Journalizing.
    d. Trial balance.
    e. Ledger.

6. Define the following:
  a. Voucher.
  b. Journal voucher.
  c. Voucher check.
  d. Balance sheet.
  e. Profit and Loss statement.

7. Define the following:
  a. Assets.
  b. Current assets.
  c. Quick assets.
  d. Capital assets.
  e. Passive assets.

8. Define the following:
  a. Active assets.
  b. Capital liabilities.
  c. Accrued.
  d. Deferred charges.
  e. Contingent assets (A. I. A.)

9. Define the following:
  a. Capital.
  b. Working capital.
  c. Trading account.
  d. Manufacturing profit.
  e. Capital expenditures.

10. a. Why should we favor the standardization of accounting terminology?
  b. What means would you suggest as best adapted to obtain such uniformity?
  c. Give two examples of accounting terms that are ambiguous. Suggest remedies.

11. a. Are the theory of accounting and the theory of common law based in any respect on the same principle? Which is the most reliable as to facts?
  b. What is meant by theory of accounts?

12. a. Name three objects of bookkeeping.
  b. What is the relation of the accountant to the bookkeeper?

13. a. State the essential principles of double-entry bookkeeping.
  b. Under what conditions does double-entry bookkeeping become an exact science?

14. a. What condition of office organization, above all others, leads to fraud and defalcation by bookkeepers and cashiers? Support your opinion.
  b. Name the ten matters of special importance in devising any system of internal check in the handling of office records.

15. a. What is the relation of nominal accounts to real accounts? How do these accounts fulfill the purpose for which they are created?
  b. What do you consider the most important account in a set of account books? Explain fully.

16. a. Which group of accounts, if eliminated from double-entry bookkeeping, would reduce accounts to an economic history?
    b. Which class or classes of accounts close into Loss and Gain (Profit and Loss) account?
17. Prepare a form of monthly summary journal entries for the books of original entry.
18. a. State the purposes of a controlling account.
    b. Give an illustration of the use of a controlling account.
    c. Give the names of several controlling accounts.
19. a. In the opening of a ledger, what principle should be followed as to the order or arrangement of the accounts? Show the advantages of the different plans.
    b. In what order should the accounts be arranged as they successively appear in:
        1. A ledger containing all the accounts of a business.
        2. A ledger containing accounts of fixed assets and fixed liabilities, as well as special, nominal, and summary accounts?
20. a. Describe a method of keeping accounts so that an independent balance of the ledger, containing only the real, nominal, special and controlling accounts, exclusive of the individual accounts of customers and of trade creditors, may be taken.
    b. How do you reconcile a debit to a controlling account and another debit for the same amount to an individual creditor with the fundamental principle of double-entry bookkeeping?

PROBLEMS ON CHAPTER I

1

The office of a firm of traders, doing business in San Francisco, was destroyed by an earthquake. The books of account, which had been fully posted, were badly damaged. The following ledger accounts were found to be legible: Purchases, net, $69,000.00; discounts, lost, $640.00; Discounts, gained, $3,450.00; sales, $54,000.00; bills receivable, $33,000.00.

Inquiry at the bank disclosed a balance on deposit, $129,000.00. Bills receivable amounting to $45,000.00 had been discounted at the bank. An audit of the checks paid by the bank showed that $99,000.00 had been paid creditors (including $60,000.00 notes payable).

A balance sheet prepared at the last closing of the books was produced containing the following items: Cash, $60,000.00; accounts receivable, $126,000.00; loans receivable, $24,000.00; real estate, $90,000.00; notes receivable, $78,000.00; capital, $318,000.00; notes payable, $60,000.00.

Prepare a trial balance supplying the missing accounts.

2

M. F. commenced business January 1, 1913, and early in February handed you his day book with the following entries in it and requested you

to open a set of double entry books and submit a trial balance as of the close of business January 31, 1913. Draft the trial balance.

Jan. 1.—Commenced business with cash capital,	$12,500.00
Deposited in bank,	11,750.00
3.—Bought merchandise from Jas. Harrison & Co.,	2,700.00
Sold goods to Wm. Adams,	2,400.00
7.—Bought merchandise from W. Smith & Co.,	3,225.00
8.—Paid wages in cash,	40.00
Sold goods to H. Allen & Co.,	2,675.00
10.—Received check from Wm. Adams (discount, $60),	2,340.00
Bank deposit,	2,340.00
11.—Paid Jas. Harrison & Co. by check (discount $135),	2,565.00
12.—Paid by cash, three months' rent,	200 00
13.—Bought merchandise from H. Kershaw,	3,700.00
15.—Paid wages in cash,	40.00
Paid office expenses in cash,	35.00
17.—Sold goods to H. Hobson,	1,600.00
19.—Sold goods to Wm. Adams,	800.00
21.—Sold goods to H. Allen & Co.,	1,250.00
22.—Paid wages in cash,	40.00
Paid expenses of office in cash,	25.00
25.—Paid W. Smith & Co. by check (discount, $160),	3,065.00
26.—Received check from H. Allen & Co. (discount, $75),	2,600.00
Bank deposit,	2,600.00
29.—Paid wages in cash,	40.00
Paid office expenses in cash,	20.00

There was $175 cash on hand at the close of the month, the balance being M. F.'s personal expenditures.

3

John Doe commenced business with a cash capital of $15,000.00. At the close of the fiscal period the ledger accounts were: accounts receivable, $4,312.50; merchandise debit balance, $5,062.50; accounts payable, $5,375.00; expense, $900.00. Doe's total loss was $2,775.00.

Prepare a statement of assets and liabilities and the profit or loss.

4

The following statements comprise the trial balances of a business at the beginning and the end of a fiscal period, together with the volume of the transactions during said period:

	Trial Balance January		Interim Transactions		Trial Balance December 31	
Cash,	$1,115		$16,583	$16,338	$1,360	
Mdse.,	5,050		17,665	26,874		$4,159
Debtors,	3,110		25,135	24,229	4,016	
Fixtures,	2,800		505		3,305	
Creditors		$ 1,575	18,922	19,410		2,063
Loan,		500		1,000		1,500
Capital,		10,000				10,000
Interest and discount			693	360	333	
Rent,			900		900	
Insurance,			50		50	
Salaries,			1,820		1,820	
Advtg,			900		900	
Carting,			1,705		1,705	
Expense,			1,333		1,333	
Drawings, propr.,			2,000		2,000	
	$12,075	$12,075	$88,211	$88,211	$17,722	$17,722

a. The sales book shows sales posted to debtors to the amount of $25,135.00.

b. The journal shows allowances to debtors for returns of merchandise sales, $1,015.00, and claims on creditors for returns of merchandise purchases, $230.00; also application of debtors' balance to settle creditors' account in the amount of $9,500.00, both accounts being in the name of the same correspondent.

c. The ledger shows that the nominal accounts entitled rent, insurance, and office salaries contain only cash charges, while the nominal accounts entitled advertising, cartage and expense show cash charges in the total amounts of $100.00, $200.00, and $773.00, respectively, all other charges therein being by invoice duly posted to creditors' accounts.

d. The merchandise account shows cash charges of $610.00 and cash credits of $1,509.00, for cash purchases and cash sales, respectively.

e. The invoice books show invoices posted to creditors' accounts to the amount of $19,410.00.

Prepare an articulation statement showing in each account the several elements of debit and credit and giving the title of the articulation account wherein the contra credit or charge appears.

5

In taking up the audit of the accounts of a company for the year ending December 31, 1912, you find that the adjustments made at the previous audit for the year 1911 have not been taken on the books, and that therefore the books are not in agreement with the audited accounts as of that date. Assuming the following were the adjustments referred to, what, if any,

disposition would you make of the items at this audit, illustrating your answer with draft journal entries, viz.:

To record:

1.	Invoices for merchandise in transit at December 31, 1911, not on books,	$ 5,000.00
2.	Invoices for merchandise received but not entered,	10,000.00
3.	Reserve for bad debts (said debts were written off in 1912),	2,000.00
4.	Factory expense bills of 1911 not entered until January, 1912,	750.00
5.	Payroll accrued at December 31, 1911,	6,000.00
6.	Insurance premiums paid in advance at December 31, 1911,	500.00
7.	Taxes for year ending December 31, 1911, not entered until May, 1912,	1,000.00
8.	Reserve against excess valuation of inventory, December 31, 1911,	10,000.00
9.	Depreciation not taken up on books prior to January, 1911, $5,000.00; year ending December 31, 1911, $1,000.00,	6,000.00
10.	To write off an unlocated difference in the accounts receivable controlling account at December 31, 1911, which, however, was located and cancelled in 1912,	1,500.00

QUESTIONS ON CHAPTER II

Twenty Questions, Five Problems

21. a. Describe the proof of posting method used in testing the accuracy of the ledger in single entry.

b. State the process of making a trial balance of a single entry ledger.

22. a. How may a set of books be changed from single entry to double entry?

b. Explain the difference between a balance sheet and a statement of assets and liabilities.

23. a. How would you reconcile the pass book balance with the cash book balance?

b. Define: Cash receipts.

c. Define: Disbursements.

d. Define: Imprest cash system.

24. a. Under what condition would the receipts and revenues and the disbursements and expenses be alike?

b. Is there any advantage in having a cash account in the general ledger, when the cash book is carefully written up and balanced? Give reasons.

25. In a certain business the cash receipts are employed in part to defray current expenses. Other disbursements are by check against funds deposited. In arranging books of account for such a business, how would you provide a clear, direct, and labor-saving record of all cash receipts and disbursements? Show the advantages of this plan.

26. a. State briefly the proper manner of conducting the bills receivable account.
    b. What is the best way of handling on the books the contingent liability on notes receivable that have been discounted at the bank?
    c. State briefly the proper manner of conducting the bills payable account.
27. a. An ice company sells coupon books to its customers; the coupons are used in paying for ice delivered. These coupon books are paid for in advance by the customers. What accounts should be opened on the company's books to record such transactions and how should the sale of coupons and deliveries of ice appear therein?
    b. State in the form of journal entries transactions for accommodation paper indorsed by the firm when coupon bonds are received as security.
28. a. Give a brief definition and explanation (using an illustration) of a trade acceptance.
    b. State wherein a trade acceptance differs from
        1. A sight draft.
        2. A promissory note.
    c. Summarize the advantages of a trade acceptance to
        1. Seller.
        2. Buyer.
29. a. Describe two forms of sales ledger and the process of entering the sales in each. Explain the advantages of each form.
    b. The Blue Ribbon Jewelry Company takes an inventory of stock preparatory to closing the books at the end of the year. If called in as auditor, how would you treat the deduction by the Blue Ribbon Jewelry Company of $15,000.00 from the total of its inventory, as representing doubtful and uncollectible accounts?
30. a. Show the form of a purchase ledger for a mercantile concern and state whether you would recommend the use of a bound or loose-leaf book, giving reason.
    b. Describe at least four methods, with forms, for recording invoices payable and state your preference.
31. a. Explain fully in what way, if at all, the profit on sale of real estate should enter into the trading and profit and loss statements of a mercantile concern. Give reasons for including or excluding.
    b. The North and South Railroad Company has demolished its old wooden station at a certain city on its line and has erected in its place a larger and more ornate structure of brick and stone at a cost of $100,000.00 in excess of the book value of the old building, after deducting the salvage. Bearing in mind that this expenditure of $100,000.00 does not materially increase the earning capacity nor decrease the operating expenses of the company, what disposition should be made of this item in the accounts? State the general principles that should govern an accountant in dealing with this class of expenditure, whether occurring in a railroad or any other property.

32. a. How would you treat cash discounts on capital expenditures, such as for new machinery?
b. Explain the distinction between replacements and renewals, giving also your idea as to the proper method of recording such transactions on the books of a manufacturing corporation.
c. Is it proper to capitalize interest paid on money borrowed to provide for construction? Explain.

33. a. Define: Good-will.
b. Give your ideas as to the treatment of good-will in accounts. Would this treatment be the same if the concern were losing money?

34. a. A firm of brick makers under the term of their twenty-year lease agreed that at the close of the term they would level the ground, cover it with soil and generally restore it to previous conditions for agricultural purposes. State how you would deal with this liability in preparing a statement of the firm, provided you found that none of the work in question had been performed and no provision made therefor, knowing that five years of the lease have expired.
b. In order to secure a particular parcel of leasehold property on which to erect its operating plant, a corporation paid a bonus of $5,000.00, the annual rental under the lease being $50,000.00, the lease running for a period of twenty-one years, with the privilege of renewal for a second period of twenty-one years, but at an increased rental of $60,000.00 a year. How should such expenses be treated on the company's books?

35. a. Submit pro forma entries covering an incidental shipment of goods to a factory, prepayment of freight, receipt of advances, receipt of account sales with cash to cover balance due, and closing of account.
b. State two ways of treating consignments inward, when goods are to be sold subject to commission at the price at which they are consigned. Give the arguments for and against each method and your views thereon.

36. a. Define: Turnover.
b. What is meant by percentage on turnover and how is it ascertained?
c. Explain fully in what way, if at all, overvaluation of opening inventory should enter into trading and profit and loss statement, with reason for inclusion or exclusion.

37. a. Describe a means for the protection of a manufacturing company in the purchase of necessary materials and supplies and in the payment of such materials and supplies.
b. In handling large factory payrolls, which do you consider the better practice for the prevention of fraud, the taking of receipts from each employee for the amounts paid or the establishment of a good system of accounting for handling payrolls. Give reasons and explain why you think one method is better than the other.

38. a. Explain what is meant by an arbitrage and cite an example.
b. Indicate three ways through which the foreign indebtedness or claim of a New York merchant may be liquidated.

c. In stating an account with a foreign firm, how should unmatured acceptances be treated with respect to rates of exchange?

39. a. What is the difference, theoretically, between expenditures by a manufacturing concern for fire and burglar insurance, health and accident insurance and watchmen? In which section of a profit and loss account should each item be allocated?

b. A corporation manufacturing explosives was compelled to pay exorbitant rates for a very limited amount of insurance, and in consequence was obliged to install an automatic sprinkler system at a cost of $75,000.00. This additional fire protection enabled it to secure a full line of insurance, though in mutual companies and at a much lower rate than was obtainable prior to such installation. At the end of the fiscal year the company received dividends from these mutual insurance companies aggregating $2,000.00. To what account should the cost of the sprinkler system be charged and to what account should the dividend be credited? State your reasons fully.

40. a. The president of a corporation engaged four salesmen on a salary and a profit-sharing basis. To one he gave 40 per cent of the profits, to the other three, 20 per cent each. The profits of the corporation were $102,608.18. Show proportion of profits payable to each salesman.

b. State the process of closing a ledger (general ledger).

PROBLEMS ON CHAPTER II

6

The books of the Butter, Egg and Cheese Company, with an authorized and outstanding capital stock issue of $25,000.00, are kept by single entry. It annually inventories all its assets and liabilities and from such inventory prepares a financial statement. At December 31, 1913, this inventory is as follows:

Office, cash,	$ 1,584.00
Balance, bank A,	10,824.00
Accounts receivable,	29,521.00
Ten shares in competing company,	1,000.00
Plant and equipment,	64,938.00
Merchandise inventory,	21,737.00
Prepaid expenses,	5,081.00
Overdraft, bank B,	5,003.00
Accounts payable,	19,747.00
Mortgage payable,	25,000.00
Notes payable,	20,000.00

From a comparison of the financial statements at the beginning and end of the year, you find that the item of "plant and equipment" is stated in an amount less by $11,460.00 than it was at the beginning of the year, plus additions during the year.

The financial statement for the beginning of the year showed a surplus of $35,703.00.

From your analysis of the disbursements and unpaid accounts payable at beginning and end of year, you find total purchases amounting to $661,910.00, and expenses for salaries, wages, supplies, repairs, etc., amounting to $120,115.00.

The purchases, however, included $450.00 paid out for John Smith, an employee, for which he has not reimbursed the company, and the total expense of $120,115.00 included $250.00 in the hands of a buyer as a working fund.

The inventory of merchandise at the beginning of the year was $18,125.00 and of prepaid expense was $2,653.00.

There was cancelled on the customers' ledger during the year $3,206.00 of uncollectible accounts.

There was paid for interest and discount on notes payable, $1,061.00. and for interest on mortgage, $1,500.00.

A 10 per cent dividend was declared but not paid.

From the foregoing prepare:

a. Balance sheet as at December 31, 1913.

b. Profit and loss statement, exhibiting net sales, cost of sales, and gross and net profit for the year.

7

Prepare a statement showing the amount of the ledger assets as of January 1, 1910; add to this statement the increase of the capital stock and the income for the period; deduct from the statement the disbursements of the period, concluding with a balance sheet showing total assets as of June 30, 1910.

THE TURNWELL TRADING CO.

	Trial Balance January 1910	Cash Receipts from January 1, 1910	Credited to Profit and Loss June 30, 1910
Land and buildings,	$30,000.00		
Horses, wagons, harness,	5,000.00		
Investment bonds,	10,000.00		
Inventory, merchandise,	11,000.00		
Stable supplies,	150.00		
Cash,	17,500.00		
Accounts receivable,	14,800.00	$36,000.00	
Interest on investment,		400.00	$ 490.00
Increase in inventory, mdse,			500.00
Capital stock,		5,000.00	
Interest on bank balances,		80.00	80.00
Sales,			38,500.00
	$88,450.00	$41,480.00	$39,570.00

	Trial Balance January 1, 1910	Cash Disbursements from January 1, to June 30, 1910	Charged to Profit and Loss June 30, 1910
Mortgage payable,	$12,000.00	$ 3,500.00	
Accounts payable,	9,000.00	22,500.00	
Interest on mortgage,		150.00	$ 210.00
Salaries of salesmen,		1,500.00	1,575.00
Surplus,	17,450.00		
Capital stock,	50,000.00		
Purchases,			20,000.00
Freight,		425.00	425.00
Stable supplies,		200.00	235.00
Advertising,		50.00	50.00
Administrative expenses,		6,500.00	6,500.00
Horse, wagon, harness,		300.00	
	$88,450.00	$35,125.00	$28,995.00

8

A cloak manufacturing concern, turning out but one grade of cloaks, claims to have been robbed on the night of April 16, and forthwith files a claim under a burglary insurance policy it was carrying.

The proof of the loss filed by the assured contained two items, viz.: 300 cloaks valued at $12,000.00, and 1,000 yards of silk stated to be worth $1,500.00.

The insurance company being notified of the loss, immediately ordered an inventory to be taken, which was done on the morning of the 17th, and disclosed the following:

1,250 cloaks.

6,250 yards of cloth.

2,500 yards of silk.

On the same day you were called in by the insurance company to examine the books for the purpose of proving or disproving the claim, when the following information was obtained:

1. That a complete inventory had been taken on January 1, 1913, of the cloaks, cloth, and silk on hand at that date, the inventory sheets of which had subsequently been lost or destroyed. However, the books showed that the total valuation was $32,675.00, and the firm's representatives assured you that this was correct and that the inventory had been properly valued at cost prices which had not fluctuated since.
2. That the cloth and silk purchases subsequent to January, 1913, had amounted to 18,750 yards of cloth and 5,000 yards of silk at average prices of 50 cents and $1 per yard of each fabric respectively.
3. That 3,000 cloaks had been manufactured during the same period.

which had consumed 20,000 yards of cloth and 5,000 yaras of silk, while 4,500 cloaks had been sold.

You were further informed that the manufacturing cost was as follows:

Material,	$5.00 per garment
Labor and other expenses,	3.50 per garment
Total,	$8.50 per garment

Give the gist of your report to your client; and state what, if any, different case you could have made out for the firm had you been employed by it instead of by the insurance company.

9

A of London, in current account with B of New York, engages an accountant to prepare a statement, to be mailed to B, based on the following data:

1914		
Debits:		
May 12,	£750	
May 30,	117	
June 12,	340	
July 1,	150	
Total debits,		£1,357
Credits:		
June 10,	£500	
June 30,	300	
Total credits,		800
Balance,		£557

Find the average due date of the account and the interest at 5 per cent to July 1, taking 365 days to the year.

10

A New York corporation builds a plant and establishes a branch in Liverpool, England. At the expiration of its fiscal period, a trial balance is forwarded to the New York office, as follows:

Plant,	£250,000	
Accounts receivable,	187,500	
Expenses,	25,000	
Inventory (end of fiscal period),	50,000	
Remittance account,	150,000	
Cash,	12,500	
Accounts payable,		£ 87,500
Income from sales,		250,000
New York office,		337,500
	£675,000	£675,000

A trial balance of the New York books on the same date is as follows:

Capital stock,		$2,500,000.00
Patents,	$1,500,000.00	
Liverpool account,	1,640,250.00	
Remittance account,		729,281.25
Expenses at New York,	25,000.00	
Cash,	64,031.25	
	$3,229,281.25	$3,229,281.25

The remittance account is composed of four 60-day drafts on Liverpool for £37,500 each, which were sold in New York at $4.85½, $4.86, $4.86½, and $4.86¾, respectively.

Prepare a balance sheet of the New York books after closing and a statement of assets and liabilities of the Liverpool branch consolidated with the New York books. Close the books at the rate of exchange on the last day of the fiscal period, which is $4.87¼, conversion of remittances to be made at the average rate for the four bills.

QUESTIONS ON CHAPTER III

Twenty Questions, Five Problems

41. Analyze and discuss the following clause taken from a certain partnership agreement:

"VIII. And it is further agreed that the said party of the second part is to pay to the said party of the first part the sum of three thousand dollars ($3,000.00); for which the said party of the second part shall receive a one-third (1/3) interest in said business of the said party of the first part."

42. Give a rule for adjusting partners' accounts:

a. When the gains or losses are to be divided in proportion to each partner's investment and the time it remains in use.

b. When the proportion of gain or loss is fixed, and interest is calculated on excess or deficit of capital.

43. Where do a joint stock company and a copartnership differ in method of profit distribution?

44. a. Explain fully in what way, if at all, partners' salaries should enter into trading and profit and loss statements, with reason for inclusion or exclusion.

b. Explain fully in what way, if at all, partners' drawings should enter into trading and profit and loss statement, with reason for inclusion or exclusion.

45. A, B, and C are equal partners, each having subscrbied $5,000.00 to the partnership. A pays in $3,000.00, leaving $2,000.00 still due the partnership on his capital account. It is agreed for the present that this $2,000.00 can remain unpaid, provided A pays interest on the same, which he does. Later a dispute arises as to how this interest shall be credited. A claims that it should be included with the earnings of the business, the profits of which are to be divided equally among the

three partners. B and C claim that this interest should be divided between them only, as they fully lived up to their obligations under the partnership agreement, while A had only partially done so. To what account should the interest on the deferred payment be credited?

36. What method should be pursued in adjusting interest on capital among partners whose investments differ in amount? Give reasons for such book entries as you would recommend in the premises.

37. a. How may a partnership terminate? Name the different ways.
b. As the bookkeeper of a firm that had no articles of copartnership, what would be your duty on learning of the death of a partner?

38. Detail a scheme for keeping shipping accounts so that the true and exact condition of each venture can be shown at any time. Give entries for every phase of shipping transactions, including advances to shipper by consignee, and state the object and effect of each entry.

49. To what extent, if any, should executory contracts be reflected on the general ledger of an enterprise?

50. A firm of contractors enters into contracts for the erection of several buildings constituting an operating plant. For certain of the buildings contracts specify a fixed price, while in other instances the contractor's compensation is to be actual cost, plus 10 per cent thereon. In what manner should the unfinished contracts be valued at the close of the fiscal year?

51. At the date of a partnership settlement two contracts are in hand and uncompleted; one for $1,200.00, estimated to cost $900.00, is three-quarters finished and is already charged up to the customer at $1,200.00 as of date of contract; the other for $2,000.00, estimated to cost $1,500.00, is half finished, and no entry has been made therefor. Suggest entries necessary to adjust these accounts so that anticipation of profits shall not occur.

52. Describe a system of accounts suitable for a firm of contractors that does work on contract for a fixed sum and also on cost and percentage.

53. A contractor engages to erect a building for $250,000.00 and his estimates indicate a profit to him of $25,000.00 in the transaction. He receives during the fiscal year payments aggregating $85,000.00 on the architect's certificates showing that $100,000.00 worth of work has been done. Ought any of the contemplated profits to be carried into the accounts for that year and if so, how much?

54. a. What is understood by "cost" or "factory" accounting?
b. Name the principal elements of manufacturing cost.
c. State wherein manufacturing or factory costs differ from commercial or selling costs.

55. Define the following terms:
a. Storekeeper.
b. General charges.
c. Writing off.
d. Storeroom.
e. Stores.
f. Cost of production.

g. By-product.
h. Prime cost.

56. a. State generally how the books of a firm doing a manufacturing business would differ from those kept by a trading concern as to (1) books of record; (2) ledger accounts.
b. How would you classify the accounts in preparing a statement of a manufacturing business?
c. What is shown in the cost books?

57. a. Show the method and the advantages in cost accounting of the process of articulating the general ledger, factory ledger, and stores ledger by summary accounts.
b. Define: Cost sheet.
c. Write out in detail the general instructions for taking the inventory of raw materials, work in process, and finished goods of a small company manufacturing automobiles. Show the general divisions that the inventory requires and provide against errors in recording the items.

58. a. What test should be made of the prime cost of manufactured goods to guard against loss of raw material through theft by employees?
b. A manufacturing company imports its raw materials and purchases exchange on Europe for use in payment therefor. How should the exchange account be treated with respect to the cost of production?
c. In the preparation of a manufacturing and trading account and a balance sheet, state on what basis the following asset should be valued: Manufactured product. Give fully your reason.

59. a. Define: Work in process.
b. How should the partly manufactured goods be valued for use in a balance sheet?
c. How should the completely manufactured goods be valued for use in a balance sheet?

60. a. What classes of salaries and wages should be charged directly against the cost of manufacture?
b. Define: Nonproductive cost.
c. A manufacturing corporation carries on its books an unapplied balance of overhead expenses, which it adds to the inventory when closing the accounts. Is this correct in principle? Explain.

PROBLEMS ON CHAPTER III

11

X and Y bought merchandise to the amount of $12,000. X contributed $7,500.00; Y $4,500.00. They afterwards sold Z a one-third interest for $6,000.00. How much of this amount should X and Y receive respectively in order to make X, Y, and Z equal partners, assuming:

a. Money paid into the business with no good-will.
b. Money paid into the business with good-will.
c. Money not paid into the business.

12

The firm of A and B have the following statements:

Store,	$15,000.00	Accounts payable,	$10,000.00
Accounts receivable,	12,000.00	Bills payable,	5,000.00
Cash,	9,000.00	A, Capital,	30,000.00
Furniture and fixtures,	2,800.00	B, Capital,	35,000.00
Merchandise,	37,000.00		
Miscellaneous equipment,	4,200.00		
	$80,000.00		$80,000.00

C is admitted as a special partner with the following arrangement: C is to contribute $30,000.00, and to be entitled to one-third of the profit for one year. Before making the contribution, the following changes are to be made in the books: Store to be marked down 5 per cent; allowance for doubtful accounts to be created amounting to 2 per cent; merchandise to be revalued at $35,000.00; furniture and fixtures to be valued at $2,500.00. At the end the amount of good-will to be fixed at three times the net profits for the year in excess of $20,000.00, this good-will to be set up on the books, the corresponding credit being to A and B equally,—A, B, and C each to draw $3,000.00 in cash, the remaining profits to be carried to their capital accounts.

During the year the following transactions took place: Merchandise bought on credit, $240,000.00; cash purchases, $25,000.00; cash sales, $125,000.00; sales on credit, $175,000.00; accounts payable paid (face, $245,000.00, discount 2 per cent), $240,100.00; accounts receivable collected (face, $170,000.00, all net except $50,000.00, on which 2 per cent allowed), $169,000.00; buying expenses, paid cash, $1,500.00; selling expenses, paid cash, $21,000.00; delivery expenses, paid cash, $9,000.00; management expenses, paid cash, $4,500.00; miscellaneous expenses, paid cash, $3,000.00; interest on notes payable, paid cash, $250.00; partners each withdrew $3,000.00 cash as agreed.

In closing the books for determining profits and good-will, the following were agreed upon: Value of merchandise on hand, $60,000.00; depreciation on store, $285.00; additional allowance for doubtful debts, $165.00; furniture and fixtures written down, $200.00.

Good-will having been estimated and duly entered, C then contributes enough cash so that his capital account equals just one-third of the total capital.

Prepare statements showing how the accounts are to be adjusted and the balance sheet after the final adjustment. (A. I. A.)

13

On April 30, 1911, St. John and Company and Carpel Brothers enter into a joint venture agreement. They each contribute $4,000.00 with which they pay for goods that are shipped on May 1 to John Doe of San Francisco. St. John and Company advance $400.00 to defray freight and incidental expenses. John Doe, the consignee, is allowed 10 per cent on the cost of the goods and is to sell them at whatever price he can obtain for them.

On June 1, 1912, on the strength of a report sent by wire, Carpel Brothers —draw at sight on John Doe for $4,000.00 to the order of Carl Peter of New York. On July 1, 1912, St. John and Company receive from the consignee a check for $11,200.00, all the goods being sold; on the same day St. John and Company settle with Carpel Brothers. Interest at 6 per cent is allowed on all transactions affecting the partners in the venture. (Construct your ledger accounts in such a manner that they will explain fully what took place, and make a cross reference possible.)

14

A, party of the first part, enters March 1, on the performance of a contract for $50,000.00, payable in two instalments of $25,000.00 each, the first of which is due on the completion of a specific part of the work but subject to 10 per cent to be retained by the party of the second part as security for the continuation of the undertaking; the second, together with the security retained as aforesaid, is to be paid on final acceptance of the completed work.

A has a capital of $4,000.00 available for payment of labor, which proves insufficient. He therefore takes in as associates on April 1, B, who contributes $3,000.00, and C, who contributes $1,000.00, B and C to share profits in the proportions of 3/8 and 1/8, respectively, and to receive interest on capital at 6 per cent per annum.

The first instalment on the contract falls due and is paid on May 1, at which date there has been expended by the contractors for labor and incidentals $7,502.00, and obligations for materials and supplies furnished on credit had been incurred and were outstanding to the amount of $13,900.00, of which all but $1,500.00 are forthwith settled from the instalment money.

On receipt of the first instalment B and C withdraw their capital and realize the profits earned at the completion of the first stage of the work leaving A to continue alone, it being carefully estimated and mutually conceded that a further outlay of $26,158.00 will be sufficient to finish the work and cover all reasonable contingencies.

Show by skeleton ledger accounts the cash payable by A to B and C respectively, on their withdrawal from their partnership and state the resources and obligations that remain to A on entering on the second part of the work.

15

The books of Factory A, the product of which is charged to the main office of the X, Y, Z Company, at factory cost, shows the following facts January 1, 1910:

Cash (imprest fund), $500.00; raw materials, $17,688.51; wages unpaid and distributed, $2,348.67; goods in process, at prime cost, $62,258.61, plus $11,352.75 for factory expenses, and $9,007.50 for management charges; finished goods, $45,290.20.

The invoices for purchases of raw material for the year amounted to $78,375.65; wages paid, $133,041.27; management charges, $53,695; factory expenses, $36,967.08. The cash receipts for one year's rent of loft were

$1,200.00 and for eleven months' sale of power, $330.00, the twelfth month being unpaid.

The raw materials consumed for the period amounted to $64,188.33; management charges distributed, $55,761.90; factory expenses distributed to cost amounted to $43,033.23. There was also a loss on machinery replacements of $107.50.

The finished product output for the year amounted to $324,583.43, including all costs. The transfers to the main office were $338,297.90.

At the close of the period, December 31, 1910, there remained unpaid and undistributed to goods in process the regular factory payroll for three days, amounting to $2,857.93, and also 1,500 hours of operatives' overtime at an average rate of 45 cents per hour, payable on a basis of 2½ hours' overtime as the equivalent of 3½ hours' regular time.

Raise all the factory ledger accounts affected and show final trial balance.

QUESTIONS ON CHAPTER IV

Twenty Questions, Five Problems

61. a. What is a corporation, and how is it formed?
   b. How does it differ from a joint stock company?
   c. What are the distinguishing characteristics of the corporation as compared with other forms of business organization? (A. I. A.)
   d. What is a close corporation?

62. Define the following:
   a. A sole corporation.
   b. A corporation aggregate.
   c. An eleemosynary corporation.
   d. A public corporation.
   e. A private corporation.

63. a. State the advantages and disadvantages of conducting a mercantile business as a corporation as compared with a partnership?
   b. What is the difference between capital and capital stock? Explain fully (*).

64. a. What are the underlying principles of corporation accounting?
   b. Name accounts and use of each that are peculiar to corporation accounting.

65. a. Name the various forms of capital stock and how created, stating the rights and privileges of each.
   c. How would you proceed to determine the book value of capital stock?

66. A corporation has the following items in its balance sheet: accounts payable, accounts receivable, cash, capital stock, expense accrued not due, expense paid in advance, good-will, merchandise, machinery, notes payable, patents, real estate, reserve for depreciation on plant, surplus, trade marks, and treasury stock.
   You are asked to figure the value of the stock. State which items you would take to get the gross, and which items you would deduct from

the gross to get the net amount, and how you would obtain the value of each share.

67. a. Why is it necessary that the authorized amount of the capital stock of a corporation always should appear upon the books? (*)
    b. How may preferred stock be created after the organization of a corporation? (*)

68. a. In its prospectus a corporation represents that it has an issue of "cumulative, non-voting, non-participating, six per cent preferred stock." Give your interpretation of this expression.
    b. How should stock placed with fiscal agents for sale be treated? (*)

69. a. State the entries necessary to open a set of corporation books so that the assets may appear properly on the ledger.
    b. A corporation is organized under the laws of this state (N. Y.), with an authorized capital of $50,000.00 divided into shares having a par value of $100.00 each. Six men agree to subscribe to ten shares each. Omitting the explanations that should accompany original entries, draft three types of opening entries for the corporation and point out which one you would favor. Give reasons.

70. a. When is a stock subscription binding? (*)
    b. What is the liability of a stockholder as to stock subscriptions?
    c. How should uncalled subscriptions be treated in the balance sheet?

71. a. May a subscriber to capital stock, part of the purchase price only being paid, surrender his shares and cancel his obligation? (*)
    b. How should money received on account of stock subscriptions and forfeited by nonpayment of instalments as they mature, be treated on the books of the corporation?

72. a. What are organization expenses? (A. I. A.)
    b. How should organization expense be treated on the books of a corporation?
    c. At what point do expenses cease to be organization expenses and become operating expenses? (A. I. A.)

73. What is treasury stock, and state the difference, if any, between that and stock authorized but not issued. At what price may either be sold? How should they appear on the books of account?

74. a. Mention and explain two common views concerning the treatment of donated capital stock. (A. I. A.)
    b. Prepare journal entry for retiring treasury stock of the par value of $100.00 acquired at $50.00 and the book value of $125.00.

75. A company has acquired at $90.00 per share one hundred shares of its own capital stock, of the par value of $100.00 per share. Its balance sheet shows treasury stock $9,000.00. Is this correct? If so, why? If not, state how you would adjust the books.

76. a. How should the discount and premium arising from the sale of a company's own securities held in its treasury (consider as capital stock) be treated on the books? Give examples.
    b. Is it proper for a corporation to pay a dividend out of surplus arising from the sale of treasury stock at a premium? Why?

77. Make the entries necessary to record each of the following (*):

a. A, B and C form a corporation for $50,000.00, authorized capital stock. A subscribes for 250 shares, B for 125 shares, and C for 125 shares. The subscriptions are made January 2, 1920, and the cash is paid in in full on February 15.

b. In (a) above, A, B and C each subscribed for 125 shares.

c. In (b) above, 50 per cent is to be paid in in cash on allotment, and the other 50 per cent whenever called.

d. In (a) above, A, B and C, on February 16, each donated twenty-five shares to the corporation for securing working capital. This donated stock was sold on February 18, for $80.00 a share.

78. The Jones Manufacturing Company was organized with a capital stock of $200,000.00, divided into 2,000 shares, par value $100.00 each. 60 per cent of this stock has been subscribed, which is to be paid for in instalments of $50.00. The first instalment has been received in cash. Required:

a. Opening entries not using instalment accounts.

b. Opening entries using instalment accounts (*).

79. The Syra Oil Company was organized with an authorized capital stock as follows:

Guaranteed stock,	$200,000.00
Preferred stock,	200,000.00
Common stock,	600,000.00
Total,	$1,000,000.00

The transactions relative to the above are as follows:

a. $150,000.00 of the guaranteed stock has been subscribed and paid for in cash.

b. $140.000.00 of the preferred stock has been subscribed, and $128,000.00 has been paid for in cash.

c. $150,000.00 of the common stock has been issued as a bonus to the purchasers of the guaranteed stock.

d. $200,000.00 of the common stock has been sold and paid for in cash.

e. $200,000.00 of the remaining common stock has been subscribed for, being payable in two instalments of $50.00 each, payable in 60 and 90 days.

f. $100,000.00 of the common stock issued as a bonus has been donated to the treasury.

Required:

1. Entries in journal form to cover the above conditions.
2. Trial balance of opened ledger (*).

80. A corporation is organized with an authorized capital stock of $30,000.00 of which only $20,000.00 is sold, and stock certificates issued therefor. Two conflicting methods of recording the capital stock on the books are suggested:

a. Treasury stock to Capital, $30,000.00; Cash and Properties to Treasury Stock, $20,000.00.

b. Cash and Properties to Capital Stock $20,000.00. Which method is correct and why?

PROBLEMS ON CHAPTER IV

16

The Brookline Coal and Lumber Company was organized under the laws of the state of New York by John Potter, Harry Berg, and Walter Joseph, who signed the certificate of incorporation and subscribed for ten shares each on June 15, 1921. The certificate of incorporation was filed by the Secretary of State on July 1, 1921. The authorized capital stock amounted to $100,000.00, divided into 1,000 shares, par value $100.00 each. The incorporators paid their subscriptions on July 1. The organization tax and filing fees amounted to $69.20.

During the subsequent four months, the following transactions occurred:

July 18.—John Dolan purchased 100 shares of stock for cash.

Aug. 8.—Arthur Hoople subscribed for five shares and paid 25 per cent on account.

Aug. 16.—John Potter subscribed for 200 shares and paid 25 per cent on account; Harry Berg subscribed for 200 shares and paid 25 per cent on account; Walter Joseph subscribed for 100 shares and paid 25 per cent on account.

Aug. 23.—Land for the yard was purchased from Andrew Pugh for 100 shares of stock.

Sept. 5.—$3,000.00 was paid Stone & Son, contractors, on account of trestle and of buildings, the total price being $25,000.00.

Sept. 8.—The subscribers of August 16, paid 25 per cent on account of stock

Sept. 10.—$10,000.00 was paid contractors on account.

Sept. 12.—The patents for a road culvert in demand by certain leading railroads were purchased from Richard Harding for fifty shares of stock.

Sept. 19.—Wagons and other equipment were purchased for $10,000.00, $4,500.00 down and notes for the balance.

Sept. 28.—The subscribers of August 16, paid their balances due on account of subscriptions as follows:
John Potter, cash in full.
Harry Berg, cash in full.
Walter Joseph, note for $5,000.00.

Oct. 8.—Paid balance due contractors.

Oct. 14.—Walter Morris, attorney, sends bill for organization services, $600.00.

Oct. 15.—Harold Bently subscribed for fifteen shares of stock and paid 50 per cent on account.

Oct. 20.—Arthur Hoople refused to make further payments on account of his subscription, and the latter was cancelled.

On the basis of the above, prepare:

1. Opening journal entry for general books.
2. The accounts showing transactions on general books.
3. Balance sheet, October 31, 1921. (*)

17

A corporation is formed on January 2, 1920, with a nominal capital of $2,000,000.00, shares being of the par value of $100.00. The first issue is 15,000 shares, $25.00 per share being due upon application; $15.00 more being on allotment on January 15; $20.00 due on February 1; $20.00 due on February 15. 14,500 shares were applied for. On January 15, 13,000 shares were allotted.

Present the entries in journal form necessary to record the above facts in logical sequence (*).

18

A corporation having issued its capital stock at par buys 1,000 shares at 95. It later sells 500 of these shares at 98, and 300 at 85, and 200 at 101. Give the journal entries covering these transactions.

How should the items appear on the balance sheet immediately after purchasing the stock, and immediately after each of the sales? (A. I. A.)

19

A corporation is formed, and places a certain number of shares of its capital stock (par value $1.00 per share) on the market, to be sold at 35 cents per share, with the understanding that there is to be no forfeiture of any money paid in, but if the subscriber becomes delinquent for any instalment, a pro rata number of shares equal to the amount of the instalment shall immediately revert to the company.

"A" subscribes for 1,000 shares and pays:
Instalment No. 1, 12½ cents.
Instalment No. 2, 5 cents.
Then transfers his interest to "B" who does not pay:
Instalment No. 3, 2½ cents.
Instalment No. 4, 2½ cents.
Instalment No. 5, 7½ cents.
But does pay:
Instalment No. 6, 5 cents.

How many shares is "B" entitled to, and in the aggregate how much do "A" and "B" pay to the company?

20

The Zero Manufacturing Company (incorporated under the laws of New Jersey) has a capital of $40,000.00, which is held as follows: A $21,000.00, B $2,000.00, C $8,500.00, and D $8,500.00. On December 31, 1920, there is an undivided surplus of $34,576.00. A disposes of his entire interest in the concern for $35,000.00, which is paid to him by the company out of the company funds. The company then agrees with B to pay him for his holdings at their book value, as determined immediately after the retirement of A.

Draft entries in journal form, covering the above transactions, showing amount paid to B, and state the value of the stock remaining in the names of C and D.

QUESTIONS ON CHAPTER V

Twenty Questions, Five Problems

81. a. Describe the steps necessary for the formation of a business corporation. State what is requisite for the validity of a contract by a corporation.

b. In organizing a general business corporation, what must be the general qualifications of those executing the certificate of incorporation? By whom is the certificate of incorporation executed, to whom sent, and with whom filed? How are the officers of a stock corporation chosen? Must they be directors? How are their powers prescribed?

82. a. Define the following terms:

1. Good-will.
2. Franchise.
3. Common stock.
4. Preferred stock.
5. Watered stock.

b. Differentiate unsubscribed stock, unissued stock, issued stock, and treasury stock.

83. a. What is meant by ultra vires in regard to the act of a corporation? Explain, and give an example of such an act .

b. May the board of directors of a corporation delegate its authority to agents or a quorum composed of less than a majority of its members? Explain. May a director vote by proxy at a meeting of a board of directors?

84. a. Under what circumstances may a company reduce its capital stock? (*)

b. Give the journal entry necessary to cover the retirement of $50,000.00 preferred stock at 110, same being in accord with the original sale terms and conditions (*).

85. Journalize and show balance sheet allocation covering the following transaction: A corporation sells $100,000.00 of its preferred capital stock at 115; no part of the premium is available for dividends (*).

86. Give method of handling the following items on the books of a corporation: (*)

a. Discount on stock.

b. Premium on stock.

c. Common stock issued as a bonus with sale of preferred stock.

87. a. List books and give purpose of each, used by a corporation but not by a partnership.

b. What knowledge must a transfer agent possess in order to safeguard his company in the transfer of its certificates of stock?

88. a. Describe how the stock ledger (shares ledger) of a corporation is kept.

b. State the full procedure leading up to the entry of the following transactions in the shares of a corporation, the par value of which is $100.00. April 5, 1901, James Williamson received certificate No. 75 for 100 shares full paid. May 3, 1901, James Williamson requests a transfer to Geo. T. Jenkins of 30 of his 100 shares. Outline a form of stockholders' ledger and properly enter above items therein.

89. A corporation has four classes of stock for each one of which a stock ledger is carried. A number of persons own shares of more than one class of stock. How may duplication be avoided in such matters as mailing annual reports, notices of stockholders' meetings, etc.? Outline in detail the method you suggest. (*)

90. A customer of a certain corporation owes it $5,000.00 and the company finds it impossible to collect such debt in due course. However, this customer is a stockholder of the corporation and, to cancel such debt, offers to pay same by transferring over capital stock certificates of a total par value of $5,000.00. The offer is accepted. Make journal entry upon the corporate books in respect of the above. (*)

91. a. Submit rulings of transfer journal suitable to record heavy transfers of a listed stock and all necessary transfer records to be used therewith. Explain fully the use of each record and its relation to the others.

b. What method would you adopt to prove the outstanding certificates of stock to be correct as represented on the transfer ledger?

92. A company whose stock is widely distributed and much dealt in, increases its capital stock of $500,000.00 by a stock dividend of 100 per cent. Some years subsequently an original stockholder brings suit for elimination from the capital stock of what he claims is "water." How can the stock issued as dividend be eliminated from the $1,000,000.00 of stock outstanding?

93. What, in your opinion, is the correct method of recording on its books of account the purchase of property and plant by a corporation where payment is made in capital stock of the purchasing company, the par value of such stock being greatly in excess of the actual value of the assets acquired?

94. A corporation organized under the laws of the state of New York has an authorized capital of $200,000.00, consisting of 1,000 shares common and 1,000 shares preferred stock, par value $100.00 each. Patents were acquired of a patentee for $50,000.00 common and $50,000.00 preferred stock. The patentee donated one-half of each issue to the company for its use in securing working capital. Show entries necessary to record these transactions.

95. A corporation is organized under the laws of the state of Michigan, with a capital stock of $250,000.00, of which $100,000.00 is preferred and $150,000.00 is common stock, shares $100.00 each. The purchasers of preferred stock at par are to receive an equal amount of common

stock free; all the preferred stock is subscribed and paid for, leaving $50,000.00 common stock unsubscribed. It is found that the remaining common stock cannot be sold for sufficient cash for requirements and the holders of preferred stock donate to the treasury $50,000.00 of their common stock. The common stock is sold at 50¢ on the dollar.

96. A company is formed with a nominal capital of $500,000.00, in 50,000 shares of $10.00 each. Of these, 40,000 are issued and subscribed for. $1.00 per share is payable on application, and $2.00 per share on allotment. A call of $3.00 per share is made four months after the date of allotment and a further call of $3.00 three months after the date of the first call. The deposit, with the amount per share due on allotment, is paid in full, but in respect to the first call $110,000.00 only is received, and on the second call $95,000.00 only. The amounts received are paid into the company's banking account.

Prepare journal entries to record the above transactions.

97. a. On the books of a partnership which is about to be taken over by a corporation, is the following account:
A—Drawings, $1,475.00.00.
What is to be done with the balance thus shown? (*)

b. The Best Store Company was incorporated for $50,000.00 on March 15, 1918, by the three partners, A, B, and C. The change in organization was not given effect upon the books of the company. Proprietary interest on January 1, 1918, was $75,000.00. The profits for the year 1918, determined in January, 1919, are found to be $10,000.00. Specifically state how you would correct this condition on the books of the Company when you called in in February 1919.

98. a. What is the principle underlying capital stock of no par value?

b. Outline the accounting procedure connected with stock of no par value as to the following: (*)
1. Stock donated to treasury.
1. Original issuance.
2. Stock donated to treasury.
3. Stock purchased for treasury.
4. Reflection of each of the above upon the balance sheet (*).

c. How should no par value capital stock appear on the balance sheet of the owner thereof? (*)

99. a. A corporation is formed whose capital stock has no par value. Shares issued, 1,000; assets, $8,000.00; liabilities, $4,000.00. Prepare the journal entries to open the books.

b. In setting up the balance sheet of a corporation which has an issue of 100,000 shares of stock of no par value but a stated value of $5.00 a share and an excess of assets over liabilities of $1,500,000.00, how would you show the capital on the balance sheet?

100. A. B. has a chance to buy 49 per cent of the stock of the Johnson Sales Company. All of the stock is now owned by C. J., and he will continue to hold the balance of 51 per cent. A. B. is anxious to invest, as the business is very profitable, but hesitates for fear that C. J., who is heavily involved in outside matters, may be forced to sell his stock,

and that the new owners might try to "freeze him out." C. J. has offered to protect A. B. as far as possible in this respect. What would you advise A. B. to do?

PROBLEMS ON CHAPTER V

21

The Glenvale Coal Company was organized in New York on July 1, 1921, with an authorized capital stock of $50,000.00, divided into $25,000.00 preferred and $25,000.00 common, 2,500 shares of each class, par value of each share $10.00. The certificate of incorporation was filed July 6, 1921.

At a meeting of the directors held July 7, 1921, there was acquired from G. C. Molton, A. B. Kershaw, and C. D. Gilbert, at a valuation of $25,000.00, all their right, title and interest in certain land held by them, paralleling the tracks of the N. Y. C. Railroad, upon which the coal yard was to be situated, same paid for in common stock.

In order to raise the necessary funds with which to commence operations, these three persons donated to the company 49 per cent of their holdings, or 1,225 shares of common stock. The stock was sold from time to time, in blocks of two shares preferred and one share common, for $25.00 a block. In all, $2,500.00 was received by this means. Likewise, other stock was disposed of as follows: In payment of surveying land lines, ten shares of common stock at par; in payment for attorney's services, organization taxes, and filing fees, bill rendered, $400.00; fifty shares of common stock.

Frame Journal entries opening the books of the Glenvale Coal Company, and present initial balance sheet. (*)

22

John Doe owns a lumber mill business with property valued as follows:

Real estate,	$100,000.00
Plant, etc.,	79,000.00
Lumber,	93,500.00

Doe, Smith, Brown, Jones and Robinson organize a corporation with an authorized capital of $1,000,000.00 divided into 10,000 shares of par value of $100.00 per share, under the following conditions:

Doe is to receive 1,000 shares for real estate, 790 shares for plant, and 935 for lumber—fully paid up stock.

Smith subscribes for 1,500 shares.

Brown subscribes for 1,500 shares.

Jones subscribes for 1,500 shares.

Robinson subscribes for 775 shares.

One thousand shares are to be placed in the treasury for future disposition, and 200 shares fully paid up stock is to be given to each incorporator for the cash payment of 10 per cent of par value, in consideration for services in the organization of the company. Each incorporator then donates 100 shares to the company for sale to produce working capital.

Draft the entries required, and present resulting trial balance.

23

The Prosperous Manufacturing Company, a corporation, was organized July 1, 1914, with an authorized capital stock of $215,000.00, par value of the shares $100.00 each, for the purpose of manufacturing novelties. The five incorporators subscribed and paid for five shares each; organization expenses were incurred to the amount of $5,000.00, and were paid for in stock; the balance of the stock was disposed of on the following conditions: 10 per cent upon subscription, and three equal calls for the balance at thirty, sixty, and ninety days.

On July 31, the Prosperous Manufacturing Company secured an option for thirty days on the plant of A. and B. for $10,000.00, agreeing to take over the assets exclusive of cash and assuming the liabilities of the partnership as at July 31, for the sum of $200,000.00 payable $90,000.00 immediately after taking over the business and the balance in ninety days. At the expiration of the option, the corporation took the plant as agreed.

The following is a transcript of A. and B.'s ledger balances as at July 31, 1914:

Land,	$30,000.00
Buildings,	35,000.00
Machinery,	20,000.00
Furniture and Fixtures,	5,000.00
Raw Material,	10,000.00
Tools,	2,500.00
Finished Goods,	10,000.00
Work in Process,	5,000.00
Supplies,	7,500.00
Accounts Receivable,	25,000.00
Cash,	8,200.00
Mortgage on Buildings,	10,000.00
Reserve for Depreciation-Machinery,	2,500.00
Reserve for Bad Debts,	1,000.00
Accounts Payable,	15,000.00
A,	77,820.00
B,	51,880.00

During the interval, A. and B., with the consent of the corporation, had sold finished goods for $5,000.00, which was 25 per cent above cost.

The subscriptions to the stock of the corporation were met on call with the exception that on the second call a subscriber for twenty-five shares notified the corporation that he was unable to complete his agreement, and he was released without further liability. The forfeited stock was sold for cash at par.

From the foregoing, draft:

a. Journal entries necessary to close the books of the partnership.
b. Journal entries necessary to open the books of the corporation and to show all transactions on the Prosperous Manufacturing Company's books.

c. Balance sheet of the Prosperous Manufacturing Company, September 1, 1914.

24

Smith and Rogers were partners in an ice business, sharing profits and losses equally. A transcript of their general ledger as of December 31, 1921, was as follows:

Cash,	$ 300.00	
Accounts Receivable,	2,675.00	
Smith-Loan Account,		$7,100.00
Rogers-Loan Account,		250.00
Smith-Capital Account (excess of loss over capital),	1,845.00	
Rogers-Capital Account (excess of loss over capital),	1,845.00	
Operation Expenses (earnings deducted),	600.00	
Sundry Expenses,	85.00	
	$7,350.00	$7,350.00

The two partners agree to sell out to the Eriez Ice Company, chartered under the laws of New York, as of January 1, 1922, in consideration of forty-five shares, of this company's capital stock, the total issue being $5,000.00, each share of the par value of $100.00; also, as part of this consideration, $500.00 in cash was to be paid to them. The Eriez Ice Company agrees to assume the payment of all the outstanding liabilities, including the amounts shown in the loan accounts of the partners.

The partnership books were used by the corporation, the latter going ahead and using them without making any entries relating to the organization of the corporation or concerning the assets acquired. One of the incorporators, in payment of his subscribers' shares, paid in $500.00, which was credited to the loan account of Smith and appears in the total set out in the trial balance shown above. The capital accounts and the expense accounts, as shown in the above transcript, were closed out subsequently by the company to the profit and loss account. The cash payment to be made to Smith and Rogers, as part of the purchase price, has not taken place.

Required:

1. All entries necessary to place the books of the corporation in order.
2. Trial balance of the adjusted ledger. (*)

25

The Nitrite Deposits Company is incorporated locally to take over the business in Chile of Messrs. W. E. Greetham and S. O. Else.

The assets of the partnership are valued at $1,000,000.00 exclusive of any good-will.

The company is incorporated with a nominal capital of $2,000,000.00 in shares of $100.00 each, of which the vendors receive 15,000 shares; the remainder are issued to the public at par.

The vendors enter into an agreement by which they hand back 2,000 shares as a gift to the company after the issue to the public has been effected.

The board decided to take these shares up on the books at $50.00 each, which was done. During the year, however, the shares were sold, and realized an average price of $90.00 a share.

a. Draft the entries necessary to record the above transactions on the books of the company.

b. State your entries in the event the company had been capitalized at only $1,000,000.00 and the vendors' and other shares had been reduced proportionately.

QUESTIONS ON CHAPTER VI

Twenty Questions, Five Problems

101. State in the form of a journal entry on the books of John Brown the following transaction:
Instalment notes given by him on purchase of real estate; face of notes includes interest charges up to and including maturity of notes.

102. What is a bond?

103. Define:
1. Registered bond.
2. Coupon bond.
3. Mortgage bond.
4. First mortgage bond.
5. Collateral trust bond.
6. Income bond.

104. Define:
1. Second mortgage 6 per cent serial gold bond.
2. Guaranteed bond.
3. Debenture bond.
4. Serial bond.
5. Underlying bond.

105. A certified public accountant, having performed the duty at the close of several years, takes up for the year just past the examination of bonds—the property of an institution. At his last examination he found coupon bonds in three classes,—registered as to principal, registered as to principal and income, and unregistered. In his examination of the books of account of the institution, he found that bonds had been bought during the year. To make an efficient examination in the most expeditious way, how might he treat these various classes?

106. A $10,000.00 5 per cent semi-annual coupon (bond) is bought on a 4 per cent basis, due 1½ years hence. What did it cost? (A. I. A.)

107. If a bond reads at 4 per cent, but the amount which will be received is 1.05 of the nominal par, what is the actual percentage of cost income?

108. How would you record on the books of account the purchase of securities which had been only partially paid for?

109. The Oak Furniture Company placed $50,000.00 of its undivided earnings in the hands of a broker to invest in United States 4 per cent bonds. The bonds were for $1,000.00 each and cost 101⅜, commission ⅛.

Prepare detailed entries to record properly the transaction on the company's books.

110. A manufacturer makes extensive investments in stocks and bonds, buying and selling from time to time as the market conditions warrant and clearing all such transactions through his regular books of account. How should such transactions be isolated from his manufacturing operations and what books and accounts should he employ to record the details of the principal and income from such investments?

111. What is the advantage of amortization in regard to the valuation of bonds?

112. A firm purchased ten $1,000.00 bonds at 97½, due January 1, 1915, bearing 5 per cent interest, payable semi-annually. What procedure would you adopt to care for the discount at maturity?

113. How should the interest received on a bond bought at a premium be treated?

114. In case of bonds purchased at a premium or at a discount, to be held until maturity, state how the price should be disposed of on the books at purchase, at maturity, and at any intervening time.

115. Sketch the form of a bond ledger which will provide the purchaser of a bond at a premium with a perpetual detail record of each bond transaction.

116. A corporation has a number of investments in stocks and bonds which are listed, and have a definite market price from day to day. It carries them at their cost prices in the ledger and wishes to retain these cost prices, but at the same time wishes to have them show in the balance sheet at the market prices. State a convenient method of doing this without changing the cost values in the ledger.

117. Classify the Income from Stocks and Bonds Owned account properly, according to the subdivision of assets, liabilities, proprietary interest, income and expenses under which it should be grouped.

118. Where would you place the Appreciation of Securities account in the Income and Profit and Loss account?

119. Explain fully, in what way, if at all, loss on bonds held and disposed of during the period should enter into the trading and profit and loss statements of a mercantile concern. Give reasons for including or excluding.

120. In preparing a balance sheet of a corporation how would you classify or deal with securities representing:
    1. An interest in a competing company.
    2. The entire ownership of a plant.
    3. An investment of a temporary surplus of cash. (A. I. A.)

PROBLEMS ON CHAPTER VI

26

In Mr. Jones' private ledger he keeps accounts with each investment he makes, one of which is an investment of 1,000 shares (par value $100.00) of the A. B. Company which he acquired in July, 1914, for $85,000.00. After

this date and up to December 31, 1918, he makes further purchases and sales of this stock. A certified public accountant called in to prepare Mr. Jones' income tax return for 1918 finds that these and other transactions have been written up in the following manner, no effort to show the profit of the sale of 1,000 shares on June 1, 1918, having been attempted.

Investment A. B. Company Account

	Debits	Credits
July 1, 1914.—1,000 shares purchased,	$ 85,000.00	
Dec. 31, 1914.—Entry to carry this stock at par,	15,000.00	
May 31, 1915.—Purchased 1,500 shares at par,	150,000.00	
Nov. 30, 1915.—Sold 300 shares at 125,		$ 37,500.00
Dec. 31, 1915.—Profit and loss—profit on sale of 300 shares,	7,500.00	
July 1, 1916.—Stock dividend of 50 per cent on 2,200 shares declared from profits, accumulated prior to Mar. 1, 1913,	110,000.00	
Feb. 28, 1917.—Sold 700 shares at 110,		77,000.00
Dec. 31, 1917.—Profit and loss—profit made on sale of 700 shares,	7,000.00	
June 1, 1918.—Sold 1,000 shares at 125,		125,000.00

Rewrite this entire account to show how it should have been kept in order to show actual profit on each sale and also calculate the actual profit on the last sale of 1,000 shares. What is the book value of the total shares on hand, December 31, 1918? (A. I. A.)

27

a. Determine the price of a 4½ per cent bond in the amount of $10,000.00, with four years to run, purchased so as to net 3½ per cent. The interest is payable semi-annually. Construct a schedule of amortization.

b. A city issues 100 5 per cent bonds, par value $1,000.00 each, payable semi-annually. These bonds are payable in forty equal annual instalments, yielding 4 per cent on the investment. What is the purchase price? (*)

c. Suppose in (b) above, 4 per cent bonds had been issued, interest payable semi-annually, to yield 5 per cent on the investment. What would then be the purchase price? (*)

28

There were purchased December 31, 1919, $100,000.00 of Brownsville 4 1/2s for $103,394.43 ex interest.

On June 30, 1921, half of the bonds were sold for $52,418.55 ex interest.

Given that the bonds are semi-annual and that the price paid in is such as to net the investor 4 per cent, i.e., 2 per cent semi-annually, present an analysis of the bond ledger account as it would appear at the close of business, December 31, 1921.

29

X & Y are dealers in bonds and securities, sharing profits and losses in the proportion of X three-fourths and Y one-fourth. They employ Z to sell securities, agreeing to pay him, in lieu of a salary, an amount equal to 25 per cent of the net profits to be divided between the partners. During the period of Z's employment, the firm purchased $100,000.00 Topeka Traction Company first mortgage 5 per cent bonds, on a 3 per cent basis. The bonds mature in one year and one-half. Interest is payable semi-annually. These bonds are held by X & Y until maturity.

Prepare statement of the Topeka Traction Company bond accounts, showing cost, amortization and interest. The total profit to be adjusted in the contract with Z is $15,000.00. Show the division of this profit.

30

The Patriotic Emblem Company, wishing to contribute to the success of the Liberty Loan, agrees to accept subscriptions for the bonds from its employees and arranges that payments may be made either in cash on July 2, or in twelve monthly instalments beginning that day.

On June 1, cash subscriptions for one hundred $100.00 registered bonds and two hundred $50.00 bearer bonds were received; also subscriptions for 480 $50.00 bearer bonds payable on the instalment plan. A remittance for 2 per cent of the total subscriptions was sent immediately to Safe & Trust, Bankers, through whom the Patriotic Emblem Company applied for the bonds. Payments to the bankers for the balance are to be made as follows: June 28, 18 per cent on instalment subscriptions; July 2, balance of cash subscriptions; July 30, 20 per cent on instalment subscriptions; August 15, 30 per cent, and August 30, 30 per cent on instalment subscriptions. The bonds are dated June 15, 1917, and bear interest at 3½ per cent per annum from that date, payable semi-annually, on December 15, and June 15. Interest at the same rate is to be calculated on unpaid instalments from June 15, 1917, both on the accounts with the bankers and with the subscribers.

It is assumed that the bonds are delivered on September 15, 1917, to the Patriotic Emblem Company, who holds the ones subscribed for on the instalment plan, pending completion of payments. In October, 1917, certain employees find it impossible to continue their payments, and the Patriotic Emblem Company agrees to take over their subscriptions. On October 31, the company refunds to these subscribers all payments made by them, plus interest to date. The par value of the cancelled subscriptions is $1,200.00.

Show ledger accounts necessary to record the foregoing transactions on the general books of the Patriotic Emblem Company, and make all entries, including interest. The cash account may be omitted. Describe method of handling accounts with individual subscribers. (*)

QUESTIONS ON CHAPTER VII

Twenty Questions, Five Problems

121. a. What is depreciation?

b. What are your views as to the necessity of a provision for depreciation on fixed or capital assets?

c. From an audit of a public service corporation it is found that no depreciation of capital assets has been provided by a charge against earnings, the officials believing that appreciation of certain real estate offsets a fair amount of depreciation. Is this a proper disposal of the matter? Give reasons. (A. I. A.)

122. a. Do you consider it good accounting practice to charge off depreciation on machinery in years when the operation of the plant results in a loss? Give reasons.

b. What is the difference, if any, between depreciation, obsolescence and depletion?

c. A company manufacturing tin tags charges to cost of manufacture (as depreciation) one-fourth of the cost of the stamping machine, which had been in service about one year. The life of this machine was estimated to be ten years, but owing to the discovery by a competitor of a new method of stamping, which, while still imperfect, promises to revolutionize the business, the stamping machine now in use will probably be obsolete within a period of three years. What would you say concerning the propriety of the above charge to prime cost?

123. a. Define the difference between fluctuation and depreciation in the value of assets.

b. Name three of the principal elements that cause obsolescence.

c. Name the advantages or disadvantages of the following methods of bringing on to the books of a company the depreciation on its machinery:

1. Crediting machinery account with 10 per cent of the balance of the account each year and charging profit and loss.
2. Crediting a reserve for machinery depreciation with 10 per cent of the balance of the account each year and charging profit and loss.

How can you combine the best features of both the above methods?

124. a. A public service corporation that regularly sets aside from its profits a sufficient amount to provide for depreciation removes part of its old plant and replaces it with a larger and more costly one. The old plant is sold for scrap. How should the cost of the new plant and the proceeds from the sale of the old plant be treated in the accounts of the company? Give reasons.

b. How should expenditures for repairs or replacements be treated insofar as they relate to the question of depreciation?

c. You are asked by a client to discuss with him the question of reserves for depreciation and depletion of his various capital assets. State your position on this subject and enumerate the considerations you would advance in support thereof. Would you, or would you

not, be guided by the rules laid down by the internal revenue authorities in deciding upon the rates to be used?

125. a. What classes of property, if any, in your opinion, are exempt from depreciation?

b. If asked to give advice concerning the proper rates per cent. to be adopted in providing for the account for depreciation on buildings, machinery, tools, etc., what could you recommend?

c. A machine costing $81.00 is estimated to have a life of four years, with a residual value of $16.00. Prepare a statement showing the annual charge for depreciation according to each of the following methods:

1. Straight line.
2. Constant percentage of diminishing value.
3. Annuity method.

(For convenience in arithmetical calculation assume the rate of interest to be 10 per cent.) Discuss the significance of each of the methods. (A. I. A.)

126. a. To what extent should an auditor hold himself responsible for the correctness of depreciation?

b. The book value of the plant of a corporation has been reduced to merely a nominal sum. Under this condition, state:

1. Whether, periodically, a reservation should be made of an amount estimated to cover depreciation.
2. The reasons supporting your answer.

c. In the event of a difference of opinion between auditor and directors concerning the rate of depreciation on plant and machinery as would involve an important alteration in the proposed rate of dividend, how can the matter be settled to the satisfaction of both parties?

127. a. Define: Reserve account.

b. How may a reserve account be properly established and for what purpose? What, if any, contra account should be maintained? Under what circumstances should these accounts be maintained? Why?

c. Explain the difference between real reserves and nominal reserves. Give two examples of each. (A. I. A.)

d. From the viewpoint of a balance sheet, what is the logical place of:

1. Reserves for depreciation of physical assets, created by charges to operations.
2. Operating reserves.
3. Reserves for redemption of liabilities.
4. Reserves for contingencies.

Give reasons for your opinion.

128. a. How would a reserve affect the book value of capital stock?

b. Explain "contingency reserve." How would it affect the book value of capital stock?

c. Classify reserve for income and excess profits taxes according to

the subdivision of assets, liabilities, proprietary interest, income and expense under which it should be grouped.

d. A corporation owns nearly all of a block of land. The remaining portion is purchased subject to an existing lease. The corporation sets aside out of surplus an amount believed to be sufficient to extend its plant over the entire block at the expiration of the lease. What ledger title should be given to the amount set aside and how should the amount be set up in the balance sheet? (A. I. A.)

129. a. An interurban railway company, wishing to provide against possible accidents, adopted the plan of depositing 2 per cent of their gross receipts each month in a local savings bank as a reserve for that purpose, charging the funds so set aside to an account which they designated "reserve for accidents." The total fund for the year amounted to $4,869.26, out of which they paid $950.00 for accidents occurring and settled during the twelve months, debiting such payment to accident account, and leaving cash balance in the bank on December 31, of $3,919.26.

The bookkeeper endeavored to close the books by showing the $4,869.26 as a charge against operating for the year arising out of accident liability, carrying over the balance in bank ($3,919.26) to provide for future accidents, and making a corresponding credit to the "reserve for accidents" account. This left the company with cash assets of $3,919.26 not represented on the books.

Wherein did the bookkeeper err, and what entries should have been made to show the transaction correctly?

b. You are employed to make an audit by a stockholder who believes the management of the corporation is piling up large secret reserves with the view of buying up the stock of the minority holders. You are given free access to the books. Explain in detail what investigations you would make to determine the truth or falsity of this belief.

130. a. Define: Reserve fund.

b. Distinguish between a reserve account and a reserve fund.

c. If asked to criticize a balance sheet prepared by a client's bookkeeper, state what you would say regarding the following caption found on the liability side of the balance sheet: "Reserve fund for redemption of bonds—$50,000.00." Explain fully.

d. Should a reserve fund be invested in interest-bearing securities? State the custom. If so invested, what account should be credited with the income?

131. a. Define the following:

1. Surplus.
2. Appropriated surplus.
3. Free surplus.

b. What do you understand by capital surplus? Is it invested capital?

c. How would surplus and appropriated surplus affect the book value of capital stock?

132. a. What items do you consider should be charged or credited direct to surplus? Would you regularly make small adjustments of subsequently discovered errors through this account? Is the balance at credit of surplus ever in any circumstances a liability, and if so, to whom? (A. I. A.)

b. When preparing a trading and profit and loss account at the end of a fiscal year, in what manner would you treat the surplus or deficit brought forward from prior year?

c. When is surplus available for dividends? When not available?

133. a. A corporation purchased a business as a going concern on January 1, 1921, with a right to the profits from October 1, 1920. Its capital is: Five per cent preferred stock, $250,000.00; 6 per cent second preferred stock, $250,000.00; common stock, $124,000.00. The year's profits to September 30, 1921, are found to have been $38,320.00. What appropriation of such profits would you consider to be correct?

b. Can surplus be created in any way other than through profits earned from operations? Explain. (A. I. A.)

c. Distinguish between the following:

1. Earned surplus.
2. Paid-in surplus.
3. Capital surplus.
4. Appropriated surplus. (A. I. A.)

d. Is the deficiency in the early years of a corporation's activities (whether an actual loss or a deficiency between the earnings and the normal rate of return) similar to organization expenses? How should such deficiencies be treated in the accounts? To what extent is such a deficiency similar to interest paid during construction? Should such deficiencies be carried on the balance sheet? If so, should they be written off, and how and when? May the deficiencies representing the difference between actual earnings and normal rate of return be capitalized, in the strict sense of having capital stock issued to a corresponding sum? State clearly just who is affected, and how, by the different methods of treating the items mentioned above. (A. I. A.)

134. a. Describe the nature of the dividend account.

b. Give the theory of dividends.

c. How would you indicate on the balance sheet, December 31: Ordinary dividends for the year, declared the following January 22? (A. I. A.)

d. How would you deal with the preference dividends declared July 1, 1914, in auditing a balance sheet as at June 30, 1914?

135. a. In preparing the balance sheet of a corporation, how would you treat arrears of cumulative dividends on preferred stock?

b. When is it proper to record on the books of a corporation a dividend on cumulative preferred capital stock?

c. How would you treat the following dividends on common stock

in preparing a balance sheet: Dividends declared on stock in treasury: declared in reduction of capital?

d. What do you understand by the term "dividends paid out of capital"? What, in your opinion, would constitute such payment, and mention any circumstances that may occur to you to justify such payment?

136. a. The Hayward Company has declared a dividend of 10 per cent on its capital stock of $100,000.00, payable July 1, 1921; stock books close on June 15, 1921. Describe the accounting procedure incident thereto and state who may participate in the dividends.

b. How would you deal with the unclaimed dividends account in preparing the annual accounts of a company? Comment briefly on any points which would need special consideration. (A. I. A.)

c. Can you mention any distinction between dividends declared out of income and dividends declared out of profits realized from the increment of invested values? (A. I. A.)

137. a. Define:

1. Stock dividend.
2. Scrip.

b. In what respect do stock dividends differ from cash dividends?

c. A firm is incorporated under the laws of the state of New York to do business within the state, with an authorized capital of $100,000.00. Its assets, including $10,000.00 for good-will, aggregate $30,000.00 When the books were closed at the end of the first year, the net profits shown amounted to $8,000.00. Are the directors warranted in declaring a dividend? If so, for what amount?

138. a. How would you handle cumulative dividends in arrears on the Balance sheet in the case of a corporation owning the stock with respect to which the cumulative dividends are in arrears?

b. A company, of which you are the auditor, makes an issue of shares for the purpose of providing money to build a factory and equip it with plant and machinery, and propose to pay interest on such shares out of capital, at the rate of 5 per cent per annum, during the construction of the factory. Write a letter to the board of directors presenting them your views.

139. a. The X, Y, Z Company established for ten years has a machinery and equipment account which has been increased from year to year as new equipment purchases have been made. It appears also that certain renewals and repairs have been charged to this account. Each year a credit has been made to the account for depreciation, offset by corresponding debit to profit and loss account, the ratio of depreciation being adequate. The company now disposes of a part of its plant at a price equal to what was paid for it seven years previously and credits the entire amount to machinery and equipment account. What adjustments, if any, are needed to correct the account? (A. I. A.)

b. The company also has several delivery trucks charged to truck account at cost, against which it has set up depreciation at end

of each year by credit to a separate reserve for depreciation of trucks, debiting the amount to profit and loss account. A truck was purchased January 1, 1918, for $4,000.00. Depreciation has been provided at 20 per cent per annum. On December 31, 1919, the truck is wrecked by collision. $1,000.00 is obtained from the insurance company and $250.00 obtained from salvage. What entries are needed to adjust the ledger accounts? (A. I. A.)

140. In an audit of the Acme Motor Car Company you find the reserve for depreciation account and the surplus account composed of the items as here enumerated:

The reserve for depreciation account was opened on December 31, 1915, the close of the first business year, by debiting the depreciation accounts of the various assets with $265,000.00.

The reserve for depreciation account was also credited with $25,000.00 on December 31, 1916, and with $20,000.00 on December 31, 1917.

During 1916 and 1917 the following items have been charged against this reserve for depreciation account: assets scrapped, $125,000.00; bad debts, $25,000.00; repairs, $10,000.00; fire loss on building and equipment, $7,500.00; organization expense, $65,000.00; salesmen's extra commission, $12,000.00.

The surplus account for 1915 and 1916 has been closed, the balance having been paid out in dividends.

The surplus account on December 31, 1917, is found to consist of the following credit items: reserve for car guarantees, $50,000.00; premium on stock sold, $50,000.00; reserve for obsolescence, $50,000.00; bonus from commercial club, $50,000.00; reserve for income and excess profits taxes, 1917, $80,000.00; operating profits, $750,000.00.

You are requested to make such adjustments in the reserve for depreciation account and surplus account as are appropriate, and to show how the several items and accounts should appear in the financial statement.

PROBLEMS ON CHAPTER VII

31

A factory consists of two blocks of buildings, A and B. On the 1st of January, 1917, A contains engine and boiler which cost $4,000.00, and machinery costing $13,000.00; B contains machinery costing $7,000.00. The following are purchases of machinery: October 1, 1917, A, $1,000.00; July 1, 1918, A, $750.00; B, $1,500.00; April 1, 1919, A, $600.00; B, $900.00; October 1, 1919, B, $250.00.

On January 1, 1918, machinery (costing January 1, 1917, $1,000.00) is sold from A for $625.00, and on July 1, 1918, machinery (costing $1,300.00 January 1, 1917) is sold from B for $1,000.00.

The accounts are made up to December 31, each year. On December 31, 1919, the whole premises and contents are destroyed by fire and the fire insurance company agrees to pay upon the following basis: engine and

boiler, cost price, less depreciation 8 per cent per annum upon that sum; machinery in A, cost, less depreciation at 10 per cent per annum and upon diminishing value; machinery in B, cost, less depreciation at 7½ per cent per annum upon diminishing value.

Prepare ledger accounts showing how much is recoverable upon this basis.

32

A stockholder desires to know the book value of his stock in a corporation for the purpose of accepting an offer from a purchaser who agrees to buy his stock at the book value as shown by the following balance sheet. Prepare a statement showing the book value of the stock.

Assets	
Cash on hand,	$ 25,000.00
Accounts receivable,	100,000.00
Notes receivable,	30,000.00
Inventories,	100,000.00
Treasury stock (1,000 shares),	125,000.00
Cost of plant,	800,000.00
	$1,180,000.00

Liabilities	
Accounts payable,	$ 15,000.00
Notes payable,	50,000.00
Bonds outstanding,	200,000.00
Reserve for shrinkage of inventories,	25,000 00
Reserve for depreciation,	50,000.00
Reserve for extinguishment of bonds,	100,000.00
Reserve for additions to plant,	50,000.00
Capital stock (3,000 shares),	300,000.00
Reserve for working capital,	200,000.00
Undivided profits,	190,000.00
	$1,180,000.00

33

As on January 1, 1905, a corporation is formed for the purpose of acquiring and conducting a cemetery, and starts business on that date with a capital stock of $100,000.00 paid for in cash. The company first purchases forty acres of land within easy access of a large city, paying for same at the rate of $1,000.00 per acre. It proceeds to expend considerable sums of money in the purchase and planting of trees and shrubs, laying out drives and pathways, sodding, building of glass houses, etc. The policy of the company is to withhold the selling of burial lots until after January 1, 1915, so as to allow the trees and shrubs to become more fully grown and in the expectation that with the growth of the city their property will become more valuable.

In the year 1915, the company commences selling burial lots, and all lots are sold under a special provision whereby the company agrees to

apply 50 per cent of all cash received on sales in the purchase of 4 per cent bonds, until a total of $150,000.00 of such bonds shall have been so purchased. The agreement further provides that after all lots have been sold the company will wind up its affairs and the above bonds, amounting to $150,000.00, shall be given to the city, which shall use the income of such bonds for keeping up the cemetery. It is the custom of the company not to purchase bonds until after the close of each fiscal year and after the total sales of that year have been determined.

In March, 1920, the directors of the company find that, while they believe the books to be in balance, no proper entries have been recorded showing total cost of their investment, and that no entries have been made with respect to the fund of $150,000.00, from which said bonds are to be purchased. While cash dividends have been declared and paid, the directors are in ignorance of what their profits actually have been and how much of the dividends so received have been out of their profits and how much in the nature of liquidating dividends, representing a return of their original investment. They, therefore, employ a certified public accountant to determine all these matters and to make the necessary entries on their books and render report to them. After determining the clerical accuracy of the books, the accountant draws off the two trial balances given below, and from them prepares the necessary entries and obtains the information required by the directors.

Trial Balances

Debits:	Jan. 1, 1915	Jan. 1, 1920
Real estate,	$ 40,000.00	$ 40,000.00
Improvements,	45,000.00	45,000.00
Bonds,		125,000.00
Administration expense,	20,000.00	46,000.00
Upkeep of cemetery,		45,000.00
Dividends paid,		130,000.00
Cash,	7,000.00	40,800.00
	$112,000.00	$471,800.00
Credits:		
Interest account representing interest at 4 per cent on unexpended cash during development period,	$ 12,000.00	$ 12,000.00
Bond interest account,		9,800.00
Sale of lots,		350,000.00
Capital stock,	100,000.00	100,000.00
	$112,000.00	$471,800.00

An inventory of their unsold lots as on January 1, 1920, shows that they have ten acres left unsold of equally desirable character with that already sold. Draw up entries, prepare profit and loss statement for period and balance sheet as on January 1, 1920, in same manner as if you had been the accountant engaged. In any interest calculation use 4 per cent simple interest.

34

The directors of a manufacturing company, before the closing and auditing of the books for the half-year ending December 31, 1921, declared out of the net earnings of the company, a dividend for the half-year, of 4 per cent on the preferred stock of $100,000.00, and 3 per cent on the common stock of $100,000.00. There has been brought forward from the last half-year an undivided balance of profit of $4,000.00 and after the audit of the books the trial balance is found to be as follows:

Debits:	
Real estate and buildings,	$ 32,500.00
Plant and machinery,	40,000.00
Patents and good-will,	80,000.00
Inventory,	29,000.00
Purchases,	82,500.00
Labor,	88,000.00
Coal,	6,000.00
Salaries—general,	11,000.00
Salaries—management,	5,000.00
Insurance,	875.00
Allowances,	6,250.00
Freight,	1,500.00
Discount and interest,	750.00
Cash in bank,	8,000.00
Investments,	15,500.00
Miscellaneous expense,	4,300.00
Book debts,	42,000.00
Preferred stock in treasury,	5,000.00
Repairs,	1,000.00
	$459,175.00
Credits:	
Preferred stock,	$100,000.00
Common stock,	100,000.00
Sales,	219,175.00
Notes payable,	26,000.00
Accounts payable,	14,000.00
	$459,175.00

Stock on hand, $26,500.00. Prepare profit and loss statement and balance sheet from the above, giving effect in the accounts to depreciation at the rate of 7½ per cent a year on plant and machinery, and an allowance of 5 per cent on the book debts to provide for bad debts; also, create a liability in the balance sheet for the dividend as stated.

35

A syndicate having invested in a coal property, presents the following balance sheet:

Assets		Liabilities	
Acreage,	$1,500,000.00	Capital stock,	$1,000,000.00
Physical equipment,	500,000.00	Bonds—1st Mtg. 5s,	1,000,000.00

The syndicate estimates it will mine and sell 1,250,000 tons per year, and the life of the mines at this rate will be twenty-five years. The surface acreage is not marketable. It will require $50,000.00 expended annually in additional equipment. This physical equipment will have no salvage value at the expiration of twenty-five years. The bonds are to be called and paid at the rate of $40,000.00 per annum. At what profit per ton over direct cost of mining must the coal be sold, so that a dividend of 7 per cent can be paid yearly on the stock and leave at the close of business, twenty-five years hence, sufficient convertible assets to pay the stockholders in cash the par value of their stock? Explain. Make a statement winding up the syndicate's affairs, assuming the general correctness of the estimates.

QUESTIONS ON CHAPTER VIII

Twenty Questions, Five Problems

141. a. Do unsold treasury bonds constitute a liability? Why?

b. Do unsold bonds of a railroad company constitute a liability? If they do, under what accounts would they appear on the ledger?

c. The ledger of a corporation has an account entitled: "First Mortgage Bond Scrip," showing a credit balance of $967.54. What does this balance represent and how would you treat the item in the balance sheet?

142. Formulate the entry in respect of the following: Preferred stock of $1,000,000.00 taken up by an issue of first mortgage 6 per cent bonds carrying the same value, in accord with a resolution adopted by the stockholders in lawful meeting assembled. (*)

143. A certain manufacturing company disposed of its entire $50,000,000.00 issue of first mortgage 6 per cent bonds at 90, the proceeds of which were used to pay for the obligations growing out of the construction of a new plant. Formulate the entries in respect of the above, and indicate how the discount item should be dealt with upon the books of account. (*)

144. A corporation borrows $120,000.00 for a period of ten years to pay off an existing loan at a higher rate of interest, paying therefor in brokerage and costs $2,750.00. How would you treat this item on the books?

145. a. Define bond discount and bond premium. How should each be treated in the annual statement of a concern?

b. If a company sells its own bonds at a premium, is the premium received a legitimate profit of the company?

146. a. "Discounts and premiums on bonds are in effect an addition to or a deduction from the interest rate paid on the bonds over their

life." (Dickinson.) Defend and illustrate this statement in view of your definition of interest.

b. What proportion of $15,000.00,—commission paid for negotiating a sale of bonds, to run ten years,—should be treated as an assset at the end of the first year? Give reasons.

147. a. How would you deal with Bond Issue Expense account in preparing the annual accounts of a company? Comment briefly on any points which would need special consideration. (A. I. A.)

b. The Bristol Manufacturing Company issued and sold on the 1st of January, 19—, to A and B (fifty to each at the same price), first mortgage bonds of $500.00 each, bearing interest at 4 per cent per annum, and received $48,000.00 in cash. What records of the transactions should be made, and in what books?

148. a. Outline an entry recording bond interest due but not paid at time of making the entry. What are the advantages of such an entry?

b. How would you disclose on the balance sheet dated December 31, bond interest due January 1?

149. Formulate the entries in respect of the following:

a. Interest accrued for eight months upon an outstanding issue of first mortgage 6 per cent bonds in the amount of $8,000,000.00.

b. Six months' interest of the above matured upon December 31, 1921, and 90 per cent of the interest coupons were presented for redemption on January 2, 1922.

Indicate how each of the above should be set out in a balance sheet dated December 31, 1921. (*)

150. A company, having $500,000.00 of debentures, bearing 5 per cent interest, which have been in existence for some years, and which are repayable February 1, 1920, arranges to provide the necessary capital by the issue, at par, of $500,000.00, 4 per cent permanent debenture stock, the interest on which runs from January 1, 1920; the accounts of the company are made up to June 30, 1920. What, in your opinion, is the proper amount of debenture interest to be charged against the profits of the half year? Give the reasons upon which your opinion is based.

151. a. A concern has an authorized issue of bonds to the amount of $100,000.00; $40,000.00 are sold at par, $10,000.00 are sold at 10 per cent premium, $30,000.00 are put up as collateral to a $25,000.00 loan at the bank, and $20,000.00 are on hand. Prepare a balance sheet showing the above transactions, supplying the other needed accounts.

b. A company authorizes its officers to borrow for its account $100,000.00 and give as security $200,000.00 of the first mortgage bonds of the company. How should this transaction be treated in the balance sheet?

152. a. A corporation has issued $1,000,000.00, 5 per cent debenture bonds redeemable at par, out of profits, at the end of twenty years. State what method should be adopted to provide for such redemption

so that each year's profit may bear its due proportionate burden of contribution.

b. What entries would you, as auditor, deem proper to record the redemption of bonds by a company with the cash deposited with its fiscal agent, where such bonds were cancelled?

153. a. Formulate the journal and cash book entries in respect of the following: On July 1, 1920, $300,000.00 of first mortgage 6 per cent bonds were retired. These bonds matured on July 1, 1925. The bonds were retired at 102½, in accord with the terms and conditions of the trust deed covering the property securing the issue. (*)

b. What advantage, if any, has the serial plan of paying bonds over the sinking fund plan?

154. a. A corporation having issued first mortgage bonds in the amount of $50,000.00, sets aside out of profits $5,000.00 each year and pays off at par bonds to a similar amount. How shall these items appear in a balance sheet at the end of five years?

b. What reason can you give for the creation of a reserve for a sinking fund when the reserve is not to be funded?

155. a. A sinking fund reserve is created out of annual earnings. How is the book value of the company's stock affected by such policy? Explain.

b. How should a reserve account and a sinking fund, both relating to the redemption of the same debt, be simultaneously operated? What purpose is accomplished thereby and how do said accounts respectively appear on the balance sheet?

156. a. Are sinking fund reserve appropriations a satisfactory protection to the bondholder?

b. If asked to criticize a balance sheet prepared by a client's bookkeeper, state what you would say regarding the following caption found on the liability side of the balance sheet: "Reserve Fund for Redemption of Bonds—$50,000.00." Explain fully.

157. a. Should a reserve fund be invested in interest-bearing securities? State the custom. If so invested, what account should be credited with the income?

b. What is the effect on a business of a sinking fund?

158. Argument has been strongly urged that aside from any question of possible mismanagement, or of the difficulty of making satisfactory investments to yield the same rate as is paid on the bonds, a sinking fund for bonds is more expensive than an arrangement for the serial payment of bonds. This is illustrated by the case of $20,000.00 5 per cent bonds. If these are paid off in a series, one each year, the total payment made will be principal $20,000.00, interest $10,500.00, total $30,500.00. The annual sinking fund to pay these bonds would on a 5 per cent basis amount to $604.85, making in twenty years $12,097.00, and the interest paid on the bonds would be $20,000.00, total payments $32,097.00. The apparent excess burden is accordingly $1,597.00. Discuss the above argument and show clearly just what the figures mean and in what the apparent saving actually consists. (A. I. A.)

159. You are auditing the accounts of a corporation and you find the following entries in one month without sufficient explanation:

Profit and Loss,	$ 8,333.33	
To—Accrued Sinking Fund,		$ 8,333.33
Accrued Sinking Fund,	100,000.00	
To—Reserve for Sinking Fund,		100,000.00
Union Trust Company, Trustee,	100,000.00	
To—Accounts Payable,		100,000.00
Accounts Payable,	100,000.00	
To—Cash,		100,000.00
Sinking Fund No. 1,	100,000.00	
To—Union Trust Company,		100,000.00
Reserve for Sinking Fund,	100,000.00	
To—Profit and Loss,		100,000.00

What would you conceive the situation to be and what recommendation would you make?

160. a. From a theoretical point of view, are the contributions to a sinking fund a proper charge against profits? Give your reasons.

b. Under the conditions of a general mortgage given by the Red Clay Brick Company to protect its issue of bonds, provision is made for payments to the trustee at stated periods, which, together with all accretions from interest and profits, are to be held and disbursed by the trustee as one fund. Should any distinction be shown on the books of the brick company between interest and profit so obtained? If so, give reasons.

PROBLEMS ON CHAPTER VIII

36

The Smith and Jones Manufacturing Company issued $200,000.00 of first mortgage fifty-year, 5 per cent sinking fund bonds which were marketed at 98½, 1 per cent commission, and expended the entire proceeds in the erection of their plant. The discount and commission were charged to Unamortized Debt Discount and Expense account, to be subsequently charged to Profit and Loss, proportionately, during the life of the bonds. Five years later, the company was enabled, owing to a disturbance in the financial market, to purchase $50,000.00 of said bonds for Sinking Fund account at 95.

Prepare the necessary journal entries to record correctly the above transactions of the company.

37

The shareholders of a company with bonds outstanding of $500,000.00 bearing interest at 5 per cent per annum, resolve to provide for paying off the same when they fall due on December 31, 1928, by investing $50,000.00 per annum out of the profits and allowing same to accumulate with interest; this arrangement to commence with the balance sheet for the year ending

December 31, 1920. Show the "Bond Redemption Account" on December 31, 1924, on the assumption that on December 31, 1920, and on the same day each year following, the $50,000.00 referred to was invested in 4 per cent railroad bonds at par, that the interest thereon to June 30, and December 31, in each year was received in July and January following, and was allowed to accumulate in the bank until December 31, and June 30, following, respectively, when it was invested in the same class of securities at the same price in multiples of $1,000.00.

38

Corporation A issues fifty bonds, par value $50,000.00, bearing 5 per cent interest, payable annually. The bonds are numbered serially, and are to be retired in consecutive groups of ten each year. They are to be sold at date of issue for an average price of $950.00.

a. Submit, in form of ledger accounts, all entries required to handle this bond issue, in what you consider the most equitable manner, from date of issue to retirement.

b. Corporation B buys bonds Nos. 21 to 40, inclusive, on date of issue, at $950.00 each, and sells Nos. 21 to 30, at the end of two years, for $1,000.00 each. The other ten bonds are retired when due.

Submit in the form of ledger accounts, all necessary entries in Corporation B's books for handling the matter in what you consider the most equitable manner.

39

At the beginning of its fiscal year, a certain corporation issued bonds for the purpose of purchasing machinery with the proceeds. These bonds were secured by a mortgage against the machinery, which required that $5,000.00 was to be set aside annually out of net profits to accumulate a sinking fund with which to retire the bonds.

The general manager of the company was under a contract which provided as follows:

1. He was to receive annually, in addition to his salary, a 5 per cent bonus from the profits for the year.
2. This bonus was to be calculated before the sinking fund instalments were charged against the earnings.

At the end of this fiscal year, it was agreed by all concerned, upon advice of the auditor, that the machinery mortgaged for the benefit of the bondholders should be depreciated $8,000.00 to cover estimated decrease in value, and that a reserve in such amount should be established.

The credit balance in the Profit and Loss account at the end of the year, representing profits for the year prior to adjustments covering bonus, sinking fund instalment, and depreciation reserve, amounted to $23,540.00

Prepare all journal entries deemed necessary in respect of the above. (*)

40

The Virginia Coal Company was originated on January 1, 1918, began operations about January 7, 1918, and kept an ordinary set of books (by double entry) but did not close their accounts at the end of any fiscal year.

After an examination and verification of all accounts stated in the Trial Balance, they are accepted as correct, except that termed "Sinking Fund Payments" ($22,500.00).

The mortgage securing bonds to the amount of $200,000.00 contains a sinking fund clause providing that the company shall deposit semi-annually with the Sinking Fund Trustee 5¢ per ton on all coal mined; such payments shall be made to trustee during January and July of each year for the preceding six months' period. Money so deposited is to be applied, as soon as practicable, to purchase bonds at not exceeding 115, and accrued interest; compensation and expenses of trustee are also to be paid from the sinking fund. Bonds, when redeemed, cannot be cancelled, but are to be held by trustee who shall collect the semi-annual interest thereon and apply to the same purposes as the 5¢ per ton payments.

Bonds are dated January 1, 1918, run for 20 years and bear interest at 6% per annum, payable January 1 and July 1 of each year.

Payments to sinking fund trustees (the General Trust Company) have been as follows:

July 27, 1918 Payment for 6 months ended 6/30/18, 5¢ per ton on 120,000 tons,	$ 6,000.00
Jan. 24, 1919 Payment for 6 months ended 12/31/18, 5¢ per ton on 150,000 tons,	7,500.00
July 28, 1919 Payment for 6 months ended 6/30/19, 5¢ per ton on 180,000 tons,	9,000.00
	$22,500.00

On January 30, 1920, the company paid to the General Trust Company (S. F. Trustee) $5,500.00 for sinking fund payment for the 6 months ended December 31, 1919, being 5¢ per ton on 110,000 tons.

The General Trust Company submitted statements of receipts and disbursements for account of the Sinking Fund to date (January 31, 1920) as follows:

Cash Received to December 31, 1919

July 27, 1918 S. F. deposit for six months ended 6/30/18, 120,000 tons at 5¢,	$ 6,000.00
Jan. 5, 1919 January 1919, coupons on five bonds,	150.00
Jan. 24, 1919 S. F. deposit for six months ended 12/31/19, 150,000 tons at 5¢,	7,500.00
July 3, 1919 July 1919, coupons on twelve bonds,	360.00
July 28, 1919 S. F. deposit for six months ended 6/30/19, 180,000 tons at 5¢,	9,000.00
	$23,010.00

Cash Disbursements to December 31, 1919

Aug. 16, 1918.—Bonds redeemed—5,000 at 110,				$5,500.00
	Commission at ¼ per cent,			12.50
	Accrued interest,			37.50
				$5,550.00
Feb. 15, 1919.—Bonds redeemed:				
	4,000 at 108,	$4,320.00		
	2,000 at 110,	2,200.00		
	1,000 at 112,	1,120.00	$7,640.00	
	Commission,		17.50	
	Accrued interest,		52.50	$7,710.00
Aug. 12, 1919.—Bonds redeemed:				
	9,000 at 90,	$8,100.00		
	1,000 at par,	1,000.00	$9,100.00	
	Commission,		250.00	
	Accrued interest,		70.00	9,420.00
Dec. 31, 1919.—Compensation of trustee,			$ 100.00	
	Advertising,		50.00	150.00
				$22,830.00
Cash balance in hands of trustee, December 31, 1919,				$ 180.00
Received in January, 1920, viz:				
S. F. deposit for 6 months ended 12/31/19,				
110,000 tons at 5¢,			$5,500.00	
Coupons on 22 bonds in S. F.,			660.00	
Interest allowed on balance to 12/31/20,			100.00	$6,260.00
				$6,440.00

Prepare entries to state properly on the books of the Virginia Coal Company all sinking fund transactions.

QUESTIONS ON CHAPTER IX

Twenty Questions, Five Problems

161. a. Define a trial balance.
b. Describe the process of taking a trial balance.
c. What is the function of a trial balance?
d. Do you consider the use of a trial balance necessary?

162. a. In case of a discrepancy in a trial balance, how may the accountant ascertain which side is erroneous?
b. When accounts are in equilibrium, what may be said as to their correctness?
c. What deductions may be safely drawn from a trial balance representing intrinsic values and true economic history of the transactions of a given period?

163. a. How should the following inventories be valued for the purposes of a balance sheet at any given date:
1. Finished products.

2. Goods in process of manufacture.
3. Raw materials.

b. On the balance sheet prepared by you from the books of a client, state which items are matters of fact and which matters of opinion.

164. a. State the difference between:
1. Receipts and revenue.
2. Expense and disbursements.

b. Define each of the following terms:
1. Capital expenditure.
2. Repair and upkeep expenditure.
3. Deferred charges.
4. Capital receipts.

165. Indicate how you would distribute the following as between capital and revenue accounts:

a. Extensive repairs made to the equipment of a power house in the total amount of $5,325.00.

b. Remodeling of a boiler house at a total cost of $4,500.00; also, extending same at a total cost of $6,200.00; both of these being done in order to install a larger and more modern type of vertical boilers. (*)

166. Indicate how you would distribute the following expenditures:

a. Profit of $10,000.00 from the sale of stock of another company held as an investment. The broker's commission in connection with the transaction was $750.00.

b. Loss of $500.00 from the sale of certain bonds held as an investment.

c. Loss of $5,000.00 from the sale of certain real estate which was not required because of moving the plant to another locality. (*)

167. a. In closing the books of a firm it is found that the accounts receivable include $5,000.00 of worthless accounts, and $10,000.00 of doubtful accounts. The firm decides to deduct from the gross profits $15,000.00 for these items. What would you consider the best method of carrying these items on the general ledger?

b. In the case of a company which publishes an annual balance sheet but no profit and loss account, state whether or not you would recommend to your client that the profits earned during the year, less dividends paid, be shown on the face of the balance sheet. Give your reasons. (A. I. A.)

168. In preparing a balance sheet as of December 31, 1921, of a certain company, how would you treat the following, and why?

a. Estimated cost $26,000.00 to replace defective parts of machines manufactured and sold and shipped during the three years ending on the above given date. (*)

b. Estimated amount $11,000.00 recoverable from the company which furnished these parts to us, our contract with them providing that all parts furnished and proving defective within two years from date of shipment are to be replaced free of charge or are to be paid for in cash at reproduction cost. (*)

169. a. Set up a form of working paper that will enable an auditor to adjust a trial balance of January 1, with a profit and loss account and a balance sheet of a subsequent period without recourse to journal entries.

b. Is the form of a balance sheet a matter of principle or convention?

170. How should the following items be dealt with in closing the books on December 31, 1921: (*)

a. Liabilities of $19,202.22 relating to the period prior to the above date, and not taken up onto the books until in January, 1922. All items contained in this total represent current running expenses of a general nature.

b. The inventory at December 31, 1921, was taken up on the books at cost, in the amount of $562,891.13; the market value of this inventory was $537,688.29.

c. Investments in other companies were taken up on the books at market, in the amount of $232,456.18, whereas, cost was $197,-243.96.

171. a. Define each of the following terms:

1. Surplus.
2. Undivided profits.
3. Inventory reserves

b. State the difference between:

1. Plant renewal and replacement and plant repair.
2. Adjustment entries and closing entries.

172. a. How should the following be set out in the balance sheet of a company: (*)

1. Depreciation reserve.
2. Sinking fund reserve.
3. Preferred stock dividends in arrears.

b. Explain the difference between cost and book value.

173. a. What constitutes selling cost?

b. Should freight-out be shown as a deduction from gross sales, as an addition to the cost of goods sold, or as a selling expense? Why?

c. Distinguish between the items allocatable to the trading account and to the profit and loss account.

d. Distinguish between gross profit and net profit.

174. a. How should the following items be distributed in the accounts of a company: (*)

1. Bonuses paid to officers and employees, $15,000.00.
2. Purchase of $100,000.00 of the preferred stock of the XYZ Company, for $120,000.00, this being the purchase of the total par value of the stock issued by the XYZ Company.

b. May any fluctuation in the value of permanent assets be permitted to affect the result of the profit and loss account? Give reasons.

175. a. In making up a profit and loss statement at the close of a fiscal year, are you stating a fact or an opinion? Give reasons?

b. What are the limitations, if any, of a balance sheet?

176. a. A company shows among its assets $2,675.00 as unexpired insurance on January 1, 1922. On February 1, 1922, the plant is destroyed by fire and a total loss of $57,875.00 occurs, which the insurance company pays. How would you treat the $2,675.00 unexpired insurance item?

b. A manufacturing corporation having several plants decides to shut down one plant because it cannot be run economically. Under what classification in the operating statement would you include the expenses attending the care and upkeep of the idle plant?

177. a. What is meant by turnover? Illustrate its modern usefulness.

b. Why must the revenue account be completed before a balance sheet can be prepared?

178. a. State two different theories in relation to the presentation of a balance sheet as far as classification is concerned. What is the reasoning on which they are based?

b. What is the mechanism of the double form balance sheet? Explain the connection between its sections, stating the theory of the organism.

179. a. Distinguish between the following:

1. Contingent asset and contingent liability.
2. General balance sheet and comparative balance sheet.

b. When do revenue expenditures create assets?

180. a. In auditing the accounts of a manufacturing company would you consider it proper to allow the profit and loss account to be credited with profit on uncompleted work?

b. What accounts on the ledger are generally considered as "deductions from income"? Why? As "other income"?

PROBLEMS ON CHAPTER IX

41

Trial Balance of the General Ledger of
John Doe, Civil Engineer, December 31, 1911

Cash,	$10,572.44	Manhattan Construction,	$ 5,000.00
Furniture and fixtures,	1,054.68	Report No. 1, Sewanee Creek Railroad,	5,300.00
Real estate (Rutherford home),	6,000.00	Report No. 2, Englewood Reservoir,	4,500.00
Investments in stocks,	15,457.50	Report No. 3, Long Acre Library,	3,200.00
Investments in bonds,	3,000.00	Connecticut Tramways Company,	1,950.00
Missouri Pacific—margin account,	13,000.00	Earnings—consulting	2,000.00
Accounts receivable,	15,361.32	Report fees,	16,000.00
General expense,	9,800.00	Sharp & Co., brokers,	11,310.00
Interest,	1,060.00	Stocks and bonds,	4,300.00
		Capital,	21,745.94
	$75,305.94		$75,305.94

Analyses:

General expense—Salaries: John Doe, $6,000.00, other salary $1,800.00; rent $1,000.00; advertising $600.00; cables and telegrams $90.00; stationery and printing $110.00; other expenses $200.00.

Interest—Debited with $1,300.00 charged by Sharp & Co., brokers, on margin account; reduced by dividends of $390.00, credited by Sharp & Co. on margin account. Balance on loans since repaid.

Manhattan Construction Co.—Represents consulting fees received during the year 1911, the contract running from month to month, with no expense to John Doe.

Reports 1-3—Are completed and delivered. Account contains fees, less expenses.

Connecticut Tramways Co.—Represents $2,000.00 received November 1, 1911, and expenses of $50.00; according to terms of contract, John Doe is to act as consulting engineer for ten months and to receive altogether $5,000.00.

Report Fees—Fees received under contract for report, $9,000.00 received on contracts on which no work has been done; balance is earned.

Stocks and Bonds—Are sold. Account represents balance.

Additional Facts—Dividends on stocks received during the year amount to $1,985.00 of which $1,000.00 was applied to the account Investment Stocks and $985.00 was applied to Stocks and Bonds sold.

Prepare:

a. A balance sheet at December 31, 1911.

b. An income statement showing John Doe's true earning power as a civil engineer.

c. The journal entries supporting your adjustments of the books, if any.

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Black and White were partners upon the following terms:

1. They were to receive 5 per cent interest upon their respective partnership capital.
2. They were to receive partnership salaries as follows: Black, $250.00 per month and White, $100.00 per month, and they were to draw no further sums, pending the ascertainment of profits.
3. Depreciation at 10 per cent per annum to be written off plant and machinery as standing on the books at the close of the year.
4. Provision at 5 per cent (for doubtful accounts) to be reserved for all accounts receivable, not including, however, bills receivable.
5. The net profit or loss to be shared as follows: Black, two-thirds, and White, one-third.

On November 30, 1915, the following was the trial balance of the firm's books, which were kept by double entry:

Partners' salary account,	$ 3,850.00
Purchases,	127,310.00
Investments (at cost),	6,150.00
Wages,	19,205.00

John Jones & Co.,	17,130.00	
Jas. Smith & Son,	35,695.00	
Wm. Owen,	18,120.00	
Legal expenses,	130.00	
Cash,	50.00	
Bank,	6,025.00	
Real estate,	103,205.00	
Machinery and plants,	27,200.00	
Bills receivable,	2,510.00	
Manager's and clerks' salaries,	4,725.00	
Office expense,	540.00	
Discount,	1,070.00	
Inventory, Jan. 1, 1915,	19,210.00	
Rent (eleven months),	3,300.00	
Albert Black (Capital account on 1/1/15),		$ 21,000.00
Benjamin White (Capital account on 1/1/15),		7,500.00
Dividends received on investments,		150.00
Bills payable,		19,075.00
Sales,		242,805.00
Roberts Bros.,		41,215.00
Robinson & Co.,		28,840.00
J. Green & Son,		34,840.00
	$395,425.00	$395,425.00

Amend the foregoing balances so far as may be necessary by posting the following transactions for the month of December, 1915:

Dec. 2.—Purchased from Roberts Bros. on credit,	$39,205.00
8.—Paid taxes,	705.00
9.—Paid Robinson & Co. (after deducting discount of $60.00),	1,200.00
10.—Paid bill payable to H. Brown & Co.,	500.00
11.—Received from J. Smith & Co. (less discount of $210.00),	4,740.00
12.—Sold Wm. Owen (on credit),	5,000.00
15.—Purchased from J. Green & Son (on credit),	17,105.00
16.—Bought gas engine from Al-Ki Gas Engine Co. (on Credit),	1,750.00
17.—Paid wages,	2,210.00
21.—Paid taxes,	105.00
24.—Paid premium on fire insurance policy for year ending Dec. 24, 1916,	325.00
30.—Received for sale of investments,	6,000.00
31.—Paid office salaries,	1,800.00
Paid office expenses,	100.00
Paid wages,	2,200.00
Sold James Smith & Co. (on credit),	5,245.00

All the above payments were made by check, and all amounts received were paid into the bank upon receipt. The stock on hand on December 31,

1915, was agreed by the partners as worth $17,000.00. The outstanding rent due to Benjamin & Lewis for December, $300.00, and the partners' drawings for the same month must be provided for. After making all adjustments provided for in the clauses of the partnership agreement, balance the books as at December 31, 1915, and prepare trial balance; also prepare an income and profit and loss statement and balance sheet.

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The following trial balance was taken from the books of the Moore & Smith Hardware Company, December 31, 1914:

Cash on hand,	$ 100.00	
Cash in bank,	3,000.00	
Sales,		$1,150,000.00
Discounts on purchases,		20,000.00
Interest on notes receivable,		1,000.00
Accounts receivable,	150,000.00	
Notes receivable,	10,000.00	
Capital stock,		200,000.00
Real estate,	50,000.00	
Buildings,	200,000.00	
Equipment,	50,000.00	
Horses, wagons and harness,	5,000.00	
Motor trucks,	5,000.00	
Insurance,	2,000.00	
Taxes,	5,000.00	
Purchases,	900,000.00	
Discounts on sales—cash,	20,000.00	
Wages of men in warehouse,	25,000.00	
Salaries of department managers,	10,000.00	
Salaries of office assistants,	5,000.00	
Drivers, teamsters, etc.,	5,000.00	
Horse feed,	2,000.00	
Auto expense,	1,500.00	
Inventories, Jan. 1, 1914,	300,000.00	
Inventories, horse feed, auto accessories, etc., Jan. 1, 1914,	3,000.00	
Inventories, stationery, advertising, etc., Jan. 1, 1914,	2,000.00	
Office supplies, stationery, etc.,	3,000.00	
Advertising,	50,000.00	
Salesmen's salaries,	20,000.00	
Salesmen's commissions,	11,000.00	
Interest on notes payable,	10,000.00	
Dividend on capital—6 per cent,	12,000.00	
Notes payable,		250,000.00
Accounts payable,		150,000.00
Real estate—not used in the business,	150,000.00	
Investment in Union Hotel Co. (at cost),	50,000.00	

Sprinkler system—at face of contract,	10,000.00	
Surplus,		290,600.00
Liability on sprinkler system,		8,000.00
	$2,069,600.00	$2,069,600.00

On December 31, 1914, the company authorized the issue of $300,000.00 cumulative 7 per cent preferred stock and sold same to the Grand Investment Company at 90, giving also a bonus of $30,000.00 common stock. $70,000.00 common stock was sold to the present stockholders at par, the total issue of common stock being $300,000.00. Of the proceeds of these sales $150,000.00 was to be expended on new buildings, the balance to be retained for working capital.

On January 2, 1915, a dividend of $40,000.00 was declared, payable on January 15, 1915.

The inventories at December 31, 1914, were:

Merchandise,	$325,000.00
Horse feed, auto accessories, etc.,	1,000.00
Stationery, advertising, etc.,	1,500.00

Of the insurance paid $500.00 applies to the year 1915; also $1,500.00 of the taxes.

The sprinkler system was installed on July 1, 1914. Of the contract price $2,000.00 was paid on that date and $2,000.00 is payable on the first day of August, 1915, 1916, 1917, 1918.

$2,000.00 of interest applies to the period subsequent to January 1, 1915.

The depreciation of buildings for the year is $10,000.00 and of equipment $5,000.00. The real estate not used in business has appreciated $50,000.00, while that used in business has been appraised at $75,000.00.

From the foregoing trial balance and data prepare a statement of income and profit and loss for the year and a balance sheet as at December 31, 1914.

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The following is the trial balance of the ledger of the Jones Manufacturing Company, at the close of business on December 31, 1920:

Capital stock,		$150,000.00
Work in process 12/31/19,	$ 53,689.39	
Materials inventory 12/31/19,	10,767.87	
Finished product 12/31/19,	115,453.90	
Unexpired insurance,	5,458.00	
Taxes,	2,937.50	
Materials purchased,	160,691.26	
Insurance,	4,567.80	
Interest,	4,200.00	
Accounts payable,		23,570.98
Accounts receivable,	45,897.57	
Traveling expenses,	3,654.62	
Factory supplies,	5,670.03	
Office expenses,	4,790.82	
Selling expenses,	8,798.46	

Petty cash,	200.00	
Power,	6,400.00	
Cash in bank,	3,609.00	
Notes payable,		50,000.00
Labor,	186,568.43	
Machinery and equipment,	124,357.00	
Factory expense,	51,800.05	
Discount on sales,	3,675.47	
Freight-out,	2,657.80	
Freight-in,	2,748.56	
Discount on purchases,		7,896.41
Salesmen's commissions,	6,600.66	
Taxes prepaid,	672.80	
Repairs,	5,346.00	
Rent,	12,000.00	
Salaries,	34,846.00	
Interest prepaid,	345.00	
Reserve for depreciation,		29,670.00
Sales,		562,109.70
Surplus,		45,156.90
	$868,403.99	$868,403.99

Notations:

1. Inventories on hand: materials, $10,434.22; work in process, $56,542.14; finished product, $70,470.89; supplies, $3,567.90.
2. Prepaid interest amounts to $350.00; prepaid taxes amount to $578.00; unexpired insurance, $987.56.
3. Reserve for depreciation to be increased 5 per cent of the total fixed assets.
4. Reserve for uncollectible accounts receivable to be 2 per cent of the total accounts receivable.
5. Insurance, taxes, and rent are to be divided 3/5 to the factory, 1/5 to trading, and 1/5 to administration.

Required:

1. Working sheet with accompanying schedules of adjusting entries.
2. Statements:
   a. Balance sheet.
   b. Statement of profit and loss.
   c. Statement showing cost of manufacture and cost of manufactured product sold.

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At the close of its fiscal year, December 31, 1915, the trial balance of the Nau-Pace Company was as follows:

Real estate,	$ 225,000.00
Fixed machinery,	150,000.00
Movable equipment,	18,000.00
Shaftings, pulleys, etc.,	10,500.00
Stable equipment,	3,500.00
Office equipment,	2,915.90

Drawings and patterns,	9,000.00	
Patents,	75,000.00	
Capital stock,		$ 500,000.00
First mortgage bonds,		100,000.00
Profit and loss,		
Surplus,		86,140.00
Dividends,		300.00
Interest on bonds,	5,000.00	
Other interest paid,	1,323.10	
Interest received,		2,469.50
Cash discount on purchases,		13,389.52
Cash discounts on sales,	2,861.50	
Sales,		1,540,816.75
Return sales,	8,258.25	
Cash,	27,750.65	
Bills receivable,	50,750.00	
Accounts receivable,	298,650.25	
Raw materials,	622,190.90	
Finished goods, Jan. 1, 1915,	62,735.06	
Goods in process, Jan. 1, 1915,	24,747.27	
Fuel,	38,688.28	
Insurance,	4,000.00	
Taxes,	5,000.00	
Bills payable,		40,000.00
Accounts payable,		46,585.85
Reserve for depreciation:		
Machinery and equipment,		50,000.00
Buildings,		30,000.00
Patents,		22,058.80
Bad accounts,		6,240.75
Salaries—Officers and clerks (general),	56,150.00	
General office supplies,	2,950.75	
Postage, telegraph, and telephone,	1,560.00	
Miscellaneous general expenses,	850.00	
Advertising,	35,000.00	
Salaries and expenses—salesmen,	72,350.31	
Agents' commissions,	30,141.40	
Credit department salaries,	7,560.00	
Miscellaneous expenses—Selling,	610.00	
Stable expenses,	3,963.46	
Direct labor (manufacturing),	508,311.39	
Indirect labor (manufacturing),	44,981.01	
Superintendence—Factory,	6,000.00	
Factory supplies,	8,547.18	
Repairs—Machinery and equipment,	7,418.52	
Repairs of buildings,	2,860.47	
Power, heat, and light,	2,875.80	
	$2,438,001.45	$2,438,001.45

You are to take into consideration the following facts:

1. Real estate, machinery and other factory equipment, and patents are stated at cost.
2. Of the real estate, $25,000.00 is for land, and $200,000.00 is for buildings.
3. All capital stock authorized has been issued and is outstanding.
4. Allowances for depreciation are:
   Machinery and factory equipment, $15,000.00.
   Buildings, 3 per cent of cost.
   Patents, 1/17 of cost.
5. $15,000.00 is to be set aside as a reserve for bad accounts.
6. Ten per cent. of the book value of stable equipment and office equipment, and one-sixth of the book value of drawings and patterns are to be charged off.
7. Inventories at the close of the fiscal year were:

Raw materials,	$63,580.40
Finished goods,	58,864.56
Goods in process,	27,024.52
Fuel,	4,823.43
Factory supplies,	1,525.00
Office supplies,	500.00
Prepaid insurance,	500.00

8. The accruals are:

Taxes,	$ 7,000.00
Direct labor,	12,618.75
Indirect labor,	2,040.50
Interest on bonds,	1,000.00
Advertising,	4,718.50
	$27,377.75

9. The depreciation of stable equipment (see item 6) is to be charged to stable expenses, and one-third of the latter is apportioned to manufacturing expenses, and two-thirds to selling expenses.
10. The cost of fuel used is to be charged to power, light, and heat.
11. Maintenance of real estate is to be charged with cost of repairs to buildings, depreciation of buildings, 20 per cent of taxes for the year, and $1,000.00 for insurance. The total cost of such maintenance is to be shown as an item of manufacturing expense on the statement of cost of sales.
12. The portion of insurance remaining after charging maintenance of real estate is to be allocated to manufacturing expenses.
13. Thirty per cent. of the taxes for the year is to be apportioned to manufacturing expense and 50 per cent is to be charged to income.
14. Of the salaries of officers and clerks (general), $3,600.00 should be apportioned to selling expenses.
15. Amongst the bills receivable is a note for $5,000.00, pertaining to a previous fiscal year, which is considered to be worthless. No provision was made for such loss.

16. Regardless of theory, cash discounts on purchases and sales are to be treated as pertaining to income.
17. On December 10, 1915, a dividend of 10 per cent on the capital stock was declared and made payable on January 10, 1916, for which no entry was made prior to taking off the trial balance.

Given the foregoing information, you are asked to prepare the following statements in approved form for the information of your clients:

a. Cost of sales.
b. Profit and loss, showing (1) the gross profit and the per cent. of same on sales; (2) the selling expenses and per cent. of same on the gross profit; (3) the general expenses and the percentage that such expenses bear to the gross profit; and (4) the net profit and the per cent. of same on sales.
c. Balance sheet, showing the surplus at the beginning of the fiscal year and the amount at the close of the year.

QUESTIONS ON CHAPTER X

Twenty Questions, Five Problems

181. a. What significance would you attach to the fact that in a two million dollar manufacturing concern, the cash on hand and in bank amounts to $3,167.22? Why?
b. What is meant by marshalling the accounts of a balance sheet?

182. a. The Good Music Company, vendors of all kinds of musical instruments, shows on its balance sheet notes receivable equal to about 2/3 of the total assets. What deductions do you draw from this fact? (*)
b. Is strict accuracy necessary as to the facts possible in a balance sheet? Why?

183. a. As between two consecutive years, it is noticed that the item of accounts receivable upon a comparative balance sheet has decreased nearly $20,000.00. What might such a decrease indicate? (*)
b. Give the method of preparing a balance sheet where ledgers have not been closed.

184. a. In a wholesale dry goods concern, the net sales for 1920 were $1,495,000.00. The balance sheet for the year showed an accounts receivable item of $373,500.00. Does any connection exist between these items to which attention should be directed when analyzing the balance sheet for credit purposes? (*)
b. On what important points will the balance sheet of a trading and non-trading company differ?

185. a. The merchandise item upon a certain balance sheet, allowing for the usual profit, is about 1/3 the sales for the past year. Does this fact have any significance in the granting of credit to this enterprise? (*)
b. Outline the forms of the profit and loss statement and of the balance sheet as submitted by the Federal Reserve Board in their proposal for a uniform system of accounting to be adopted by manufacturing and merchandising concerns.

186. The inventory item in the balance sheet of a leather manufacturer is shown subdivided as follows:

Finished leather and cut soles,	$442,891.27	
Leather in process,	246,742.30	
Leather on consignment,	110,221.80	
Raw hides,	75,438.19	
Tanning and other supplies,	82,664.28	$957,957.84

Can you offer any criticism on the above? If so, what?

187. a. In a statement of a meat packing house, the asset of merchanidse is equal to about 1/12 of the sales for the year. Is this as it should be? (*)

b. What items would you designate as "quick assets"?

188. a. In the balance sheet of a wholesale dry goods concern, out of a total amount of fixed assets of $50,000.00, the item of furniture and fixtures equals $21,000.00. The remaining fixed assets consist of real estate $10,000.00, and outside investments of $19,000.00. What conclusion may be drawn from the above? (*)

b. Give two examples of fixed assets in a business which become floating assets in another business.

189. One of the footnotes to a certain balance sheet reads: "Insurance 1920-1921—85 per cent."

Explain the meaning of this footnote. (*)

190. In a certain balance sheet the cash item is twice the size of the accounts payable; likewise, the notes payable item amounts to $250,000.00. What deductions may be drawn from the above facts standing by themselves? Would your answer be the same if the notes payable item amounted to $210,111.00?

191. a. What features should one expect to be in evidence in a good balance sheet of a department store? (*)

b. Give instances of the manner in which fixed assets and floating assets affect the stability and the credit of a business.

192. a. In a statement submitted to a bank by a plumbers' supply house, out of a total amount of assets of $550,000.00,—the inventory consists of $280,000.00, the notes receivable of $35,000.00, and the accounts receivable of $200,000.00,—in round numbers. What comments would you make upon these items? (*)

b. What is the theory applying to deferred debits shown in a balance sheet?

193. The balance sheet of a firm is summarized as follows:

Assets:		
Cash, stock and accounts receivable,	$67,500.00	
Manufacturing plant,	15,000 00	
Liabilities:		
Notes and accounts payable,		$49,500.00
Capital,		33,000.00
	$82,500.00	$82,500.00

Would you consider this firm solvent? Give reasons for your answer.

194. Draw up a short report on the following balance sheet, criticizing such items as you consider abnormal:

Buildings,	$87,500.00	Capital and surplus,	$155,000.00
Machinery,	12,500.00	Current liabilities,	87,500.00
Sundry stock,	90,000.00	Suspense account,	7,500.00
Cash,	3,200.00		
Bills receivable,	6,800.00		
Customers,	20,000.00		
Good-will and patents,	30,000.00		
	$250,000.00		$250,000.00

195. Arrange the following in a balance sheet for presentation to a banker:

Furniture and fixtures,	$15,000.00	
Stock of merchandise at cost,	50,000.00	
Accounts receivable,	35,000.00	
Officers' accounts,	30,000.00	
Bonds owned,	10,000.00	
Capital stock,		$75,000.00
Accounts payable,		20,000.00
Trade notes payable,		40,000.00
Surplus,		5,000.00
	$140,000.00	$140,000.00

196. The High Pressure Valve Manufacturing Company submit the following balance sheet taken from their books in connection with the facts enumerated; the organization is highly skilled and dependent upon cooperation. Give your recommendations as to what should be done to serve the interest of the business:

Plant, $14,500.00; accounts receivable, $4,000.00; cash, $1,510.00; capital stock, $15,000.00; loan payable, $3,000.00; accounts payable, $4,000.00; notes payable, $3,500.00; sales, $16,000.00; cost of sales, $10,000.00; general expense, $2,000.00; selling expense, $3,500.00; deductions from income, $4,000.00. The valves are in demand and in general use.

197. Jones, a trader, commences business July 1, 1920, with a capital consisting of cash, $100,000.00; land and buildings worth $80,000.00, subject to a mortgage of $30,000.00.

An abstract of his books July 1, 1921, discloses the following accounts: Purchases, $75,000.00; sales, $90,000.00; cash expenses, $15,000.00; cash drawings, $8,000.00; profit and loss debit, $5,000.00; sinking fund, $5,000.00; goods returned to creditors, $4,000.00; returned sales, $3,000.00; contingent fund, $2,000.00; reserve for bad debts, $5,500.00; due sundry creditors, $61,000.00; sundry customers, $34,480.00; discounts allowed customers on accounts paid, $520.00; no goods were sold to creditors or purchased from customers.

Inventory July 1, 1921, $7,000.00. Interest on mortgage 6 per cent. Supply the missing accounts, and furnish an adjusted trial balance from which the usual statements may be prepared. (*)

198. An auditor is called upon to verify a balance sheet and upon investigation he finds that unexpired insurance, interest paid in advance on discounted notes, taxes accrued, interest accrued on demand notes, bonded indebtedness, royalties, etc., are not included in the same. He is informed that it has not been the custom of the corporation to include in their balance sheet such items, as they offset one another, and that the directors do not desire any change in the practice they have adopted. Discuss this proposition, stating reasons for your conclusions.

199. A corporation wishes to get figures of its earnings early each month. Besides its regular income, it has bonds and stocks from which the interest and dividends are received either quarterly or semi-annually. It has trouble in getting some of its expense bills promptly, as some come in quarterly, semi-annually, and even yearly. State the method of getting out promptly with as little work as possible these monthly figures.

200. a. Under what circumstances, if any, may capital expenditures be charged against revenue?

b. In the audit of the accounts of a corporation for a year in which the business has made a loss and at the close of which no profits are available for dividends, would you consider it your duty to direct the same attention as usual in distinguishing between expenditure on fixed assets chargeable to capital and that chargeable against operations? Give your reasons.

c. Expenditures are made by a corporation for items of each of the following classes: (a) Taking down a machine in one part of a factory, moving it and putting it up in another part; (b) expenses of incorporating the company, including State charges and lawyer's services; (c) brokerage on purchase of a piece of property; (d) commission on an issue of debenture bonds; (e) costs attending a mortgage; (f) furniture and fittings of a city office and salesroom; (g) cost of patents, including solicitor's charges and government fees. Which items should be charged to capital and which to revenue? State reason for your answer in each case.

PROBLEMS ON CHAPTER X

46

You are employed to prepare a statement for credit purposes from figures submitted to you in a letter from the Western Manufacturing Company. Their letter submits figures and data as follows:

Their plants stand at cost price, $90,600.00. They have set up a reserve for depreciation of $15,300.00. There is a mortgage of $30,000.00 on the plant and interest on the mortgage is at 6 per cent and is paid to within three months of date of your proposed statement. They hold $15,000.00 of notes receivable and have discounted at bank $37,500.00. Accounts

receivable they consider good, amount $27,000.00, including $4,500.00 due from employee on personal account. Accounts with trade customers are subject to 5 per cent discount if paid at due date, and $15,000.00 is now past due. Suspense accounts amount to $6,000.00, 50 per cent of which are believed to be good. A new machine has been ordered but not yet delivered, which cost $9,000.00. They have indorsed a note for $9,000.00 for Smith and Co., but say it will be paid when due. Accounts payable amount to $63,-000.00, insurance amounts to $600.00 a year and has six months to run. They owe a note at bank for $7,500.00, interest paid to date. They own fifty shares of stock in a company from whom they buy raw materials. They cost $4,200.00, and are presumed to be worthless. Inventory was taken at a selling price of 10 per cent more than cost. This amounts to $26,400.00.

You are not asked to accept any responsibility for the figures in the statement but simply to prepare the statement in the best form you can from their letter.

47

A manufacturing corporation, requiring additional capital, presents to a firm of bankers the statement given below, with the request that the bankers underwrite the proposed new capital stock. The corporation has secured a war contract from the government, which is expected to yield very large profits. Capital is required to increase the size of the plant, as well as the working force of highly skilled employees. Analyze the statement for the banker and comment briefly on it from the accountant's standpoint.

July 31, 1917

Real estate,	$ 90,000.00	
Capital stock,		$100,000.00
Machinery,	10,000.00	
Advances on contracts,		50,000.00
Buildings,	40,000.00	
Accounts payable,		42,000.00
Work in process,	10,500.00	
Surplus,		6,300.00
Material and supplies,	8,000.00	
Cash,	3,500.00	
Good-will,	30,000.00	
Deferred charges,	2,100.00	
Accounts receivable,	4,200.00	
	$198,300.00	$198,300.00

48

Criticize the content of the following balance sheet item by item from the viewpoint of an accountant:

XYZ COMPANY

Balance Sheet

December 31, 1921

Assets

Real Estate, Buildings, Plants, Machinery, Equipment, and other Permanent Investments, including Good-will,			$1,000,000.00
Investment in Stocks and Bonds at cost (Market value, $60,000.00),			100,000.00
Current Assets:			
Inventories:			
Raw Materials,		$170,000.00	
Finished Product, at sales price, less 5 per cent discount,		100,000.00	
Consignments (selling value),		50,000.00	
Supplies (estimated),		200,000.00	
		$520,000.00	
Accounts and Bills Receivable, including Advances to Employees,		125,000.00	
Stocks in the Treasury (Unissued):			
Preferred,	$150,000.00		
Common,	137,225.00	287,225.00	
Investments in Subsidiary Companies,		225,500.00	
Cash and Miscellaneous Items,		50,500.00	1,208,225.00
			$2,308,225.00

Liabilities

Capital Stock:		
Preferred,		$500,000.00
Common,		750,000.00
Bonds and Bankers' Loans (Bonds outstanding $200,000.00),		575,000.00
Current Liabilities:		
Accounts Payable,	$ 15,225.00	
Other Indebtedness,	231,000.00	
Accrued Items,	2,000.00	248,225.00
Reserves:		
For Depreciation,	$ 50,000.00	
Less—Renewal Expenditures Written off,	65,000.00	
Balance (Debit),	$ 15,000.00	
For Bad Debts,	20,000.00	
For Contingencies,	5,000.00	10,000.00
Surplus (less dividends paid), including Appreciation in Real Estate and other Capital Assets and Profit on Inventorying Raw Materials at market price,		225,000.00
		$2,308,225.00
		(*)

49

From the following figures of net sales, costs and expenses prepare a statement, accounting for the shrinkage in profits in 1920, and showing in dollars and cents what portion of such shrinkage is due to decreased sales and what portion is occasioned by the various variations in cost and expense items:

	1920	1919
Materials,	$230,500.00	$265,335.00
Direct labor,	78,500.00	108,228.75
Indirect labor,	6,725.00	8,379.00
Factory expenses,	27,500.00	26,999.00
Trading expenses,	23,500.00	20,947.50
Office expenses,	10,500.00	11,637.50
Net Sales,	$390,750.00	$465,500.00

50

The bookkeeper of a manufacturing concern could produce only the following statement from its records on January 1, 1920:

Manufacturing expenses,	$ 4,622.89
Capital stock,	10,000.00
Plant and equipment,	17,500.00
Gross sales,	8,469.10
First mortgage bond (due December 31, 1920),	15,000.00
Materials and supplies (inventory),	4,289.34
Notes payable,	5,000.00
Accounts receivable,	5,423.23
Accounts payable,	2,436.28
Interest on bonds (seven months),	393.75
Interest on notes and accounts payable,	282.40
Cash,	832.14

On January 1, 1920, the management changes, and you are later retained as a public accountant to conduct an examination and prepare a balance sheet as of January 1, 1921.

You find that during the preceding year the directors have subscribed in cash to $7,500.00 additional capital stock and have retired all the notes and old accounts payable and that no interest was paid on these accounts for the year. You also find that the plant and the equipment was revalued at $15,000.00 and 5 per cent of this amount was charged off to provide for depreciation, while an additional 2½ per cent was ordered placed in reserve account to cover repairs and renewals, the entire 7½ per cent being charged direct to profit and loss. The bond outstanding fell due on December 31, 1920, and was paid, principal and interest, in cash.

An inventory of material and supplies placed their value at $2,328.19, the practice being to charge all purchases direct to manufacturing expenses and credit back the amount of the inventory.

The accounts payable (all for material and non-interest bearing) amount o $546.28.

Of the accounts receivable January 1, 1920, $4,968.18 was collected and the balance charged off as uncollectible.

In addition to the material used from stock during the year and the amount still due for material purchased, the manufacturing expenses were $3,720.52, all paid in cash, the total manufacturing expenses being 31 per cent of the gross sales for the year ending January 1, 1921.

Of these 91.3 per cent were collected in cash and the balance, all of which is considered good, remains on the books in accounts receivable.

Produce a comparative balance sheet of January 1, 1921-1920, and state the amount of the gross sales for the year.

QUESTIONS ON CHAPTER XI

Twenty Questions, Five Problems

201. Redraft the following statements, if incorrect. Interest on capital to be 5 per cent per annum:

Balance Sheet

December 31, 19—

Accounts payable,	$ 5,400.00	Accounts receivable,	$10,200.00
Notes receivable,	3,200.00	Cash,	4,700.00
Capital—partners,		Bank loan,	5,000.00
6/31/19—,	10,000.00	Inventory 12/31/19—,	5,000.00
Net profit,	8,000.00	Notes payable,	1,700.00
	$26,600.00		$26,600.00

Profit and Loss Statement

Six Months Ended December 31, 19—

Purchases,	$27,000.00	Sales,	$40,025.00
Inventory, 12/31/19—,	5,000.00	Interest on capital,	500.00
Drawings,	2,500.00	Inventory, 7/1/19—,	8,250.00
Rent,	500.00	Commissions,	1,500.00
Salaries,	1,500.00		
Wages,	4,750.00		
General expenses,	900.00		
Interest on loan,	125.00		
Net profit,	8,000.00		
	$50,275.00		$50,275.00

202. a. In determining the value of a business, would you base your decision chiefly upon the balance sheet or upon the statement of profit and loss? Give reasons for your answer. (*)

b. What is your interpretation of the difference between the total debit balances and the total credit balances of the accounts belonging to the capital division and to the current division of a balance sheet?

203. Discuss "going value" in the following case: A certain corporation of a public service nature with all its property in one state is incorporated in another state. It has outstanding securities in the amount of

$40,000,000.00, while the appraised value of its property is $32,000,000.00. In making application for a charter in the state in which its property is located, the corporation claims that in addition to the $32,000,000.00 appraised value of its property it has a "going value" of an additional $8,000,000.00, which brings its total property up to the amount of its outstanding securities. (*)

204. What is your understanding of the following terms used in connection with corporate accounting: (*)
a. Fixed charges.
b. Maintenance expenditures.
c. Replacement expenditures.

205. a. A certain manufacturing concern makes various kinds of equipment for use in its own plant and charges them to the fixed asset accounts at market value, which is in excess of cost, and credits the difference to profit and loss of the period in which the various equipment were manufactured. Criticize, if necessary. (*)
b. From an accountant's point of view, what are the most important things in a balance sheet? (*)

206. Which of the following charges are proper additions to the plant account: (*)

a. Interest on bank loans,	$4,200.00
b. Salary of engineer,	8,000.00
c. Legal and other sundry expenses incurred in acquiring certain properties,	2,000.00

207. Indicate the balance sheet set-out of the following items as of December 31, 1921: (*)

a. Sinking fund assets,	$ 39,777.43
b. Unissued preferred stock,	100,000.00
c. Dividend payable, March 15, 1922, declared on December 20, 1921,	25,000.00
d. Reserve for bad debts,	18,916.34

208. Indicate the balance sheet valuation of the following items: (*)
a. Outside investments held as marketable investments.
b. Outside investments held as permanent investments.

209. a. In a statement of the earnings of a business to be sold on the basis of its earning capacity, how should the question of interest paid on accounts payable, on bills payable and on loans be treated?
b. Prepare a chart of a balance sheet, showing the relationship of all factors involved in its construction that will exhibit a view of what, in your opinion, is the meaning of a balance sheet.

210. In preparing an income statement for the purpose of setting out the earning power of a business, how should the following items be treated, and why: (*)

a. Interest on indebtedness, bank loans, bonds, etc.,	$ 70,000.00
b. Salaries of management,	120,000.00
c. Settlement of a patent suit extending over a five-year period,	50,000.00
d. Profit from the sale of property,	12,000.00

211. A client submits to you the following statement, covering a period of ten years, of a long-established nut and bolt business which he contemplates purchasing:

Sales, averaging per year,	$300,000.00
Wages, averaging per year,	100,000.00
Expenses, averaging per year,	15,000.00
Materials used,	115,000.00
Real estate, appraised value,	50,000.00
Machinery, two years old, original cost,	20,000.00
Machinery, four years old, original cost,	10,000.00
Machinery, ten years old, original cost,	20,000.00
Materials on hand,	40,000.00

From the above figures write a brief report, to submit to your client, setting forth the value of the business, including goodwill.

212.

Assets	1921	1920
Land and building,	$ 57,000.00	$ 60,000.00
Machinery,	9,000.00	10,000.00
Inventory,	44,771.00	39,321.00
Accounts receivable,	26,109.00	30,219.00
Loans to officers,	15,000.00	10,000.00
Cash,	7,260.00	10,600.00
	$159,140.00	$160,140.00
Liabilities		
Accounts payable,	$ 27,140.00	$ 30,140.00
Notes payable,	22,000.00	20,000.00
Capital stock,	100,000.00	100,000.00
Surplus,	10,000.00	10,000.00
	$159,140.00	$160,140.00

How much of a loan would a bank be justified in granting this company? Give reasons. (*)

213. Criticize the following profit and loss statement and balance sheet of a private firm trading in provisions from the point of view of a bank which contemplates advancing $20,000.00 to the firm. The clerical accuracy of the books has been verified.

Statement of Profit and Loss

Year Ended December 31, 1920

Stock at 1/1/20,	$50,000.00	Sales less returns,	$80,000.00
Purchases,	40,000.00	Stock at 12/31/20,	75,000.00
Wages and salaries,	8,000.00	Dividends on investment	5,500.00
Office and general expense,	7,000.00		
Rent, etc.,	15,000.00		
Interest on loans,	2,700.00		
Bad debts,	800.00		
Profits,	37,000.00		
	$160,500.00		$160,500.00

Balance Sheet

December 31, 1920

Assets		Liabilities		
Book debts,	$250,000.00	Trade creditors,		$344,500.00
Stock as per inventory	75,000.00	Loans,		27,000.00
Investments at cost,	50,000.00	Partners Capital,		
Good-will,	10,000.00	1/1/20,	$ 8,000.00	
Lease of premises,	5,000.00	Profit,	37,000.00	
Furniture, etc.,	1,000.00		$45,000.00	
Cash in hand,	500.00	Less—Drawings during year,	25,000.00	20,000.00
	$391,500.00			$391,500.00

214. a. Draw up a form of balance sheet for a manufacturing company owning its own plant, so as to also show at a glance the amount of circulating (working) capital invested.

b. What is the mechanism of the double form balance sheet? Explain the connection between its sections, stating the theory of its organism.

215. In the balance sheet of a company, as prepared by the secretary, you find the following items:

Under capital assets:

a. Factory real estate, buildings, plant and machinery.

b. Real estate held for investment.

c. Investments in and advances to another company for purposes of control.

d. Franchises having a fixed term.

Under current assets:

e. Company's treasury stock (carried at $.50 on the dollar).

f. Raw material, finished product, and inventory of office supplies and stationery.

g. Advances to officials of the company (unsecured).

h. Insurance premiums paid by the company on a policy of the life of the company's president, in which the company is beneficiary.

i. Due by customers.

j. Sinking fund investments.

k. Unexpired fire insurance premium.

l. Cash in bank and on hand.

Discuss the correctness or otherwise of the above classification of items under capital and current assets, giving reasons for your opinions, and criticizing the items generally.

216. a. Define the term "passive liabilities."

b. A distinction is made between funded debt and unfunded debt. Please define and compare, discussing the advantages and disadvantages, if any, attaching to each. (A. I. A.)

c. Give examples of such assets and liabilities not usually found on

books of account, as should be considered by the auditor when preparing an income and profit and loss statement at the close of the fiscal period.

217. a. What do you understand to be the meaning of the word "deferred" when applied to accounts?

b. Define:

1. Deferred charges.
2. Deferred credits.
3. Contingent assets.

c. Why is capital always shown on a balance sheet as a liability?

218. a. Explain the treatment you would give the following in the books of account.

b. State the counterbalancing or offsetting accounts.

c. Explain how they would appear on the balance sheet.

---

1. Notes receivable discounted.
2. Actions pending against your client.
3. Cumulative preferred dividends payable.
4. Liability as guarantor for third parties.
5. Liability as accommodation signer on note.
6. Contingent liabilities under contract.
7. Unpaid balances on contracts not yet fulfilled.
8. Collateral in possession of your banker to secure payment of a note.

219. Draw up a short report on the following balance sheet, criticizing such items as you consider abnormal:

Buildings,	$ 87,500.00	Capital and surplus,	$155,000.00
Machinery,	12,500.00	Current liabilities,	87,500.00
Sundry stock,	90,000.00	Suspense account,	7,500.00
Cash,	3,200.00		
Bills receivable,	6,800.00		
Customers,	20,000.00		
Good-will and patents,	30,000.00		
	$250,000.00		$250,000.00

220. A certain accountant, upon the basis of the following figures, was asked to explain the changes in value which lead to the bankruptcy of the Ru-Ja Manufacturing Company:

Values at June 30, 1921: land, $75,000.00; buildings, plant and machinery, $120,000.00; new machinery, $20,000.00; good-will, $20,000.00; work in progress, $20,000.00; raw materials, $15,000.00; accounts receivable, $60,000.00; notes receivable, $5,000.00; cash, $500.00; mortgage payable, $25,000.00; accounts payable, $90,000.00; notes payable, $15,000.00; advances on contracts, $15,000.00; wages accrued, $500.00; taxes accrued, $2,000.00; capital stock,$200,000.00; deficit, $12,000.00.

Values at June 30, 1920, were the same as the above with the following exceptions: no new machinery; work in progress, $25,000.00; raw

materials, $40,000.00; accounts receivable, $50,000.00; notes receivable, $20,000.00; cash, $5,000.00; mortgage payable, $10,000.00; accounts payable, $10,000.00; notes payable, $30,000.00; no advances on contracts, wages accrued, and taxes accrued; capital stock, $300,000.00; surplus, $5,000.00. (*)

PROBLEMS ON CHAPTER XI

51

Examine and criticize the following profit and loss statement of a coal mining company for the year ended June 30, 1920, and, if desirable, recast into a more desirable form:

Sales of coal, 250,000 tons,		$300,000.00
Mining Labor,	$215,000.00	
Supplies, expenses and repairs,	30,000.00	245,000.00
		$55,000.00
Rents and miscellaneous income,		12,000.00
Steel car earnings, net of repairs,		20,000.00
		$87,000.00
Selling expenses, including agents' commissions,	$10,000.00	
General office expenses,	4,000.00	
Legal,	500.00	
Taxes,	2,500.00	
Interest and discount,	35,000.00	52,000.00
Net profit,		$35,000.00

52

A manufacturer is desirous of securing a partner and furnishes a statement covering five years' operations as follows:

Assets	
Buildings,	$20,000.00
Machinery and fixtures,	75,000.00
Inventory, merchandise and supplies,	50,000.00
Cash,	5,000.00
Accounts receivable,	40,000.00
Liabilities	
Accounts and bills payable,	30,000.00
Sales average per year,	500,000.00
Wages paid per year,	170,000.00
Expense, selling and general, per year,	35,000.00
Material purchased,	260,000.00

Buildings are on leased ground, lease expires in ten years, annual land rental, $1,000.00. Buildings revert to owner at expiration of lease.

New machinery when installed ten years ago cost $50,000.00. Additions

since cost $25,000.00. No depreciation has been charged off. All repairs and replacements charged to expense.

What in your opinion would be a fair price to be contributed for a half interest? Explain fully.

53

A manufacturing company that had been in business for a number of years, began operations the first of a certain year in an entirely new plant, built to last twenty years, the building of which was made necessary by wear and tear and obsolescence affecting the old plant. The new equipment cost $200,000.00, for which the company issued ten obligations of $20,000.00 each at 6 per cent, maturing the first of each year following the date of their occupancy of the new plant. The old plant has been disposed of at a scrap value of $10,000.00, when it was vacated, at which time the balance sheet of the company showed:

Assets		
Plant,	$225,000.00	
Less scrap value,	10,000.00	$215,000.00
Other assets,		80,000.00
		$295,000.00
Liabilities		
Capital stock,		$200,000.00
Surplus,		50,000.00
Profit and loss,		25,000.00
Gross sales for year,	$100,000.00	
Less operating expenses,	75,000.00	
Floating debt,		20,000.00
		$295,000.00

The new plant was at once added to the asset values at $200,000.00, and the company's liability on its obligations shown for the same amount.

Owing to competition and limited use of products, the sales have been uniform for a number of years, and could not be expected to increase, but the new and improved machinery, with better methods of manufacture, saves 10 per cent in operating expenses (including therein 6 per cent interest on the borrowed money) by their method of accounting.

The books have shown a net earning of $25,000.00 per year, as follows:

Gross sales,	$100,000.00
Operating expenses:	
Manufacturing expenses	
Repairs expenses,	
Selling expenses,	
General expenses,	75,000.00
Taxes expenses,	
Insurance expenses,	
Ground lease rentals,	
Net,	$25,000.00

At the close of the first year's operations of the new plant, the balance sheet showed as follows:

Assets		
Plant,		$415,000.00
Other assets,		112,500.00
		$527,500.00

Liabilities		
Capital stock,		$200,000.00
Surplus,		75,000.00
Profit and loss,		32,500.00
Sales for the year,	$100,000.00	
Less operating expenses,	67,500.00	
Notes payable,		200,000.00
Floating debt,		20,000.00
		$527,500.00

The balance sheet is submitted, and a dividend declared. Discuss all the foregoing, and illustrate your conclusions, and draw up statement showing what, in your opinion, is the true condition of the company.

54

The balance sheets of the Greenleaf Manufacturing Company at December 31, 1913, and December 31, 1914, may be summarized as follows:

	Dec. 31, 1913	Dec. 31, 1914
Good-will,	$ 200,000.00	$ 230,000.00
Land and buildings,	450,000.00	750,000.00
Machinery,	200,000.00	400,000.00
Tools,	40,000.00	80,000.00
Unexpired insurance,	3,000.00	4,000.00
Inventories,	400,000.00	375,000.00
Accounts receivable,	175,000.00	250,000.00
Cash,	25,000.00	20,000.00
Investments in stocks and bonds,	95,000.00	
	$1,588,000.00	$2,109,000.00
Capital stock,	$ 800,000.00	$1,100,000.00
Bonds,	350,000.00	500,000.00
Bank and other loans,	70,000.00	80,000.00
Accounts payable,	145,000.00	125,000.00
Accrued interest,	7,000.00	11,000.00
Accrued taxes,	4,000.00	6,000.00
Surplus,	212,000.00	287,000.00
	$1,588,000.00	$2,109,000.00

During the year a dividend of 4 per cent was declared and paid on the stock outstanding at the beginning of the year. $7,000.00 was provided for the depreciation of the buildings, $16,000.00 for machinery, and $4,000.00 for tools. The bonds were sold for par, and the stock was sold at 90 and the difference was charged to good-will account.

In the light of the above facts interpret the changes that have taken place in the financial position of the company between the two dates, and, so far as possible, indicate how they were effected.

55

From the following comparative balance sheets of the A. B. C. Company at December 31, 1917, and December 31, 1918, prepare a short statement showing the funds realized during the year and the disposition made thereof:

	Dec. 31, 1917	Dec. 31, 1918
Assets		
Capital assets, (Replacement values as shown by appraisal were used at December 31, 1918.)	$ 600,000.00	$ 900,000.00
Inventories,	1,000,000.00	1,160,000.00
Accounts receivable,	850,000.00	800,000.00
Cash,	200,000.00	550,000.00
Deferred charges,	20,000.00	10,000.00
	$2,670,000.00	$3,420,000.00
Liabilities		
Capital stock,	$1,000,000.00	$1,000,000.00
Bonds (issued at par),		500,000.00
Capital surplus representing excess of sound replacement value of appraisal at December 31, 1918, over the book value of capital assets at that date,		150,000.00
Bank loans,	750,000.00	400,000.00
Accounts payable,	500,000.00	600,000.00
Reserve for depreciation and replacements, (The reserve at December 31, 1918, represents the difference between the replacement and sound value of the appraisal at December 31, 1918.)	100,000.00	200,000.00
Surplus,	320,000.00	570,000.00
	$2,670,000.00	$3,420,000.00

Note. The profits for the year were $450,000.00, and dividends were paid during the year amounting to $200,000.00. The sum of $100,000.00 was charged to operation for depreciation during the year and $50,000.00 was charged against the reserve for replacements. (A. I. A.)

QUESTIONS ON CHAPTER XII

Twenty Questions, Five Problems

221. a. Define merger.

b. Define amalgamation.

222. The A Company acquired the entire capital stock of the B Company by purchase and claimed to have absorbed subsequently the B Company by merger, and as an evidence thereof, recorded on its own books of account, the varous assets and liabilities of the B Company. How

would you, as auditor, proceed to satisfy yourself that such transactions were correct and duly authorized? How should the account on the books of the A Company, representing the capital stock of the B Company, be disposed of?

223. If a New York corporation was merged, at some date other than the end of the fiscal year, into another New York corporation which owned all of the outstanding stock of the first corporation, how would you handle the existing accounts of the two corporations, as of the date when the merger became effective, and subsequent thereto?

224. A and company acquire the plants of B, C, D, and E, assuming their assets and liabilities at book values, the purchase price being one-half of the amount shown by the surplus account of each. Without going into lengthy detail, but just considering the three items, assets, liabilities, and surplus, what entries would you make to set up these accounts in the ledger of A and company?

225. The A corporation to prevent injurious competition purchases from the B corporation, a competing firm, the whole of its business as a going concern on January 1, 1920, for $500,000.00, subject, however, to certain conditions stated below.

The B corporation agrees to continue trading under its old management on behalf of and at the expense of the A corporation until December 31, 1920, when if the profits earned amount to less than $40,000.00, the A corporation reserves to itself the right to cancel the agreement for purchase on payment of the difference between the earnings for the year and $40,000.00.

At December 31, 1920, the profits for the year earned by the B corporation amount to $50,000.00, and the A corporation actually takes over the B corporation, paying $450,000.00 in full settlement.

Criticize the following methods of treating the transaction, and state which you consider correct, giving reasons for your opinion:

a. Debit investment account with $500,000.00 and credit profit and loss with $50,000.00 earnings.

b. Debit investment account with $450,000.00.

c. Debit investment account with $500,000.00 and credit special reserve account with $50,000.00.

It may be taken as an ascertained fact that the assets are fully worth $500,000.00 at the time of purchase by the A corporation.

226. A mining company purchases the assets of another company, subject to its liabilities, for $1,000,000.00. It opens up books, transcribing the balance sheet of the old company as below:

Assets:	
Cash,	$ 347.60
Accounts receivable,	14,200.25
Ore on dump,	5,807.00
Mine,	700,428.00
	$720,782.85

Liabilities:	
Bank loans,	$ 32,500.00
Accounts payable,	28,370.40
Capital,	500,000.00
Surplus,	159,912.45
	$720,782.85

An entry is made debiting mine and crediting capital account for $500,000.00 thereby increasing the latter account to $1,000,000.00, the purchase price. If you find anything to criticize here, write a short report to the directors, stating your objections, your reasons therefor, and the proper entries to make the necessary corrections. (*)

227. What are the essential features to be considered when two or more companies contemplate consolidation?

228. Give sample of a report such as you would make after having examined several copartnerships engaged in the same line of business, that desire to combine in one corporation. Give your views and reasons therefor as to the advisability or as to the inadvisability of the merger.

229. Under what circumstances is it necessary to open a good-will account? What advantages are there in allowing it to remain open indefinitely on the books? If the tangible assets taken over by a company are in excess of the capital stock, would you credit the excess to surplus? If not, why not, and to what account would you credit such excess?

230. In the case of the consolidation of three manufacturing concerns, how would you determine the amount of good-will of the consolidated company?

231. A manufacturing corporation desires a certificate of its average annual profits for three years; after charging up all costs, expenses, and depreciation, and an allowance for bad debts, it is found that the profits for the first year were $62,000.00, for the second year $64,000.00 plus $10,500.00 profit on sale of investments, and for the third year $72,000.00 plus $8,400.00 profit on the sale of real estate. Give the average annual profit to be certified.

232. In a statement of the earnings of a business to be sold on the basis of its earning capacity, how should the question of interest paid on accounts payable, on bills payable and on loans be treated?

233. Where a number of manufacturers contemplate consolidating, what means should be taken to insure the statements of assets and liabilities and profits being on the same general plan?

234. Three corporations are to be merged. In examining the records of corporation B, formed three years previously with an authorized capitalization of $250,000.00, you find the entire capital stock on the books as fully paid in, The facts you ascertain are as follows:
There are three directors, X, Y, and Z, composing all the subscribers to the stock. The payments have been received at a directors' meeting with all present. X subscribed for $100,000.00 worth of stock and paid all in cash; Y subscribed for $75,000.00 worth of stock and paid $50,000.00 in cash and a note of $25,000.00 on demand; Z sub-

scribed for $75,000.00 worth of stock and paid $25,000.00 in cash and a note of $50,000.00 on demand.

These notes are carried among the assets and are still unpaid at the time of your examination, no interest having been collected. Y and Z cannot make good. In preparing a report on this state of facts, what recommendations would you make, and why?

235. Two concerns in similar lines contemplate consolidating their business. You are requested to examine the books of account and report on matters germane to the contemplated merger. What data would you probably present in your report?

236. Your advice has been asked as to the basis of consolidation and recommenations as to the determination of the value of the physical assets of the several companies. State what your suggestions along these lines would be, and in your recommendations as to the basis of consolidation what weight would you place upon the values of the several physical properties, the net current assets owned, the volume of business performed by each company, and the percentage of net earnings on investment?

237. An amalgamation of four manufacturing corporations is proposed. You are asked to give a report as to the earning power of each company for the past ten years. What items regularly treated as expenses may be omitted in the preparation of your report? List the items and give brief reasons for so doing.

238. In a report upon the proposed amalgamation of two companies, state how you would treat the following points in arriving at the earning power of each concern. Give reasons for your treatment:

a. Anticipated profits on construction in process.

b. Depreciation, repairs, renewals and replacements of plant and equipment.

c. Interest paid on borrowed capital.

d. Bad debts reserve.

239. On March 1, 1913, two corporations, A and B, agreed to amalgamate on April 1, 1913, in a new corporation C. The distribution of the capital stock of C to be based upon the respective financial condition of A and B, on January 1, 1913, whereby A was to receive 40 per cent and B 60 per cent of said stock. All assets of A and B to be turned over to C, which is to assume A's and B's liabilities, all as of April 1, with adjustment of any dividends paid by A or B between January 1 and that date. February 1, A had drawn out in dividends $20,000.00. What amount should B draw out before the amalgamation to equalize the cash assets to be turned over by him to C?

240. The following are the balance sheets of two companies which, carrying on similar businesses, have decided to amalgamate on the basis that the good-will and assets (except the shares of Y. Z. Mining Company held by A. B. Mining Company) are of equal value. How would you recommend that the amalgamation should be effected?

State two possible methods, with full explanation of your reasons, and give in each case the balance sheet of the amalgamated company.

THE A. B. MINING COMPANY

Balance Sheet at December 31, 1920

Assets		Liabilities	
Cost of mines and other assets,	$250,000.00	Accounts payable,	$ 12,500.00
Shares in the Y. Z. Co. (1,250 at $100.00 each) costing,	187,500.00	Creditors for cost of 1,250 shares of Y. Z. Co.,	187,500.00
Accounts receivable,	5,000.00	Capital stock, 2,500 shares of $100 each,	250,000.00
Cash,	2,500.00		
Stock of minerals,	5,000.00		
	$450,000.00		$450,000.00

THE Y. Z. MINING COMPANY

Balance Sheet at December 31, 1920

Assets		Liabilities	
Cost of mines and other assets,	$250,000.00	Accounts payble,	$ 10,000.00
Stock of minerals,	2,500.00	Capital stock, 2,500 shares of $100 each,	250,000.00
Accounts receivable,	5,000.00		
Cash,	2,500.00		
	$260,000.00		$260,000.00

PROBLEMS ON CHAPTER XII

56

The Kent Wire Screen Company having acquired all of the capital stock of the Derby Wire Netting Company, it is proposed to merge the latter with the former as of July 1, 1912.

The trial balances June 30, 1912, of the respective companies after closing, are as follows:

KENT WIRE SCREEN COMPANY

Land and buildings, $525,750.00; equipment, $85,729.43.00; motor trucks, $8,780.25; furniture and fixtures, $6,943.27; Derby Wire Netting Company, capital stock, par value, $100,000.00, cost $97,713.50; materials and supplies, $18,379.51; goods in process, $16,591.46; finished goods, $23,468.46; cash, $12,640.31; accounts receivable, $54,345.26; notes receivable and interest, $10,132.75; sinking fund, $45,376.59; deferred charges to expense, $1,537.82; first mortgage 6 per cent gold bonds payable, due 1927, $250,000; taxes accrued, $5,250.00; salaries and wages acrrued, $3,178.29; accounts payable, $85,216.04; due to Derby Wire Netting Company, $536.12; notes payable and interest, $41,273.25; interest accrued on bonds payable, $2,500.00; reserve for depreciation of plant and equipment, $69,434.91; preferred capital stock outstanding, $250,000.00; common capital stock outstanding, $150,000.00; profit and loss surplus, $50,000.00.

DERBY WIRE NETTING COMPANY

Land and buildings, $240,327.92; machinery and tools, $48,934.27; horses, wagons, and harness, $6,387.35; furniture and fixtures, $8,500.00; capital stock of the Improved Screen Door Company, par $20,000.00, cost $23,457.86; patents, $10,000.00; raw materials, $23,721.89; goods in process, $32,568.34; finished goods, $18,478.27; cash, $14,686.43; accounts receivable, $57,395.05; due from the Kent Wire Screen Company, $536.12; notes receivable and interest, $8,037.50; sinking fund, $30,483.14; consignment, $1,000.00; deferred charges to operations, $1,250.00; first mortgage 5 per cent gold bonds payable, due 1930, $100,000.00; taxes accrued, $2,787.00; salaries and wages accrued, $5,843.62; accounts payable, $114,527.16; due the Improved Screen Door Company, $10,000.00; notes payable and interest, $51,673.53; interest accrued on first mortgage bonds, $833.33; reserve for sinking fund, $30,483.14; reserve for depreciation of plant and equipment, $37,329.52; common capital stock outstanding, $100,000.00; profit and loss surplus, $72,286.84.

From the foregoing submit:

a. The entries on the books of the Kent Wire Screen Company necessary to effect the merger.
b. The necessary entries on the books of the Derby Wire Netting Company.
c. Balance sheet of the Kent Wire Screen Company after the merger.

(*)

57

A close corporation, incorporated under the laws of the State of Illinois, known as Company A, purchases the entire outstanding capital stock of $35,000.00 of Company B in the year 1920 for the sum of $52,500.00. A statement of assets and liabilities as on January 1, 1921, of each company is given below:

Company A

Assets:	
Plant, machinery, etc.,	$ 457,500.00
Merchandise,	400,000.00
Investment in Company B's capital stock,	52,500.00
Due by Company B on current account,	220,000.00
Accounts receivable,	400,000.00
Cash,	45,000.00
	$1,575,000.00
Liabilities:	
Capital stock,	$1,000,000.00
Surplus,	500,000.00
Accounts payable,	75,000.00
	$1,575,000.00

Company B

Assets:	
Plant, machinery, etc.,	$ 100,000.00
Merchandise,	95,000.00
Unsubscribed capital stock,	65,000.00
Accounts receivable,	80,000.00
Cash,	15,000.00
	$ 355,000.00
Liabilities:	
Capital stock,	$ 100,000.00
Surplus,	35,000.00
Due to Company A,	220,000.00
	$ 355,000.00

The directors of Company A, realizing that it is illegal for an Illinois corporation to own the capital stock of another corporation, and furthermore desiring to eliminate the indebtedness of $220,000.00 due by Company B to Company A determine to sell the stock that they own in Company B to their own shareholders at 150. Company B increases its capital stock from $100,000.00 to $300,000.00, declares a stock dividend of 35 per cent and sells 2,300 shares (shares $100.00 each) to the stockholders of Company A at par. Company A declares and pays a dividend of 28¼ per cent to its shareholders. Company B then liquidates its indebtedness to Company A.

Prepare journal and cash book entries that each company should make to record the above transactions, with suitable explanations, and prepare balance sheet of each corporation after completion of the above transactions.

In this question it is assumed that the shareholders in Company A buy the stock of Company B in the same ratio as their holdings in the stock of Company A bears to one another.

58

The Smith Brewing Company with $1,000,000.00 capital stock, the Young Brewing Company with $500,000.00 capital stock and the Star Brewing Company with $400,000.00 capital stock, agree to consolidate as the Universal Brewing Corporation, the new company to buy all the properties of the old companies, at a valuation to be fixed by appraisal, payment therefor to be made in full-paid stock of the new company, the old companies to pay off their own indebtedness.

The appraised values of the old companies are as follows:

	Real Estate and Buildings	Plant	Cash	Bills Receivable
Smith,	$680,000.00	$390,000.00	$15,000.00	$10,000.00
Young,	327,000.00	160,000.00	3,000.00	6,000.00
Star,	126,000.00	71,000.00	1,000.00	

	Horses, Wagons, and Harness	Office Furniture	Total
Smith,	4,000.00	1,000.00	$1,100,000.00
Young,	3,000.00	1,000.00	500,000.00
Star,	1,500.00	500.00	200,000.00
Total appraised value,			$1,800,000.00

On this valuation the Universal Brewing Corporation issued $2,000,000.00 of stock, shares $100.00 each, which was divided pro rata among the old companies on the basis of their appraised value, no fractional shares of stock to be issued, odd amounts to be paid old companies in cash.

Give journal entries necessary to set up property accounts and credit old companies with their pro rata on the books of the new company.

At the time of the consolidation the ledger accounts of the Star Brewery were as follows:

Real Estate and Buildings,	$250,000.00	Capital Stock,	$400,000.00
Plant,	247,000.00		
Cash,	1,000.00	Bills Payable,	50,000.00
Horses, Wagons and Harness,	1,800.00		
Office Furniture,	1,200.00	Accounts Payable,	51,000.00
	$501,000.00		$501,000.00

Make the proper journal entries to liquidate in stock of the new company the liabilities other than capital stock, to apportion the remaining stock and cash, and to close the books of the Star Brewing Company.

59

The Martin Manufacturing Company, the U. S. Specialty Company, and the firm of Brown & Smith (a partnership) decide to consolidate under the name of the Progressive Manufacturing Company, with an authorized capital stock of $1,300,000, divided between 7 per cent cumulative preferred stock of $500,000, and common stock of $800,000.

Under the agreement of purchase, the vendors receive preferred stock at par for the net tangible assets and common stock for the good-will. The issue of the common stock is to be based upon a sum equal to ten times the average annual earnings of the past five years, after allowing 7 per cent interest on the capital invested. The following balance sheets reflect the financial position of the respective interests at the date of the consolidation.

Brown & Smith share profits and losses equally.

	Martin	U. S.	B & S
Plant and equipment,	$102,000.00	$145,000.00	$ 95,500.00
Accounts and notes receivable,	62,400.00	78,500.00	38,700.00
Inventory,	48,500.00	61,500.00	43,650.00
Insurance unexpired,	1,250.00	1,700.00	800.00
Discount paid in advance,	500.00		
Cash,	5,600.00	7,250.00	8,650.00
	$220,250.00	$293,950.00	$187,300.00

Capital stock,	$100,000.00	$150,000.00	
Brown capital account,			$72,000.00
Smith capital account,			42,000.00
Accounts and notes payable,	36,100.00	86,075.00	70,230.00
Interest accrued,		850.00	1,220.00
Taxes accrued,	750.00	825.00	600.00
Labor unpaid,	1,400.00	2,200.00	1,250.00
Surplus,	82,000.00	54,000.00	
	$220,250.00	$293,950.00	$187,300.00
Yearly Earnings			
First year,	$37,500.00	$42,700.00	$33,400.00
Second year,	48,700.00	31,800.00	26,900.00
Third year,	43,400.00	39,600.00	27,350.00
Fourth year,	36,200.00	46,100.00	31,600.00
Fifth year,	59,200.00	39,800.00	30,750.00
Total,	$225,000.00	$200,000.00	$150,000.00

Prepare the following:

1. Opening journal entries on the books of the Progressive Manufacturing Company.
2. Balance sheet after giving effect to entries referred to in (1).
3. Necessary journal entries to close the books of the respective vendors.

60

The Excelsior Gas Company is incorporated on January 1, 1920, with an authorized capital of $300,000.00 (⅔ preferred and ⅓ common, all the shares being of the par value of $100.00) to acquire and conduct the business of the Bradford Gas Company, whose general balance sheet shows the following on December 31, 1919:

Buildings, machinery and equipment,	$100,000.00	Notes payable,	$ 10,000.00
Mains, conduits, meters and connections,	70,000.00	Accounts payable,	52,000.00
Franchises, rights, privileges, etc.,	50,000.00	Capital stock,	200,000.00
Materials and supplies,	15,000.00	Surplus,	30,000.00
Tools and emergency equipment,	10,000.00		
Cash,	11,800.00		
Accounts receivable,	35,200.00		
	$292,000.00		$292,000.00

On January 15, 1920, all the preferred and common stock of the Excelsior Gas Company was issued to the twenty stockholders of the Bradford Gas Company, in exchange for their holdings of stock of the latter company, in the proportion of one share of preferred and one share of common for each share of stock exchanged.

At a meeting of the board of directors of the Excelsior Gas Company,

held January 20, 1920, it was resolved to carry out the provisions of a plan of merger in accordance with which the Bradford Gas Company was to transfer its assets and liabilities to the Excelsior Gas Company, and surrender its charter. A certificate of merger was issued at the close of the meeting.

At the meeting held January 31, 1920, the board of directors of the Excelsior Gas Company resolved to open accounts on the general books of the company, with the individual assets and liabilities taken over and assumed, at the figure shown by the balance sheet of the Bradford Gas Company on December 31, 1919, with the following exceptions: (a) franchises, etc., to be raised to $70,000.00; (b) surplus not to be carried.

As to the January operating transactions, they were recorded in special books, in order that they might be embodied at the proper time in the books of the Excelsior Gas Company.

Prepare:

a. Chronologic journal entries reflecting on the books of the Excelsior Gas Company the different stages of the merger.

b. A journal entry closing the books of the Bradford Gas Company.

QUESTIONS ON CHAPTER XIII

Twenty Questions, Five Problems

241. Define the following:
  a. Holding company.
  b. Subsidiary company (A. I. A.)
  c. Consolidated balance sheet.
  d. Intercompany profits. (*)

242. Explain the theory and practical use of a consolidated balance sheet.

243. Upon what basis should the outstanding stock of subsidiary companies be taken in a consolidated balance sheet?

244. a. When a number of corporations are operating under their own charters, but are managed and controlled by one other corporation, how would you state the results of the business when the controlling corporation owns all of the stock of the other corporations?
  b. How will you handle on the consolidated balance sheet capital stock of one of the subsidiary corporations, part of which is in the hands of the public?

245. In making up a consolidated balance sheet of a holding or parent company and two subsidiary companies where, in the case of one of the subsidiary companies, its entire capital stock has been acquired at less than par, and in the case of the other, at a substantial premium, how would you deal with such discount and premium, respectively, in the consolidated balance sheet?

246. If in consolidating the accounts of a holding company and its subsidiary companies, you find that in the case of one of the subsidiary companies the holding company owns only 60% of its voting stock, state briefly how you would treat this subsidiary company's accounts in the consolidated balance sheet and why your proposed treatment reflects

the true financial position of the combined companies more clearly than other methods with which you may be familiar. (A. I. A.)

247. In preparing a balance sheet and income account for a holding company, which embraces the operations of several subsidiary corporations, what items on the subsidiary books, if any, should be omitted from the consolidated statements?

248. a. State briefly what you would do if the accounts payable, amounting to $280,000.00, include a balance of $100,000.00 due to an affiliated company.

b. How would you treat guarantee of payment of interest on bonds issued by a subsidiary company in the balance sheet of a company you were auditing?

249. A parent company holding notes receivable from a subsidiary company to the extent of $100,000.00, indorses and discounts said notes with its bankers, thus creating a contingent liability thereunder. In preparing a consolidated balance sheet of the two companies, state how and where the liability would appear.

250. The A Company buys on January 1, 95 per cent of the stock of the B Company. The balance sheet of the latter company on that date is as follows:

Assets:	
Property account,	$ 500,000.00
Current assets,	850,000.00
	$1,350,000.00
Liabilities:	
Capital,	$1,000,000.00
Surplus,	100,000.00
Current liabilities,	250,000.00
	$1,350,000.00

The A Company pays par for 91 per cent of the stock and 120 for 5 per cent of it. During the next six months a doubtful claim of the B Company, which prior to January 1 had been written off, turns out to be good and $5,000.00 cash is realized on it.

At the end of the first six months B Company has made $100,000.00 net profit from operations, and a dividend of $200,000.00 is paid.

In making up a consolidated balance sheet of A Company and its subsidiary at January 1 (date of purchase), state, giving briefly your reasons, how you would treat:

a. A Company's interest in the B Company; and at July 1.

b. The doubtful claim recovered.

c. The dividend paid.

d. The interest of outside B stockholders in B Company. (A. I. A.)

251. Three corporations are consolidated by acquiring all the capital stock of the said companies, with the exception of 10 shares of the smallest corporation. The new company acquires all the assets and assumes all the liabilities of the smallest company and closes its plant. How

should this state of affairs be treated by the accountant in opening the books of the new company?

252. A holding company owns 90 per cent of the capital stock of a subsidiary company. The directors of the subsidiary company pass a resolution appropriating surplus earnings as dividends and direct the treasurer to remit to the holding company whenever surplus funds are available. The subsidiary company earns $40,000.00, which it pays to the holding company. What are the rights of the interested parties and how should they be set forth in a brief report?

253. In the process of consolidating several competing establishments, Corporation A, the holding company, acquires $98,000.00, out of a total of $100,000.00, of the capital stock of Company B. At the time of the purchase the balance sheet of B Company showed surplus and undivided profits of $50,000.00. Company A bought the stock of B at 200 per cent. Almost immediately after the purchase Company B paid a cash dividend of 25 per ceut. In what ways would the payment of this dividend affect:

a. The balance sheet of B.

b. The balance sheet of A.

c. The consolidated balance sheet of A and its subsidiary companies. Give your reasons for your answer. (A. I. A.)

254. In examining the accounts of a department store corporation, you find that it is the owner of the capital stock of another department store corporation; the stock is carried on the books of the parent corporation at par. Quarterly dividends have been regularly received. What further information would you require before certifying the balance sheet and income account of the parent corporation?

255. A holding company owns the stock of a subsidiary company, for the purchase of which it issued two shares of its own stock for each share of the subsidiary company's stock. The assets of the subsidiary company were sold and after the debts of such subsidiary company were liquidated, the balance remaining was paid in cash to the holding company. How should the cash so received be treated on the books of the holding company?

256. A company owns all of the capital stock of another company. The latter company has outstanding an issue of bonds not guaranteed by the company holding the stock. The assets of this subsidiary company are deemed insufficient to cover the bonds, so that its capital stock has no value. The owning company desires the auditor to prepare its balance sheet, setting up the assets of this subsidiary company along with other assets directly owned, and the bonds as liabilities. Is it proper for him to do so under the circumstances? Give reasons for your answer.

257. In a combination of companies into one, how should an underlying company charge out its product to another underlying company which will use it as raw material?

258. In auditing the accounts of the Brown Manufacturing Company, you find that it owned the controlling interest in the Smith Foundry

Company. In addition to making cash advances the Brown Company shipped goods to the Smith Company. At the end of the year, namely, December 31, 1920, you find that the Smith Company appeared as a debtor for $50,000.00. On January 2, 1920, the Brown Company had received from and credited the Smith Company with notes receivable of $20,000.00. These the Brown Company discounted and on the due date, namely, July 2, 1920, took them up, thereafter receiving new notes from the Smith Company. These were due on September 2, and the procedure of July 2 was followed. These notes taken in exchange were payable on February 2, 1921, and were discounted by the Brown Company immediately upon receipt, namely, on September 2. How should the Brown Company balance sheet of December 31, 1920, show the position at that date? Give the reason for your answer. If there is any asset, how much is it, and under what heading should it be included in the balance sheet; that is, under current, working, or what?

259. When would be the proper time for a holding company to declare dividends?

260. Immediately after organization, a corporation takes over certain highly speculative properties, issuing therefor its entire capital stock. Subsequently, three-fourths of the stock issue was returned to treasury for the purpose of providing working capital.

Much of this was underwritten at a very low figure and none was sold at par.

At the end of the first year, the books showed fair profits from operation, but dividends in excess of earnings had been distributed to stockholders.

Early in the second year, the properties had been developed sufficiently to indicate wonderful probabilities and the prospect was used commercially to such an extent that market trading was active at figures greatly in excess of par. At this time, the corporation trades its balance of treasury stock holdings for control in a holding company whose balance sheet indicated a book value of less than par.

What was the price paid for control in the holding company?

PROBLEMS ON CHAPTER XIII

61

Four corporations, S1, S2, S3, and S4, are controlled by corporation H. These four companies operate separately, buying and selling both to outside parties and to each other. Over a certain period of time, the operations are as follows:

S1 purchases raw material from the outside in the amount of $100,000.00. It sells $20,000.00 of this, at cost, to outside parties, and $66,000.00 to S2, at a cost of $60,000.00. S2 expends $34,000.00 in manufacturing labor and expense on the purchases from S1, after which it sells $20,000.00 of its goods, at cost, to outside parties, and $70,000.00 to S4, for which S4 paid

S2 $77,000.00 S4 received these goods over the railroad of S3 and paid the latter $5,000.00 in freight charges upon which there was a profit of $1,500.00. S4 expends $18,000.00 in manufacturing labor and expense after which it sells $70,000.00 of its goods at cost, to outside parties.

For the purpose of the consolidated balance sheet and profit and loss statement of H, determine:

a. First cost of product sold.
b. Intercompany profit on sales.
c. Stock on hand. (*)

62

The following are trial balances as of December 31, 1920:

H Company:		
Real estate,	$200,000.00	
Machinery and equipment,	100,000.00	
Accounts receivable,	50,000.00	
Cash,	10,000.00	
Inventories, December 31, 1920,	75,000.00	
Shares—S Company (300, par $100.00),	35,000.00	
S Company current account,	5,000.00	
Notes payable,		$ 20,000.00
Accounts payable,		30,000.00
Capital,		400,000.00
Surplus:		
Balance,		19,000.00
Profit for year 1920,		6,000.00
Totals,	$475,000.00	$475,000.00
S Company:		
Furniture and fixtures,	$ 3,500.00	
Inventories, December 31, 1920,	25,000.00	
Accounts receivable,	45,000.00	
Cash,	5,000.00	
Treasury stock (100 shares at cost),	11,000.00	
H Company drafts accepted and discounted,		$ 5,000.00
Accounts payable,		10,000.00
H Company current account,		4,500.00
Capital stock (500 shares, par $100.00),		50,000.00
Surplus,		20,000.00
	$89,500 00	$89,500.00

The stock on hand of S Company was manufactured by H Company and was billed to S Company at 10 per cent in excess of cost, at which value it was taken into the inventory. The difference in the inter-company current accounts consists of a note issued by S Company in settlement of a claim for damages but not entered on the books, being paid by H Company. The directors of S Company declared a dividend of 1½ per cent on December 15, 1920, payable January 15, 1921, which has not been entered on the books

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Company A purchased on January 1, 1921, the entire capital stock of Company B at $175.00 per share, and the entire stock of Company C at $80.00 per share.

You are handed the balance sheet as understated at June 30, 1921, and are requested to prepare a consolidated balance sheet of the A Company and its subsidiaries at that date.

Balance Sheets

Company A:		
Property and good-will,	$ 850,000.00	
Stock of subsidiary companies,	1,500,000.00	
Current assets,	700,000.00	
Capital stock,		$2,250,000.00
Current liabilities,		150,000.00
Surplus January 1,		525,000.00
Undivided profit for one-half year,		125,000.00
	$3,050,000.00	$3,050,000.00
Company B:		
Property and good-will,	$ 650,000.00	
Current assets,	60,000.00	
Capital stock,		$ 400,000.00
Current liabilities,		10,000.00
Surplus January 1,		200,000.00
Undivided profit for one-half year,		100,000.00
	$ 710,000.00	$ 710,000.00
Company C:		
Property (as appraised January 1, 1921),	$1,130,000.00	
Current assets,	180,000.00	
Capital stock,		$1,000,000.00
Current liabilities,		240,000.00
Surplus January 1,		30,000.00
Undivided profit for one-half year,		40,000.00
	$1,310,000.00	$1,310,000.00

There are no inter-company accounts or inventories.

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From the following three trial balances prepare a consolidated balance sheet as at December 31, 1921, in the form you would draw it up for presentation to the stockholders of the parent company (the S. R. Company) showing as separate items therein:

a. The total good-will of the combined companies.

b. The net profits accruing to the new corporation (to the S. R. Co.).

S. R. Company:	
Preferred stock,	$1,500,000.00
Common stock,	1,500,000.00

	Debit	Credit
Investments in subsidiary companies—4,000 shares of stock of L. W. Co. and 4,000 shares of stock of S. B. Co., both of $100.00 each at cost,	$2,500,000.00	
Accounts payable,		20,000.00
Dividends from subsidiary companies,		100,000.00
Administration expenses,	25,000.00	
L. W. current account,	100,000.00	
S. B. Company advances,	150,000.00	
Cash,	270,000.00	
Organization expenses,	75,000.00	
	$3,120,000.00	$3,120,000.00
L. W. Company:		
Properties and plant,	$ 325,000.00	
Good-will,	250,000.00	
Investment in S. B. Co.—2,000 shares of a par value of $100.00 each, cost $300,000.00,	400,000.00	
Inventories,	250,000.00	
Receivables,	195,000.00	
Cash,	90,000.00	
Capital stock (4,000 shares),		$400,000.00
Accounts payable,		125,000.00
S. B. Company,		175,000.00
Surplus (includes $100,000.00 added to book value of investment in S. B. Co.),		710,000.00
S. R. Company,		100,000.00
	$1,510,000.00	$1,510,000.00
S. B. Company:		
Good-will,	$ 50,000.00	
Property and plant,	325,000.00	
Inventories,	190,000.00	
Receivables, general,	105,000.00	
L. W. Company,	195,000.00	
Cash,	10,000.00	
Capital stock (6,000 shares),		$ 600,000.00
Accounts payable,		90,000.00
S. R. Company,		150,000.00
Surplus or deficit,		35,000.00
	$ 875,000.00	$ 875,000.00

In the preparation of your consolidated balance sheet be guided by the following assumed facts:

1. That the S. R. Co. was formed on March 28, 1921, and acquired its stock ownership in the two subsidiary companies, as shown in its trial balance on April 1, 1921.
2. That at January 1, 1921, the L. W. Company had a surplus of $605,000.00 and the S. B. Company a deficit of $50,000.00.

3. That no inventory was taken of either the L. W. Company or the S. B. Company between January 1 and December 31, 1921, the business of the companies being continued without interruption notwithstanding the change in ownership of the capital stocks as indicated above.
4. That prior to December 31, 1921, the L. W. Company declared a dividend of $100,000.00 payable to the parent company which was duly taken up on the books of both companies, being passed through the current accounts and charged against the surplus of the L. W. Company prior to December 31, 1921.
5. That the difference in the current accounts between the S. B. Company and the L. W. Company represents as to $10,000.00, merchandise in transit, and as to the remaining $10,000.00, a charge for rental of warehouse for the last six months of 1921, which has been credited to the rent account on the books of the S. B. Company.
6. That it is estimated on reliable authority which may be accepted as final that from January 1, to March 31, 1921, the net profits of the L. W. Company amounted to $30,000.00, while during the same period the S. B. Company lost $15,000.00.

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Following are the trial balances of Company A and its subsidiaries at December 31, 1920:

Debits	Co. A	Co. B	Co. C
Cash,	$ 75,000.00	$ 50,000.00	$ 60,000.00
Accounts receivable,	350,000.00	190,000.00	420,000.00
Notes receivable,	200,000.00	60,000.00	40,000.00
Inventory, raw material 1/1/20,	150,000.00	105,000.00	160,000.00
Purchases, raw material,	650,000.00	400,000.00	510,000.00
Labor,	450,000.00	320,000.00	370,000.00
Manufacturing expenses,	190,000.00	190,000.00	205,000.00
Selling expenses,	85,000.00	40,000.00	75,000.00
Administrative expenses,	45,000.00	25,000.00	35,000.00
Inventory, goods in process 1/1/20,	80,000.00	70,000.00	75,000.00
Inventory, finished goods, 1/1/20,	90,000.00	65,000.00	80,000.00
Plant and equipment,	900,000.00	400,000.00	750,000.00
Investment in stock of Company B,	875,000.00		
Investment in stock of Company C,	1,200,000.00		
	$5,340,000.00	$1,915,000.00	$2,780,000.00
Credits			
Capital stock,	$3,000,000.00	$ 500,000.00	$ 800,000.00
Notes payable,	110,000.00	80,000.00	60,000.00
Accounts payable,	100,000.00	65,000.00	250,000.00

Bonds payable,	500,000.00		
Premium on bonds,	5,000.00		
Reserve for depreciation,	100,000.00	60,000.00	112,500.00
Sales,	1,400,000.00	1,050,000.00	1,250,000.00
Surplus,	125,000.00	160,000.00	307,500.00
	$5,340,000.00	$1,915,000.00	$2,780,000.00

The inventories at December 31, 1920 were:

	Co. A	Co. B	Co. C
Raw material,	$280,000.00	$175,000.00	$210,000.00
Goods in process,	95,000.00	80,000.00	85,000.00
Finished goods,	135,000.00	145,000.00	105,000.00

Company A purchased the entire stock issues of Companies B and C at January 1, 1920, at the prices shown in the trial balance. During the year each of the three companies declared and paid a 5 per cent dividend. Company A took up its dividends from Companies B and C by credits to surplus. The various entries for the dividends were the only entries affecting the surplus accounts during the year.

At December 31, 1919, Company A's inventory of raw material included goods purchased from Company B at a price of $60,000.00, the cost thereof to Company B being $40,000.00.

At the same date Company B's inventory of raw material included goods purchased from Company C for $75,000.00 on which Company C made a profit of $25,000.00.

During 1920, Company C sold goods to Company B at a price of $200,000.00. These goods cost Company C $160,000.00. Company B still owes $30,000.00 on these purchases, the indebtedness being included in the accounts payable.

During 1920, Company B sold goods to Company A at a cost of $300,000.00 and at a selling price of $375,000.00. Company A made cash advances totaling $400,000.00 to Company B during the year. These sales just mentioned were charged against the advances account, the $25,000.00 balance of which is included in Company B's accounts payable.

The inventories at December 31, 1920, include inter-company profits as follows:

	Raw Material	Goods in Process	Finished Goods
Company A,	$20,000.00	$5,000.00	$4,000.00
Company B,	30,000.00	6,000.00	5,000.00

Company A's bonds were issued July 1, 1920. They bear 5 per cent interest, payable semi-annually and mature in five years. No interest has been paid.

Allow depreciation at 5 per cent per annum on the cost of the fixed assets.

Prepare the following consolidated statements:

Cost of goods manufactured and sold.

Profit and loss statement.

Surplus statement (showing as the final balance therein the surplus balance appearing in the consolidated balance sheet).

Balance sheet. (A. I. A.)

QUESTIONS ON CHAPTER XIV

Twenty Questions, Five Problems

261. What are fiduciary accounts? Give three examples.

262. It has been stated by a writer on accounting that single (or simple) entry is the basis of all fiduciary accounting. Do you agree? State your reasons.

263. Define and differentiate executor, administrator, trustee.

264. What two essential elements are involved in the accounting of executors?

265. On what are the accounts of an executor based?

266. Describe the method of keeping the accounts of an executor and state what books are necessary for the purpose.

267. Define:

a. Intermediate account.
b. Final accounting.
c. Corpus. (A. I. A.)
d. Income. (A. I. A.)

268. In what books should an administrator keep his accounts? What, if any, special ruling would you suggest? Illustrate.

269. You are retained to open books for the executor of A. B. deceased. Mention the books that you would procure and the accounts that you would ordinarily open. State from what documents you would get the information on which to found book entries.

270. Under what heading, corpus or income, would you, as a general rule, place the following:

a. Funeral expenses.
b. Executor's expenses.
c. Profit or loss on sale of investments.
d. Cash dividend on investment of executor.
e. Cash dividend on investment of testator.
f. Cash legacies.
g. Property legacies.
h. Quarterly allowance to widow.

271. How should executors' and administrators' accounts be stated for the purpose of filing in court? What does the summary of accounts usually include? What are assets of the estate? When are dividends, interest and rents to be treated as principal? With what does the executor charge himself? For what does he take credit?

272. Define the nature of the items you would except to find in the profit and loss account as kept by the executor and trustee of a large estate.

273. State the composition of the "account" of an executor as required by the law. Explain the intimate relation of its components.

274. John Brown died, leaving an estate consisting of realty and personalty,

and in his will named George Green as executor and trustee. Under the will the executor was vested only with the naked power of sale (so far as the realty was concerned), the whole estate being devised in trust for the benefit of a sole legatee. George Green, as executor, sold a certain parcel of realty to William Smith, for $3,000.00, the full amount in cash. He subsequently, as trustee, advanced Smith $2,000.00 as a builder's loan, receiving as security a first mortgage on the property, including the improvements. As a protection he further received from Smith a policy of insurance for $2,500.00 to protect the mortgage. Two years later Smith defaulted in the payment of his interest and taxes and would pay no attention to the trustee's requests that he make such payment. Smith's continued neglect resulted in foreclosure proceedings, brought by the trustee, which terminated in the trustee's obtaining title to the property. The back interest, taxes, and foreclosure expenses amounted to $375.00. In a spirit of revenge Smith set fire to the house and caused its total destruction. The trustee obtained $2,500.00 from the insurance company in settlement of the loss, and subsequently sold the lot for $2,000.00. State briefly the necessary entries to be made by the executor and trustee to record properly the amounts so received.

275. The will of William Christy provided for a division of his estate into three equal parts, of which one part was to be paid in cash to John Christy, and one part to James Christy, and one part was to be held in trust for the benefit of Thomas Christy, who was to receive the income therefrom. January 1, 1921, the executors had $100,000.00 cash in bank, representing the amount realized from the bulk of the testator's estate. The executors paid to John and James Christy $30,000.00 each and lent $30,000.00 on a real estate mortgage at 6 per cent interest. Prepare necessary ledger accounts for the books of the executors.

276. A person dies, leaving a will disposing of a personal estate that is valued by the appraisers at $36,470.00. All but $209.00 is disposed of by the executor, who realizes $32,131.00. This together with $2,187.00 of income received during the administration of the estate, constitutes the full sum to be accounted for. The testamentary and funeral expenses amount to $512.00. Debts of the estate to the amount of $1,500.00 are presented and satisfied. Expenses of $700.00, including trustee's commissions, are paid and the sum of $30,000.00 is divided among the heirs. Prepare in customary form a summary of the executor's accounting, and a cash account.

277. A dies, leaving a small estate. In his will he directed the creating of a separate trust for each of his two married daughters and also provided that the residuary estate should be divided between the two daughters, share and share alike, on the death of the widow who was made a life tenant of the residuary estate. When called on by the executor to prepare his accounts for filing, you find that, as the income from the residuary estate was not sufficient to pay administration expenses and to maintain the widow as she had been accustomed to live, the executor had made a loan to the widow from the principal of the estate

and had taken as security non-income producing collateral, the loan being made without interest. Was the executor authorized to make such a loan, and, if so, how should it be stated in the executor's accounting?

278. In the administration of an estate, the executor is required to construct an iron fire escape on the front of the building in order to remove a violation filed by the fire department of the city. Should such expense be charged to principal or to income account? Give reasons.

279. As an executor of an estate you receive ten shares of stock as a dividend on 100 shares of the same stock held by the estate, said ten shares being a distribution of earnings, one-half of which accrued prior to the death of the testator and one-half since his death. Does such stock belong to the life tenant or to the remainderman? Explain.

280. If called upon to prepare a trustee's accounting, state how you would handle the following items: The trustee sold two East and West Railroad Company first mortgage 4 per cent bonds which he had received from the testator as a part of the estate and which were included in the inventory at $2,000.00. These bonds were sold for $1,800.00, and $1,600.00 of the proceeds were reinvested in North and South Railroad Company three-year 6 per cent notes, maturing in two years from the date of purchase. These notes were redeemed by the North and South Railroad Company at par, $2,000.00. How would you treat the gain of $400.00, resulting from the purchase of the short term notes?

PROBLEMS ON CHAPTER XIV

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A dies on June 1, 1918, at which time his estate consisted of the following:

	Inventory	Realized
Cash,	$ 43,500.00	
1st mtge Mo. Pac. 6 per cent bonds, interest payable April 1 and October 1,	75,000.00	$ 79,000.00
Mortgage loans—6 per cent, interest payable March 1 and September 1. All interest due has been paid,	40,000.00	36,000.00
Loans to sundry persons,	39,000.00	24,000.00
Preferred stock—Acme Mfg. Co., at par,	125,000.00	128,000.00
Notes receivable—interest at 5 per cent, paid to May 1, 1918,	30,000.00	29,000.00
Investment in the firm of K & L,	34,000.00	36,000.00
Household goods,	1,200.00	

Sundry liabilities in the amount of $24,000.00, actually were found to be $27,000.00.

The following legacies were mentioned in the will:

1. John Doe,	$2,000.00
2. Wm. Roe,	3,000.00
3. Chas. Moe,	2,000.00

Funeral expenses were $1,100.00; surrogate court costs were $2,400.00; fees of attorney and accountant were $1,000.00.

The debts were paid on August 10, 1918, and the legacies were paid on August 15, 1918.

The income from investments was received as and when due. The income collected to October 31, 1918, was paid the widow on that day, she being entitled thereto. Household furniture was given to the widow on July 1, 1918.

During the next six months period, beginning November 1, 1918, the widow died, with the result that the estate assets were converted into cash as indicated in the column above headed "realized."

Prepare the following:

1. Entries necessary to open executor's books.
2. Entries to book transactions up to October 31, 1918.
3. Statements:
    a. Summary of cash transactions to October 31, 1918.
    b. Charge and discharge statement as of October 31, 1918.
4. Entries to book transactions subsequent to October 31, 1918.
5. Ledger accounts for the above.
6. Trial balance of above ledger. (*)

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By the will of Henry Palmer, deceased, specific bequests were made to three of his children, viz.: William, $100,000.00, Mary, $75,000.00, and Emma, $75,000.00. A sum of $20,000.00 was bequeathed to charitable institutions, and his eldest son, Henry, was named as residuary legatee. In accordance with the terms of the will all real estate was sold, the amount realized being $75,000.00. The inventory filed by John Jacobs, executor, was as follows: bonds and stocks, $87,500.00; bonds secured by mortgages, $135,000.00; furniture and other household effects, $2,750.00; cash in bank, $1,237.50.

On an accounting the executor's books showed disbursements as follows: undertaker's bill and other funeral expenses, $675.00; probate of will, legal expenses, publishing citations, etc., $14,278.75; debts of testator, $10,875.25; stationery, postage, etc., $118.75; improvements on real estate, $750.50; repairs on real estate, $4,860.75; taxes and insurance, $17,505.00; care of cemetery lot, $350.00; services of accountant, $1,800.00; cost of executor's bond, $1,400.00. Receipts were as follows: sale of bonds and stocks, $86,327.00; bonds and mortgages paid, $98,915.00; sale of furniture, etc., $2,285.75; interest on bonds and mortgages, $61,270.50; interest on deposits with trust companies, $1,275.45; rents, $17,250.00; dividends on bonds and stocks, $37,918.50.

The inventory at the date of accounting showed bonds and stocks, $18,755.00; bonds and mortgages, $30,375.00, and cash in accordance with the foregoing transactions, including satisfaction of the specific bequests of the will.

Prepare, with the distinction as to principal and income, a summary statement of the executor's account, showing the amount of the executor's commission and the amount due the residuary legatee.

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Fredericka Ward dies leaving one daughter, Doris, and two sons, Henry and Arthur, all of age. Her will directs that after the discharge of all just claims on her estate there shall be placed in trust for Fredericka Winter, the child of her deceased sister, $50,000.00, the income of which is to be used for the child's support by the guardian appointed under the trust, and the principal to be paid over to her when she becomes of age. The remainder of the estate is to be divided equally among the testator's three children.

The estate consists of cash in a trust company $12,500.00; bonds and mortgages on real estate, $250,000.00; registered municipal bonds, $90,000.00; household furniture appraised at $20,130.00; horses and carriages appraised at $3,000.00; clothing appraised at $2,000.00, and jewelry appraised at $7,400.00.

One of the aforesaid mortgages, $50,000.00 at 5 per cent, is in arrears of interest for one year, and foreclosure proceedings are commenced by the executor, with the result that on an immediate settlement the estate realizes the principal and the interest so in arrears and the trust fund is paid over to the guardian of Fredericka Winter. The February and August semi-annual instalments of interest at 5 per cent on the two remaining mortgages of $100,000.00 each and the January and July interest on the registered 4 per cent bonds are all duly received, and the bonds are forthwith sold for $90,190.00. The executor then pays $30,000.00 to Doris, and $10,000.00 each to Henry and Walter respectively, on account of their interests. Doris takes, as a part of her legacy, household furniture $5,000.00, clothing $900.00, and all the jewelry at the appraised valuation. Each of the sons takes as part of his legacy one of the remaining bonds and mortgages.

On the sale of the remaining effects the furniture realizes $15,000.00, the clothing $1,000 .00, and the horses and carriages $3,200.00. There is also received from the trust company for interest on deposit, $350.00. The executor expended for probate $150.00, funeral $600.00, monument $1,000.00, tax on personal estate $350.00, counsel fees $1,500.00, fire insurance $32.00, and sundry claims against the estate $7,201.00. The allowance for executor's fees was fixed by the will at $2,500.00.

Prepare a summary accounting showing the cash in hands of executor and the amount payable to each of the heirs at the close of the transactions above described.

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John Doe died on March 1, 1921, leaving a will which made the following provisions:

1. Wm. Doe his brother was made executor.
2. A legacy of $10,000.00, and his personal jewelry to go to his son, George.
3. A legacy of $5,000.00, and his electric automobile to go to his daughter, Kate.
4. That his widow, Mary M. Doe, should receive a legacy of $5,000.00, and a sum additional thereto sufficient to pay all household expenses due and accrued at the time of his death.

5. That his widow, Mary M., shall be paid an allowance of $7,200.00 per annum, and to have full possession and use of the homestead property from the date of his death to the final distribution of the estate. The annual allowance herein provided to be paid in quarterly payments, the first payment to be made three months from the date of his death.
6. That the executor should use his best judgment in the disposition of such assets as might be necessary to liquidate the liabilities of the estate, to make immediate payment of the initial legacies to his widow, son and daughter, and to make the quarterly payments to his widow as provided in paragraph 5.
7. That the executor shall have authority to sell property of the estate and to take in payment therefor either cash or securities but that the executor is not of authority to invest the proceeds of property sales.
8. That during the term of executorship, the executor shall receive $4,800.00 per year in payment for all services (in lieu of all fees and commissions) but such salary not to include necessary expenses of the executor.
9. That the final distribution of the estate should be made as soon as possible and should be as follows:
   ½ to the widow, Mary M.
   ¼ to the son, George.
   ¼ to the daughter, Kate.

On March 15, 1921, William Doe filed evidence of executorship. On April 1, 1921, the executor filed with the court the following inventory of the estate of John Doe.

Inventory April 1, 1921

Filed by Wm. Doe, Executor

Property	Appraised Value
Homestead grounds and buildings,	$ 40,000.00
Renting real estate,	100,000.00
Unimproved real estate,	80,000.00
Rents due for March,	500.00
Cash received for February rent,	500.00
Stock of the C. O. D. Ry. Co.,	10,000.00
Certificates of deposit dated December 31, 1920, at 4 per cent interest, figured quarterly,	6,000.00
Cash in bank, checking account,	2,000.00
Personal jewelry,	300.00
Electric automobile,	1,000.00
Note receivable, dated December 1, 1920, for one year, interest rate 6 per cent, payable semi-annually,	4,000.00
4 per cent bonds of the Chicago Street Ry. Co., par $1,000.00, interest payable January and July,	30,000.00
Note receivable, drawer Wm. Doe, due July 1, 1921, without interest,	1,000.00
Total,	$275,300.00

Debts

Mortgage held by Trust Co. on renting real estate, due September 1, 1921, interest rate 6 per cent payable annually,	$20,000.00
Note held by Commercial Bank—dated February 1, 1921, for four months at 6 per cent,	1,000.00
Accrued household expenses for February,	150.00
Accrued household expenses for March,	150.00
Unpaid funeral expenses,	700.00
Sundry personal debts of John Doe,	500.00
Total,	$22,500.00

During the period of executorship, in addition to the specific transactions required by the provisions of the will and the ordinary transactions which do not require special mention, the following transactions took place:

1. The revenue producing real estate was sold on September 1, 1921, for the sum of $110,000.00 cash. The purchaser assumed all unpaid taxes. The monthly rents ($500.00 per month) had been collected to the time of sale.
2. Notes receivable were collected when due.
3. The Chicago Street Ry. Co. bonds were sold on May 1, 1921, for 102 and accrued interest.
4. The expenses of the executor amounting to $850 were paid on March 31, 1922.
5. The salary of the executor was paid on March 31, 1922.
6. The executor paid repair and unkeep expenses on revenue producing property amounting to $900.00.
7. The executor paid taxes on unimproved real estate for the calendar year 1921, amounting to $3,600.00. (Do not capitalize in solution).
8. The executor paid taxes on the homestead property for the calendar year of 1921, amounting to $1,800.00.
9. A dividend of 5 per cent was received on the stock of the C. O. D. Ry. Co. for the year 1921.

Certificates of deposit were not converted into cash and were on hand March 31, 1922.

On March 15, 1922, the executor, having paid all of the old liabilities of the estate, filed a report settng forth the transactions of the executor and setting forth a plan of final distribution of the estate in accordance with the terms of the will The plan of distribution was approved by all legatees. and the court on March 31, 1922, the current liabilities were liquidated, the division of the estate was accomplished and the executor discharged.

The following information is to be submitted either in the form of separate schedules, or in one large schedule arranged in columnar form:

1. Assets and liabilities of the estate of John Doe at the time of his decease.
2. Cash receipts and disbursements from the decease of John Doe to the close of the executorship, excluding final division of the estate.
3. Assets sold or disposed of by the executor, excluding final distribution of the estate.
4. Liabilities liquidated by the executor.

5. Expenses of the estate from the decease of John Doe to the close of the executorship.
6. Revenues of the estate from the decease of John Doe to the close of the executorship.
7. Legacies to the widow, Mary M., excluding final distribution of the estate.
8. Legacies to the son, George, excluding final distribution of the estate.
9. Legacies to the daughter, Kate, excluding final distribution of the estate.
10. Residual assets owned by the estate and distributed to legatees on March 31, 1922.
11. Use your total figures and submit proof of the accuracy of your solution.

A division of the residual assets according to the terms of the will is not required.

70

Upon the death of a retired business man in June, 1920, a will is found conveying real and personal property aggregating $300,000.00 to the widow, who is his second wife, for her life, and upon her death to four children in equal shares. It is discovered after his death that his first wife had left to her two children, Henry and Emma, $20,000.00, consisting of securities for $10,000.00 bearing 6 per cent interest, and uninvested cash of $10,000.00. The father had regularly collected the semi-annual interest on the investment, but there was no evidence as to his disposition of the cash portion of the bequest. Exactly ten years elapsed between the death of his first wife and his own death, so that he had collected twenty items of interest, the last one just before he died. Henry and Emma were of age at the time of their father's death, and had never been informed of their legacy.

Prepare a statement showing what would accrue to each of the four children at the death of the widow, who died immediately after her husband, including the amounts to which Henry and Emma would be entitled on account of their mother's estate. Exclude and do not consider any accrued income of the estate unexpended.

Use interest rate of 5 per cent.

QUESTIONS ON CHAPTER XV

Twenty Questions, Five Problems

281. a. What is a receiver?

b. What is his first duty on taking possession of profit or trust funds committed to his care?

282. a. What elements enter a statement by a receiver?

b. Prepare an exhibit showing the construction of a receiver's statement.

283. Give the names of the general accounts to be used and state briefly how you would proceed to open a set of books for the receiver of a small manufacturing concern, the court having issued an order that

the receiver shall continue manufacturing in order to utilize to the best advantage the work in process and the raw material.

284. A trading company votes to go into voluntary liquidation, the directors (three in number) being appointed trustees, to realize on the assets and pay the debts. What change, if any, should be made in the books of the corporation and how should the trustees' transactions be recorded?

285. Outline accounting procedure necessary to prepare schedules in bankruptcy under the United States Bankruptcy Act. State schedules in their order and give substantially what each contains.

286. a. If appointed an assignee for a corporation, what would you consider to be your first duty?
b. How should the assignee's account be prepared for submission to the court?

287. a. What is the duty of the assignee's accountant in the case of an assignment? How is the inventory stated? What are included in the schedules?
b. What does the summary of account usually include? With what does the assignee charge himself? For what does he take credit?

288. An assignee has been appointed for an insolvent manufacturing corporation whose liabilities and assets consist of its capital stock, notes and accounts payable, unpaid wages, cash, notes and accounts receivable, raw materials, supplies, finished goods, stock in process, plant and balances against "branches." The assignee is, temporarily, to handle the property "as a going concern." You are placed in charge of his accounts. What are the first steps to be taken by you relative to:
a. The liabilities.
b. The assets.
c. What ledger accounts should be set up in the books of the assignee?

289. What are the usual methods of stating the accounts respectively of:
a. Receivers.
b. Assignees.
c. Trustees in bankruptcy.
State in what essential respects they differ.

290. What statements are drawn up to present the affairs of an insolvent business? Give a form of such a statement without figures.

291. a. Define and describe:
1. Statement of affairs.
2. Deficiency account.
b. Show wherein the following differ:
1. Revenue account.
2. Trading account.
3. Profit and loss account.
4. Deficiency account.

292. a. What is the primary object of a statement of affairs? (*)
b. To what various uses may such a statement be put? (*)

293. Differentiate fully between a balance sheet and a statement of affairs. (*)

294. What facts should be made clear in a statement of affairs? What conclusion is shown in the final balance?

295. a. What are preferred claims? Cite examples.
   b. Are there any circumstances under which certain liabilities may take precedence over a first mortgage?

296. a. What are the sources of information upon which statements of affairs are based?
   b. Define the following terms and show how they should be treated in the preparation of a statement of affairs:
      1. Unsecured liabilities.
      2. Partially secured liabilities.
      3. Secured liabilities.
      4. Contingent liabilities.
      5. Preferential liabilities.

297. Set up a deficiency account, explaining the points involved.

298. What basis would you suggest for valuing the assets for the purpose of constructing a statement of affairs?

299. In preparing a statement of affairs, against what account or accounts should be offset the contingent liability on notes receivable discounted?

300. You are instructed by the receiver of an importing and trading concern to examine the accounts and report to him upon:
   a. The financial position of the concern.
   b. The causes that have mainly contributed to the failure.
   In your answer prepare a statement of the assets and liabilities in such form as you think should be used for the information of the receiver and the creditors and under (b) state the matters to which you would direct their attention, having in mind the nature of the business and how you would proceed with your investigation.

PROBLEMS ON CHAPTER XV

71

The accounts of a partnership include:

Cash,	$ 1,400.00
Merchandise,	15,000.00
Accounts receivable,	20,000.00
Notes receivable,	4,000.00
Machinery,	7,000.00
Real estate,	5,000.00
Investments,	2,500.00
Mortgage payable on real estate,	3,000.00
Notes payable,	16,000.00
Accounts payable,	35,000.00
Taxes due,	500.00

Wages due,	1,000.00
Rent due,	700.00
Notes receivable discounted,	3,000.00
Partners' accounts,	12,000.00

All the investments are pledged as collateral on $1,500.00 notes payable. Of the accounts receivable, $1,000.00 are considered bad, $2,500.00 doubtful and worth 50 per cent of book value, and the balance good. Real estate is undervalued 10 per cent. Merchandise is subject to a discount of 25 per cent. Machinery is overvalued 25 per cent. $2,000.00 notes receivable discounted have been paid by makers. Expense of liquidation estimated to amount to $1,500.00. The partners have personal estates valued at $4,000.00.

Prepare such statements as seem desirable under the circumstances, and state probable amount for distribution among creditors.

72

The officers of the A company find that they are unable to meet current obligations and a receiver is appointed on April 28, 1919. The receiver calls for an inventory and a statement as at date of appointment, which is given as follows:

Assets

Machinery and equipment,	$507,300.00
Consigned merchandise,	220,000.00
Merchandise at mill,	115,000.00
Cash,	800.00
Accounts receivable,	1,400.00
Unexpired insurance,	800.00
Employees Liberty bonds,	4,700.00
	$850,000.00

Liabilities

Reserve for depreciation,	$ 7,300.00
J. Smith & Co.,	250,000.00
Bank loans,	105,000.00
Acceptances,	15,000.00
Bank overdraft,	1,000.00
City taxes accrued,	4,000.00
Collateral notes payable,	4,700.00
Mortgage on machinery,	100,000.00
Accrued interest on mortgage (to date),	3,000.00
Lease—machinery,	30,000.00
Accrued interest on lease agreement,	10,000.00
Accounts payable,	110,000.00
Capital stock common,	100,000.00
Capital stock preferred,	100,000.00
Surplus,	10,000.00
	$850,000.00

On November 20, the receiver having disposed of all assets for cash (except consigned merchandise and $400.00 accounts receivable which were considered doubtful) calls upon you to prepare an interim statement for the information of the stockholders and creditors.

He leaves the form to your judgment but suggests that it be as concise as possible and that you show his valuations, as well as book value, at date of receivership. He also wants a summary of his transactions not necessarily to include profit or loss showing, and finally wants statements to show conditions as they are at date you are called in.

You find that the collateral notes payable were for accommodation of employees and were secured by the deposit of bonds, also the property of employees as per statement. The bonds have now been delivered to the employees and the notes paid by them.

The court has authorized payments of the city taxes and accrued interest of $400.00, which latter amount has been omitted from the statements but included by receiver in his valuation statement. Federal taxes were also found to be due and were also paid (amount $1,000.00)

The lease covered machinery worth $30,000.00, but the firm that furnished this machinery has accepted a release of the A company's equity in this machinery as full payment of notes under lease agreement and the accrued interest.

The receiver finds that J. Smith & Co.'s account represents advances on the entire consigned merchandise and that this merchandise has been pledged to secure this claim in part (to the extent of value of merchandise). Receiver accepts book value for purpose of his records.

After removal of the leased machinery the remaining machines and equipment were sold for $200,000.00, and the mortgage (and accrued interest to date of payment, $5,000.00) were paid in full. (Receiver's original value placed on machinery was $200,000.00).

The merchandise at the mill was valued by the receiver at $75,000.00, but after six months' operation the amount on hand was sold without inventory for $25,000.00.

The accounts receivable were valued by the receiver at $1,000.00 and the amount was in fact realized in cash, the balance appearing doubtful (estimated to be worth 50 cents on dollar).

Unexpired insurance is accepted by receiver at book value. November 10, a rebate of $100.00 was received and all policies were cancelled.

Upon comparing the statement with the books you find accounts payable understated $10,000.00 in the statement given receiver because of an error on the part of a bookkeeper when closing the books at April 28.

Claims were duly filed for entire amount owing (except $10,000.00 accounts payable). An account in purchase ledger was disallowed and is in dispute (amount, $5,000.00).

The receiver sold merchandise to the amount of $75,000.00 all of which had been paid for. Other receipts were rent for portion of building—sublet, $1,000.00; unclaimed wages, $500.00; interest on bank account to November 20, 1919, $200.00; cash surrender value of insurance policy on life of treasurer, $1,000.00.

Other payments were receiver's accounts payable, \$50,000.00; taxes, \$3,000.00 (assessed since receivership); rent, \$2,000.00; legal expense, \$5,000.00. No fee has been allowed receiver or will be considered in your statement.

An analysis of the ledger determines the fact that only the following bills and expense vouchers had been carried through the invoice register since receivership, and all had been paid promptly, viz.: labor, \$20,000.00; materials, \$20,000.00; shop expense, \$3,000.00; heat and power, \$2,000.00; freight, \$1,000.00; general expense, \$4,000.00. (A. I. A.)

73

Jones & Robinson, merchants, are unable to meet their obligations. From their books and the testimony of the insolvent debtors, the following statement of their condition is ascertained:

Cash on hand,	\$ 5,500.00
Debtors: \$1,000.00 good; \$600.00 doubtful, but estimated to produce \$200.00; \$1,000.00 bad,	2,600.00
Property, estimated to produce \$9,000.00,	14,000.00
Notes receivable, good,	4,250.00
Other securities: \$3,000.00 pledged with partially secured creditors; remainder held by the fully secured creditors,	28,000.00
Jones, drawings,	9,000.00
Robinson, drawings,	8,400.00
Sundry losses,	13,500.00
Trade expenses,	7,400.00
Creditors, unsecured,	25,000.00
Creditors, partially secured,	23,900.00
Creditors, fully secured,	17,000.00
Preferential claims: wages and taxes,	700.00
Jones, capital,	10,000.00
Robinson, capital,	16,050.00

Prepare a statement of affairs, showing the liabilities and the assets with respect to their expected realization and payment; also a deficiency account, showing such of the above stated particulars as would account for the deficiency shown by the statement of affairs.

74

On June 30, Ward & Parker, merchants, announce their inability to meet their obligations, and make an assignment for the benefit of creditors.

From an examination of their books, supplemented by other information, their condition appears as follows:

Liabilities

Creditors, unsecured,	\$31,250.00
Creditors, partly secured,	29,875.00
Creditors, fully secured,	21,250.00
Taxes and Wages of Employes (preferential),	875.00

Assets	
Cash on Hand,	$ 6,875.00
Chattels,	17,500.00
Bills Receivable,	5,312.00
Warehouse Receipts and other securities,	35,000.00
Sundry Debtors,	3,250.00
Losses	
Profit and Loss Account, sundry losses,	$16,875.00
Trade Expenses, current period.	9,250.00
Personal	
Ward, Capital Account, Cr.,	$12,500.00
Ward, Personal Drawings, Dr.,	11,250.00
Parker, Capital Account, Cr.,	20,062.00
Parker, Personal Drawings, Dr.,	10,500.00
Accounts Receivable show,	3,250.00
Bad Accounts,	1,250.00
Doubtful Accounts,	750.00
Expected to Produce,	250.00

The securities are in the hands of creditors pledged to secure payment of their accounts, viz.:

In hands of partly secured creditors,	$ 3,750.00
In hands of fully secured creditors,	31,250.00
The chattels are expected to realize,	11,250.00

Prepare a statement of affairs and a deficiency account.

75

The Republican Asphalt Contracting Company is forced into liquidation, and the receiver, when taking possession, finds the books of account to show:

Liabilities:		
Bills payable,		$18,000.00
Creditors open accounts,		75,500.00
Mortgage on real estate and improvements,		17,500.00
Mortgage on contracting equipment,		7,000.00
Capital stock subscribed,	$100,000.00	
Less not paid up,	2,500.00	97,500.00
		$215,000.00
Assets:		
Cash in bank and office,		$ 700.00
Bills receivable,		4,300.00
Debtors' accounts,		8,200.00
Bonds and warrants,		23,000.00
Real estate and improvements,		35,000.00
Manufacturing plant,		24,000.00
Contracting equipment,		14,000.00
Uncomplete contracts (cost),		41,000.00
Inventory of materials and supplies,		3,500.00
		$153,700.00

The bondsmen on the unfinished contract estimate that an expenditure of $25,000.00 will complete the uncompleted contracts and realize the contract price of $60,000.00, and their offer of $2,750.00 for the inventory of the material and supplies as part of said expenditure, is accepted by the receiver. The company owes for personal taxes and adjustment of employers' liability premiums $175.00 and $100.00, respectively, and unpaid labor accounts amounting to $1,700.00, which amounts do not show on the books of account.

The bills receivable amounting to $4,300.00 are pledged as collateral for $3,500.00 due creditors, and $20,000.00 of the bonds and warrants have been given as security for $33,000.00 due creditors; $1,000.00 of the bills receivable is subsequently dishonored.

The receiver finds that $1,100.00 of the debtor's accounts is collectible. The sale of real estate and improvements (book value $35,000.00) realizes $32,500.00; manufacturing plant 40 per cent of the book value; contracting equipment 35 per cent of book value.

Prepare a statement of affairs and deficiency account.

QUESTIONS ON CHAPTER XVI

Ten Questions, Five Problems

301. Distinguish between assignee, receiver, and trustee, and state their respective duties.

302. Describe the following and show wherein they differ:
- a. Trial balance.
- b. Balance sheet.
- c. Statement of affairs.
- d. Realization and liquidation account.

303. What statement is drawn up at the end of a receivership to show the result of the same? Give a form of such statement, without figures.

304. In what connection is the realization and liquidation account used?

305. State the theory and the practical uses of a realization and liquidation account, showing at least two instances in which it may be used with advantage.

306. What are the sources of information upon which the realization and liquidation accounts are produced?

307. When preparing a statement of realization and liquidation in the case of a company dissolving itself, how would you treat reserves for depreciation? State three methods of treating the matter and give reasons for your preference.

308. A trading corporation votes to go into voluntary liquidation, the directors (three in number) being appointed trustees, to realize on the assets and pay the debts. What change, if any, should be made in the books of the corporation and how should the trustees' transactions be recorded?

309. Outline the accounting procedure necessary to prepare schedules in bankruptcy under the United States Bankruptcy Act. State schedules in their order and give substantially what each should contain.

310. Distinguish between the statements drawn up to present the affairs of an insolvent business and those drawn up at the end of a receivership to show the receiver's operations. (*)

PROBLEMS ON CHAPTER XVI

76

Walter Hopkins, while perfectly solvent and doing a profitable manufacturing business had so tied up his capital in plant and materials that he was unable to pay his debts and was on the point of suspending for want of funds to pay for labor, and his creditors were preparing to commence legal proceedings to enforce a settlement. The condition of his affairs at this time was as follows:

Balance Sheet

Assets		Liabilities	
Plant,	$25,198.00	Creditors,	$20,230.00
Cash,	212.00	Capital,	50,000.00
Materials, raw and partly finished,	40,400.00	Surplus,	4,900.00
Finished goods,	6,070.00		
Accounts receivable,	3,250.00		
	$75,130.00		$75,130.00

At a meeting of creditors he said that while his plant was entirely efficient, it was all of special character and would realize on forced sale only the value of scrap, that the unfinished goods would require the employment of skill and processes known to him only, and that while forced suspension would yield to his creditors not over 50 per cent, it would ruin him absolutely.

The creditors decided to advance him a loan of $5,000.00 to continue operations and allow him additional credit for materials and expenses. A trustee was appointed to see that the proceeds were used solely for the recuperation of the business.

The subsequent operations under the supervision of the trustee were as follows:

Purchases on book account, charged to materials $5,100.00, to expense, $12,100.00; sales on book account $57,802.00; losses on bad debts $300.00; cash receipts (loan from creditors) $5,000.00; settlement from debtors $58,100.00; cash payments for labor $12,500.00; for expense $4,350.00; for plant $600.00. Creditors $42,030.00; Walter Hopkins, personal drawings, $3,000.00.

There remained raw materials $4,000.00, finished goods $22,388.00.

Prepare:

a. Realization and Liquidation account.

b. Trustee's cash account.

c. Balance sheet of the estate as restored to Walter Hopkins.

77

A, B, C and D, partners sharing profits equally, decide to dissolve partnership and on December 31, 19—, appoint a liquidator and transfer all assets to him. He is to receive for his services 5 per cent of the cash collected by him in the liquidation of the assets. The liquidator is also to be allowed the expenses paid by him in the liquidation of the business as follows:

Clerk hire,	$1,000.00
Rent,	500.00
Miscellaneous expenses,	700.00

All the debts of the firm were paid and all the notes and accounts were collected excepting $3,200.00 of worthless and uncollectible accounts. The furniture and fixtures brought $2,800.00, and the merchandise was sold for $18,000.00 cash. The balance payable to partners was distributed on December 31, 19—. No interest is to be figured on the partners' accounts or on the moneys in the possession of the liquidator. Prepare cash account of liquidator, statement showing expenses and losses in liquidation and statement of the partners' accounts. The balance sheet of the firm on December 31, 19—, was as follows:

Furniture and fixtures,	$ 3,500.00	Notes payable,	$ 5,000.00
Merchandise inventory,	20,500.00	Accounts payable,	38,740.00
Notes receivable,	14,000.00	Accrued interest on notes payable,	80.00
Accounts receivable,	38,000.00	Accrued taxes	480.00
Unearned insurance premium expiring in 19—,	800.00	A's account,	16,000.00
Cash,	7,500.00	B's account,	8,000.00
		C's account,	10,000.00
		D's account,	6,000.00
	$84,300.00		$84,300.00

78

Harvey Brothers became financially embarrassed and a trustee was appointed January 1, 1920, to take charge of their affairs for the benefit of the creditors.

On that date (January 1, 1920), the financial condition was shown by their balance sheet as follows:

Assets		
Cash on hand and in bank,		$ 1,006.50
Bills receivable,	$18,000.00	
Accounts receivable,	4,500.00	22,500.00
Machinery and tools,		6,000.00
Merchandise inventory,		4,350.25
Real estate,		20,000.00
		$53,856.75

Liabilities		
Bills payable,	$6,000.00	
Accounts payable,	9,000.00	$15,000.00
Notes receivable discounted,		10,000.00
Loan payable,		1,000.00
Mortgage on real estate,		15,000.00
Taxes due,		315.00
Mortgage on machinery and tools,		5,000.00
Capital,		7,541.75
		$53,856.75

In order advantageously to realize on all assets, the trustee purchases merchandise to the amount of $10,000.00, and during the year collected $21,350.00 cash for sales. The book debts realized $3,950.00. Of the bills receivable entered in the balance sheet as $18,000.00 there was on hand only $8,000.00, the balance of $10,000.00 having been discounted with the bank and which are represented on the liability side by the item notes receivable discounted. The $8,000.00 notes on hand realized the full sum, while of the $10,000.00 discounted with the bank only 70 per cent could be realized the balance was lost.

The bills payable, accounts payable, taxes, and interest on mortgages, (5½ per cent) were paid in course of settlement.

Current expenses were as follows: Salaries, $1,000.00; office expenses, $800.00; legal fees, $1,200.00; withdrawals for private use by the owners, $2,000.00; trustee's commission, $2,000.00. On January 1, 1921, the trustee surrendered charge of the estate and paid over the cash balance on hand.

There remained on that date merchandise on hand, $5,600.00.

Prepare a realization and liquidation account, a trustee's cash account, and a balance sheet of the estate at termination of trust.

79

James Stetson is appointed trustee of the manufacturing business of John Brightlawn, for the purpose of rehabilitation. On taking charge he finds that the available assets are: Cash in bank, $356.00; accounts receivable (a) good, $3,712.00; probably uncollectible, $350.00. The working and trading assets consist of: Raw materials, $17,258.00; sundry manufacturing supplies, $700.00; finished goods, $8,000.00; goods in process, $30,945.70. Other assets comprise: Machinery and machine tools, $41,000.00; shop and hand tools, $1,300.00; deferred debits to manufacturing, $530.00. The liabilities are: Creditors' accounts, $39,700.00; wages accrued, productive, $500.00, unskilled $230.00.

The transactions under the trusteeship are as follows: Loaned by creditors for immediate needs, $7,000.00. Purchased on book accounts: raw materials, $8,300.00; sundry manufacturing supplies, $9,500.00. Factory expense: Paid in cash $1,300.00; incurred as a liability to creditors and subsequently liquidated, $2,100.00. The doubtful accounts receivable proved worthless. Cash paid for: Productive labor $16,000.00; unskilled labor, $2,500.00; general expense, $8,000.00; additional shop tools, $609.00; freight inward, on raw materials manufactured and sold, $60.00. Interest allowed to creditors on their accounts amounted to $143.10. The trustee advanced $4,300.00 to John Brightlawn on account of expected profits; the sale of finished wares amounted to $91,000.00.

At the close of the trusteeship, the trustee's books show the working and trading assets to be: Finished goods, $11,000.00; goods in process, $10,450.00; raw materials, $1,945.70; manufacturing supplies, $395.25. There is besides an amount of $750.10 representing factory expenses unapplied. The creditors' accounts show a balance of $1,650.30, while the uncollected

accounts receivable amount to $2,975.36. The shop and hand tools amount to $1,609.00.

Prepare an account which, while respecting the fiduciary character of the relations of the trustee and the proprietor of the business, will reflect logically and clearly the result of J. Stetson's administration.

80

The following is the trial balance of the Raw Deal Company, June 1, 1911, on which day the directors of the company resolve that the secretary of the company be authorized to call a meeting of the stockholders to vote on the immediate dissolution of the company:

Land,	$ 15,000.00	*Bond secured by mortgage 6 per cent,	$ 26,000.00
Building and realty fixtures,	40,000.00	Interest accrued on bond secured by mortgage,	312.00
Machinery and machine tools,	35,000.00	Accounts payable,	21,700.00
Shop and hand tools (in store),	5,000.00	Reserve for depreciation of building,	5,300.00
Furniture and personalty fixtures,	9,700.00	Reserve for depreciation of machinery,	8,000.00
Raw materials and freight thereon,	10,350.00	Reserve for depreciation of furniture and fixtures,	5,100.00
Accounts receivable,	23,400.00	Surplus,	23,358.00
Cash in bank and offices,	11,320.00	Capital stock, authorized, issued and outstanding,	60,000.00
	$149,770.00		$149,770.00

* Buildings and realty fixtures pledged thereunder.

The stockholders' meeting was held on July 1, 1911, and the dissolution took place. The company sold the building and its equipment to the mortgagee for $34,000.00 as of August 15, 1911. On September 1, 1911, the cash book showed:

Debits: Building and realty fixtures, $7,363.00; machinery, $25,340.00; shop and hand tools, $2,100.00; furniture and fixtures, $3,700.00; accounts receivable, $23,130.00; raw materials, $7,950.00.

Credits: Accounts payable, $21,700.00; expenses, $1,530.20.

Prepare:

a. The journal entries affecting the dissolution of the company.

b. A statement of realization and liquidation that will show the percent received by the stockholders on their holdings.

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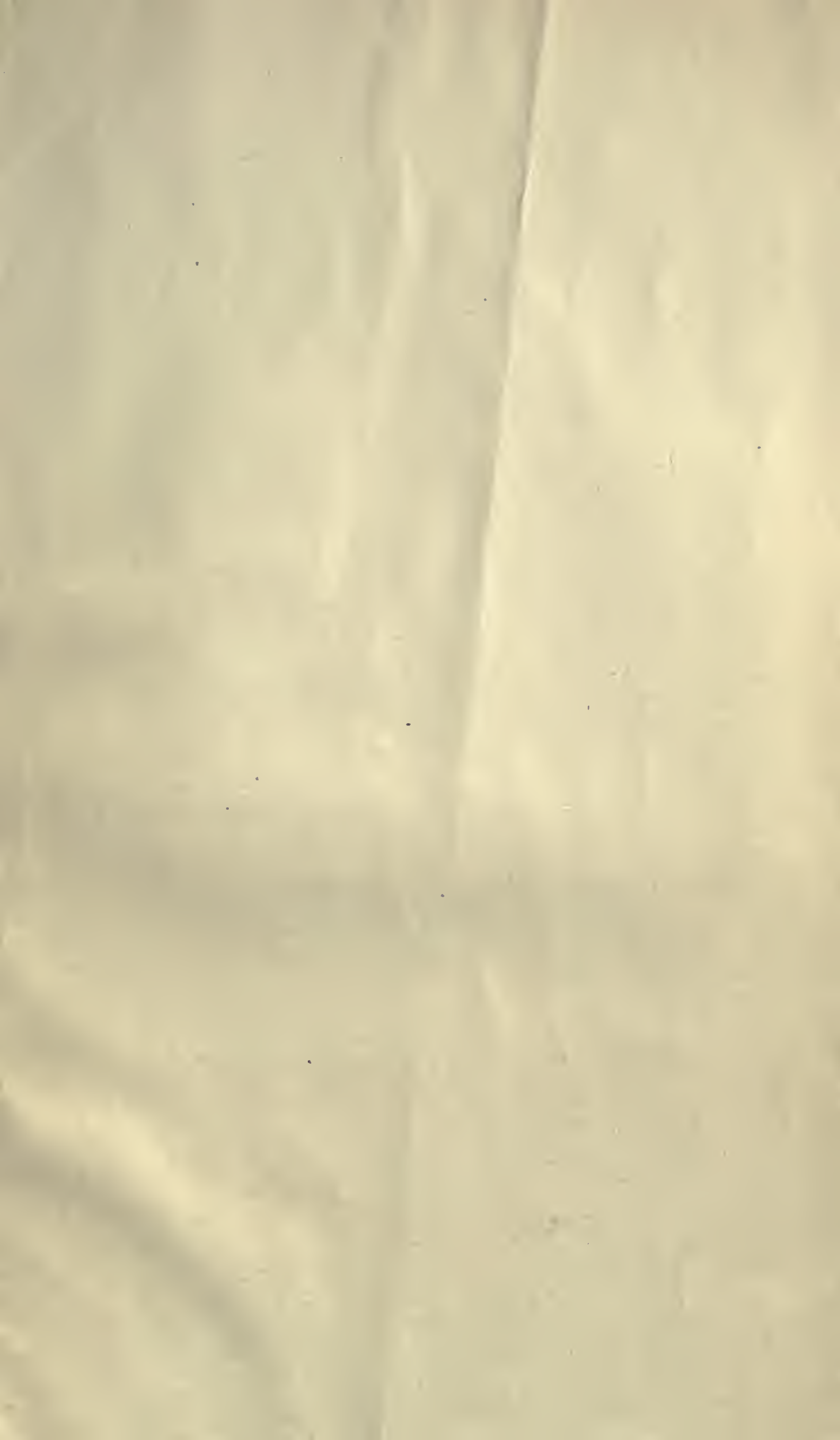

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