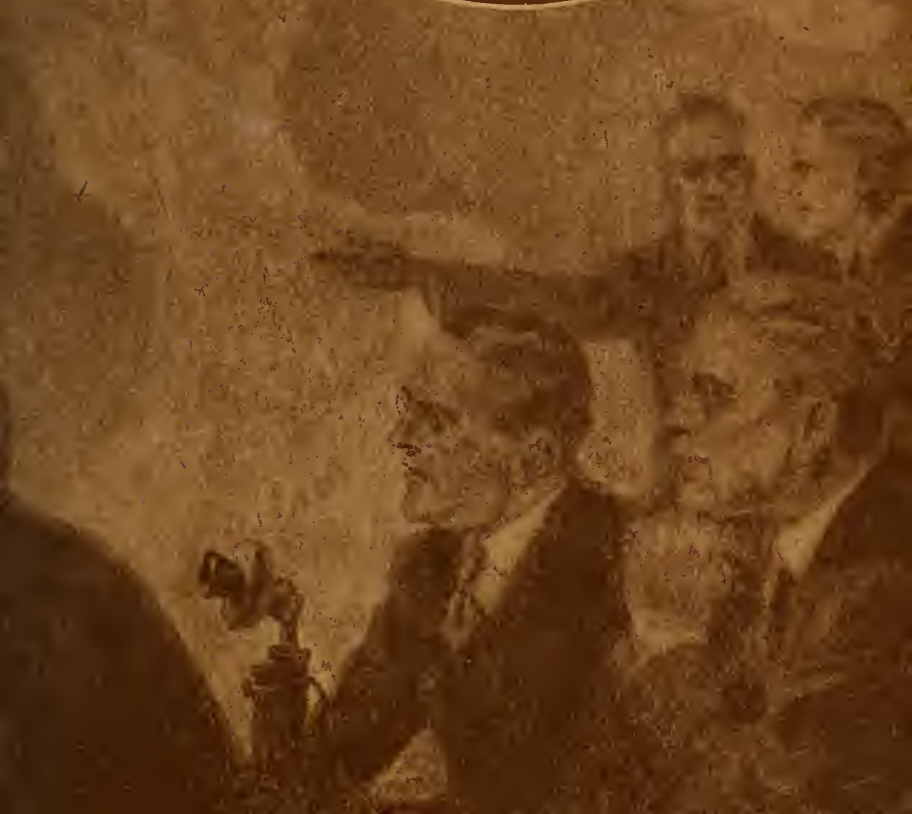
The theoretical man knows *why*. The practical man knows *how*. The man who would lead must know why *and* how.



Accountancy

and

Business Management

A General Reference Work on

BOOKKEEPING, ACCOUNTING, AUDITING, COMMERCIAL LAW, BUSINESS ORGANIZATION, FACTORY ORGANIZATION, BUSINESS MANAGEMENT, BANKING, ADVERTISING, SELLING, OFFICE AND FACTORY RECORDS, COST KEEPING, SYSTEMATIZING, ETC.

Prepared by a Corps of

AUDITORS, ACCOUNTANTS, ATTORNEYS, AND SPECIALISTS IN BUSINESS METHODS AND MANAGEMENT

Illustrated with over Fifteen Hundred Engravings

SEVEN VOLUMES

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Grateful acknowledgment is made also of the valuable service rendered by the many manufacturers and specialists in office and factory methods, whose coöperation has made it possible to include in these volumes suitable illustrations of the latest equipment for office use; as well as those financial, mercantile, and manufacturing concerns who have supplied illustrations of offices, factories, shops, and buildings, typical of the commercial and industrial life of America.

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Foreword

WITH the unprecedented increase in our commercial activities has come a demand for better business methods. Methods which were adequate for the business of a less active commercial era have given way to more elaborate systems and countless labor-saving ideas in keeping with the financial and industrial progress of the world.

¶ Out of this progress has risen a new literature—the literature of business. But with the rapid advancement in the science of business its literature can scarcely be said to have kept pace, at least, not to the same extent as in other sciences and professions. Much excellent material dealing with special phases of business activity has been prepared, but this is so scattered that the student desiring to acquire a comprehensive business library has found himself confronted by serious difficulties. He has been obliged, to a great extent, to make his selections blindly, resulting in many duplications of material without securing needed information on important phases of the subject, except at the sacrifice of much time and patience.

¶ In the belief that a demand exists for a library which shall embrace the best practice in all branches of business—from buying to selling, from simple bookkeeping to the administration of the financial affairs of a great corporation—these volumes have been prepared. Prepared primarily for home study, the authors have striven for simplicity and directness of style and have used a large number of practical problems to further illuminate the text. In addition to the purely accounting and management phases, the newly developed subject of Income Tax has received adequate treatment.

¶ Editors and writers have been selected because of their familiarity with, and experience in handling various subjects pertaining to Commerce, Accountancy, and Business Administration. Writers with practical business experience have received preference over those with theoretical training; practicability has been considered of greater importance than literary excellence.

¶ These volumes are offered with the confident expectation that they will prove of great value to the trained man who desires to become conversant with phases of business practice with which he is unfamiliar, and to those holding advanced clerical and managerial positions.

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*For page numbers, see foot of pages.

†For professional standing of authors, see list of Authors and Collaborators at front of volume.

AUDITING

PART I

THE DUTIES OF AN AUDITOR

Definition. The word *auditing* is so broad in its application and so often loosely referred to by the public, that a clear understanding of the subject is necessary at the very outset of our studies.

The Century dictionary defines the word *auditing* as follows:

> Official examination and verification of accounts or claims; an examination into accounts or dealings with money or property; especially an examination of accounts by proper officers, or persons appointed for that purpose, who compare the charges with the vouchers, examine witnesses, and state the result.

This definition is quoted chiefly not because it is at all comprehensive, but it does illustrate the lack of knowledge, almost general, until a short time ago, as to what an audit really is. The definition quoted was a true enough description a few years ago. A large majority of audits consisted entirely of a comparison of the records of cash payments with the vouchers therefor, and, if there seemed to be an agreement between the payments and what purported to be evidences that someone had received corresponding sums, then the so-called auditor considered his task completed and wrote out a certificate. This certificate was usually broad and unqualified.

Amateur Auditing. Unfortunately, there are still some audits conducted along the same lines; the word "unfortunately" is used advisedly, for as a rule the firm or corporation which would not be greatly embarrassed financially by a defalcation, even of a considerable sum, is not, generally, the subject of an inefficient audit because its proprietors know enough to engage competent auditors. On the other hand, the institution, society, or club which exists for the purpose of conserving the savings of poor people, rarely procures for itself an efficient audit, but—supposedly to save expense—usually appoints one or more incompetent persons to conduct the audit.

The shortcomings of these amateur auditors and the misery and distress that have been caused by their scandalous incompetency make it unnecessary to deal gently with them. Auditing is much too serious a matter to be trifled with; the evil that can be wrought by an incompetent auditor is hardly less vital—and is infinitely more extensive—than that which may be exercised by an unqualified medical practitioner. The latter, if he be the possessor of an extensive practice, might possibly poison a hundred or so patients in the course of a long career; but the former can, while merely confining his attentions to the affairs of one undertaking (such as a Building Association or Savings Bank), readily accomplish the ruin of tens of thousands and the starvation or suicide of scores, in a much shorter period.

Some may think that this is overstating the case, and will say that there are many amateur auditors who are both capable and conscientious. It is not attempted to dispute the fact that the number of amateur auditors who are known to have failed to justify the confidence reposed in them, is altogether insignificant as compared with the number who are still discharging their functions to the satisfaction of all concerned. It may, however, be remarked that *the satisfaction of all concerned* does not go for much; the auditors of certain disastrous undertakings abroad as well as in the United States exercised their functions, presumably, to *the satisfaction of all concerned* (especially of the criminals) until the moment when the crash occurred; and it is worthy of note that the crash never does occur until the defaulter has taxed his milch-cow beyond its strength, and that when it does occur, it is not the amateur auditor who has brought it about. In fact, until the defaulter is fool enough to kill his golden goose, the amateur auditor always does *continue to discharge his functions to the satisfaction of all concerned;* but does that prove the said auditor to be discharging his functions either capably or conscientiously? Assuredly not.

Again, is it not a fact that, as a class, amateur auditors have been shown, by indisputable statistics, to be more often concerned in cases of disaster than professional auditors? Is it not almost invariably the case that, where professional auditors are concerned, they have themselves detected the frauds, while with amateur auditors the crash almost invariably comes from without?

As, however, this treatise is primarily intended for those who propose to become professional auditors—to whom, alone, the perusal of any discussion upon auditing would be likely to confer any practical advantage—the subject need hardly be discussed further. It is of interest, however, to note that the number of amateur auditors is thinning down each year, thus leaving the field open to those who are fitting themselves to do the work properly.

When we consider the vast number of corporations, beneficial organizations, savings banks, building and loan societies, and other undertakings where the accounts are submitted each year to *auditors;* and when we consider further that the surety companies before renewing the bonds of employes require a certificate to the effect that the accounts have been examined, we gain some idea of the tremendous aggregate of amateur auditing which is being done at the present time. The number of practicing professional auditors is far too small to admit of their performing more than a small proportion of the so-called audits which are undertaken annually in the United States. The appalling number of defalcations occurring each year may be traced largely to the fact that the audits conducted by committees of stockholders or members are not only incomplete, but the very fact that the defaulter knows exactly how (little) his accounts will be investigated gives him such a feeling of security in his manipulations that he becomes more daring and abstracts larger sums than if no audit were expected.

As was stated by an English accountant in this connection —

> The gentlemen appointed have not either the time, the inclination, or, so to speak, the machinery for that thorough examination which we know to be essential if an audit is to be effectual and reliable.

Constant agitation of the inefficiency of amateur auditors will do much to draw the attention of the business public to the danger of employing them. In justice to the amateur, however, it must be said that his duties are frequently thrust upon him, and many of them would gladly surrender their nominal positions of honor to more capable hands. Many substitutions of professional auditors have been at the direct solicitation of the amateurs, so that it is hoped that by a simple process of elimination the good ones will soon go of their own accord and the bad ones will be superseded.

Professional Auditing. Steps in this direction have been taken by many corporations and societies through the introduction of a clause in their by-laws requiring the employment of *certified public accountants,* and the day is probably not far distant when the omission of such a requirement will be the subject of unfavorable comment by the investigating public. It is believed that the controlling spirits in our corporations and societies are becoming sensitive enough on this point to warrant the hope that the practice suggested will become general in a short while.

Professional auditors, both on account of their special training and on account of the fact that their energies are not distracted by other, and dissimilar, occupations, are of course the ideal auditors.

It is quite clear that under no circumstances can any professional audit be regarded as so complete a safeguard as to constitute, in effect, an *insurance* against fraud; and it has been expressly held by the English Court of Appeal that an auditor *is not an insurer.* There is, however, a vast difference between holding an auditor liable as an insurer and expecting him to provide such reasonable safeguards as will, under all normal circumstances, preserve the undertaking against loss owing to dishonesty. Dealing with the matter first of all from the purely commercial—and, therefore, from the lowest possible—standpoint, the minimum premium charged by an insurance company for a guarantee of honesty is thirty cents per hundred dollars, and a higher premium is almost invariably charged in the case of employes. A comparison of this figure with most audit fees will show that, if any credit at all is to be given for the actual work of examining the accounts (which work is, of course, never performed by a liability insurance company), little, if anything, remains to cover an *insurance* of the honesty of the staff; while a slightly broader—and, therefore, more common-sense—view of the situation must, of course, show that the risks which insurance companies, with their large paid-up capitals, can afford to run in the ordinary course of their business are far different from the risks that any individual professional man could prudently accept. Thus, on the grounds of law, equity, and expediency alike, it is clear that an auditor does not guarantee his client against all loss by dishonesty.

This, however, is—it need perhaps hardly be pointed out—a very different thing indeed from an entire disclaimer of all pecuniary responsibility. The mere fact of an auditor attaching his signature to the accounts of an undertaking is a distinct *representation* to all whom it may concern that the accounts in question have been audited by him; and all, therefore, who are entitled to rely upon this representation are clearly entitled to the assurance (using the word in its popular sense) that the work alleged to have been performed has been conducted with a reasonable amount of skill and care. The exact effect of this *assurance* in each separate case must, of course, be determined upon the merits of that case; but the safeguard afforded by the personal responsibility of the auditor is, in itself, by no means a negligible quantity. Further, it may be pointed out that, in the case of professional auditors, whose living depends upon their reputation for skill and care, a far greater measure of security is provided than the mere legal limit of the responsibility of the auditor. For obvious reasons it would be inexpedient to strain this legal responsibility too far, or the effect would inevitably be to drive men of substance out of the profession; the chief safeguard of a professional audit, and its great superiority over an amateur audit, lies thus, not in any increased measure of legal responsibility but in the safeguard afforded by the fact that the professional depends for his livelihood on his business reputation as a careful and skillful auditor, whereas the amateur obviously does not.

Official Auditing. As distinguished from the *professional* auditors we have the *official* auditors, who are employed to audit the accounts of State and Municipal authorities, as well as those appointed by the courts of the various states to examine and pass upon the accounts of decedents' estates, etc. The latter are almost invariably lawyers, and the most important part of their duty appears to be to scrutinize the various transactions, with a view to seeing that they are not *ultra vires*. This is, of course, a very important matter, but it is to be regretted that the attention of official auditors should be—as in point of fact it is—almost entirely restricted to a scrutiny of the accounts from this standpoint, with the result that, although the accounts are supposed to be checked with a view to detecting error and fraud, it has frequently transpired that dishonesty has remained undiscovered for a very considerable period, and that the accounts themselves are grossly inaccurate in essential particulars. It is suggested that, for the accounts of estates, etc., to be really effectively audited, the investigation of the official auditors, with their legal training, should be confined to a scrutiny of the various transactions from a legal point of view, the actual checking of the accounts themselves being performed by professional auditors, who, by their training, are far better qualified than any lawyer to detect both errors in bookkeeping and dishonesty on the part of those having the handling of money. This, it is thought, is the true solution of the difficulty; but, because these matters are frequently settled by favor, and rarely on their merits, it is not likely to be adopted.

Still another class of official auditors includes various employes of National and State Departments who almost invariably secure their positions through political influence, but upon whom devolves a vast amount of work which more properly belongs to professional auditors. It is altogether likely that the inefficiency of many of these men will lead to reforms in this direction, which cannot help increasing the scope and responsibility of the work of the certified public accountant.

It must be taken into consideration, however, that official auditors usually work under disadvantages in that they are not only limited as to the scope of their examinations, but, furthermore, the time at their disposal is usually too limited to admit of a thorough audit in most cases.

The more prominent of the official auditors included in the last class are National and State Bank examiners, State Auditors employed by the Departments of Insurance, Charities, etc., and examiners connected with the Bureau of Corporations of the Department of Commerce and Labor.

In recent years there has been a strong tendency towards Government supervision, with the consequence that the number of official auditors has greatly increased, and in all likelihood the accessions to the ranks will continue. It is not proposed to criticise nor even discuss the work done by these officials, but it is not out of place to call attention to the fact that the salaries attached to the positions are, for the most part, considerably too low to attract first class men.

There are, therefore, two reasons at least why official auditors are not so competent as professional auditors, one being the fact that nearly all of the appointments are in payment of political debts, with the consequent result that wholly inexperienced and incompetent men are frequently chosen; and, secondly, even if the places were filled solely upon the basis of merit, it is not to be expected that capable men will be found, in any great number at least, occupying positions of great responsibility but with small salaries attached.

THE AUDITOR'S QUALIFICATIONS

First, it is very generally conceded that exhaustive knowledge of every department of bookkeeping is the very "A B C" of the auditor's art.

Second in importance, probably, is a thorough acquaintance with commercial law and general business customs regulating the different undertakings in which the auditor may be concerned.

Thirdly, although this point has been bitterly contested by some, a sufficient knowledge, not only of business generally, but of the especial way in which various particular businesses are conducted. In his address at the first meeting of the Institute of Chartered Accountants the President clearly advocated this doctrine when he said:

> No accountant can successfully carry on his practice in all the required branches unless he is a person of considerable knowledge, skill, and experience, for he must be not only acquainted with bookkeeping, which is to him as the alphabet only, but, to put it very briefly, he must have some general knowledge of various trades and their customs . . . . He ought also to have some knowledge of the practice of the Stock Exchange.

If anyone who has commenced this course has not had a fairly thorough training in bookkeeping of a varied nature and in addition has not had sufficient practical experience in business affairs to enable him to think and act quickly, he had better postpone his course in auditing until he has acquired enough experience to make a good student. The only man who can learn anything worth while is he who has the temperament and mental equipment to place himself in a receptive position. Applying this to auditing, it is absurd for every student to take it for granted that a good memory applied to the auditing lessons will make him a good auditor.

You have presented to you a branch of the accountancy profession which requires a prodigious amount of application, a rare combination of tact, business knowledge, and judgment, broadmindedness, ability to concentrate oneself completely for days, perhaps, at a time, and inclination to forego sleep, food, friends, society, and almost—family. And it is well known that not a large proportion of men are willing to so tie themselves down.

The following memorandum prepared by the late Charles W. Haskins, C. P. A., is pertinent to the subject under discussion:

The successful auditor is not made by the study of textbooks or by any other form of merely academic instruction; nor can his work, like that of the bookkeeper, be completely illustrated or tested by any number of set problems in theory or practice. He must be, it is needless to say, a master in accounting and able to comprehend quickly any honest entry made in a book of account; but, inasmuch as he is likely to meet new problems in any piece of work he undertakes, it is desirable that he should have a broad general knowledge of business, and it often happens that he needs the intuitions of the detective no less than the skill of the accountant. His work is necessarily analytic. He must read from the books and records the history of what has been done, and beyond that, he must seek to know if everything that has been done is fully and correctly recorded.

But, while books and teachers cannot make an auditor, they can do much to help him. Much of the accumulated experience of the profession has been preserved in books and periodicals and in traditions, and out of this experience has grown an approved general course of procedure that is of great value.

Your attention is also called to what Mr. A. Lowes Dickinson, C. P. A., has to say on this subject:

Bookkeeping is a simple science, and complete mastery of its principles does not call for any very high order either of intelligence or of education. Bookkeeping, however, is only one, and perhaps the smallest, of the necessary qualifications for the public accountant who would succeed in his profession.

The public accountant acting as a professional auditor must be familiar with the general principles of Commercial and Common Law, including that relating to corporations, bankruptcy, and trusts; he must be acquainted with economic and banking principles; and with those underlying the valuations of property of all kinds. But his knowledge of all these subjects is a means to an end, and that end is the application thereof to that one subject of accounts in which his skill specially lies; while on the more complicated legal, economic, or valuation questions he must, and does, consult those other business advisors who have special skill in these matters. There is probably no other profession, not even excepting that of law, which requires of its members, if they would succeed, a higher standard of education, experience, and general business knowledge.

The moral qualities called for are so high that it should place the profession at the head of all which come into contact with business affairs. The lawyer's duty is first of all to his client, and that duty frequently compels him to avail himself of technicalities and other means of enabling that client to evade the law and its penalties; but the public accountant has only one duty to his client and to the public, and that is to disclose to him or for him "the truth, the whole truth, and nothing but the truth," so far as his abilities and special training to that end enable him to ascertain it. No legal quibbles will save him from moral condemnation if he fails in this duty; no juggling with words and phrases will absolve him from responsibility, moral and often legal, for results which he has reason to know are not what they seem to be, or which, having regard to his special training in business affairs and the accounts relating thereto, he ought to have known did not represent the facts. Errors there may be and must be, and for errors made after full and proper precaution taken and due care exercised no responsibility will lie. But there is no profession in which the results of careless errors or misstatements will more certainly bring retribution.

If enough has not been said to discourage you, you should realize that the professional auditor must not only *know* about as much as three average men to start with, but after he does start he must *do the work* of about three men to keep up the pace. This comes in through the necessity of taking in hand the best possible care of each day's tasks—which is one man's work. Second, there is an actual demand on him to keep up with *general* business and financial conditions—this means reading newspapers which contain reliable business news and which employ financial writers of known ability; the reading of reviews such as appear in the New York Evening Post on Saturdays and in the New York Times Weekly Review; magazines like the Journal of Accountancy, World's Work, Van Norden's and Moody's Magazines, and others which contain many articles bearing on business subjects. Then he must read books and special articles on trade conditions, money systems, foreign exchanges, etc. He should at least read as much along the lines of his future work as is required of a law student along legal lines, and the latter covers tens of thousands of pages of textbooks, reports of cases, digests, etc., before and after his examinations.

The third section of his work consists in the exercise of that dual personality which must be acquired and constantly exercised by reason of the necessity of looking after other work, other clients, and his own assistants—while purportedly concentrating all of his attention for a full day on the particular work in hand. This latter phase is of much importance and many professional auditors, while appreciating its importance, fail to strike or keep a proper balance between the two and do not prosper. The successful lawyer has the same problem before him for he constantly has a number of cases partly finished and must dispose of all of them. So the auditor will have at times far more than he can do, and at other times less than he desires. Therefore it is an important factor in his program to look ahead as well as to take care of current affairs; he practically never cleans up; never feels that a day's work is really complete, even though he has used his brain to its limit for a considerable part of twenty-four hours. How much more desirable it seems to hold down a job where at four or five o'clock you can forget the cares of business and turn to recreation or study along some other line, or become acquainted with your family. But it sounds fine when you read an advertisement which tells you to become a *Certified Public Accountant* and earn twenty-five to one hundred dollars per day and thus gain independence. If becoming independent consists in working under greater pressure than in any other profession or business, subjecting your mind and nerves to a more complete strain than is usual or even possible in legal or other severe mental tasks, and running the constant risk of breaking down in health as is the case with many successful accountants every year, and, in addition to all, incurring for this twenty-five or so dollars a day (if you really get it) a moral and legal responsibility running into perhaps thousands of dollars a day, you can proceed as indicated and gain independence.

When a lawyer renders an important opinion involving thousands or millions of dollars he charges accordingly; when the surgeon performs an important operation he asks a large fee; but when the accountant renders service of equal value, takes the same professional risk as to using reasonable skill, he receives, as a rule, a much smaller fee in proportion.

But if you love the work, if you have a passion for analyzing financial statements, if you can become engrossed in working out complicated problems in accountancy, and if you are in dead earnest about it, then you should forsake all else and plunge into what will prove to be fascinating beyond your utmost hopes. While the profession of the public accountant may never return to you a pecuniary recompense equal to what is commonly known as a *good income*, yet you may have that higher satisfaction of knowing that you have accomplished a work requiring mental skill and effort equal or superior to the highest class of human endeavor.

The statement is frequently made that the real *simon pure* auditor is the one who has gained all his skill through the daily grind of actual experience; but this assertion, like many other ill-considered ones, can be disposed of by citing the case of the man who builds a machine by personally making each individual part and then assembling them; he may, perhaps, build two or three complete machines during his lifetime but would it be reasonable for his son to pursue the same course if he could have someone else make the individual parts, and, under his direction, have someone else put them together. In this way he might build one or more a day. The son would probably know as much as his father with respect to *how* the parts were made and *how* they were assembled, but he could put in the greater part of his time to better advantage than spending it on non-essentials. So the auditor of to-day can secure a good theoretical knowledge of the underlying principles of auditing by using the recorded experiences and suggestions of those who have preceded him. There can be accomplished in months what years of experimenting and testing would hardly cover.

Anything which stimulates thought is valuable, providing, of course, that the thoughts are properly directed. Therefore there is a distinct gain to the man who thinks above the one who does not, for the latter is after all compelled to use his mind sooner or later and, if he waits until a condition arises before he begins to formulate his plan of action, he will not only retard the work and thus displease his client but he will do less valuable work because in thinking and acting simultaneously he does not have time to reflect, but must plunge in and act somehow, and, if he finds later that he did not start right, he must begin again and perhaps he will make an equally unfortunate blunder next time.

Now the majority of audits can be largely mapped out before the work is commenced, and in many instances before the books are inspected for the first time. Conditions may compel a change in procedure but in few cases will there be any change in principle, and in any event you will convey the impression to your client and his staff that you know exactly what you want and, as the first impression is about as important as the last, you will win half the battle before you begin.

It may as well be mentioned here that Audit Companies, composed of bankers and others who are not qualified accountants, cannot expect to have the standing of professional auditors; it is true that there are audit companies owned and controlled exclusively by public accountants of recognized ability but so long as most of them are run on commercial, money-making lines they cannot expect to be treated with respect.

We are supposed to have been considering the qualifications of the members of a *profession*. Is it not absurd to call a corporation a *professional auditor?* Where can personal responsibility for unprofessional conduct be placed? As a matter of fact the whole theory of the confidential relations supposed to exist between a professional man and his clients is upset when a corporation claims to be able to do professional work.

THE OBJECT AND SCOPE OF AN AUDIT

The next point to be considered is the object and extent of an audit. The object of an audit may be said to be threefold:

(1) Detection of fraud.
(2) Detection of technical errors.
(3) Detection of errors of principle.

Detection of Fraud. On account of its intrinsic importance the detection of fraud is clearly entitled to be considered an "object" in itself, although it will be obvious that it can only be concealed by the commission of a technical error, or of an error of principle. It will be appropriate, therefore, to combine the search after fraud with the search for technical and fundamental errors; but it can never be too strongly insisted that the auditor *may* find fraud concealed under *any* item that he is called upon to verify. His research for fraud should therefore be unwearying and constant.

It has been asserted by some that the whole duty of the auditor is to ascertain the exact state of his client's affairs upon a certain given date. This is, in effect, the same thing as saying that he is only responsible for the correctness of the balance sheet. Even if this be the case—and it is open to considerable doubt, as the extent of an auditor's duties depends entirely upon the terms of the express or implied contract between himself and his client—the balance sheet cannot well be verified without a proper examination of the revenue account, which in its turn involves a complete examination of the books.

The detection of fraud is a most important portion of the auditor's duties, and there will be no disputing the contention that the auditor who is able to detect fraud is—other things being equal—a better man than the auditor who cannot. Auditors should, therefore, carefully cultivate this branch of their functions—doubtless the opportunity will not for long be wanting—as it is a branch that their clients will generally appreciate.

Detection of Errors. Before dealing with the various methods to be adopted to insure the detection of errors, it will perhaps not be out of place to inquire what is the *extent* to which an auditor is expected to carry his research. This will naturally vary according to the circumstances of each individual case; but even allowing for this, the greatest diversity of opinion obtains, some claiming that an auditor's duty is confined to a comparison of the balance sheet with the books, while others assert that it is the auditor's duty to trace every transaction back to its first source. Between these two extremes every shade of opinion may be found; and, among others, the opinion of most practical men. Were the auditor's functions limited to a certification that the balance sheet submitted to him was in accordance with the books, it would be difficult to conceive why the amateur auditor should have been found so lamentably wanting; on the other hand, it cannot be denied that—except in concerns of comparative insignificance—a minute scrutiny of *every* item would be quite impossible to the auditor; nor, indeed, is such a detailed audit often necessary, although it is in the highest degree desirable that every concern should possess the means of enabling its own staff to make such an examination for itself.

In undertakings where the transactions are too numerous to justify checking every entry, it is usually possible to test the accuracy of the bulk of the work by aggregates which appear in subsidiary books and ledgers, and which are represented in the general or private ledger by controlling accounts. This is a matter that will be dealt with at some length later on, and its further consideration may be postponed until that time.

It is in the highest degree necessary that the auditor, before commencing his investigation, should thoroughly acquaint himself with the general system upon which the books have been kept.

In England it is customary in most cases, and compulsory in others, for the auditor to be supplied with a list of the books in use, but in this country the list is in nearly all cases either not supplied at all or else it is made by the auditor himself during the progress of the audit. Such a practice is, indeed, very desirable. It cannot be too strongly insisted, however, that such a list can only be of any real utility when the auditor thoroughly grasps the uses, and the possible abuses, of which each book is capable. Numerous instances have been known of an audit entirely failing through neglect of this precaution.

Having thoroughly made himself master of the system, the auditor should look for its weakest points. *Where is fraud most likely to creep in?* he should ask himself; and, if he can find a loop-hole, let him be doubly vigilant there. But never let him for a moment suppose that, because he sees no opportunity for fraud, none can exist. To the intelligent auditor who has grasped his system thoroughly, it is generally practicable to dispense with some portion of the mechanical means of checking. To what extent this can be done with safety must always remain a question for each auditor's own intelligence and experience to answer, and it may be added that probably he must take the risk of any consequences that may ensue; but—so far as the matter can be explained in a general treatise—its solution will be sought after in these lessons.

Before leaving this subject, it may, perhaps, be well to add that, under the expression *mastery of the general system,* perusal of the partnership agreement, the charter and by-laws of a corporation, recorded contracts and agreements, State laws, and any and all other documents that in any important way affect the general constitution of the concern, are included.

ADVANTAGES OF AN AUDIT

The question has been raised from time to time as to what advantages may be reasonably expected from a proper professional audit of accounts and the student who is looking forward to the carreer of a professional auditor should always be ready to do missionary work along the line of educating the uninformed.

In addition to those heretofore mentioned, as coming under the head of the primary *objects* of auditing, it may be pointed out that the proprietor or proprietors of a business will not only have the advantages of having placed before them an accurate statement of their affairs, together with a profit and loss account showing how this position has been arrived at, but that they would also have available certified accounts as to operations and profits which cannot fail to be of the greatest convenience, in the event of their wishing to sell the business to a private individual, or firm, or to an incorporated company, or in the event of one of the partners dying or wishing to retire, or for the purpose of submitting a statement to banks as a basis for loans. One of our most eminent New York bankers in a recent address to a bankers' convention advised those present to require prospective borrowers to furnish statements prepared by *certified public accountants*, and bankers are now advising their customers to submit certified balance sheets.

A Committee of the American Bankers Association is in favor of joint action by all banks looking to certified statements from all borrowers. Such action would increase the work of the *certified public accountant* at least tenfold. Under any of these circumstances the importance of a thoroughly reliable statement of profits cannot well be overestimated, and the convenience it affords—as well as the enhanced price which can be obtained in the event of a sale—will under all normal circumstances more than compensate for any slight expense which the audit may have originally involved. It is, of course, quite clear that one of the reasons an enhanced price may be obtained is, that in consideirng an ordinary statement of profits, no matter how carefully it may be prepared, it is usual for prospective purchasers to "discount" the results, while an audited statement can be safely taken at its face. So far as private firms are concerned, an efficient audit possesses the further advantage that, by reason of its insuring a periodical preparation of reliable accounts, it tends to minimize the risk of partnership disputes, with all their attendant annoyance and expense.

In the case of corporations the audit assumes a slightly different aspect. The company auditor is not expected to act as the financial advisor of the undertaking—a position that is frequently thrust upon upon him in connection with private audits—his duty being rather that of an auditor appointed in the interests of a *silent* partner. It devolves upon him to examine the accounts of their stewardship, prepared by the active partner—*i. e.*, the directors—and to state whether in his opinion those accounts are correct, and fully and fairly disclose the position of affairs, or in what respects they fail to do so.

In addition, it may be pointed out that an auditor, through gross negligence, failing to discover fraud or embezzlement on the part of the employes of the client, may possibly be held liable in damages for the amount lost as a result of his negligence. While no cases bearing on the specific liability of auditors have been decided by any of the higher courts in the United States, the law is very well settled in England that auditors are liable for gross negligence. In the absence of American decisions our courts can be expected to follow the English cases. If they do not, however, they will seek analogous cases on our own books, and, as will be more fully explained later, our courts are reasonably sure to hold auditors strictly accountable.

This liability involves, of course, a corresponding benefit to the persons in whose favor the liability accrues, and is consequently a factor that ought not to be lost sight of in weighing the advantages of an audit. It is, perhaps, hardly necessary to add that the auditor does not insure the honesty of his client's employes.

There does not seem to be any general realization on the part of many auditors of the responsibilities they assume when they undertake to audit the accounts of large concerns for an extremely small fee—frequently fixed in advance—and which on its face does not allow for more than a mere skimming of the affairs of the company. It would, therefore, be no great calamity to the profession as a whole to have an American decision definitely settling this vexatious question.

METHOD OF AUDIT

A comparison of the relative merits and disadvantages of completed and continuous audits is worthy of more attention than it has hitherto attracted.

Continuous Audit. The continuous audit sometimes includes the preparation of the periodical accounts by the auditor or his staff. Its advantages may be said to be: (1) the examination occurs sooner, and consequently any errors committed are more quickly detected and rectified; (2) the periodical visits of the auditor keep the bookkeeper, and in fact the whole clerical force, closer up to their work; (3) a more detailed audit is practicable; (4) the audit can be completed soon after the closing of the books, without unduly hurrying the examination. On the other hand, there is always a danger of items that have been checked by the auditor being altered (either ignorantly or fraudulently) before the final audit; and it is therefore necessary that the one in charge of a continuous audit be very wide awake, and have a full and clear idea of the system under which he is working.

It has been found a good plan to adopt a special *tick* for the verification of all figures upon which a correction appears; as, if this plan is adopted, a correction made after the tick has been affixed will be more readily discovered. It goes without saying that the difference in the two ticks should be as slight as possible, and the bookkeeper should *not* be told what the difference implies.

Completed Audit. The completed audit—by which is meant the audit begun after the trial balance has been completed—obviates this difficulty to a certain extent, and, if the books remain in the auditor's sole custody during the duration of the audit, entirely; but the drawbacks it presents, which are, naturally, the advantages of the continuous audit, render its adoption impracticable, except in small concerns or in partial audits, unless the books can be so arranged that very little detailed checking has to be done by the auditor.

The risks involved in leaving the books in the hands of the bookkeeper during the audit are undoubtedly very considerable; but, so long as these difficulties are not lost sight of, there is but little doubt that common-sense and a general alertness will save the auditor from this—as well as many another—danger. Moreover, where the auditor himself closes the books—and this will not infrequently be the case in small audits conducted continuously—it should be difficult for fraud on the part of the client's staff to altogether escape detection.

It would be well to mention here the extreme importance of completing each item of the audit as soon as possible after it is begun. Extensive frauds have escaped detection because the auditor checked the balances of a ledger one day, and the additions of such balances on the next—some of the items having been altered in the meantime. It will be obvious that had the additions been checked on the same day as the extraction of the balances, and a note taken of the total, the fraud would have been impossible.

Ideal Audit. What may be described as the *ideal* audit is one combining the two modes of investigation just described. It is sometimes attained by the employment of two independent auditors, one performing a continuous and the other a completed audit; but more frequently the continuous audit is done by *staff* auditors, or by the client's ordinary employes under a good system of internal check.

GENERAL PRINCIPLES WHICH UNDERLIE ALL AUDITS

The underlying principles of auditing are theoretical and are not subject to change to fit particular businesses or special systems of account. They are few in number and can be applied indefinitely. Let us examine them—assuming that the audit covers a past date.

(1) The auditor must ascertain that all of the assets shown by the books to have been on hand at a certain date *were* actually on hand.

(2) He must ascertain whether any other assets, not on the books, *should* have been on hand.

(3) He must ascertain that the liabilities shown by the books to be owing at a certain date were *actual* liabilities.

(4) He must ascertain whether or not *all* liabilities were in fact shown by the books.

(5) He must ascertain whether or not liabilities so shown were *properly* incurred.

(6) He must ascertain whether the earnings shown by the books were properly *accounted for*, and whether any of the earnings were *omitted* therefrom.

(7) He must ascertain whether or not the expenses and losses were *properly* stated and supported.

You have been asked and you will be asked again, not only during your student and State Board days, but throughout your entire professional career, "How would you audit the accounts of a blank company? How would you proceed, etc.?"

Special knowledge is not required of any but a very few undertakings (such as stock brokers'), although, of course, it is extremely desirable. The underlying principles of auditing as summarized above can be committed to memory, and to this you need only add the ability to read a balance sheet understandingly to commence an audit.

In the accounts of a printing house, a wagon factory, or a gas company, the captions of the accounts will, naturally, differ; the books will differ somewhat in their ruling; the names of the books will (sometimes) differ—sometimes, for it is quite possible that the consumers' register in the gas company and the pay-roll in the wagon factory will each be called by their proprietors the *red* book.

Do not assume the attitude that there is anything sacred about the usual technical names of ordinary books of account; let your client call his own books by any names he pleases.

If you have not been able to secure the last balance sheet or trial balance, make one up in your head and then proceed — and you will find what you are looking for or else discover quickly what is lacking.

Do not be too technical—leave it to the lawyers. If the minute book of a corporation whose stock is all owned by four or five persons does not indicate a meeting for several years, although the stockholders' personal accounts indicate that profits have been credited thereto, do not assure them that they are in a bad way. If the profits have been credited equitably and the concern has actually earned them and is not insolvent, and if the State has not been defrauded out of taxes, do not make a fuss, and if they wish to continue in the same unscientific way do not stop them and no Court will. Therefore, what accounting or legal principles have really been violated?

It is of course not strictly ethical for an auditor to point out methods of evading or reducing taxes levied upon individuals or corporations, but so long as our corporation laws are inequitable and are framed in utter disregard of convenient accounting there would seem to be no moral turpitude involved in assisting a client to reduce his taxes to a minimum provided, of course, that you keep strictly within the law.

Above all be of value to your client. Make your audit worth a little more to him than the amount of your fee. As an example, take the case of a manufacturer who also owns horses, and where horse feed has been sold; not one such man in fifty cares whether or not his bookkeeper credits a sale of oats to the stable account or to the general sales account, but fifty men out of fifty have a reasonable cause for complaint against an auditor who would fail to discover that oats *were being sold,* and that stable expenses *were increasing* beyond reason, the latter being readily discovered by analyzing the accounts and making up a comparative statement, and this discovery in turn uncovering the fraud. So be practical. Don't attempt the work of a professional auditor unless you *know* that you are able to take such a broad view of a balance sheet that you can see not only what *is* there but what *should be* there.

The most important work of the auditor to-day is to prevent loss, not so much in the way of defalcations, but in the sense of business failures or bankruptcies. A careful audit by a trained professional auditor should disclose the approximately correct financial position of his client. Just as soon as business men actually believe that the certificates of *certified public accountants* to balance sheets are an indication that the assets and liabilities therein stated are dependable, their work will increase more rapidly than they are able to take care of it.

Auditors lose sight of the fact that the closing of books and the resulting balance sheets are based on estimates only. Some men spend many hours in adjusting balance sheet items representing a few hundreds dollars in order to correct a few trifling errors when there were valuations of hundreds of thousands of dollars in plant, merchandise, stocks, etc., all of which were necessarily estimates and which fluctuated from day to day—as must the value of all materials and goods.

Spend more time on essentials and cut down the time on non-essentials. Put yourself in the position of a possible purchaser or stockholder of the concern you are auditing. What items would interest *you* in such a contingency? Surely not the smaller and unimportant items, but those assets on whose value the success or failure of future operations must depend and those liabilities the classifications of which will reveal to you the time in which they must be met.

An engineer recently, when asked about the value of an accountant's services, said that they were of value chiefly to add up and subtract, but that he alone could be of real service in arriving at the valuation of the capital stock of a certain company. This is true of many auditors who do little more than the work described, but it is not true of the auditor who takes the proper view of his work and who realizes that he is not engaged as a bookkeeper, nor as a copyist. The latter term should be applied to all auditors who certify that the balance sheets they submit "are in accordance with the books" and stop there. Any boy from a business college can go through a ledger and verify a trial balance, and such service is worth three or four dollars a day. When you commence to charge that much an hour you must do very different work.

PREPARATIONS AND INSTRUCTIONS

For some years it has been the custom of leading firms of accountants to use a small note book for each audit on which they are engaged.

The form usually preferred consists of a book with printed instructions of a general nature in front, followed by several blank pages for special instructions applicable to the particular audit, and for memoranda to be written up during successive audits.

Specially ruled pages are then provided. Each page is used to record the work done on one book or class of accounts, and enough sheets should be bound in each book to allow for recording the memoranda of the audit of a large undertaking. The pages are printed and ruled somewhat as shown on Page 22.

The most convenient book is one in which each page is ruled with twelve double columns, thus providing for the record of a year's work where the audits are made monthly; six years' work where they are made semi-annually, etc. The columns are arranged so that the date of completing each part of the work may be recorded as well as the initials of the one responsible.

On the other hand, it has been suggested that if a competent man is sent to undertake an audit (and none but competent men should be sent), it is much the better way to leave him unfettered with printed instructions, but allow him to go thoroughly into the whole system in operation, and from the nature of such system, and from what he sees, let him outline his own method of procedure. By this means there is not so much danger of his getting into a semi-careless groove of working, and, moreover, he feels that more responsibility is placed upon him, which acts as an incentive to do the work more thoroughly than would be the case were he working to *rule of thumb*. There is, doubtless, something to be said upon this side of the question; but if so much be left to the assistant, it is a little difficult to see what the principal is expected to do himself. In any case, however, the book is useful as a record of the routine work performed and of the queries raised in the course of audit. It is believed that, in point of fact, some sort of audit note book or equivalent "Program of Audit" is almost invariably used by accountants at the present time.

The printed instructions cannot be more than a mere outline of an auditor's duties, but they can be so framed as to be of material assistance where the auditor uses assistants.

GENERAL CASH	12/31/16	6/30/17	12/31/17	6/30/18	12/31/18	6/30/19	12/31/19	6/30/20
Count cash on hand								
Prove balance first of month								
Verify bank balances								
Examine vouchers								
Verify footings								
Petty cash transfers								
Cash sales transfers								
Postings debits								
Postings credits								

Sample Page of Auditor's Note Book

The following instructions are modeled after a set used for many years, and will be found extremely suggestive. Various modifications of these instructions appear in most audit note books. It is understood, of course, that no attempt is made to lay down any hard and fast rules.

INSTRUCTIONS FOR AUDIT

1. In commencing a new audit obtain a list of all the books kept and of all the persons authorized to receive or pay money and order goods.

2. In the case of a corporation, examine the by-laws and board minutes respecting the receipt and payment of money, and the drawing of checks, notes, etc.

3. Ascertain and take note of the general system upon which the books are constructed, and the plan of checking the correctness of the accounts paid, and whether they are paid exclusively or generally by checks.

4. Report if the accounts and vouchers have been systematically checked and certified by the client's clerks; and note any discrepancies.

5. Compare the cancelled checks with the stubs or check registers and the latter with the cash payments. Compare a portion of the items of deposits, as detailed in check stubs or copy check book, with the receipt side of the cash book, to determine whether all items deposited have been properly entered. Prove the reconciliation of the check book balances at the end of the period with the Bank pass books, and see that the latter are frequently balanced and examined. Secure direct confirmation of the bank balances at date of audit.

6. Note any unusual or extraordinary payments or receipts.

7. In regard to the payments for wages and petty cash, note any unusual items, and see that vouchers for all other payments are kept and produced.

8. In all cases where branch establishments are included in one business, you will be careful to examine into the mode of bringing the returns of operations, accounts, and expenses to the head office.

9. Examine the purchase and sales books, and see that the proper returns of purchases and sales are made by each department; that the purchase and sales books are properly entered up; that the

invoices are properly checked as to quantities and prices; satisfy yourself that every liability of the year is brought into the accounts.

10. The posting in the individual ledgers must be checked with the cash book or thoroughly tested, and a portion of the same ledgers checked with *all* the subsidiary books.

11. All the postings in the private or general ledgers must be checked. The mode of the journalizing must be carefully examined and its correctness tested.

12. Examine the notes receivable and notes payable books, scrutinize any past due, renewed, or protested notes, and make list of same and of the collateral security, if any.

13. Examine the entries and transfers passed through the journal, and check the postings; and although you are not held responsible for the details of classification, it is desirable that you should make any suggestions required, and note any discrepancies, especially in relation to the division thereof on account of capital and revenue accounts respectively.

14. Ask for special instructions as to examination of capital stock and mortgage and bond accounts.

15. In the accounts of stock-taking see that all stock sheets and returns are duly signed by the heads of departments, and that the same are correctly carried forward to the general inventory account; and ascertain and note whether goods finished or in progress are taken at cost price or otherwise; also in large concerns report whether an independent clerk has verified the stock returns in regard to prices and quantities.

16. In checking the profit and loss account, note whether the usual and proper deductions have been made for wear and tear and depreciation.

17. Take care that in the balance sheet no additions are made to expenditure on capital account, except such as are authorized or passed upon by some responsible person, and note the distinction between new construction and mere replacements.

18. Ascertain the correctness of the cash balances, promissory notes, and other securities in hand. Take note of any items or memoranda carried as cash.

To sum up, then, the matter may be stated thus:

At the commencement of an audit the principal should, if possible, go over the ground personally, and decide what work requires to be done. A list of such work (together with any other special notes that may seem desirable) should be entered in the audit note-book, which should be ruled in columns, so that the initials against any item may clearly show who is responsible for the correctness of that item for the period named at the head of the column. As heretofore mentioned, it is practicable to keep books ready printed, which, with but slight alteration, will answer the purposes of any audit; but there will usually be some special circumstances connected with each audit that distinguish it from others, and these circumstances will usually involve some modification of the customary routine obtaining to that class of accounts.

HOW AND WHERE TO BEGIN

In a completed audit it is customary and usually desirable to commence with counting the cash on hand. As a rule it depends on the auditor whether this part of the work proves to be pleasant and satisfactory or whether it results in the bookkeeper or cashier throwing such obstacles in the way that a satisfactory check cannot be obtained. For instance it is quite possible that an auditor will, in his desire to jump in without notice, really upset a cashier who has certain routine methods of his own for handling the cash and cash records. First impressions are very important and it never pays to disarrange the work of a single person in a client's office unless a definite reason exists for proceeding offhand and without giving notice. Where the client informs his staff that the accounts are about to be audited, it is of course desirable for the auditor to take advantage of the chance to surprise the man in charge of the cash. Probably more petty frauds are disclosed in this manner than in any other for it is only too true that a great many men are unable to distinguish between their personal funds and those of their employers. Many of these discrepancies are under one hundred dollars and if the cashier were given time to put his money box in order the shortage would disappear. It may be argued that in such a case no great harm would ensue as there would be no actual money loss to the client. No greater mistake could be made, however, for a man whose moral senses are so blunted that he will pilfer a few dollars is on the highway to further frauds and only needs a good chance to misappropriate anything of value on which he can lay his hands.

In actual practice the auditor's appearance is usually expected; if the audit is a periodical one, an approximate time of commencing is known in advance; and if it is a special engagement, in most cases the negotiations with the auditor are known to all in the client's office.

There the auditor can exercise a little tact or diplomacy; the cashier may for instance balance his cash late in the day and if it is much of a task he will be anxious to hurry off home upon the striking of a balance. The wise auditor will make it a point to tackle him first thing in the morning at a time when the memoranda of the day have not commenced to accumulate and when the cash book is written up and the footings shown.

Very often slips of paper, tickets, and so-called vouchers will make up a large portion of the *cash* in the drawer. In all cases count the actual money first and then list the memoranda. Make your notes full and complete for there may be some delay before you refer to this list again, and cases have been known where unauthorized tickets carried as cash have mysteriously disappeared immediately after an auditor's count of the drawer.

If there is a difference between the amount on hand and the balance called for by the cash book or the round sum carried in the ledger as a petty cash fund, do not assume at once that there is something wrong.

You should put your own footings in the cash book in red ink and initial the figures; with this information in your possession together with your count of the cash drawer you can afford to give the cashier a chance to hunt for the difference. If he has balanced the night before the error will no doubt be in your own figures, and if you have gone about the matter in the right way you can reconcile your items harmoniously. Of course, if a shortage exists it will soon develop unless the cashier makes a good enough explanation, but his evidence must be complete to deceive a good auditor.

After the petty cash or cash drawer is verified, the bank accounts should be proven. The only safe way is to have the pass books sent to the Bank forthwith and after balancing delivered only to you or your representative. This means a delay of a day or two; in the meantime you can proceed with the next item on your program.

In a *special* or *limited* audit there may be no real necessity for counting the cash on hand nor for verifying the bank accounts.

Frequently an auditor is requested to examine into the earnings and financial condition of a certain business and it is expressly understood that an audit is *not* desired. Your client may wish to assume the responsibility of taking the honesty of the accounts for granted and may direct you to confine your investigation to an analysis of the operations and to other special features. You are justified here in following instructions for after all your client is the one to please and unless you are asked to certify to something which you cannot approve there can be no objection to your omitting almost any part of the work upon which you would insist if the audit were supposed to be a complete one.

Too much emphasis cannot be laid upon securing a clear insight into the whole scheme of accounts just as soon as possible. This should not interfere with the orderly carrying out of the program which we will assume has been made up, at least tentatively, before the commencement of the work; but it is sometimes practicable to take a general survey of the various books and their uses, the last trial balance, the journal entries, etc., within a very short space of time, all of which will help in adjusting the program to actual conditions.

WORKING PAPERS

It may seem strange that a chapter should be devoted to the subject of *working papers,* but it is a matter of so much importance that it deserves the emphasis thus placed upon a much neglected topic.

It is too bad that illustrations cannot be given of how things should be done and how they should *not* be done. Perhaps the assertion that the skill of an accountant can always be ascertained by an inspection of his working papers is too sweeping, but it will hold good in so many cases that it may as well be called a general rule and, therefore, warn all prospective auditors that they may be so judged some day.

If a professional man were as careful with his tools as is the mechanic he would do better work and he would save himself many hours of duplicate work. The average lawyer makes his notes on scraps of paper and in such an unsystematic way that an orderly filing of them is impossible. Subsequently (in many cases) the notes cannot be found, or if found they cannot be understood. For-

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tunately for the lawyer his notes are, in a majority of cases, not required later, which accounts perhaps for his carelessness.

Now an accountant should be the personification of order and system. Even if he is not so naturally he must appear so, for his business is to criticise slack methods in others and construct proper systems for those who have none. Therefore, he should at least convey the impression that he appreciates order and good methods and be able to demonstrate this by an exhibition of the highest possible degree of perfection in his own working papers.

Stationery is cheap, far cheaper in proportion than the implements or tools used by mechanics, and yet many accountants will use a scrap of paper or the back of an envelope to make a record in connection with an audit where the item so noted is important enough to be set down in an orderly way on a whole sheet of specially ruled paper. It really seems absurd to devote space to any lengthy review of this matter and it is only because there is such a widely prevalent looseness well known to the writer, that this emphasis is given to the use of good stationery, and importance placed on plenty of stationery always being available.

An accountant or a bookkeeper should have on hand, at all times a complete assortment of specially ruled paper of all sizes. Let him consider this as part of his plant, if need be, although a very small expenditure will secure a large supply of paper. The special rulings should cover every form for which there may be the slightest call.

With respect to money columns, paper should be ruled having from three to eighteen columns. The former will be the most used, but there is a constant call for the latter. Then, of course, ledger-ruled paper will frequently be used, and it is very desirable to have ledger paper with two money columns on both sides. The paper should be furnished in pads of fifty sheets each.

In commencing an audit a full assortment of paper, together with various colored pencils or ink, etc., will be gathered together and preferably carried in a stout leather portfolio with a first-class lock on it and containing convenient *pockets* for papers, pencils, rubber stamps, etc.

Is it not obvious that a client or a client's clerk will have more respect for an auditor who appears to be fully equipped than for a man who is compelled to borrow first a sheet of paper and next a pencil in order to record details of the petty cash as counted.

It is no excuse to urge that many offices of comparatively wealthy concerns are woefully lacking in good stationery and that a little pile of carefully cut used envelopes is still in evidence in many offices. In most cases the supply is sufficient for the bookkeeper who is not in possession of ruled statement paper, and who probably does not see any necessity for having it on hand. He is so blissfully unconscious that there are scores of uses to which he might put some well-ruled paper for the edification and financial benefit of his employer and which would almost surely result in an increase in his own salary that it is not fair to the wide awake man to say too much about it. He will simply make way some day for a more competent successor.

The professional auditor, however, cannot afford to start wrong for he does not have the same opportunity for concealing his incompetency. Stock up, therefore, and keep stocked up and a few extra dollars invested in a big supply of stationery will be the greatest possible help to the young practitioner.

Having the paper—use it. That is, don't even try to economize for it is not safe to temporize and think that a particular memorandum is unimportant and, therefore, just as well recorded on a scrap as on a whole sheet which maybe cost a quarter of a cent.

It will be a great convenience to head up several sheets of paper at the commencement of an audit along the following lines:

Cash vouchers lacking
Errors in footings—cash
Errors in footings—sales book
Errors in postings—private ledger
Etc., etc., etc.

There should be an absolute rule strictly adhered to forbidding the writing of more than one class of errors on the same sheet of paper. If, for instance, an audit developed but three errors in footings and postings, one being in the cash book, one in the journal, and one in the sales ledger, there should be three sheets of paper submitted at the close of the work, one error appearing on each.

The reason for this is evident. No one can tell how many errors *may* develop and it is almost criminal for an accountant to write and rewrite and classify and reclassify his memoranda during the course of an audit when every bit of the rewriting and reclassification could have been avoided by simply using one sheet of paper for one class of errors, or queries.

As intimated above there is a general habit to minimize the importance of working papers and while the client suffers most because his affairs are not properly looked after, yet the auditor who starts in wrong does himself positive harm by not getting the most out of each engagement.

To make the latter statement clearer let us imagine an auditor who is careless about his working papers. He has taken up an audit and, having forgotten to supply himself with stationery, has called on his client's supply. Irregular pieces of scrap paper are supplied to him and on these he makes his various notes and comments. He dislikes to ask too often for paper and so economizes by using both sides of some pieces and fills others to the limit. By the time the audit is completed he has a veritable mess of scraps; he then vainly attempts to make sense out of a lot of notes which were considered of great importance when made and which would have been written out properly if the means had been at hand.

How is it possible for such a man to write a report of the greatest possible value to his client? Even if he finally deciphers all of his notes and does not forget to look on the back of every scrap, he has made so much trouble for himself that in consequence thereof he has written a report in a troubled and irritated frame of mind and his careless style has, of course, permeated the text.

Consider the case of an auditor who takes the trouble to provide himself with an ample supply of paper; who uses a separate sheet for each class of error, suggestion, or comment. When he is ready to unite the report he merely sorts his working papers and with full notes before him, with no irrelevant matters constantly interrupting his train of thought, has simply to proceed in an orderly manner to the close.

Is it worth while?

Who has the best chance for another engagement from the clients so served?

VERIFICATION OF FOOTINGS AND POSTINGS

The auditor of a large concern must give due weight to the general system of accounts in use and to the internal check, if any, which exists. If the concern is large enough there will be an auditing department with its own staff, but in order to do the greatest good to the greatest number it will be assumed that not one of you for some years will be required to audit the accounts of a concern with its own auditing department. The National City Bank of New York is not the best example to use in explaining bank audits; the Pennsylvania Railroad when railroad accounts are considered; nor the United States Steel Corporation when the audit procedure of a manufacturing corporation is outlined. As soon as you commence to secure clients of such size you will know enough about auditing to work out your own salvation; in the meantime, let us address ourselves to establishments doing a comparatively small business—where you will not be overawed by clerks and officers whose salaries make your incomes look sick.

It will have to be a very small business, however, where there can be a justification for verifying every posting and every footing. In past years about half of the auditing which has been done has consisted of the laborious work of checking back postings in detail and verifying the footings of all books including the ledgers. An actual analysis of various defalcations which have occurred in recent years demonstrates the fact that the percentage of frauds which have been concealed by false postings and incorrect footings is small. This small percentage may be covered just as well in what may be called a *test* audit as in a so-called *detailed* audit. Of course where books are out of balance there is a distinct value in checking over as many postings and footings as possible, for it not only gives the auditor a chance to see at first hand the sort of errors which the bookkeepers have been making and thus furnishing data for his report, but it helps along the current work, and if all the differences are located he will earn the goodwill of the bookkeeper, which is a most important matter. The undertaking of this sort of work is dangerous, however, unless it has been definitely arranged with the client and he is convinced that part of the work being done is that of an accountant and part that of an auditor.

Some auditors are fond of testing the ledger postings by making up their own controlling accounts, or else reversing the process and, by analyzing each ledger account, extract the totals of each source of original entry. There are certain very exceptional cases where this plan may be followed, principally where the ledger is not in balance. It is an old-fashioned scheme, however, and has no place under modern methods in a well-ordered plan. It is useless to minimize the importance to the auditor of being able to say subsequently that he has ascertained that the books *were* in balance and that what might be called the arithmetical equilibrium *was* fully established; but this benefit is small compared to the enormous advantages which accrue to the auditor who knows enough to be able to prove such work by tests and thus gain valuable time which can be devoted to other and more important work—more important because the largest number of frauds occur in other places than footings and postings. Therefore in that vast number of audits where there has been no fraud, but where the auditor wishes to justify his employment, *all* the constructive or labor-saving suggestions will arise from the other portions of the work.

Many cases are known of audits, occupying say four weeks, where the verification of footings and postings has taken three weeks and all the rest of the audit has taken one week. Obviously there can be no hard and fast rule as to the time each class of work should take and it is not worth while to attempt to approximate one, but it must be obvious that unless there is some specific justification for this division it would be far better to spend one week on postings and footings and three weeks on work which afterwards may mean something to the clients.

Now the question arises: Is it not possible that in cutting down the work by two-thirds too much has been taken for granted and that an auditor would not be excused who neglected such a material part of the work as footings and postings? The latter part is answered by the statement that no auditor can be excused who *neglects any part of the work;* the former query is a pertinent one and you must therefore be sure in each case which is presented that you take nothing for granted until you have made such intelligent and exhaustive tests as will assure you that the accounts as a whole are, in your judgment, correct. Note the expression *in your judgment*, for the moment the auditor is deprived of the free exercise of his judgment he is reduced to the position of an automaton, and the title of *professional* auditor becomes a misnomer. What is an intelligent and exhaustive test of postings and footings? In answering, first of all direct your attention to the general groups into which they can be divided. The four great divisions are:

(1) The records of the purchase of goods or materials as reflected in purchase or invoice books, voucher registers, etc.

(2) The records of sales as found in sales books or binders or in any one of the various good or bad forms used.

(3) The receipt of cash.

(4) The payment of cash.

The majority of postings and footings occur with respect to the records mentioned so that if you can agree on what constitutes a fair test of these groups or divisions you can safely leave the remaining records to be dealt with on their merits.

The following suggestions are definitely grounded upon the fundamental principle that no audit is complete unless the trial balances of all the ledgers have been proved; there may be exceptions as, for instance, a department store where they have one hundred individual ledgers; but it has been agreed to omit the procedure required in such a concern, and it will be assumed that in all the cases under consideration, the trial balances of *all* ledgers will be verified.

Purchase Records. If fraud exists with respect to purchases it usually will be found in overcharges, or fictitious vendors, and very seldom, if ever, will there be any concealment of fraud through manipulations of footings or postings. It is assumed that auditors are not seeking to locate clerical errors in trial balances, but to concern themselves with the possibility of the trial balance, which is ostensibly in agreement, being *forced.* As this occurs not only in cases where fraud exists, but also where there is a lazy or incompetent bookkeeper, one must always be on the lookout for evidence of forced balances. As a rule, however, where a trial balance *is* forced, there will be no alteration in the current postings and footings. The usual and popular expedient is to alter in the ledger the last posting, during the period, to one of the large nominal accounts, such as sales or expenses.

These remarks as to the trial balance have a bearing on purchase records to the extent that whatever detail work is omitted, the verification of the postings of the monthly or periodical aggregates must not be forgotten. By this is meant the debit side of the purchase accounts. Usually you can safely omit the checking of all of the credit postings.

As to the footings in a fairly large concern, prove the footings of about every tenth or twelfth page, in addition to the last page of each month, where the audit covers a period of one year.

In a smaller concern prove, say, every fifth or sixth page, including always the last page of each month. It is hard to imagine, and wide experience has not developed a case, where such a percentage would not have been sufficient in any given audit where, as a matter of fact, *every page* was footed. That is, the verification of every page did not disclose any discrepancies (except as hereafter noted) so that, naturally, the work could have been cut down eleven-twelfths with equal results (except as to cost to the client). The last page in every case is mentioned particularly because instances are known where such figures have been altered.

Sales Records. The monthly or other aggregates of the sales postings should be checked. If there is a controlling account with customers in the general ledger, it will not be necessary to verify in detail the postings of the customers' ledgers. If there is no controlling account, you should construct one, so in neither case is it worth while to prove the debit postings.

Remember right here that there is more fraud in connection with accounts receivable than in any other department of a business; but the fraud does not consist in a failure to post the sales which are recorded *in the sales books* to the ledgers. The fraud comes in through omitting the sales from the sales records entirely or else through failure to enter cash collections.

It is, of course, important to know that all the sales appearing in the sales record have been posted; as stated above this can be and should be covered by use of a controlling account as the items are of such a nature that they are grouped in the original records, and where you can prove the posting of a thousand entries in one you save time. This method assumes, of course, that there will be a verified trial balance of the customers' ledgers to support the controlling account. The question of accounts which have been collected, but which do not show the collections, will be considered later.

As to footings, one should be a shade more apprehensive than with purchase records. In a large concern prove, say, every eighth page, and in a small concern, say, every third or fourth page, always including the last and sometimes the next to the last page of each month.

Cash Receipts. In all well-regulated concerns *all* cash receipts are deposited in the bank and all payments, therefore, must be made from the bank account. This almost disposes of the question of checking the footings of the cash book. Where the bank account is proved and the cash receipts and payments are traced into and out of the bank it would seem logical that the footings of the cash book could be automatically proved at the same time. If this does not seem to be a complete verification, in a large business you may consider that, in addition thereto, the proving of every third or fourth page would be a complete check.

The postings of the nominal accounts should usually be verified, not because there is any great danger of fraud lurking therein, but for the purpose of locating any possible posting to a wrong account. For instance, it frequently happens that part of a plant or old machinery may be sold. Sometimes such items are posted to an earning account instead of to a capital or a reserve account. These postings are as a rule few in number and are important enough to be verified *in extenso.*

The postings to the credit of customers should be proved in totals through the controlling accounts. If there is no controlling account and one cannot be constructed readily you should make a fair test of the individual ledger credits, working, of course, from the ledger back to the cash book and not *vice versâ.* The reason for this is obvious; if a customer has been credited with an amount which purports to have been posted from the cash book, but which, as a matter of fact, is not entered there at all you would not discover such items by using the cash book as a basis. And it would not be safe to depend on looking through the ledger subsequently to see that all items are ticked. It is sometimes suggested that the chief danger in such practice lies in the possibility that the ledger clerk can, where the work is not finished at a sitting, supply the ledger tick marks himself. There is not much basis for this fear, but it would be foolish to expose oneself to it where no necessity exists.

If it is thought wise to verify the individual postings to the customers' accounts, do not check every one unless some pretty good ground for suspicion exists. If the audit is a periodical one, say, for six months, cover, say, half the letters of the alphabet only. Six months later cover the other half, or cover one-fourth only each audit and take two years to the entire list. It is not an infrequent fraud wherein ledger credits do not appear as cash debits, but it is hard to imagine one case where a good test would not have disclosed the fraud. You can imagine a man who would confine his peculations to customers whose names commenced with X Y Z only, but surely your imagination is not strong enough to induce you to cover X Y Z every audit. You can afford to take your chances that he will inadvertently tackle an *A* customer, in which case he would not escape the first time and if he only used one or two letters he would still be caught in a reasonable time.

Cash Payments. The footings if proved with the bank account need not be verified a second time. Many instances have been found where cash book footings have been overstated but in every case a reconcilement of the cash footings with the bank account would have revealed the fraud.

The auditor should insist, wherever feasible, on having *all* payments represented by checks. It reduces the possibility of manipulation of cash book footings to a minimum, and, for this reason alone, is worth all the trouble which may be occasioned by the necessity of depositing all currency receipts. If the footings cannot be proved by the bank account, verify, say, every third or fourth page.

If the cash book is properly columnarized and a controlling account is kept with accounts payable, most of the postings will consist of monthly aggregates, which should be checked to see that they do not get into the wrong ledger account. Here, however, it is important to avoid duplication. In many audits it is desirable to make full analyses of the various expense and purchase accounts for use in the reports. This work should be done at the time of the verification of the postings for it may be found that the details in the ledger are not sufficient and the cash book pages must then be consulted again.

Do not verify the postings to the individual accounts unless some special reason appears. The payments are supposed to be vouched to establish their authenticity and it is not necessary to trace the payment to the debits of the accounts. A controlling account supported by a trial balance of the subsidiary ledger is a good proof, but even where this is *not* in evidence the checking of the debit postings is usually superfluous.

As against the practice—fairly common—of checking all postings and footings, the above will seem radical. It is not radical if it is approved after full discussion and thought, and if it will stand the additional test of each particular audit. Where the slightest cause for suspicion exists, there must be a more careful study of the situation, but still that does not imply that because there *is* a probability that something is wrong, therefore, the auditor should jump in blindly and tick every entry in the books. Even with a definite knowledge of fraud there is a good argument against the immediate verification of all the arithmetical work in the books.

Other Records. In many lines of business the books of account bear distinctive titles and it may be that these books have not been called by their technical names in the foregoing pages. For instance, in a publishing business you may not find a sales book so called, but you, no doubt, will find a subscription record and an advertising register. With these books, as to footings and postings, proceed about the same as with regulation sales book—as a matter of fact that is exactly what these two records represent—sales of advertising space and sales of copies of the publication for a stated period (subscriptions). It is far more satisfactory to have an illuminating title like this for a book than it is to attempt to cut down the number of account books in use and perhaps journalize every transaction. Aside from the saving of labor to a bookkeeper through the use of books for special purposes is the more important function of being clear to one who does not understand bookkeeping. Most business men are at sea when they try to understand an ordinary journal, but if you label a book *subscription record* or *advertising register* anyone with ordinary intelligence knows exactly what to look for within its pages.

EXAMINATION OF VOUCHERS

Vouchers. Not many years ago one of the principal features of every audit was the inspection and verification of vouchers for cash payments. In many instances certificates stated without reserve that the *accounts have been audited and found to be correct* when as a matter of fact absolutely nothing was done except compare certain receipts, purporting to represent payments of cash and acknowledgments thereof, with the payment side of the cash book. Look at some of the certificates appearing at the end of treasurer's statements in pulished reports of charitable and religious institutions and you will find just such a state of affairs.

It seemed conclusive to many people that if a cashier or a treasurer could furnish a voucher for every item of cash disbursement there simply could not be anything wrong about the accounts as a whole. As the science of accounts developed, some auditors were not satisfied with this and they supplemented the examination of the vouchers by a complete verification of the footings and postings. Having done this they were content and felt that great strides had been made in the art. Add to the above the checking of the trial balance and you will have the full program of a large percentage of audits certainly up to say ten or fifteen years ago. Sorry to relate, a very considerable number of present day audits vary little from this procedure in spite of the fact that professional auditors now have an opportunity to profit by the mistakes of their predecessors and to apply more scientific rules to their work. Some auditors, however, do all their thinking after they start to work, and will not take the time and trouble to plan ahead.

An estimate can be made of the number of defalcations out of one thousand which would have been discovered by a verification of the vouchers, footings, postings, and trial balances: certainly not 50% and probably not 30%. But, it will be said, if 30% or more of defalcations would be disclosed by an examination along the lines described, would this not prove not only the value but the necessity of such work? Of course it would, but speaking relatively—which is more important, the work which would disclose 70% of fraud or the routine which would disclose but 30%? Granted that the former is the more important, the point is proved that an auditor must at all times study and think, and that he must appreciate the need of preparing all his plans on a *relative* scale Conceding the obvious conclusion that no audit can or should embrace a complete duplication of all the transactions of the period under review, then the cutting out process must proceed along the lines of *greatest* resistance, and the points covered will then coincide with the weak spots.

Coming back to vouchers, it must be admitted that their examination is necessary and valuable, but with respect to *relative* importance, such work will be classified down towards the end of the list. If a careful comparison of vouchers with cash books would disclose improper or extravagant purchases or expenses it would raise the value, but unfortunately the ordinary voucher, so called, is usually little more than a receipt for a given sum of money and is usually of so little practical use that many concerns never insist on them nor do they preserve them when they are furnished.

If a check bears on its face or back any indication of its purpose it is the best receipt for money paid that can be secured; if it bears no evidence as to its purpose, but if it can be readily identified with a particular bill or invoice it still is a better voucher than a receipted bill. The comparison of vouchers with a cash book without the identification of the entries in the cash book with the checks is worse than negligence, for the sole purpose of vouching cash is to ascertain, as nearly as possible, that the payments represent an equivalent in value to the payors, and that the equivalent—that is the discharge of a like liability—is received when the cash is paid. A mere receipt for so much money, which can readily be forged, is poor evidence of a legitimate payment, but a paid check, properly endorsed and otherwise identified as representing a definite liability is pretty fair proof that the money has reached a creditor; follow this up with a careful scrutiny of the documents supporting the check and you will be on the right track.

An auditor can be of great assistance to his client by looking into the various operations surrounding a payment as well as passing on the question as to whether or not it is a *bonâ fide* transaction. The bill or invoice being paid, if representing a purchase, should bear on its face all the proper marks or initials to indicate that the goods or materials were received in proper order as to quality and quantity; that they were as ordered, which includes an approval of the price, provided it was recorded at the time the order was given, or an approval by a responsible official where the price was not fixed in advance; that if the quotation was *delivery free* freight is not paid or, if paid, has been charged back to the vendor; that in all other respects the purchase was in order including the checking of the calculations, the notations as to the department or account to be charged, etc. Where such a system is in force it will not be necessary to inspect every bill; a complete test should be made to see that there is a strict compliance with the rule, but this test will be complete by taking, say, three or four months out of twelve and examining each item, always including the last month of the period. You should then look over the cash book very carefully for the other eight or nine months and in connection with your analysis of the ledger accounts you can note any unusual or suspicious looking item and call for the voucher covering it; this will obviate the necessity of checking over the great mass of documents which you have satisfied yourself by your general test to be for the proper and ordinary purposes of your client. The analysis of the ledger accounts is important wherever charges have been made to plant accounts, and these, of course, must always be supported by proper vouchers.

Vouchers for Petty Cash Payments, Pay-Roll, Etc. Where payments are made covering expenses and wages, and for similar purposes, and where there is no ledger account with the payee, great care must be taken to ascertain that the amounts have not been overstated, either by fraudulently raising the figures on the bill or memorandum or by entering a larger amount in the cash book than the voucher represents.

Taking up the question of wages, it is a well-known fact that receipts are worthless so far as they serve as a check on the amount paid It may be valuable to a concern to have a receipt from each man to guard against subsequent disputes, but these receipts are of little real value to an auditor who is attempting to prove to his own satisfaction that the aggregate amounts of the pay-roll payments have reached the hands of those entitled thereto. You can think this out for yourselves with the one suggestion that the best check on wages' payments is to use as many people as possible during the various stages from the point where the time is recorded to the final handing out of the envelopes. If the latter, for instance, is done by an employe who has no access to the rolls nor to the cash, it makes a good check. If an auditor is on hand when the men are being paid off he should supervise the operation or take a more active part if feasible. Obviously, this procedure would be of no value unless it was done without notice to *anyone*.

Petty cash vouchers are often altered, and petty cash payments are frequently the subject of manipulation. Junior clerks see how easy it is to hand in a memorandum calling for $10.00 postage when

$5.00 is all that is necessary, or in fact used, and they gradually extend their field of operation until considerable sums are abstracted in various ways. Postage or mail books are in general use in England and if more generally adopted here would save many a boy from the penitentiary. It is a grave responsibility for any employer to permit, or any auditor to approve, a loose or inefficient system for handling petty cash, postage, etc.

It is not generally known that a large percentage of young boys who are employed throughout the business districts of our large cities and who have access to or can draw from petty cash funds, are constantly following the races through the worthless afternoon papers or through pool rooms and in other ways. Some of the conversations which take place in large offices indicate the keenest interest in the results of the races not only near New York, but throughout the country. It is a disgrace to our civilization that newspapers like "The New York Evening Journal," which print sermons on the editorial page and *one best bet* on the first page should be allowed to exist.

Professional auditors should take a firm stand on all questions, public or private, which affect gambling. An auditor who countenances gambling is violating the unwritten code of ethics of the profession just as flagrantly as would a physician who encouraged his patients to use poisons or drugs in the hope of working up more business.

Coming back to petty cash vouchers—in view of the informality of so many of them, the auditor's best protection is to have some responsible person scrutinize the payments, rather than the vouchers themselves, and indicate his approval by initialing each page or each month of the petty cash book. The whole question of vouchers is one which calls for the exercise of good judgment rather than the application of fixed rules, and you should take this view of it rather than to feel that it is merely a matter of comparing pieces of paper with certain entries on the payment side of a cash book.

There is, of course, no great objection to examining every voucher where the concern is not too large, and where you have plenty of time, and where you do it right; but you should relegate the inspection of vouchers to its proper place, and if you are pressed for time attend first to more important matters.

A practical consideration in connection with vouching is with regard to the actual marks an auditor should make to indicate that this work has been performed. In the first place, the voucher should be so cancelled that it cannot be afterwards used as a voucher in support of another entry; and, in the second place, the entry that has been vouched should be so marked that the auditor can afterwards readily ascertain what items remain unvouched. With regard to the marking of the vouchers, the following methods are in use:

(1) A large "tick" across the face of the voucher.

(2) The auditor's initials, or the letter "E".

(3) A rubber stamp bearing the name of the auditor either with or without the clerk's initials.

(4) The auditor's initial cut out by using a conductor's punch.

As the main object is to so disfigure the voucher that it cannot again be used in support of another entry, it is not very material which of these methods be employed. It may be remarked, however, that initials necessarily take longer to make than a tick or an impression from a rubber stamp. The third method is, it is thought, generally to be preferred, as indicating clearly who is responsible for the cancellation. In other cases the record in the audit note book ought to be sufficient for this particular purpose. With regard to the marking of the entries in the books as being vouched, some firms employ a distinct V, which has the advantage of being clearly distinguished among various classes of ticks, and so enabling a list of missing vouchers to be more readily compiled. Sometimes, however, an imperfect voucher is accepted, and in such a case it seems desirable that a special form of mark should be employed, so as to guard against the real voucher being produced in support of another entry. Many firms, therefore, employ the following marks by way of a *cross-tick* against the ordinary posting tick:

Where a regular voucher has been produced ×.

Where the only voucher is an endorsed check ×.

Where payment was made on a bearer check, but the entry has been otherwise vouched ×.

THE TRIAL BALANCE

One of the most important matters in any audit is the verification of the trial balance. By this is not meant the routine checking of the ledger footings and extraction of the balances merely to test its arithmetical accuracy, but that careful examination or study of it which will throw light on the entire and detailed working of the whole system. Every ledger caption should mean something. After some experience an auditor by simply looking at the various accounts scheduled on the trial balance will be able to discuss the whole system and without further data suggest improvements therein. Of course no sane practitioner would commit himself after such a cursory glance, but he will have gained sufficient insight into the affairs of his client to suggest the next and succeeding steps in the audit. Do not spend too much time on trifling errors in a trial balance, but take enough time to satisfy yourself that the trial balance honestly represents the face of the ledgers and that it may be relied on as a basis for report or balance sheet.

Having once secured a trial balance that he knows has not been tampered with, the auditor may cease to trouble himself about the materials from which it was built up—they may be manipulated and altered up and down, but he holds in his own hand the key of the whole position. Nor need the course indicated cause offense, or even excite suspicion, if carried out with tact. It is generally an easy matter to hang on to a list of balances, and, even where this cannot be accomplished unostentatiously, a few notes and private marks will often serve the purpose. It is not a difficult matter to acquire a *tick* which, while looking much the same as any other, can be instantly distinguished from a forgery. A man forging ticks will be much less careful as to their form than a man forging initials, and can thus be more often detected. It is not a bad plan to carry about one's own colored ink, and to take care that it is a different make from that in general use at the offices where the audit is conducted. The auditor, however, must be careful not to talk about these things; and he should also be careful not to leave his ink about. It is often a great advantage to employ ink of a different color from that used at the preceding audit.

In the foregoing paragraph it has been assumed that an exact balance has been arrived at by the bookkeepers before the auditor commences his investigation. This, of course, is as it should be, for clearly it is no part of the auditor's duties (as such) to balance the books. The question arises, however, as to whether an auditor is ever justified in passing accounts that do not exactly balance. Obviously, accounts that do not balance cannot, in the nature of things, be entirely accurate; but so long as the auditor is satisfied that the discrepancy arises from one error, and not from the combined effect of numerous errors, and so long as the difference is so small as to have no practical effect upon the ultimate result, the absence of an accurate balance may sometimes be disregarded. Here, as elsewhere, however, much depends upon circumstances; a *nominal* or *private* ledger—or indeed, any ledger with less than, say 500 accounts—ought certainly to balance exactly; on the other hand, it may be impracticable to insist on an absolute balance with a large *individual* ledger—hence the importance of these balances being tested at frequent intervals, say, monthly at least.

VERIFICATION OF INCOME

It is not often advisable to make statements which cannot be supported by facts, and it is obvious that a dependable analysis of frauds will never be compiled from accurate data, but an estimate prepared from long experience supports the assertion that nearly, if not quite, 75% of defalcations and frauds are connected directly with a failure to account for income or cash receipts, and less than 25% with methods of improperly diverting cash after it has found its way into the treasury.

Here will be discussed, as of the more importance, the 75% division. This, in turn, can be divided into two groups; the first is made up of that class of frauds which consist in a failure to enter in the books, or at least in the books which form a part of the double entry system, any record whatever of the sale or delivery of goods or materials; the second class includes those cases where there is a record of the original sale or delivery, but where the subsequent collection is omitted entirely or where the entry of collection is postponed until a later date. Obviously, the former methods will be the ones most easily concealed and the auditor must, therefore, be especially vigilant in this part of the audit. When the audit is completed one should be able to certify that in his opinion all revenue or earnings have been properly accounted for. This does not mean that the cash which was duly entered in the cash book and the sales which were in due course entered in the sales records were assumed by you to be *all* the cash receipts and *all* the sales, without further investigation.

It is very important to ascertain that all cash sales are accounted for. In nearly every business some sales are collected for at once and are not passed through the customers' ledgers. Do not allow the fact that the general ledger shows very few such transactions, to influence you unless you have made inquiry from some one other than the cashier. One instance may be cited where the auditor found that there were practically no cash sales accounted for; he inquired as to this and was informed that it was not the custom to make such sales; further investigation, however, developed the fact that the cash sales had been quite large, but that his first informant had pocketed the whole proceeds. In this case a rough memorandum was discovered which enabled him to locate the entire shortage, and it will be found the rule rather than the exception to find some sort of record which can be compared with the cash book. The formal original records, which are nicely written up and which agree exactly with the other books are not the ones you want. If you can find the first *originals* in rough form, perhaps, and very dirty and almost illegible, there is no doubt about the advisability of using such records in preference to the fair copies, because the latter are frequently written up by the same men who write up the final cash records, and when you know that professional auditors testify that original records corresponding closely to the above description have revealed to them perhaps more instances of fraud than any other source, you will understand the importance placed upon it.

Included in the latter statement are the original records of sales and the original records of shipments. You rarely find that order books or shipment or delivery books are considered among the formal books of account, and it is perhaps fortunate for the auditor that this is so, because in many cases where the examination of these records has revealed fraud, there has been great astonishment and usually indignation that an auditor should ask to see *memorandum* books. If the defaulters in most of these cases had suspected that the books mentioned would be called for they could readily have been destroyed or altered before examination.

Wherever possible, therefore, secure the order books and compare some of them with the ledgers to see that the orders were filled. If not, find out why not. It may be that through carelessness an order was not filled and that it was not reported. Here is a good chance to be of positive value to your client.

Orders may have been filled and the proceeds collected and not accounted for. This should be discovered by comparing the shipping or delivery books with the sales records. Fair tests here are all that are necessary because any system of fraud involving the above methods has been, in practically all known cases, continuous, so that a complete comparison for a few weeks or a month would cover the point quite as well as a more exhaustive comparison.

A fruitful source, which you should not overlook in your effort to ascertain whether or not all the income has been accounted for, is the balance sheet—or the trial balance after closing, which may state the various items of assets in greater detail than the balance sheet. Give each item proper thought to determine the possibility of the income therefrom being omitted from the books. Take, for instance, a mining company where the balance sheet shows that it owns workmen's houses. You will then have to find out if all of the rents of *all* the houses have been accounted for. Furthermore, where there are tenants you will usually find sales of coal and other fuel and all sorts of supplies. If you do not find any record of such sales inquire from some one *higher up* why. Don't take the cashier's word for it.

Another instance is a firm or corporation which has invested part of its surplus in bonds or stocks or some other outside investment. See to it that all income which should have been accounted for has found its way into bank.

These are merely suggestive and serve to illustrate the idea that you must not use the receipt side of the cash book as a basis for verifying the actual income or receipts. Work from every outside interest you can find *to* the cash book and you will then be reasonably safe.

There is not the same difficulty with the cases where there has been some record in one of the original books of account of a sale, the subsequent collection of which has not been accounted for, or where the sales have been debited in due course to customers, but the collections have not been credited.

The former class will be disclosed by any good test of the footings of the sales records, and the proof of the postings of same to the customers' ledgers. This has been fully covered.

The instances where credits have been arbitrarily made to customers' accounts, but without corresponding entry in the cash book, have also been covered.

You now come to what is believed to be the most prolific source of fraud practiced, viz, the failure to enter in any book, collections from customers. The detection of such fraud is difficult and it will pay, therefore, to devote considerable time and space to the subject.

The most common practice can be illustrated as follows:

Customer *A* on January 2d pays $112.53, say, by check; the cashier fails to enter the collection in his books. If he has made other collections in currency exceeding $112.53, he will deposit the check and take the equivalent in currency from the drawer, thus obviating the necessity of forging the endorsement and having the check cashed, although the latter method is more common than is generally supposed. In the first case the fraud might be discovered by comparing the details of the cash receipts with the details of the bank deposits as listed in the check stubs or copybooks, but this record is not always available and auditors frequently find that where such a fraudulent practice exists the record of the bank deposit has been altered or made up to correspond with the cash book which makes the comparison of no value.

In most cases it is not considered safe to hold out collections too long for fear some one in the office will discover that customer *A* has not paid and go after him. The cashier, therefore, on January 31st, decides that it will not be wise to hold up *A's* credit any longer, and accordingly credits him with $112.53 in the cash book and the amount finds its way to the ledger in due course. By this time the cashier is further in trouble and customer *B*, having on this day (31st of January) paid $250.00, also in check, he fails to enter the amount and thus creates a cash *over* of $137.47, which he removes from the cash drawer as soon as he can accumulate that amount of currency.

Here again may be urged the importance of recommending to your clients the daily deposit of all receipts — currency and checks — and there will be far less opportunity for fraud afforded to a clerk dishonestly inclined.

And so it continues—he must soon credit *B* with $250.00 and he therefore calls on *C*, or by this time *A* may have paid again. In all cases it will be found that the amount grows larger and larger until in many cases the discovery is forced without the aid of an outside auditor. In more cases, however, it goes on for years and unfortunately more than once such a practice has been in full force during, prior, and subsequent to, periodical audits by public accountants.

The best way to detect such a defalcation is for the auditor to send out statements to all customers, requesting them to confirm the accuracy of the balances on a blank enclosed for the purpose, which, in turn, is returned direct to the auditor's office. This is the practice followed by many leading auditors and where the client does not or will not consent to such a course you should put the responsibility for the integrity of the customers' balances squarely up to him. Every year the objections to this practice grow less and no doubt within a very few years the verification of customers' outstanding balances by correspondence will be the rule rather than the exception.

It has been found that this independent check is of value not only in the disclosure of fraud but also in the insight which it gives to the condition of the accounts with respect to unadjusted items, allowances, etc. It is needless to say that some bookkeepers are careless and others lazy, and where this exists it is important for the auditor to find it out. In all classes of business various claims and errors crop out from time to time; where these affect customers' accounts, adjusting entries should be made at once, otherwise the outstanding balances do not reflect the true state of the accounts. If a bookkeeper *is* lazy or careless it will soon develop in the replies from customers to the requests for confirmations. In several instances this inquiry has demonstrated a very unsatisfactory condition where the cause was carelessness and not fraud. In many instances, however, carelessness leads to fraud and so where you can check loose methods you may really be preventing fraud, and the auditor who prevents fraud is a very useful person.

It is, of course, impossible in a limited space to suggest more than a bare outline of the procedure to be followed in ascertaining that all income has been accounted for.

The very nature of a business will suggest to an intelligent auditor practically every source of revenue, special and ordinary. For instance in the audit of a land or real estate company it would at once occur to the auditor that he must look carefully for receipts from sales of building lots. Now the last places to look are the receipt side of the cash book and the sales book or other record of the sales, although when you ask for a record of sales, that is the point to which you will be directed and in at least nine out of ten times, the client will expect you to take these records as starting points rather than to expect you to consider such a record as a goal *to* which you are working.

There probably never has been a land company which did not issue a map of its property nicely marked off into lots with a number and block for every lot. What could be simpler than for the auditor to take a map and one of the printed price lists usually available and proceed to account for every lot on the map. All lots sold for less than list price should pass inspection by a duly authorized officer. All lots not accounted for as sold should be on the *for sale* list or else specified as being set apart for particular purposes; these purposes to be evidenced by resolutions of the board of directors or other authority properly expressed.

As most lots are sold on installments the auditor will immediately resolve to look for collections of interest on the deferred installments and will require that every item be accounted for.

And so through the rather simple processes of most business enterprises it will be possible to *think* out the sources of revenue instead of using the books as a guide; by so doing you will avoid the danger of being influenced by the entries which are shown therein and thus lose sight of the fact that those entries are not all which *should* appear.

THE BALANCE SHEET

The Audit of the Balance Sheet. That part of an audit has been covered which embraces the verification of income and expenses, together with the proper tests of postings, footings, and trial balances. The balance sheet has now to be considered and the best and most comprehensive manner of satisfying ourselves that it represents the true financial position of any given firm or corporation at a specified date, discussed.

The ground already covered is the most important from the standpoint of our clients and their relations to their employes, while the question of the accuracy or inaccuracy of a balance sheet affects proprietors—whether partners or stockholders—also the public whenever the balance sheet is submitted to a creditor, a bank, or a prospective purchaser, or as a basis of purchase or sale from one partner to another.

The auditor must determine for himself, based on the circumstances of each particular case, whether or not an audit directed principally to transactions prior to and leading up to a balance sheet will be of equal or greater value to his client than an audit which very largely takes for granted the integrity of the current operations and in which the chief interest devolves upon the assets and liabilities—do they or do they not correctly represent the true financial position at a certain date. The latter is a balance sheet audit so-called. Where there is an auditing department properly conducted, or where the purpose of the investigation is to determine the net worth of the concern, it is perfectly good practice to devote oneself almost entirely to the items of the balance sheet. For instance, if a man wishes to borrow money from a bank, the bank official is more interested to know as nearly as possible the man's capital than he is interested with respect to the internal conduct of the business during the last fiscal period.

The Vice-President of one of the largest commercial banks in New York, in an address before the American Bankers' Association a few years ago, strongly recommended that all banks should insist on each borrower submitting, with his application for a loan, a balance sheet certified to by a certified public accountant. This practice is growing but slowly, because the competition among banks has been so strong that many bankers who personally favor such a requirement have been afraid to insist on it. In view of recent developments, however, we may expect sounder conditions to prevail in banking circles and, in time, the borrower who is *not* required to submit a certified statement will be suspicious of his bank, and will want to change over to an institution where modern methods prevail. If you are called upon, therefore, by a bank for the purpose of verifying a customer's statement, do not express surprise at the engagement. It is, or should be, needless to say that an audit for such a purpose is *not* a detailed audit; it is not even an audit where comprehensive tests can be made to ascertain that income has been accounted for and expenses vouched, but it is to be directed solely to an inquiry as to how nearly correct the signed statement, submitted to the bank, may be.

You must not neglect to consider the possibility that the examination might justify a certificate that the capital investment claimed was not excessive, while at the same time a defalcation was going on which in time might become serious enough to wreck the concern. Under such circumstances the auditor would not be subject to any legal liability unless the examination of assets and liabilities if properly conducted would have disclosed the fraud; but it is a serious question as to whether or not he would be held morally responsible with a consequent loss of prestige. It must be borne in mind, however, that a careful checking of a balance sheet will often reveal manipulation of the accounts even though the balance sheet is not affected, and a careful auditor will not omit to make such tests as may be practicable. For instance, it is often desirable to assure yourself that the outstanding customers' accounts are genuine and represent *bonâ fide* sales; where no audit of the books is made this is of special importance so that it may be considered desirable to prove the postings of, say, the last half month or so—the debits as well as the credits.

In the following remarks it will be assumed that the rules with respect to the audit of income and expenses have been fully complied with, and that the preliminary work having been completed, the verification of the assets and liabilities is in order.

Verification of Assets. An untrained auditor should inspect physically *all* assets, otherwise he may be deceived; but an auditor with the requisite training and experience will find that many assets are susceptible of actual verification without the physical scrutiny otherwise required.

Bank balances, for instance, may be proved without visiting the bank and requiring them to show your client's money, even if banks earmarked all funds in their possession. A bank pass book indicating a balance in excess of that called for by the cash book is, however, by no means conclusive. Bank pass books are easily duplicated and forged. Outstanding checks may more than exhaust the nominal balance shown by the bank—more than wiping out the balance claimed. The procedure in these two instances is plain: the auditor should secure the pass book from the bank himself, or ask for a direct confirmation, even if it were balanced the day before the audit, and, as audits are usually made at a later date than that of the balance sheet, an inspection of the checks returned subsequently will probably disclose any discrepancy in the list of outstandings at the time of the balance sheet. Cash on hand should always be counted at the commencement of an audit; where notice has been given it is often wise to count it again just before leaving.

It is hardly necessary to state that the only currency which should appear in the cash drawer is that issued by the United States Government. Sundry notes-of-hand issued by the cashier himself, or other employes, are no longer regarded as good form.

Bills Receivable, Stocks, Bonds, Etc. After the verification of the cash, which is the most *liquid* asset and, therefore, is more liable to change and requires immediate attention, will come the examination of promissory notes or other evidences of indebtedness, stocks, bonds, etc. One cannot go into details at this time; it is sufficient to say that no one should attempt to pass on the adequacy of securities unless thoroughly acquainted with the general laws and customs regarding them. This, of course, includes a knowledge of commercial paper; familiarity with corporate stocks and bonds of various kinds; enough knowledge of law to distinguish between a third mortgage and a ground rent; and above all, enough common-sense and everyday knowledge of the market to be able to detect false values placed upon beautifully printed certificates and bonds. It is quite true that many sound enterprises are not quoted daily but, as a rule, they speak for themselves, and securities which are so much a mystery that a well-trained auditor finds himself unable to secure any independent valuation thereof, had better not be left to the tender mercies of an officer who is anxious to show a profit. So, if the cost of this entire class of assets is not shown clearly by the books, be very careful in accepting figures of which you entertain the slightest doubt.

In this connection it should be noted that all overdue or protested notes should be transferred immediately to the personal accounts of the debtors. The bills receivable account in the ledger is for live notes not due, and its use as a morgue must be condemned by every auditor.

Accounts receivable can, as a rule, be valued without difficulty. If the business has been established for some years past results can be used profitably, and based on this an allowance for bad and doubtful debts can be ascertained. Be as generous as possible in this reserve in spite of all the plausible arguments which will be advanced.

You will, of course, have to consult the client or his staff frequently with respect to the value of customers' accounts, and you can soon make up your mind as to how much is being concealed from you.

Of course, all *recent* accounts are good! But were not *all* bad debts at one time *recent?* Therefore do not allow your demand for a reserve to be overruled.

Stocks on Hand. As an auditor acting in his professional capacity is not an appraiser, he is not held responsible for the value nor quantity of the stock of merchandise, matèrials, or product which is shown by the balance sheet, unless, of course, he chooses to accept the responsibility. In practically every audit of a commercial undertaking, the audit is commenced after the date of the balance sheet. If the auditor ascertains that the stock has been taken by competent persons; certified to by responsible officials; the extensions and footings verified by himself or his assistants; numerous items critically examined to see that the stock is priced at cost or the market, whichever is the lower; that a careful analysis of the profit and loss account does not reveal any marked discrepancy between the inventory in question and that of former years, unless readily explained—he may feel reasonably safe in accepting it. In all cases, however, his certificate should set forth just how far his verification went.

This item in the balance sheet should be the first to be examined if there are collateral indications that the business had been profitable even though the books show a loss. Inventories are frequently taken hurriedly, materials in transit are often omitted, or included when the bills therefor have not been entered. An inventory at the beginning of a period might be overvalued, and at the end undervalued, and numerous other causes might be cited to suggest errors which, not detected, result in misleading profit and loss statements; so that in a case of this nature an auditor will find the inventories the most fruitful source of error.

Here also an auditor will have to use good judgment in passing values, for each increase or decrease in an inventory affects the profit and loss account correspondingly. It is about as bad to pass undervalues as overvalues, where the result may be used in an ulterior manner. The most flagrant cases, however, are overvaluations, with which an auditor must deal without fear or favor.

Plant, Machinery, Real Estate, Etc. If possible, ascertain exact book costs and apply proper depreciation. This is a short answer but it is correct, although its ramifications cause the auditor more trouble than all the other asset and liability items on the balance sheet put together. If you cannot do as suggested, get as near to it as you can; but above all things do not accept book values as conclusive.

An auditor whose work covers perhaps one year only must accept the responsibility of the whole previous history of the undertaking so far as capital assets are concerned, unless he specifically disclaims it, and even then nine out of ten stockholders will hold him liable—and rightly, too.

This brings up the question of how far an auditor is safe in accepting the work of a predecessor. If he is a reliable professional accountant, by all means accept his balance sheet, but you won't often face this contingency. Most reliable professional auditors retain their clients, so you will usually succeed—if you do, in fact, succeed a professional auditor—an *incompetent* one, or one whose work will bear as careful scrutiny as that of the ordinary bookkeeper.

If an appraisal indicates a greater valuation of capital assets than the books disclose—due perhaps to excessive depreciation charges—it may be good accounting to increase the book valuations and correspondingly increase the surplus.

The surplus so raised, however, should not be used for dividend purposes, and in view of the fact that an appraisal may simply affect values at a time when materials of all description happen to be abnormally high and far above actual cost, it is rarely advisable to disturb the book valuations unless, of course, they are excessive, and even then if at cost and properly depreciated the present apparent value should not govern.

Revaluations are valuable to adjust insurance schedules, etc., but are not so scientific from an accounting standpoint as cost and depreciation.

In rare cases it may happen that the accounts are kept too conservatively and that items properly chargeable to plant have been charged to maintenance. It would not require an appraisal to discover this, however, for a proper audit would disclose the fact. It is frequently no easy matter to determine the distinction between additions to plant and renewals. The word or the record of the office force is not enough, but it is a question as to whether one can go back of the statement of an engineer or superintendent unless, of course, there is cause for suspicion.

Renewals must not be classed with revaluations, although they have some points in common. For instance, if an engine costing \$15,000.00 has 50% or more greater efficiency than a \$10,000.00 one, which it replaces, there should be an increase in the machinery account of \$5,000.00. If proper depreciation had been provided there would have been a sufficient sum set aside, plus scrap value, to contribute \$10,000.00 of the \$15,000.00 required. If, for instance, depreciation were only \$3,000.00 and the old engine sold for \$1,200.00 net, there would have to be an immediate charge against profit and loss of \$5,800.00.

Accrued Interest, Unexpired Insurance, Etc. A careful analysis of the nominal accounts will disclose all prepaid items, and a careful examination of the assets will show up accrued items. As these assets vary from year to year, it is never safe to overlook them and they should be placed on every balance sheet.

This also covers the items which do not usually appear until the closing of the books, such as accrued interest payable, unpaid wages, or commisions to agents, etc.

Liabilities. The audit of liabilities need not be discussed in detail. The principal point to be urged is that Rule 4, of the ones submitted to you on Page 18, is the most difficult to cover of all those mentioned and perhaps the most important. A reasonably careful audit of the facts and figures *in* the books will be sufficient to vouch the liabilities per the balance sheet, but it requires more than a reasonably careful audit to ascertain whether or not all liabilities are, as a matter of fact, in evidence. It requires intuition, almost, in certain cases to locate large notes payable or other debts, the existence of which has been hidden from the auditor. Sometimes these omissions are intentional and fraudulent, oftener unintentional and due to carelessness, but in either case the auditor's duty is the same. He is not, and no verbal understanding will make him, responsible only for what appears in the books. He is not a machine to add up columns; he is supposed to have all the skill and experience which should always be expected of each member of a skilled profession. Therefore, if the *account payable* does not appear in the voucher record he must notice its absence, even though the machine would not detect anything wrong.

In the case of contracts, if the full contract price has been entered as an earning, an ample reserve must be created to cover the liability existing to complete the contract. This reserve should also cover the profit (if any) on the unfinished portion, and if the end of the work is not in sight, the reserve had better be the full unexpended part of the contract price without taking any credit whatever for profit in the current period.

In very many concerns the officers, managers, heads of departments, and others, some or all, have a more or less large interest in the net profits. Here is a strong temptation to hold out invoices for purchases or bills for expenses, etc., incurred near the end of a period, and which in all probability will easily escape detection.

Just as an auditor should confirm every outstanding account so should he have some evidence that every creditor is properly represented on the books. This, of course, can be best accomplished by calling for and receiving a statement of account from each creditor. This seems so impossible that the ordinary auditor throws up his hands and instead of doing what he can he passes the debts as they stand. Now there is no excuse for this; if no more is done, the auditor should at least call for, say, a dozen or so of the monthly statements—which it can be depended upon are received from all creditors—and compare these with his client's books. In more than one instance the results of so doing have been astonishing. You may and will find many differences representing all sorts of disputed and undisputed items. There are many reasons for these discrepancies and frequently the bookkeeper is not at fault. It is sometimes hard to secure the consent of responsible officials or partners to the entry of bills, and very often where some question as to price has arisen the invoice will be stowed away in a basket or drawer, to which the auditor does not have access, and it will not be until the latter finds that the statement does not agree with the books that it is brought to light; ten to one the dispute has been settled and the liability has been determined upon, although no note of same is made in the books. Do not underestimate the importance to your client and yourself of ascertaining that all liabilities which should appear on the books do so appear.

If there is a deliberate scheme to hold out bills for purchases in order to increase profits or decrease losses, the auditor will find it a more difficult matter to locate them than where the omissions are due to the causes just mentioned. It is sometimes possible and desirable to scan stock books or receiving clerks' books to ascertain whether the purchases or receipts there indicated are represented by invoices duly entered prior to the closing of the books. If there is the slightest objection raised when you ask for the creditors' statements, you should at once be on your guard and consider this one of the reasonable grounds for suspicion of which an auditor is bound to take cognizance. You should then make the investigation as complete as possible.

Any additional liabilities discovered by the auditor and placed on the books, thereby reducing the net profits and correspondingly diminishing the share of the manager or other interested party, represent a cash gain to the client as a rule. Many managers know that their term of office is short and, having little regard for the future, overstate profits as much as possible in order to realize their *share.*

Corporate Minutes. No corporation audit is complete without a careful reading of the minutes of all board meetings, as well as the records of executive or other governing committees. This is particularly important in an audit of liabilities, for, in many cases, it will be found that contracts and other proposed expenditures of various sorts are discussed and perhaps recorded, while matters arising out of litigation, and which may result unfavorably to your clients, may be the subject of resolution or motion. It is quite true that contingent liabilities, such as possible judgments payable, are not often seen in a balance sheet except in the case of a liability company. They should always appear, however, in the liabilities of street railway and similar corporations.

Then, too, the salaries of officers and managers are not supposed to be fixed by themselves but by the board, and the auditor should rely on the minutes for the authority for all such payments. This also applies to bonuses and other special compensation.

As an illustration there can be cited a street railway audit which was made some time ago; in reading the minutes the auditor found a resolution stating that the salary of the president was to be paid in common stock at par, although he had drawn it in cash and, as may be supposed, in full. When the auditor referred him to the resolution, he said that he had never agreed to it; but when the auditor pointed out that he had presided at the meeting in question, and at the following meeting when the minutes were approved without dissent, he had no further basis for objection.

If you meet with any obstacles in securing access to minutes or similar records you may be sure that there is something to conceal, or else you are not securing that full coöperation which is desirable as well as necessary.

SPECIAL CONSIDERATIONS WITH RESPECT TO DIFFERENT CLASSES OF AUDITS

In the previous chapters the rules laid down have been of as general a character as possible; but it must not, therefore, be supposed that the audit of every concern is to be carried out on precisely the same lines. The opportunities for fraud will vary widely in concerns of a different character, while the chances of unintentional errors of principle and in detail will likewise vary extensively in different undertakings.

As has been already intimated, the auditor who wishes to be of the greatest possible service to his client should avail himself of every opportunity to become practically acquainted with the working of the business, as it will only be when he has some real acquaintance with the matter he is discussing that his opinion upon the accounts of any given business will possess any great weight; for if he has no knowledge of the business carried on, it is impossible for him to intelligently criticise the system of accounts that records the transactions effected; and if he has no knowledge of the nature of such transactions it is hardly to be expected that he should be in a position to form any reliable opinion as to the risk that exists of the transactions not being correctly recorded in the accounts. These remarks will, perhaps, appear superfluous to many, but so much has been said not only by business men but by some auditors about accountants confining themselves to their own province, that it has become necessary to point out the utter inefficiency of any audit which confines its investigations to an inquiry as to the academical correctness of the bookkeeping.

The object of the following suggestions is not to supply the student with such special knowledge concerning each class of undertaking as it may be desirable for him to possess before presuming to certify as to the correctness of its accounts—such a knowledge cannot be altogether imparted by any book, and is beyond the scope, as it is beyond the compass, of the present discussion—but in the following paragraphs the student will find his attention directed to those points most worthy of his consideration in each of the leading classes of accounts he is likely to be called upon to verify. The special opportunities of fraud, and the points upon which an innocent misstatement of facts is most likely to occur, will, so far as possible, claim attention; it may be added that accounting literature now provides a series of handbooks dealing with the accounts of most of the leading industries, and is likely to prove useful to both the practitioner and the student.

COMMERCIAL ACCOUNTS

Wholesale Merchants. The chief openings for fraud in these accounts are: theft of stock; misstatement of cash sales; fraudulent payment of bogus purchases; misappropriation of moneys received in payment of accounts—such accounts being either left open or written off as *bad;* petty theft by the raising of fictitious items of discount allowed on receipts, or interest incurred on payments; and similar matters. Of what may be styled *innocent* errors, the most common are errors of principle in the valuation of stock-in-trade; insufficient depreciation on furniture and plant; omission to allow for outstanding discounts and interest; errors of principle in the valuation of foreign currencies; omission of liability on outstanding expenses, and on notes discounted; insufficient provision for bad debts, etc. There are not many trade details with which the auditor will require to be acquainted in these accounts, but he will do well to ascertain the terms of payment and discount accorded to, and by, his clients, and to make use of this knowledge continuously. Where the terms vary—and they generally do vary—they should be written in red ink at the head of each account in the ledger. The auditor should make himself acquainted with the percentage of profit expected by his clients, and should compare it, both with the actual results and the rate generally realized by others in the same trade. Stock accounts can, almost invariably, be kept by merchants but this is, in practice, only occasionally done.

The question of patents or trade-marks sometimes arises in these accounts, but the consideration thereof is more appropriately dealt with in a later lesson.

Manufacturing Traders. Under this heading are intended to be included those manufacturers who ordinarily keep a stock of ready-made articles, and who do not manufacture exclusively (or principally) *to order.* What has been said under the heading *Wholesale Merchants* will also apply to the consideration of these accounts; but a few additional precautions are required in connection with the manufacturing department.

The item of wages, in particular, is one requiring the utmost care; and the question of depreciation of plant and machinery will also require a full share of attention. A proper system of cost accounts becomes all but essential. It is probable that the auditor will find some such system in operation; but it is at least equally probable that the actual system employed will be found both unscientific and unreliable.

Retailers. Retailers who give credit, in many respects follow upon the same lines as the wholesale houses in the same trade; but the increased number of transactions renders a detailed audit more difficult. It is generally quite impossible, and in nine cases out of ten entirely unnecessary to call back all the postings of the sale-ledgers, but the balancing thereof can be checked without difficulty, and must always be done. Where practicable the posting of the cash received may be checked with advantage, or at least fully tested, as explained previously; the list of balances should always be compared with the ledger, and the additions checked. Where the business is very voluminous, the audit of the sales ledgers is frequently deputed to some of the clients' own staff; but in any case, the auditor should not lose his grip on this department, and should occasionally check the balances himself. To check, say, one or two ledgers at random each year will probably have all the moral effect of checking the whole set.

Many retail houses supply goods to their own clerks and some others, at reduced rates, and allow credit until the following pay-day.

A separate *employes' ledger* should always be kept in these cases, and the auditor is usually expected to see that the payment of these accounts is not unduly delayed. At every closing of the books he should be careful to ascertain that no amount stands to the debit of an employe who has left.

The purchase ledger is generally of comparatively manageable proportions; consequently it is sometimes desirable to check it more in detail than is the case with the customers' ledgers. In any case the purchase ledger payments should be checked as to vouchers. Sometimes in a continuous audit it is arranged that the auditor shall pass all the purchase ledger statements or vouchers for payment, and the system has much to recommend it. In addition to seeing that each item on the statements is also in the ledger, the auditor should make the ledger bookkeeper initial—and so guarantee the correctness of every statement that is submitted by him. The auditor should also compare the discount deducted with the terms of payment stated at the head of each account in the ledger. It need hardly be added that this passing of the purchase ledger statements for payment is not a necessary part of any audit, and, where performed, it should command a special fee.

The vouching of cash received—whether for cash sales or sales ledger accounts—may, under a good system of internal check, safely be left to the care of the client's staff; but it is the auditor's duty to see that the receipts are duly deposited and to verify the bank balance. A large retailer's audit will, almost invariably, be continuous; and it is desirable that the bank balances, and also that of the petty cash, be examined at least once a month.

The examination of petty cash has already occupied attention, and it therefore only remains to add that—in addition to vouching for the *bonâ fide* of all payments—it is essential that some responsible person be made accountable for the correctness of the analysis of the items.

The department accounts must not be lost sight of, as they form one of the most important branches of the auditor's duties. An account showing the sales, purchases, and estimated stock should be submitted to the officers or proprietors each month, and the preparation of this account frequently devolves upon the auditor. At the stock-taking the reconciliation of the estimated figures with the actual stock on hand may also profitably occupy the auditor's attention.

The postings of the private or general ledger should always be called back, and it is highly desirable that such private ledger should contain, within itself, all the material for a trial balance.

Notes receivable will but rarely be found in connection with a retailer's business; but bills payable are almost certain to exist, and will require attention.

The vouching of payments for salaries must not escape attention, but it calls for no special comment here.

In cash businesses the problem is somewhat simplified by the considerable reduction effected in the number of sales ledger accounts. Indeed, these accounts are, of course, naturally abolished in name, but they remain in essence—as for instance deposit accounts kept by regular customers who wish to avoid the trouble of remitting with every order. It is an important part of the auditor's duty to see that deposit accounts are never overdrawn without proper authority and that the interest credited is at the rate agreed upon.

The system adopted for checking the accuracy of the cash receipts, will, as before, require the auditor's careful consideration; but, in the absence of any special arrangement to the contrary, it is not necessary for him to carry his investigation into the accuracy of such receipts beyond seeing that the system in use is properly carried out, and that the stated returns are duly deposited.

It is needless to say that this statement as to what may be necessary should not prevent an auditor from keeping a sharp lookout for flaws or weak spots in the system.

It is very usual for credit notes to be issued against goods returned by customers; and, as these credit notes may be used in payment of subsequent purchases by the customers, or the money therefor obtained upon application to one of the cashiers, the question has to be dealt with by the auditor. It is generally arranged that, at the end of the day, the petty cashier will redeem all credit notes in the hands of the receiving cashiers, the amounts being charged up through petty cash. The issue of credit notes must, therefore, be carefully guarded against abuse; and it is essential that the system under which the various departments are debited with their respective returns be properly arranged. The credit notes should always be compared with the stubs, and presented to the auditor for cancellation. Failure to properly cancel credit notes has in several instances been responsible for fraud, which has been effected by a dishonest employe securing possession of and re-cashing them.

Contractors. Under this heading the accounts of those who keep little or no ready-made stock will be dealt with. This class includes builders, engineers, shipbuilders, etc.

In these accounts the cost of—and profit or loss arising from—each contract will require to be separately stated; the contractor, in fact, opening a special trading account for every contract. Cost accounts thus form an especial feature of the contractor's books, and an inquiry into the principles upon which they are based is thus a most profitable occupation for the auditor.

. The systems upon which stores are issued, time records written up, and wages calculated and paid, are also of the greatest importance; and time spent upon such an inquiry is likely to be of considerably greater advantage to the client than any detail examination of the books.

It is also important to call for the monthly statements from the sub-contractors, who will frequently be found to have large claims for *extras* which do not appear to their credit on the contractor's books. Probably the contractor has billed the owner for these identical items and passed the amount to the credit of the contract. Frequently it will be found that an agreement has been made with the sub-contractor to pay him for the extras only in the event of the contractor being successful in collecting, but the books in the meantime show a credit to the contract which must not be carried to profit and loss, and which, therefore, should be offset by a *reserve* sufficiently large to cover all such items and also for such further claims as the sub-contractor may have, which may not be passed upon or which have not been allowed for various reasons.

The extent of the auditor's examination into detail will be a matter depending largely upon the nature and magnitude of the undertaking. A detailed audit would not usually be necessary, as the main points could generally be accomplished by an examination of the general ledger; in any case the leading principles will be the really important matter.

The same rules which have already guided the auditor as to the extent of his inquiry into details will serve him here; the larger the undertaking, the more its opportunities of internal check, and consequently the less necessity for the skilled auditor to check every detail. Many large undertakings keep their own staff auditor, who is responsible for the technical accuracy of the trial balance.

The valuation of contracts in hand and the calculation of depreciation are both matters of the greatest importance, but they will be more conveniently dealt with at a later stage.

Breweries. The audit of a brewery is a matter concerning which some experience upon the part of the auditor is specially desirable, and it is by no means easy to indicate, in a few words, the salient features of the task before him.

Theft of stocks and of collections are, perhaps, the two main risks run by brewers. The former is best guarded against by properly designed stock accounts, and the comparative statistics deducible therefrom, combined with a certain amount of practical knowledge—which latter the auditor will most likely have to take upon trust from the master brewer. The second risk arises from the fact that customers' accounts are frequently collected by the drivers; the matter therefore requires great care, but it presents no exceptional features. The discounts showed must not be passed without inspection, however, as they can easily be juggled with.

In connection with saloons controlled by the brewery, the auditor should see that all the revenue receivable from this—as well as from any other—class of investment is brought into the account, subject only to due provision for bad and doubtful debts. In most cases loans will be due from the tenants, and in connection with these loans provision against loss is a matter of considerable importance, and one requiring the most careful consideration. It should, moreover, be borne in mind that the limit of possible loss in most cases greatly exceeds the amount actually advanced, inasmuch as the brewery will sometimes have guaranteed a loan obtained by the tenant, which forms a first charge upon the property. The aggregate amount of such guarantee should, it is thought, be stated upon the balance sheet as a contingent liability.

Another point of considerable importance is the question of depreciation. In the case of a brewery plant, the actual wear and tear is probably less than in the case of most undertakings, because the plant will not be working every day, and thus—apart from the fact that it is running a comparatively small number of hours per week—the intervals of rest afford facilities for making satisfactory and permanent repairs to a far greater extent than is practicable with most other undertakings. The result is that a brewery plant can in practice be kept at a very high state of efficiency by careful and reasonable repairs and renewals. On the other hand, some items are especially liable to depreciation by becoming obsolete, and this important fact should not be lost sight of.

Hotels. The accounts of hotels, whether belonging to companies or to private persons, do not call for any extended comment. The auditor who is accustomed to hotel accounts will be able, by a careful examination of the items comprised in the profit and loss account, to form a fairly reliable opinion as to whether or not any leakage exists. If there appears to be any reason to suspect that things are not as they should be, it might be found desirable to thoroughly examine in detail the charges for a portion, at least, of the period under consideration; but, under ordinary circumstances, it is not usual to carry the investigation behind the guests' ledger, except for the purpose of verifying the wineroom stock books. Proper stock accounts ought always to be kept of wines, liquors, cigars, etc., and these should be carefully inspected, especially if the profit and loss account does not show an adequate return on this department. Where the bookkeeper is also the cashier, especial care must be exercised to ascertain that all receipts are properly accounted for; and it is also important to see that the petty cash disbursed upon behalf of guests has been duly charged to their accounts and collected. The entries in the purchase and private ledgers should always be thoroughly checked; and special care should be given to the vouching of all payments, including wages.

The question of depreciation—here, as elsewhere—is also a most important one, and must be carefully considered. Such items as bedding and linen, plate, cutlery, china and glass, etc., are frequently re-valued for each balance sheet, instead of being depreciated regularly; but perhaps a better plan is to debit profit and loss account and credit renewals account with a fixed (ample) provision for renewals, the actual expenditure being debited to renewals account, and any credit balance treated as a reserve. The advantage of this course is that it equalizes profits, so that a period of five years could be averaged; but it is well for the auditor to satisfy himself that the amount written off against revenue is ample for all ordinary contingencies.

Restaurants. These follow, in many respects, the same lines as hotels. The accounts are, in some ways, simpler; but, on the other hand, they are generally less complete. An experienced auditor may prove himself of considerable value to the proprietor of a restaurant, but he cannot pretend to protect him against fraud on the part of his employes; neither is it always possible for him to detect any fraud that may have been committed. He can, however, prepare—or superintend the preparation of—accounts that will show exactly how the net profit has been earned, and these accounts will suffice the experienced client, for he knows exactly what result ought to have ensued from a given turnover, and so can judge for himself as to the satisfactoriness of the existing management.

Club Accounts. The accounts of clubs follow very much upon the lines previously indicated with regard to hotels; but there are one or two points with which it seems desirable to deal in a little further detail. In the business of a hotel it is, of course, practically impossible for the proprietors to rely upon their customers to assist them in any way in checking their employes; but, in the case of clubs—and particularly members' clubs, where the members themselves are the proprietors of the undertaking—the accounts can be somewhat modified with advantage, with a view to devising a system by which the members themselves may, to a certain extent, check fraud upon the part of employes.

Numerous instances have been disclosed where the members' dues have been misappropriated, and this has usually happened where the payments were in currency. It is a good plan, therefore, to print a request on the bills to members to pay same by check to the order of the club.

It is also advisable to request the members to pay their house accounts in the same way, and as it is becoming the custom of many clubs to require all payments to be made at the office, very little difficulty should be experienced in enforcing the rule of payment by check.

In connection with the bar, also, the accounts of clubs present an advantage over those employed by many hotels, viz, that all orders for drinks have (frequently) to be signed by the member, and are thus available as vouchers for verifying the taking of wines and spirits out of stock. It may be added, however, that this is a system which is used by a considerable number of hotels, although many dispense with it on the ground that it is difficult to get their customers to take the necessary trouble. In clubs, where the orders or tickets are returned to the members monthly after payment of their accounts, carbon sheets are frequently used and duplicate orders obtained.

Another system is that of ticket books, everything bought by members to be prepaid therefrom. It saves bookkeeping—no personal accounts being necessary—and has much to commend it.

Theater Accounts, Etc. The most difficult feature in theatrical and similar accounts (from the auditor's point of view) is the large account of cash—*i. e.*, currency and coin—which is necessarily handled by all persons connected with the financial part of the management. It is to be regretted that managers cannot be induced to make their payments by check more generally, but fortunately the practice is increasing in this country.

An auditor, must, however, above all things, be practical; and it is, therefore, well to face the situation at once, and do his best with the existing cash system, for he may rest assured that no amount of representation upon his part will induce managers to make all their payments by check, while it is, of course, quite impossible that their receipts should be, to any great extent, in anything but currency.

It is not usual for the auditor to be expected to verify the cash takings; this is usually performed by the treasurer, who is considered a sufficiently responsible person for the performance of a function that requires integrity certainly, but no great technical knowledge.

Theater accounts differ so widely from ordinary commercial accounts that a brief description of their methods is in order before the question of audit is considered. The treasurer makes up a daily statement as follows: about half an hour before the beginning of each performance the treasurer of the theater counts the unsold coupon tickets and makes up a *rough* statement of the cash which should be on hand; to this he adds the proceeds of sales of *hard* tickets (general admission and exchange) and he then submits this statement to the treasurer of the company. The two treasurers then count the tickets contained in the doortenders' boxes, which, except in stormy weather, agree very closely with the rough statement. After the count the theater treasurer makes out a final statement, which is signed by both treasurers.

At the end of each week the theater treasurer makes up a *settlement sheet,* which shows the gross receipts, and the share of same due to the theater. To this is added any additional earnings, and after deducting the salaries and petty expenses, he pays the remainder, in currency, to the manager. The latter usually pays all advertising, bill posting, light, etc., about Tuesday of each week to cover the previous week. In some theaters the treasurer pays all bills and settles with the manager for the profit or loss shown by the weekly statements only, but this is unusual.

The treasurer of the theater also prepares a complete weekly statement for the company treasurer, and settles therefor. After making these two settlements he would have on hand only the receipts of *advance sales;* this is an important item sometimes, and will be considered again further on.

The object of theater bookkeeping is to show the profit or loss of each week's business so as to determine which attractions pay best. It is, therefore, usual to apportion such items as the annual license fee, rent, repairs, etc., weekly on a basis of a season of about thirty-five weeks. Thirty weeks would be more conservative.

With the foregoing in mind the audit of theater accounts will be a simple matter, and should be made somewhat as follows: count the coupon tickets in the rack and deduct the number on hand from the total capacity of the house; secure a statement of *hard* tickets furnished the treasurer at the beginning of the season, deduct the number on hand at the time of balancing, and the remainder must be accounted for in cash. The total result should then agree with the cash and the vouchers in the hands of the treasurer.

See that all nightly statements during the period covered by the audit are signed by the treasurers of the companies. Compare contracts with managers' settlements to ascertain that receipts have been properly divided, and that the proper shares of *extras* have been collected from companies.

Call for properly authorized vouchers for all payments. The vouching of payments resolves itself upon the lines ordinarily adopted in trading concerns; and here—as elsewhere—it is not the least important of the the auditor's functions to inquire into the manner in which the pay-rolls are prepared. It need hardly be stated that all persons entering the premises before a performance sign an attendance book kept at the stage door for that purpose, and that fines for absence or lateness are arrived at from that source. It is not usual for the auditor to verify the composition of the pay-rolls, but there would be no harm done if he did so occasionally—and unexpectedly.

It will be easy to suggest improvements in the methods generally found in force, but it will be almost impossible to secure any changes. One of the greatest difficulties in theater accounting is to divide the responsibility of the treasurer and his assistant. They both have access to the same cash, and, as it takes an expert at least an hour to count a rack, it will be seen that one cannot balance to the other as hotel clerks do when they change watch. The same difficulty arises in connection with the weekly payments to the manager. After making settlement with him, the cash remaining represents the advance ticket sales, which, of course, should be verified at the time. Owing to the difficulty of counting a large number of tickets, managers seldom do it, and more than one defalcation has been carried along by means of using the proceeds of advance sales to cover up shortages.

In *continuous performance* houses most of the admissions are *strip* tickets, which are, of course, easily counted.

Theatrical Companies. The audit of the accounts of a company should be quite a simple matter, but owing to the conditions under which a company treasurer usually works, his books and accounts will be in a more or less unsatisfactory state. In any event, he should be required to keep a cash book and balance it at least once a week.

With this as a basis it will be comparatively simple to build up what are generally known as "Production" accounts, which may be classified as follows:

Preliminary Expenses. These cover all expenses incurred during rehearsals, such as stage manager's salary, musical director's salary, typewriting parts, orchestra, renting of hall, etc.

Scenery. This is usually built by one firm, but it may be painted by different artists. A certain high-priced artist may be engaged to paint a difficult landscape, but the painting of a simple interior would be given to a cheaper man. The work of building and painting is nearly always done under contract, and payments made at specified times.

Properties. This item includes almost everything used in the stage representation which could not be classified as scenery, costumes, or electrical apparatus. It includes furniture, draperies, artificial flowers, spears, animals (either papier-maché or alive). Perishable properties are not charged to production, but to current expenses.

Costumes. This item includes clothing, hats, wigs, shoes, etc.

Electrical Apparatus. This covers calcium lamps, special devices, etc., and is sometimes a very large item. Some companies rent the electrical equipment, and it is then charged to current expenses.

The company's profit and loss account is also made up weekly to accord with the theater accounts. An audit would consist largely in checking the receipts by comparison with the nightly statements signed by the house treasurer; seeing that all fines imposed by the stage manager have been collected; examining the contracts and securing proper vouchers.

Theatrical productions are so uncertain in their outcome that no rule for dealing with the question of depreciation can be laid down. Obviously the copyright of a successful play is an asset which does not depreciate rapidly in value, while the total cost of an unsuccessful production must be written off at once. It is stated on good authority that the entire cost of production is charged off against the first year's business by all of the New York managers. Each undertaking should, therefore, be considered with respect to the usual custom, provided it is conservative.

Publishers. The audit of publishers' accounts presents a peculiar combination of complications. In many cases publishers will do their own printing, and in this respect they follow the rules of manufacturing traders. (See Page 60.) Almost invariably, however, they will also be retailers, and hence the considerations detailed under that heading will also apply. Many houses add the further occupation of trading, either wholesale or retail, or both, in the publications of other firms, which, to a great extent, brings them under the heading *Manufacturing Traders;* while almost every house will occasionally undertake the publication of authors' works upon such terms, as to royalty, etc., as make it absolutely necessary that both stock accounts and cost accounts should be carried to perfection. In this respect publishers' accounts involve many of the considerations discussed under *Contractors* when dealing with contractors' accounts.

A complete audit of publishers' accounts is, on account of the multiplicity of detail involved, a practical impossibility; the extent to which a partial audit may advantageously be carried must, on the other hand, of necessity, vary with almost every individual case. The considerations involved in the previous paragraphs are the only ones that can be offered; but it may be added that here—as in the case of all other partial audits—the precise routine may be varied from time to time with the greatest advantage.

Permanent assets, such as buildings, plant, etc., must, of course, be subjected to proper depreciation, and stock-in-trade will require careful valuing. It ought to be possible for the auditor to obtain absolute proof as to the quantity of stock-in-trade, but he can hardly be expected to check the inventory in detail. The prices set upon unsold publications should never exceed the cost of production.

Care should be taken to ascertain that the stock list is not unduly inflated by almost entire editions of absolutely unsalable publications that are not worth anything like the cost of production.

With regard to the valuation of copyrights for balance sheet purposes, it is usual for a separate account to be opened for each publication, which is, in the first place, debited with the actual cost of production, including, of course, the printing, binding, illustrations, etc. —and, where the copyright is purchased, the purchase-price thereof, together with that of any stock which may have been taken over therewith. Many firms at balancing time review the debits to the various copyright accounts, depreciating some and appreciating others; that is to say, the system is adopted of valuing the copyrights by inventory at each period of balancing, wholly irrespective of the actual cost. It is, of course, very desirable that where necessary the cost should be written down from time to time; but the arguments with regard to the writing up the value of a copyright are precisely those which might be—and, indeed, should be—invariably used against writing up the value of the asset goodwill and crediting the difference to profit and loss account. It may be perfectly true that a large revenue is expected from this asset in the future; but that, in itself, can afford no possible argument for anticipating that revenue, and taking credit for it in the current period. On the other hand, it will probably be generally admitted that no great harm can be done by writing up such copyrights as have appreciated, so long as the actual effect of so doing is not to increase the book-value of copyrights as a whole. In this connection it may be mentioned that with many houses there is a good general rule in use, to the effect that the value attached to any copyright should not exceed three years' purchase upon the gross profit earned therefrom during the past year.

Sometimes, even when a publication is itself a failure, some residual value will attach to illustrations, etc., which have been used in its production. It is very important, however, that no fictitious estimate should be put upon the value of such doubtful assets as these, and of the two it seems infinitely preferable that they should be stated at *nil* in the balance sheet.

The value of artists' original drawings (for illustrations) is often considerable, and has not infrequently been found to exceed the price originally paid for both original and copyright. It is hardly safe, however, to reckon such originals as assets—if valuable, they will generally be sold, and if retained, the most that can be said is that they have a latent value.

It is unfortunately the custom in many large publishing houses in the United States to carry their electrotypes at cost, or with a very small allowance for depreciation. No matter how successful the publication may be, it should always be borne in mind that every book turned out will have to bear a proportionate share of the costs of all the plates. The failure of more than one publisher has been traced to this omission.

On behalf of his clients it may be thought desirable for the auditor to thoroughly check all royalty accounts, but this does not form part of a regular audit.

Newspapers and *periodicals* present several special features. In the absence of a staff-auditor, the auditor will require to satisfy himself that every advertisement is eventually paid for—unless, of course, a bad debt has been made—or else that it has been franked as *free* by some responsible person. The commission accounts of agents and canvassers should also always be examined.

In the case of a monthly magazine, at least two numbers out of twelve should be selected and checked thoroughly to see that every advertisement is accounted for. A certain portion of the contracts should also be checked into the advertising register, as it very often happens that this book is kept by a clerk in the advertising department who does not appreciate the importance of accuracy.

The subscriptions will be more difficult to verify. Usually, however, great care is taken to secure a good internal check, and the system should be looked into carefully. It is needless to say that the clerks in charge of the subscription cards and records should not have access to the cash. The balance sheet must, of course, contain a reserve for unfilled subscriptions, although most publishers do not provide such an account.

The *inside* of a paper is the work of the regular staff, or of *contributors;* the former are paid a regular salary (usually), the latter are paid for the actual work done. It would be a desirable thing to make sure that a contributor was never paid for a sub-editor's work, but no auditor could ever ascertain such a thing for himself, and he must therefore rest content with the certified contributors' accounts as they are submitted to him.

The number of copies printed, issued, returned, exchanged, distributed free, and in stock, should always be certified by the publishing manager. From his return the individual ledger debits may be vouched.

The postoffice returns, or vouchers, for second-class postage are a good check on the total circulation.

Every periodical is started at a loss, and it is usual to debit this loss to an establishment account; when the concern pays—and so acquires a goodwill—the cost of such goodwill is represented by the amount to the debit of establishment account, which thus virtually becomes a goodwill account. There is no great objection to this system, and it is much in favor on account of the information it affords to the intending purchaser of a recently established paper; but, when a periodical is once fairly started, the auditor should require a very good reason to be furnished him before he sanctions the transfer of an unexpected loss to the establishment account; if such loss arises from an increase of matter (in quantity or quality) or a reduction in price, it may be in the nature of capital outlay, as tending to increase the permanent value of the concern, but an unexpected loss is likely to have the contrary effect.

AUDITING

PART II

MINING ACCOUNTS

Coal Mines. Better advice can hardly be given to the accountant who is about to audit the accounts of a mine for the first time than to suggest that he should make a tour of the whole works (both above and below ground) in company with the colliery manager. If he be of an observant turn of mind he will probably, by the end of his inspection, have formed at least some idea of the scope of the undertaking, and he will doubtless find that the gloom of the underworld has thrown considerable light upon the records kept above ground. Even the auditor experienced in colliery accounts will probably find that the thorough inspection of a new mine is really a wise economy of time; in fact, whatever the nature of the business may be, the auditor who acquaints himself with the manner in which it is carried on, does wisely.

A question of particular importance in these accounts is the treatment of the capital expenditure account. Great care must be taken to see that no expenditure properly chargeable against revenue is included herein—indeed, it is always desirable to get the capital expenditure account altogether closed as quickly as possible.

Some mining companies, in calculating the cost per ton of the ore extracted, include the expense of dead work, development, explorations, etc., while many others state as the cost of extraction work the actual expenditure for stoping and hoisting only, treating the development work, especially in shaft sinking, as a capital expenditure.

The item *minimums paid in excess of royalties earned,* which frequently occurs as an asset in the accounts of young collieries, requires some little explanation. The royalty payable is based upon the quantity extracted—usually upon the number of tons, but sometimes upon the number of cubic yards, or the acreage of the seams worked—a fixed *minimum* or *dead* rent being payable in any event, whether the mines are worked or not. During the sinking of the shafts and first working of the mine, therefore, the rent paid naturally exceeds the normal percentage upon the output. Under ordinary circumstances this would represent a charge against revenue in the usual way; but, as the lessees are empowered to recoup themselves out of subsequent mining, it is quite justifiable that the excess so paid away at first should be carried forward as a set-off against the output of later years. It is very necessary, however, that the auditor should examine the constitution of the amount so carried forward. It not infrequently happens that the mine as a whole is comprised of several leases, some of which are not being worked, and never will be; the minimum rent upon such portions ought, of course, to be charged against revenue each year, and where, in the early days of the colliery's existence, an accumulation of such minimums has been allowed to be carried forward, it must be written off as soon as possible. Again, there is often a limit to the time during which over-paid royalties may be recouped, and this limit, of course, must not be exceeded. It need hardly be added that the only justification for treating the whole —or any portion—of the balance of the redeemable dead rents account as an asset, is the reasonable probability that it will be redeemed out of future workings within the time limit allowed by the lease.

The question of depreciation upon mines is naturally one of no slight importance; but it would appear that—however desirable it may be that an adequate provision should be made for depreciation arising either from the exhaustion of minerals, or from the lapse of the lease, or from both—it may not be legally necessary even for a mining company to set aside any portion of its earnings to replace wasting capital. The auditor can thus do no more than advise the extreme desirability of so prudent a course.

Many mortgages upon coal and ore lands require a sinking fund to be established to cover exhaustion, usually at a fixed rate per ton. Here, of course, the accounts must be constructed accordingly, and a careful reading of all mortgages will be required.

Unfortunately, sinking fund provisions in mortgages are not always entirely clear. They are almost invariably written by lawyers, who rarely consider the matter in connection with the accounts of the undertaking.

For instance, where a clause in a mortgage on coal lands requires the setting aside of five cents per ton on all coal *shipped*, a difference of opinion can easily arise over the question as to whether the coal consumed in the company's own operations both at the mines and in transit should be provided for. If the provision was based on probable exhaustion, certainly every ton produced must be taken into account, but if the original intention was to cover sales, no payment to the sinking fund would be required therefor.

Subsequent differences of this nature would not arise if more attention were given to the wording of these provisions.

In this connection it will be of interest to note the following extract from *"The Profits of a Corporation," by A. Lowes Dickinson, F. C. A., C. P. A.

> In the case of minerals, the product taken out of the land becomes the stock-in-trade of a corporation as soon as it is extracted, and whatever the land was worth before its extraction it is clearly worth an appreciable amount less thereafter. The provision to be made should be on the basis of the number of tons extracted, having regard to the total tonnage available and to the realizable value of the property after the minerals have all been extracted. The same principle would also apply to timber lands, where no provision is made for re-foresting. The contention is sometimes made that no provision need be made for exhaustion of minerals where the amount of mineral known to be in a definite tract at the end of any period is largely in excess of that which has been discovered at the beginning of the period. This argument cannot, however, for a moment be admitted except as a reason for reducing the tonnage rate to be provided. As a general principle, whatever there was in the land, whether known or unknown, has been reduced during the period under consideration by whatever amount has been extracted; and while the new discoveries may be accepted as reducing the necessary rate of provision for extinction from, say, one dollar to one cent per ton, the original principle that provision must be made holds good on the smaller figure, whatever it is. It may be, of course, that the provisions made in earlier years have been sufficient to cover a number of future years on the basis, from the commencement, of the rate subsequently found to be sufficient in view of the new discoveries, and in this case there is obviously no necessity to provide further for extinction until the total production at the new rate is equal to the total amount written off.

Usually mining companies own the cottages occupied by their work people, and this matter will require the auditor's attention. Rents receivable, however, has already been considered.

Gold Mines, Etc. The services of an auditor are frequently required in connection with gold, silver, copper, and other mining

*Paper read at the St. Louis Congress of Accountants, 1904.

enterprises carried on in the far West. Usually the services consist in ascertaining for dissatisfied creditors or stockholders just where the cash capital has been sunk, in which case it is rather of the nature of an investigation than an audit. It sometimes happens, however, that ore is actually found in paying quantities, and the question then arises as to how far the mine manager's accounts can be accepted. He usually remits periodically a statement of his receipts and payments, which is incorporated in the accounts kept at the head office. Such accounts are not usually very voluminous, and are generally examined by the auditor in detail. It is, of course, desirable that all expenditure at the works be properly vouched, and that the auditor examine these vouchers.

For balance sheet purposes the mine manager should be required to apportion all expenditure between capital and revenue, and to certify such apportionment; also to submit a certified statement of local floating assets and liabilities, or a certificate that no such assets or liabilities exist locally, and at the same time he should report upon the state of efficiency of the plant and machinery, together with any buildings and other more or less permanent assets owned by the company. This latter report is most essential for a proper consideration of the question of depreciation.

It is always well—and where the produce of the mine is precious, it is very essential—for the auditor to use every available means of ascertaining that credit has been taken in the books for the value of the whole of the output.

In conclusion, it may be added that he should expressly state in his report what the precise extent of his examination has been.

Depreciation of plant should, of course, be provided for; but that question is best dealt with in a later chapter.

The wages paid by mining companies require the same careful attention that must at all times be accorded to this most important item; but inasmuch as the great bulk of wages paid is at the rate of so much per ton, the aggregate amount payable can be tested with greater facility than in many cases.

The peculiar conditions obtaining to mine accounts generally render it desirable that the audit should descend into somewhat considerable detail; concerning the actual extent of such detail, however, no general rules can be given, as each case must be judged upon its own merits. Great care should be taken to see that no expenses are capitalized that are not *bonâ fide* of a *capital* nature.

FINANCIAL ACCOUNTS

Banks. In dealing with the question of bank audits, it is well to remember that one of the most controversial subjects relative to professional practice is being discussed. So far as possible, a position that few will care to assail will be occupied; but it were well to admit at once that the duties of a bank auditor are very much more onerous than some eminent accountants care to admit, whatever his legal responsibilities may be. It is to be remembered that bare legal responsibility is not the highest measure of the duties of a professional man. It is certainly very desirable that the law should not be unduly harsh—or the position of an auditor would be intolerable—but it is imagined that few would consider that they had discharged all moral obligations when they had complied with their legal duties. These remarks apply to all classes of audits.

The inference must not be drawn, however, that a bank audit is fundamentally difficult, or that it requires special knowledge of an extraordinary sort; on the contrary, it can be successfully maintained that a general practitioner of wide practice is better qualified to audit the accounts of a bank than one who devotes his entire attention to this class of work. Many bank examiners claim that a man in order to be well versed in bank auditing should practically devote his entire time to it. In the latter case the mere familiarity with the usual books and methods tends to narrow one's vision, and a bank examiner is apt to fall into a rut. After all, the theory of a bank audit is very much like that of any other audit, and the same careful study of a bank's statement, which an auditor must pay to the balance sheet of a manufacturing concern, will indicate to him the scope of the audit, and after one or two experiences he need expect no trouble.

In all cases the auditor should secure the most recently published statement of the bank whose accounts he expects to examine, and a general scrutiny of the several asset and liability items will reveal far more of what he has before him than in almost any other work he undertakes.

Under our National Banking Act, compulsory examinations are made by examiners in government employ; and while in the past they have rendered invaluable service, and many of them are auditors in the highest sense of the word, it must be remembered that their chief duty is to see that a bank is solvent and complying with law, and this accounts for the large number of minor defalcations which they never discover. Owing to the insufficient time which is allotted to each bank, it is a physical impossibility for them to cover the ground thoroughly; and it is no longer a rarity to hear of bank defalcations which have been going on under the eyes of the National Bank Examiners for twelve to fifteen years.

For these reasons, bank directors are gradually coming around to the feeling that it is their duty to have more thorough audits, and naturally the work falls to the certified public accountant, and it is very satisfactory to note that several State Bank Examiners have made recommendations to this effect.

The certification of a bank balance sheet involves the thorough examination and exhaustive testing of every account in the general ledger, the counting of the balance of cash in hand, the examination of all notes (especial care being taken to note that all overdue notes are properly explained), and the inspection of all securities—whether owned by the bank or held as collateral for borrowers. With regard to the counting of the cash balance, the only safe way of dealing with checks in hand is for the auditor himself to forward them to the clearing house and other agents, or where this is impracticable, to secure direct confirmation of the clearing house returns. The disregard of this precaution has left the door open for most serious frauds upon the part of bank managers and others.

The counting of the cash in a large bank is very hard physical work, to say nothing of mental strain. As the securities and collaterals should be taken up the same day, it is useless for an auditor to undertake this work unless he has a staff of reliable men, some of whom should have had previous experience in counting cash and handling securities. Not less than five or six men will be needed the first day in a large bank, but after the second day the force can be decreased.

It hardly seems necessary to urge the importance of making the audit without notice to anyone, and this means the officers and directors as well as the tellers and other clerks.

The work of counting the cash and examining the securities can be commenced early in the afternoon by taking up the reserves first, and working down to the settlements. The staff should be distributed and instructed so that any transfers from one teller to the other, or sending out for cash to conceal a defalcation, would be immediately detected.

The examination of demand loans and collaterals therewith is one of the most important branches of the work. Extensive defalcations have been covered up by the failure to endorse partial payments on the notes; the only way to ascertain the correctness of these loans and collaterals is to send out a memorandum to each borrower setting forth the amount of loans and collaterals held as at the day of commencing the audit. The confirmation should, of course, be returned direct to the auditor.

The recent death of a prominent broker in Philadelphia disclosed the fact that for some years he had been borrowing large sums, aggregating nearly one million dollars, from banks upon stock certificates which had been *raised* from a small to a much larger number of shares. The forgeries were cleverly executed, and in every case deceived bank officers through whose hands they passed, so that a professional auditor could hardly be criticised for failure to detect the alterations; the instance should, however, be borne in mind, and a knowledge of the facts in this case may be a reminder to an auditor that *eternal vigilance* is always necessary in bank audits.

In connection with the inspection of securities, it is, perhaps, well to call attention to the extreme importance of all the securities being produced simultaneously, and of their all remaining in the auditor's sole keeping until the inspection is completed. Extensive frauds have been known to remain undetected through failure to observe this simple precaution.

If the examination cannot be completed the first day, the securities and bills not inspected should be locked up, and access denied to anyone connected with the bank except under the eye of the auditor.

The accounts with other banks will have to be verified by correspondence, and these confirmations should also be directed to the auditor and not to the bank.

How far the auditor should extend his examination of the depositors' accounts is a matter concerning which considerable dif ference of opinion obtains. The ideal way would be to have all the pass books called in at once, and have them settled by the auditor's own staff. It is, of course, practically impossible to do this, but it is of the utmost importance that as many be examined as possible. The auditor should keep a list of the books inspected, and in the course of a few years the entire list of customers might be covered.

The auditor should see that a proper internal system of checking the balances prevails. It is now customary in large banks for all pass book balances to be compared with the ledgers and initialed by some one other than the bookkeeper before they are handed to the customers; and in some banks customers are requested to fill out and return a memorandum confirming the balance.

It will be observed that the view adopted here with regard to a bank audit is that the verification of details may, and indeed must, to a large extent, be left to an internal audit. The recent frauds upon the Bank of Liverpool, which paid upwards of $850,000 upon checks forged by one of the ledger clerks, may perhaps raise a question as to whether this reliance upon the system of internal check is altogether justified in practice. It is thought, however, that the Liverpool frauds have little, if any bearing upon the point, in that the system of internal check seems to have been chiefly conspicuous by its absence, or at least by its inefficiency. Three of the fundamental rules of any effective system are:

That no clerk should have access to books recording entries which go to check the entries kept by that clerk.

That the clerks should be shifted about at frequent intervals, so that fraud—even if committed—may be speedily detected by a fresh clerk going over the same ground.

That no unusual entries, as, for example, transfers, should ever be made without special authority.

None of these rudimentary precautions appears to have been adopted in the case mentioned, and it seems safe to say that, had any one of them been in force, the frauds could not have been committed, or would at least have been discovered at a very early date. At the same time, as has already been stated elsewhere, it is always desirable that an auditor, when considering the exact extent of his investigation, should make careful inquiry into the system of internal checks employed, and satisfy himself that the system theoretically in force is actually carried out in practice.

In dealing with bank accounts, and all other accounts of a similar nature, the auditor must never forget that his responsibilities are not confined to safeguarding the interests of the proprietors His certificate is virtually—whatever it may be legally—a guarantee to the public that the accounts submitted are to be relied upon as being in every respect correct It is not, of course, suggested that he guarantees the safety of the customers' deposits; but he would reasonably be blamed were it to transpire that a bank which he had certified as solvent was afterwards discovered to be hopelessly insolvent.

At first sight it may appear impossible for the auditor to act up to the position here indicated, but he must remember that, in reality, the test of an auditor's competency is in his ability to judge of the correctness of items by an exhaustive testing—not necessarily of the items themselves, but of their totals.

A few remarks concerning the revenue account will not be out of place. The items of interest constituting the gross profit must be carefully tested, especially as to the rate charged upon current transactions, and the interest and dividends upon securities owned must of course all be accounted for.

It will probably be found that the banking house and fixtures are carried at a sum considerably less than their value, and this constitutes one of the secret reserves that many conservative bankers favor. The most recent instance is that of a prominent Trust Company in Philadelphia whose President proposed that their building—costing about $1,000,000—be charged off against surplus, so that the property account would represent the cost of the land only. While frankly admitting that the abuse of secret reserves is to be deprecated, it must be remembered that a balance sheet is not—and does not purport to be—a statement of facts, but rather an estimate of a position of affairs which by its very nature cannot be accurately determined. As proof of this it may be mentioned that only a few banks in the United States carry any reserve for unearned discounts, yet in a large bank this is a very considerable item.

The time will probably come when all banks will be required to keep their accounts upon a more scientific basis; and the bank officer, who now freely criticises a customer's statement which takes credit for future earnings, will reach the point where his own statement will reflect conditions more in accord with the facts than is now the case.

In the foregoing remarks the desirable extent of the auditor's duties has been stated rather than the bare limits of his legal responsibilities; the latter question will, however, be found more fully discussed under the heading of "The Liabilities of Auditors."

Stockbrokers. A considerable amount of mystery appears to envelop Stock Exchange accounts; and the remark has frequently been made that the audit of Brokers' accounts is altogether too technical a matter to be safely conducted by the general practitioner. The advantage of special practical knowledge on the part of the auditor has already been freely admitted, but it is contended that the desirable knowledge may be readily obtained, even by the general practitioner; and, with Stock Exchange accounts in particular, it is suggested that the necessity of *specialism* has been greatly exaggerated.

It is, however, essential that an auditor should have had some acquaintance with Brokers' books before attempting an audit, and this can frequently be gained by the special work which they require at especially busy periods.

Brokers' books differ widely from the usual books of account. Many use a cash journal which serves as a daily record of all cash and securities received and delivered. In this book the left-hand page contains the receipt of cash and the delivery of securities, while the right-hand page represents cash payments and receipts of securities, or *vice versâ*.

The subsidiary books also vary materially from commercial books, and some little experience is valuable, and perhaps essential, before attempting to audit them.

In the large New York houses initials are used for all active stocks, which is not only confusing but requires considerable memorizing before any attempt can be made to verify the books.

As in a bank, a large force must be put on without notice, and, as the stocks will have to be *balanced* before many changes occur, this will mean quick and accurate work.

For the benefit of those not familiar with Stock Exchange transactions, it may be said that all big brokerage houses carry large lines of stocks and bonds for customers *on margin*. These are in turn hypothecated with their banks as collaterals for loans. It is necessary, therefore, to go through the customers' ledgers and prepare a list of all stocks and bonds to be accounted for, taking into account the *shorts* as well as the *longs*. Lists must then be prepared of the stocks and bonds deposited with the banks, and the securities verified by correspondence; those on hand in the *box* must be examined, and the stocks at transfer offices checked. If everything is in order the lists will balance.

In an active market all this must be done within a very few hours, or the verification will be worthless, as the changes will be too numerous to follow.

Customers' accounts, at the first end of the month after the audit commences, should be mailed by the auditor; and the confirmations, which for obvious reasons are addressed to the client, should be secured before being opened by the clerks.

In the last few years some very large brokerage houses have consented to the customers' confirmations being mailed direct to the auditors, recognizing the value of the audit being independent in every way.

Testing the charges for commissions may reveal a fruitful source of errors, and it is not unusual to discover inaccuracies which will repay the cost of the audit. These can readily happen on busy days, as it is not possible to prove the calculations except by going back over them, and this is not always done.

For the audit of these accounts to be of any value, however, it is necessary that it should be of the most detailed description; the danger of error or fraud—either of which might assume alarming proportions—is extremely great, and the utmost care and circumspection are, therefore, imperative.

Perhaps the chief danger in this class of audits lies in the fact that in the great majority of offices there exists no regular system affording a reliable internal check, and no efficient supervision. To remedy this obvious weakness the visits of the auditor should be frequent, say, at least twice during each year; indeed—although a *completed* audit is doubtless useful, as affording a reliable periodical statement of accounts—the only really efficient audit of Stock Exchange accounts would appear to be one that is both detailed and continuous.

Insurance Companies. The general corporation laws of the various States do not, usually, cover Insurance Companies, and they must incorporate under special laws. These laws give the companies special privileges, but they also impose numerous restrictions. In most of the States there is an insurance department which is empowered to examine the affairs of all companies, local and foreign, doing business within the State. These departments vary considerably as to methods, and while the examinations made by some of them are thorough in their nature, yet their purpose is not in line with that of an audit conducted in the interests of stockholders. Like the examinations of National Banks, these audits are not to be relied upon to prevent fraud or carelessness by the employees, because the chief object of the State examination is merely to determine the solvency of the company, and its observance of the State laws.

A number of the European companies have their American accounts audited and reported upon monthly, and this may form a valuable part of an auditor's practice These monthly examinations are of the nature of a continuous audit, and should, of course, be supplemented by a more exhaustive audit at the end of the year.

The accounts of a fire insurance company are usually not at all complicated, and it will be in order to outline briefly the more important parts of an auditor's work in connection therewith.

The income must be thoroughly checked. The agents' original reports form the basis of the premium income, and enough of them should be checked into the books to test their accuracy.

The remittances from agents should be properly recorded at once, and no opportunity afforded to the cashier to *hold over* remittances.

The total outstandings due from agents at the end of the period should be thoroughly verified. The detailed balances should be analyzed, and any accounts in arrears should be taken up with the manager. It should be an invariable rule to have someone other than the cashier write the agents about their overdue accounts.

A considerable part of the income arises from investments and this can be checked thoroughly, and must not be overlooked.

Likewise the examination of the securities themselves forms an important part of the audit, and this will be conducted on the same lines as with banks.

The vouching of the cash payments very often occupies a larger proportion of the time than should be given to it; of course, the work is important, but it may be noted that an analysis of defalcations in insurance offices discloses the fact that very few are in connection with fraudulent vouchers. It is perhaps enough to say that the loss, expense, and all other vouchers should be properly approved and recorded, and if this is seen to, the payments will have been sufficiently covered. In connection with the payments there should be in force a good system of recording re-insurances, so that in case of a loss the re-insured portion will surely be collected.

The verification of allowances to agents for rebates, returns, premiums, and commissions falls under the heading of vouchers. Some special knowledge is desirable in this connection, but with reasonable care these points can be satisfactorily covered.

The balance sheet items require very little explanation, and present no unusual features, with one or two exceptions. In most States the insurance departments will not permit furniture and fixtures to appear as assets in the company's reports, and for this reason very few companies carry this account. This is an instance of a secret reserve, although not very flagrant.

The *reserves* should include ample provision for losses adjusted and unpaid, and for all other losses which may be disputed or unadjusted.

A very good article on "Auditing Insurance Accounts," by George Wilkinson, C.P.A., appeared in several numbers of the *Business World* a few years ago and will well repay reading.

Some months ago an article appeared in the *Journal of Commerce*, written by Mr. D. J. Tompkins, of the Guarantee Company of North America, with special reference to "Insurance Accounts," which is here reproduced. It will be noticed that it applies with equal force to any establishment where customers' accounts appear.

As an officer of one of the older guarantee companies, the writer has had over twenty years' experience of claims under fidelity bonds on defaulting employes. Three-fourths of the defaults by treasurers and cashiers accrue by embezzlement of remittances received, and then by concealing the theft by the *lapping* system, so-called. For instance, the defaulter embezzles a cash payment by *A* and defers the entry of such payment on the cash book until, on receiving a remittance from *B*, he puts *B's* check into the cash drawer and into the bank and then enters *A's* payment on the cash book, but likewise defers entry of *B's* remittance until the arrival of *C's* remittance enables him to enter *B's* payment in a similar way. He has to continue this system until the end, or until the shortage is made good. The more items stolen, the greater the number of accounts that must be tampered with to conceal default.

The result is, that as sundry amounts paid in by customers have not yet been entered by the cashier on the cash book, and hence not posted by the bookkeeper to the credit of their accounts on the ledger, their balances appear on the ledger at amounts larger than actually due by them. Manifestly, therefore, no audit can be complete or conclusive as to the existence of a default without the auditor's verification of the ledger balances by communication with agents and customers.

However, it is not often necessary to thus verify all such accounts to determine with reasonable certainty if such a default exists. If default exists in any appreciable amount its concealment by *lapping* will involve the existence of irregularities in a considerable number of such accounts; and if there be, say, one hundred accounts on the ledger, let the auditor select ten or fifteen accounts that are fairly representative and verify those. The result will indicate as to the necessity of verifying the remainder.

Again, there is another means of more certainly determining, right inside the office, whether this *lapping* system is in vogue to conceal existing default. If, as should be, the employe is required to make and retain on file in the office a carbon duplicate deposit slip showing items deposited in the bank each day, the auditor should compare the individual items so shown deposited with the items on the cash book for the same day. Let him make such comparison for three or four days of each month. If he finds that such individual items correspond, except for explainable differences, he may feel reasonably assured of the absence of any evidence of *lapping*. But if he finds frequent variances between such items—if, for instance, he finds on certain days such discrepancies as shown by the following, viz:

	Receipts as per Cash book		Deposits as per Slip	
Sept. 5.	Brown	$149.70	Check	$300.00
	Smith	205.00	"	275.00
	Jones	310.00	"	160.00
	Roberts	180.00	"	121.70
	Moore	45.00	"	45.00
	Thomas	22.50	Currency	10.50
	Total	$912.20		$912.20

—in such case the auditor should realize that here exists the indication of *lapping*—the deposit of checks in different amounts from the receipts entered on cash book—the availing of a deposit of remittances of certain customers to enable the cashier to enter credit to other customers for amounts previously received and entry of which had been deferred—the sure sign of default. True, occasional discrepancies of this kind may be natural and legitimate, but if such discrepancies occur frequently the auditor should know that a thorough verification of all accounts should be at once begun. If a carbon duplicate of the deposit slip be not retained in the office, the auditor should make such comparisons from copies of some of the original slips made by him at the bank.

Since railroad auditors, under pressure from guarantee companies, have begun to test outstandings in the accounts at large freight stations, defaults which formerly ranged from $10,000 and upwards in such accounts have now dwindled to an average of only $2,000 or $3,000. Only a similar test of ledger accounts will curtail the large amount of defaults now so frequently sustained by insurance, manufacturing, and commercial concerns.

The audit of a Life Insurance Company will present very few unusual points. The distinguishing feature of these accounts is the actuarial valuation of the company's liability to the policy holders. The auditor is not responsible for the accuracy of this valuation, but it is his duty to see that the accounts are duly prepared in accordance with the actuary's figures.

On account of the nature of the business the investments will be a very considerable item, and will be likely to include more real estate and other fixed property than is usually owned by any other undertaking. In most of the States the companies cannot purchase real estate except for their own occupancy, but as this has been construed to cover enormous office buildings, from which large rentals are received, and as foreclosure proceedings bring in numerous other parcels, it usually happens that a very fair portion of the assets will be represented in real estate. The income from rentals, etc., will have to be looked after carefully and the balance sheet valuations should be supported by the appraisals of competent men.

The loans made by the companies to their policy holders upon the assignment of their policies as collateral, should be carefully checked, and the presence in each case of the policy properly assigned ascertained. These loans are supposed to constitute one of the best assets the companies possess.

As a rule, investments must be made in accordance with State laws, but an auditor can hardly do more than obtain a certificate from the companies' counsel that the laws have been properly complied with.

Insurance Companies as a rule do not carry any liabilities on their books for accrued expenses, with the exception in some cases of an allowance for medical fees, because it is their custom to charge these expenses only as paid. Recently, however, the State examiners have recommended that proper reserves be carried for accrued salaries, rents, office expenses, taxes, bonuses, commissions, legal fees, etc. The plan is, of course, in the line of proper accounting.

The routine of the audit will differ but little from that of the fire office, but the auditor will be wise to pay particular attention to the lapses. Claims should also be more carefully looked to than is necessary in fire offices.

The audit of the investments will be a much more voluminous matter than before, and will require considerable care, both to see that the principal is intact and that the prescribed income has been received. As, however, the method of keeping investment ledgers varies considerably with different offices, this matter cannot well be gone into in further detail.

Accident, Title Guarantee, General and Special Liability, and similar companies do not raise any new considerations. The great majority of such accounts follow entirely upon the lines of fire offices —the company's contract being an annual one, which they can discontinue at any time, should they think well to do so. The business of health insurance, however, more nearly approaches that of a life office, and actuarial assistance will be required for the determination of the value of the unexpired risks.

Investment Companies. The accounts of these companies are, probably, as simple as accounts can well be. The ostensible purpose of such companies is to enable investors to spread their capital over a large field, and so, by the principle of average, obtain a better security for their principal without a corresponding sacrifice of interest.

The history of many of our mortgage and debenture companies has not been satisfactory from the investors' point of view, and an auditor's position here is a responsible one.

The auditor will require to see the original memoranda for all sales and purchases, and also to ascertain that all interest and dividends have been properly accounted for. Purchases *dividend on* and sales *ex dividend* will probably be the most likely cases in which an irregularity may occur. Only income earned during the time that an investment is held should be credited to revenue; while on the other hand revenue is entitled to take credit for all the income earned during that period, that is to say, where extraordinary revenue is collected in a certain period that period alone should receive the benefit. Such income should not be anticipated in prior periods.

The valuation of investments is perhaps the most important function of the audit of investment companies. Under existing conditions, the auditor cannot, of course, prevent the directors issuing accounts stating investments at cost price (regardless of value), but he at least can—and certainly should—call attention in his report to anything that he considers to be an undue inflation of assets.

It is not always imperative that investments should be written down to market price. In the first place, the principle of averages may consistently be followed here, and it will suffice if the total market price be not less than the total cost price. If, however, there be a deficiency in this respect, it should be met, not by a revision of individual values, but by a setting aside of a lump sum to an investment fluctuation account as a reserve against loss. This reserve may either be deducted from the amount of investments in the balance sheet, or separately stated as a liability. A reserve so created should, except in very special cases, not be reduced in subsequent years, except for the purpose of providing for the actual loss realized upon the sale of depreciated investments.

When the total market value exceeds the total cost price it is not at all desirable that the capital value of the investments be increased. To credit such an increase to revenue is clearly as incorrect as it would be to credit it with an assumed increase in the value of goodwill. There is no particular harm in writing up the assets and crediting the difference to a reserve not available for dividends, but it is much better kept in hand—at all events until the permanence of the increase be well assured—as a secret reserve, against which the company may draw in bad times.

With regard to the profits or losses arising from sales made during the period under audit, in the first place the dividend should be apportioned (from day to day) so that the actual profit or loss may be arrived at. Such profits and losses made during any one year should be treated in the aggregate; if the result be a profit, it is available for dividend; if a loss be the result, it should come out of revenue, unless an adequate reserve exists from which the loss may be taken. It is, however, highly desirable that profits made by changes of investments be taken to reserve, and not credited to revenue.

In bad times the conscientious auditor of investment companies has an unthankful task before him, but he must not shrink from the responsibilities of his situation.

It is important to distinguish between investment companies and speculative finance companies. The chief profits of the former are income derived from investments; and profits derived from a change of investments only arise incidentally. In connection with the latter the profits derived from a change of investments form the main source of income; consequently all such investments must be regarded as so much stock-in-trade—as floating assets—and valued accordingly, whereas the investments of a *bonâ fide* Investment Company may fairly be treated as fixed assets. The importance of this distinction lies in the fact that, whereas the investments of a speculative finance company ought never to be valued at a price in excess of the current market price, it is frequently difficult (if not impossible) to arrive at any reliable basis of valuation; for Stock Exchange quotations are by no means necessarily a reliable basis, if there be no free market. Again, it may be pointed out that, following the ordinary principles of the valuation of unsold stock, no appreciation in the value of investments ought to be credited to revenue until those investments have been actually sold. It is not, however, necessary to write down each separate investment that has depreciated, while writing up those that have appreciated; the proper course would appear to be to maintain the investments in the balance sheet at cost price, making provision for a reserve sufficient to cover any deficiency in the aggregate intrinsic value, as contrasted with the aggregate book value. Realized profits may, of course, be properly credited to revenue; but care should be taken to see that they have been actually realized in cash, and, so far as possible, the auditor should be upon his guard against the inflation of profits by means of *accommodation* transactions between different members of a group of companies. Probably the Whitaker Wright frauds in England will be sufficiently fresh in the minds of the student to make unnecessary any detailed explanation of what is alluded to under this heading.

This whole point was very carefully covered and clearly stated in Mr. Dickinson's paper, "Profits of a Corporation," already referred to. The section is reproduced in full, Page 112 hereof.

To sum up, it appears that although, so far as the authorities have hitherto gone, it would appear that under some circumstances dividends may be legally declared out of current revenue without first making good depreciation of investments; it is, on the other hand, certain that the declaration of such dividends is a direct violation of every principle of sound finance, and should at all times be discouraged by the auditor, who should make sure that the true position of affairs is sufficiently revealed to the stockholders, either upon the face of the accounts or by a special clause included in his report.

PUBLIC SERVICE CORPORATIONS

The recent agitation in the United States with regard to municipal ownership of public utilities has aroused considerable interest in the methods of keeping the accounts of such utilities and preparing them for publication. So far municipal operation has not proved so successful as municipal ownership coupled with private operation through leases, and it is probable that the latter plan will prove more desirable for some time to come.

The day is probably not far distant, however, when all public service corporations, at least in the more populous States, will be under the supervision of a State Board, or Commission, empowered to fix rates and compel reports prepared along uniform lines. Many of our States have created these commissions and it is safe to say that the rest will follow as the people demand it, and our legislators are alive to the fact that it makes possible enormous patronage. In New York State a single commission is spending more than a million dollars a year almost entirely in salaries and special compensation.

The most notable case of public regulation is that of the Interstate Commerce Commission, appointed under authority of Congress to supervise the operation of steam railways doing an interstate business. The results—so far as encouraging, and in some cases compelling, the keeping of and submitting accounts prepared along uniform lines—have been wonderfully successful, and part of the prosperity of our railways is no doubt attributable to the increased attention which has necessarily been given to the accounting departments of the Railway Corporations which have been subject to this control.

In the fixing of maximum rates, however, the Interstate Commerce Commission was for a long time impotent, and additional legislation has from time to time been required to enable anything to be done along this line.

In the case of local public service corporations, however, State Legislatures can readily, and in some cases have, passed the necessary acts delegating to Commissions or Municipalities the power to fix rates.

This puts a responsibility on an auditor which is far more serious than when he is dealing solely with stockholders and other owners, for now he finds himself not only in the position of safeguarding the interests of the owners, but he also occupies a quasi-public position. The accounts to which he certifies should not be so conservative that the profits are unduly diminished and the public deceived; nor, on the other hand, should they be so lacking in proper reserves and depreciation allowances that the profits will appear too large, and the attention of the consumers consequently called to this fact, with the result that agitation for rate reductions naturally ensues.

This matter received the attention of the Congress of Accountants, held at St. Louis in September, 1904, under the auspices of the Federation of Societies of Public Accountants, and the attention of the student of public utility accounting is, therefore, called to the published proceedings of the Congress.

It is not amiss in this connection to report the findings of a special committee appointed to pass upon this subject.

The committee appointed at the Congress of Accountants, held at St. Louis, U. S. A., in September, 1904, to review the paper by Robert H. Montgomery, C. P. A., upon *The Importance of Uniform Practice in Determining the Profits of Public Service Corporations Where Municipalities Have the Power to Regulate Rates*, having taken the paper into consideration, have come to the following conclusions, and now beg to state the same as their opinion upon the questions raised.

I. A distinction must be made between the profits of an undertaking from the point of view of the general community and the profits available for dividends from the point of view of a corporation owning such undertaking. The former would be the net earnings from the operation of the undertaking, after providing for all waste or depreciation of capital assets arising directly out of such operation; while the latter would only be arrived at after providing also for any possible loss on capital assets arising from causes not directly incident to such operation and for interest on borrowed money.

II. The *net earnings* of a public utility with which the general community is concerned are determined by the excess of *gross earnings* over *expenses*, defining the latter terms as follows:

Gross earnings consist of the charges for all services rendered during the period as distinguished from mere receipts, but would exclude incidental earnings not arising out of the operation of the utility, such as interest on investments.

Expenses consist of:

1. The direct cost of operation and of maintenance (ordinary repairs), expenses of management and provisions for bad debts, damage claims and rebates, as well as extraordinary expenses incurred during the period, such as legal charges, etc., but they should not include interest on bor-

rowed money, discounts on bonds issued, or other charges in connection with the promotion or financing of the undertaking.

2. Depreciation—

a. On plant—physical—covering wear and tear, including direct requirements for renewals, etc., arising both from known and probable causes, such as electrolysis, etc.

b. On plant—indirect—due to obsolescence and the like, but not that due to a fall in value from general causes.

c. On other capital assets which are diminishing in value as a direct result of the operation of the property, such as moneys properly expended in acquiring from the local authorities the franchise under which the utility is operated where such franchise is, as is usually the case, terminable after a certain number of years; or cost of mines, quarries, or other similar properties which are being used up continuously for the purpose of operating the utility. But there should not be included any provision for recouping promoters' profit or other watered capital, or for possible loss by reason of a general fall in values, etc., on the purchase at the end of the franchise of the whole undertaking by the public authorities— *i. e.*, the State or the Municipality.

III. In dealing with the private accounts of a corporation operating the utility, earnings will also embrace miscellaneous receipts, if any, not connected with the actual operations of the undertaking; and the following additional expenses should be allowed for, before arriving at a balance available for distribution:

1. Depreciation—An additional amount to cover any excess of the book value of goodwill, franchise, and plant over that provided for under Section 2, sub-section *c* above, or over the sum it may be expected to realize on the expiry of the franchise.

2. Interest—On bonds or other funded or floating debt.

IV. In determining the rates which should be charged to the public, regard must be had (*a*) to the profit ascertainable under Section II, and (*b*) to the further charges specified under Section III, which would have to be borne by the corporation out of such profits. For instance, if eight per cent per annum on the capital invested is considered a reasonable rate for a corporation to earn, taking into consideration the risks in Section III, then the rates should be fixed so as to allow of a profit of eight per cent calculated as laid down in Section II, and out of this profit the corporation would have to provide for the risks and expenses stated in Section III.

A. Lowes Dickinson,
Elijah W. Sells,
Harvey S. Chase,
Earnest Reckitt,
John B. Niven,
Robert H. Montgomery, Chairman

It will be noticed from the foregoing that the most important matter, from the auditor's point of view, is the division of all expenditure into classes—capital and revenue. It is not, however, always possible for the auditor to judge as to the correctness with which, say, the cost of an improvement, or renewal, has been apportioned as between capital and revenue; nor, indeed, is it necessary that he should attempt to constitute himself an engineering expert. He will, however, require to see that the company's engineer has certified the apportionment to be correct, and that the expenditure on capital account has been passed by the Board. In addition, it is desirable that he should satisfy himself that the principle followed by the engineer in arriving at his apportionment is a sound one. There is, properly speaking, no *safe side* in these matters—an undue charge to capital is unfair to the proprietors, while an undue charge to revenue is an injustice to the consumers. The following examples of apportionment will, however, be found useful, as indicating, in general terms, the correct method of arriving at the amount chargeable against capital and against revenue, in any special case that may arise:

New plant (including extensions): *capital.*

Conversions.—In case old materials, instead of being sold, are used for other purposes on the works—treat the particular department of capital expenditure as the purchaser of the old materials in question, debiting it with the value of the materials and the full cost of conversion (if any).

There are some special features connected with public utility enterprises which will be considered under their appropriate headings.

Gas Companies. The income of a Gas Company consists of gas rates, residuals sold, and generally profit on fittings and rents, in addition to interest on investments. The collections of gas rates are best checked in totals (in the manner shown under Fire Insurance accounts, care being taken to fully test both allowances and arrears), the total receivables being arrived at from the meter readings books, which will show the total amount of gas consumed and what meters are in use. The residuals sold cannot well be checked as to quantity (save by comparing the results of various working statements), but, of course, the auditor may, and should, check the collection of the amounts debited. The same remark applies to fittings, which will almost invariably be found to form a part of the Gas Company's business. It may be added that it is best merely to state the profit arising from fittings on the credit side of the revenue account (rather than to credit revenue with income, and to debit it with expenses), as there is nothing gained by showing the whole world what percentage of profit has been made. The leading items of expenditure arise from coal and other fuel, stores, and wages. The question of depreciation should be carefully considered in connection with Gas Companies, because a considerable part of the plant must be wholly renewed at comparatively short intervals. A provision must, therefore, be made for these renewals. All cash book entries must, of course, be vouched, the additions checked, and the balance verified; also all the general ledger postings should be called back.

The investments held against *reserve, insurance,* and (if any) *depreciation funds,* must be verified by an inspection of the securities held.

The auditor of a Gas Company should be thoroughly familiar with the system of uniform accounts submitted to the American Gas Light Association at its annual meeting in 1902, and with the later amendments thereto. The report covers the "Classification of Operating Expense Accounts; Classification of Betterments or Property Accounts; Forms of Monthly Journal Entries, and Rules for Closing." While certain features of this system can be improved upon, especially the nomenclature, it forms a most valuable basis for an ideal system.

Reference should also be had to the uniform systems prescribed by the various State Public Service Commissions. For instance, New York has prescribed systems for gas, electric light, and street railway companies which are very complete; copies may be secured from the Commission.

Water Companies. The audit of water companies is slightly simpler than that of gas undertakings, by reason of the fact that the rates charged are, for the most part, fixed, instead of fluctuating with the quantity used. Such portion as is supplied by meter, for trade purposes, will entirely follow the method recorded under Gas Companies. With regard to the greater portion, which is based on flat rates, it is not usual to exhaustively check the calculations involved, but they should be *tested* to such extent as may appear desirable. Vacancies may sometimes be vouched by a declaration of the owner that the property in question has been vacant for the whole of the period. Allowances (which should be very exceptional) must be properly explained, while arrears and bad debts must both receive careful attention.

Most companies are empowered to make their charges in advance, and consequently their books will, at the date of the accounts, reveal a profit that has not yet been earned; due allowance must. of course, be made for this in the general balance sheet.

Gas and Water Companies. These companies (combined) will —in almost every instance—be found to keep the accounts of the two undertakings separate. In the few old companies where no such practice exists, separate accounts should, at least, be made out for capital expenditure and revenue (the management expenses being apportioned according to, say, the ratio of the average gross income from each department), so that the profit upon each may be known and the proper working statistics prepared.

Electric Lighting Accounts. The general method of audit will practically follow the lines indicated under the head of "Gas Accounts;" especial care should, however, be directed to the current apportionment of expenditure between capital and revenue.

Care should be taken to see that all proceeds of sales of lamps, etc., are accounted for and proper stock accounts kept.

Electric light accounts differ from those of most other undertakings in that the perishable nature of the fixed assets renders it imperative that special attention should be devoted to the subject of depreciation. It is not merely sufficient that the working plant should be fully maintained in a state of working efficiency out of revenue, as the high speed at which the machinery is run, combined with the fact that only the smallest possible intervals of rest can be afforded to rectify defects, very materially shortens the duration of the life of these assets. Moreover, in connection with this particular industry the advances of modern science are so rapid that, in spite of this comparatively short time of life, many parts of an electrical plant become obsolete before they are worn out. For these reasons a high rate of depreciation must be provided, and it is now being realized that in most cases depreciation has occurred at a more rapid rate than has been provided for in the accounts.

It is thought that a minimum safe provision against depreciation of the actual expenditure as a whole would be one equal to five per cent on the total capital expenditure. It may be added that five per cent allowance for depreciation on the entire cash investment is the minimum figure used by a prominent American electrical engineer, who has made a careful study of conditions in every part of the United States; in the case of one ten million dollar plant he claims that the annual depreciation rate should be nine per cent.

One caution in conclusion may not, however, be out of place: where no regular purchase ledger exists—and this state of affairs will also be frequently found in connection with both gas and water companies as well—particular care will be necessary to guard against any omission of outstanding liabilities, when the annual accounts are drawn up.

For a complete study of the actual working out of various public service plants, reference should be had to the report of experts made to the National Civic Federation covering their investigations of *Private Operation of Public Utilities.*

Steam Railways. Railway accounting in the United States has reached such a high state of perfection, that the auditing department usually has at its head a thoroughly competent official. With a few noteworthy exceptions the accounts are not audited by professional accountants, but it is thought that the time is not far distant when railroad stockholders will not be satisfied unless an independent examination is made on their behalf. Until recently it was not customary for any allowance to be made for depreciation, and there was a remarkable lack of uniformity in regard to writing off so-called betterments. Railroad men are almost unanimous in claiming that depreciation, as such, is offset by the charges against revenue for renewals and betterments; but, as these charges are usually large in prosperous years and painfully small in lean years, it is hard to see wherein the logic of their position lies.

The Interstate Commerce Commission has recently ordered important changes in the accounts of steam roads and a reserve for depreciation must now be maintained. Many objections have been made to the order and it is impossible to forecast the result.

It would require a whole volume to properly discuss this question, and the reader who is specially interested in railway accounts can find numerous books on the subject. A few remarks on the routine work are, however, in order.

The auditing department, in itself, constitutes a continuous and thorough check upon every other department under the supervision of the controller, and as no moneys whatever pass through that office, it may be safely taken that the work is honestly performed.

The auditor's work may thus be said to commence with the certified returns of traffic, and the certified accounts of tradesmen and others. He must, however, himself examine and verify the summaries of these items. He must see that they tally with the cash received, and that the latter finds its way into the bank in due course. He must examine the vouchers of all expenditure, and, so far as possible, verify its apportionment; in particular must he satisfy himself as to the correctness of the apportionment of such expenditure between capital and revenue. With regard to the issue of new capital, he must see that the amount actually received agrees with the totals shown in the stock ledgers kept at the secretary's office. He should compare the certified returns of the *foreign* railways with the entries in the books of his own company. He should check the transactions in notes in detail, follow the matured notes into the bank account, and verify the outstanding notes by the inspection of the actual documents. He must check the traffic outstandings with the certified statements, examine the entries on both sides of the banking account, and, so far as possible, the classification of the items. He should examine all bonds that have been redeemed, and see that they have been cancelled. He should also see that all paid coupons have been cancelled and properly filed. He should examine the accounts for repairs done to the rolling stock of private car lines and compare the lists with the ledger. He should examine the accounts of rent received, thoroughly check the general ledger, compare the balances of the various stock accounts with the certified list of stores on hand, and compare the totals of the general ledger expense accounts with the totals of the subsidiary books. It will then still remain for him to ascertain that such liabilities as traffic drawbacks are provided for, verify the investments by inspection of securities and examination of the interest received, compare the capital issued with that authorized by stockholders' minutes, give a final consideration to the apportionment of capital and revenue expenditure, and see that the necessary certificates have been furnished as to the efficiency of the permanent way, rolling stock, etc.

Of course all the above details cannot be covered in the audit of one of the great trunk line systems. In such a case, however, the internal check is likely to be more efficient. As with other undertakings, the auditor must be governed by the special circumstances of the case, and should only omit such details as are checked intelligently by independent employes.

Street Railways. The majority of street railway companies now keep their accounts along uniform lines as laid down by the uniform methods prescribed by their respective State Commission or by the Street Railway Association, and a study of the report of their committee on standard classifications should be made by an auditor before commencing an audit of a street railway. The audit, however, is rather simple, as the business may be said to be on a *cash* basis.

The audit of the receipts is of the utmost importance. The daily returns will usually be found to be certified to. An examination of the system will develop whether this can be depended upon. If so, the daily receipts should be traced into bank. It may, perhaps, seem superfluous to suggest the propriety of seeing that receipts are accounted for upon every day of the year. It will be found in nearly all cases that the entire daily receipts are deposited, which is, of course, the only proper way, and if this method is not in force the change should be made instantly. Other sources of receipts should be inquired into, and it may prove to be a fruitful inquiry, for in many undertakings, where a most rigid system exists of looking after the usual transactions, infrequent items of revenue, such as sales of old materials, etc., receive scant attention, and numerous cases are known of these sales being unaccounted for.

The only other source of revenue of any importance will be advertising; but, as this is almost invariably sublet to a contractor, it needs no comment.

The expenditures—which should always be made by check, no payment out of traffic receipts being on any account permitted—must be carefully vouched; while the analysis thereof must, so far as possible, be verified. In particular, the apportionment between capital and revenue must be thoroughly scrutinized.

If the directions laid down in the uniform system are properly carried out, and if renewals were uniform from year to year over, say, twenty years, it might, perhaps, be claimed with some show of reason that there is no necessity for providing directly for depreciation.

It frequently happens, however, that the first examination the auditor makes follows immediately, or very closely, the reconstruction of the road, or its consolidation with other lines, or with electric light companies. During this period the charges to construction will be heavy—legitimately so—and the direct charges to repairs and general maintenance will be light. It is contended that the only scientific way to prepare the accounts of such a year is to include an allowance for depreciation. If this is not done, it almost invariably happens that in later years, when the renewal charges are heavy, the necessity arises for capitalizing these large expenditures; and where there should be ample reserve to provide therefor, laid aside out of earnings, there is not a dollar in hand for this purpose, and the fact that the dividends paid were, in fact, out of capital, develops too late.

The opinion of an engineer on the question of depreciation of electric trolley railways is of value to professional auditors. The following extract is from a recent report made by a prominent engineer:

> Pole lines and copper, ten per cent.
> Ties, twenty per cent.
> Machinery, ten per cent.
> Cars, twenty per cent.

It is within the province of, and it is in fact the duty of, the professional auditor to take a firm stand upon this question, and to refuse to certify the profit and loss statement of a street railway company which does not amply provide for depreciation—either directly or by satisfying himself that the charges for renewals represent a fair equivalent.

If he is unable to secure this result his certificate should draw prominent attention to the fact, and it must follow ultimately that the protest will be heeded.

EXECUTORS AND TRUSTEES; INSTITUTIONS; BUILDING ASSOCIATIONS; PROFESSIONAL ACCOUNTS

Executors' and Trustees' Accounts. It will sometimes happen that the professional accountant is called upon to audit the accounts of executors or trustees, on behalf of some dissatisfied beneficiary, or, as is more frequently the case, he will be called in by the executors or trustees themselves, because they desire the certificate of an independent auditor that their accounts are correct.

The purport of the auditor's investigation in such cases will be to ascertain that the terms of the will or trust have been complied with, and that no improper use or unauthorized investment of the trust funds have occurred. Questions of apportionment between capital and income will also claim his attention.

The fullest investigation into details will be necessary, except, perhaps, that where the trustees have been authorized to carry on the testator's business, and where there is no suggestion that their conduct has, in this respect, been improper, the business accounts may be excluded from inquiry.

In addition to the will and probate, and the accounts kept by the executors and trustees, the probate account (with any subsequent corrective accounts) and residuary account, together with the minute book (if one be kept) and all documents and vouchers, will require to be carefully examined.

With regard to the question of apportionment, it is important to remember that all interest accrued to the date of death (inclusive) forms part of the *corpus;* that the profit or loss arising from any subsequent *bonâ fide* change of investment falls, as regards capital, upon capital, and as regards income, upon income; that, even where investments of a wasting nature are specially authorized, the whole of the income does not of necessity pass to the life-tenant. Where the will or deed of trust provides that the wasting assets must be administered for the equal benefit of the life-tenant and the remainderman, the usual custom is to consider five per cent (or thereabouts) as income, and to capitalize the remainder—that any loss arising out of an unauthorized investment falls upon the trustees personally, who are liable to repay the amount with such interest as the court may direct—the rate being usually six per cent (simple interest), and the same rate is usually charged where the trustees have applied the funds to their own use. Any of the above provisions may, however, be modified by the special terms of the will or other instrument creating the trust.

The investments authorized for trust funds (subject to any special terms in the will) have varied from time to time. The auditor will therefore require to satisfy himself that each investment was a proper one *at the time it was made.* The investments authorized by the several states vary as to their character, but usually consist of first mortgages upon real estate, government and first lien railroad bonds.

It frequently happens that an estate is so bequeathed as to be apportionable between persons of different ages, with the provision that the share of each is to be held in trust for him until the happening of a certain event—such as his attaining his majority (or, in the case of a female, on her marriage)—the beneficiary in the meantime only receiving the income on his, or her, share. Under such circumstances it generally follows that the beneficiaries do not become simultaneously entitled to their respective shares in the principal; but the moment anyone becomes entitled to a share in possession he becomes entitled to actually receive his share, and—save by consent—the division (or partition) of the estate cannot be postponed. If the estate consists of investments that are readily capable of division, the problem is, of course, a quite simple one, for the beneficiary entitled to the partition may then have transferred to him (or sold for his benefit) his due fraction of each of the numerous investments held by the trustees; but when the estate includes mortgages, lands, or other non-divisible assets, some arbitrary method of arriving at the beneficiary's share becomes essential. If all beneficiaries are of age, the share of each may be mutually agreed; but if any one of the beneficiaries be under age, there is no means of obtaining his (or her) consent. The only course is then to apply to the court, when the court will direct a *partition* of the estate, and the ascertainment of the share immediately payable to the beneficiary entitled to a possessory interest, and the order of the court will be a protection to all parties concerned. Upon payment of the amount found to be due to the beneficiary, he ceases to have any interest in the trust estate, and the residue of the estate is then held in trust for the remainder of the beneficiaries, who alone are concerned in any subsequent fluctuation in the value of the trust investments.

It is especially important to remember that beneficiaries, unless of full age, have no power to consent to any variation in the terms of the trust.

In conclusion, it need hardly be pointed out that one of the most important duties in these audits consists of a very careful verification of the investments.

Accounts of Institutions. *Charities.* Under this head may be included the accounts of hospitals, certain endowed universities and schools, and similar institutions.

The distinguishing feature of most charities' accounts is the receipt of subscriptions and donations. These will, of course, require to be vouched in the usual way; but, perhaps, the most effective check consists in the publication of a list of subscribers and donors along with the accounts.

In the case of hospitals there will be a considerable revenue from patients' board, etc., which will have to be carefully checked. It is not always the custom to keep these accounts upon a double entry system, and abuses frequently occur.

There is no reason why the patients' accounts should not be as carefully kept and easily checked as the accounts of guests in a hotel. There is always a Patients' Register, giving time of arrival, etc., and the other books can be arranged conveniently to allow of a satisfactory audit.

It is unfortunate that the accounts of institutions receiving state and private aid should be lacking, as most of them are, in uniformity and clearness. It is hoped that the increased attention which is now being given to uniform municipal accounts will extend to public institutions and great benefit may be expected in this direction.

In some states where state aid is given to hospitals and other charities, an official auditor visits the recipients and *audits* the accounts. It is the custom, however, for these officials to simply satisfy themselves that the state's appropriation to the particular institution has been properly expended, without regard to other sources of income and expenditure, and the books are, as a rule, arranged for his convenience. It is needless to say that such a system does not lend itself readily to the preparation of proper income and expense accounts. On the whole it will be found advisable to continue what ever forms the state examiners may require, but in addition there should be installed a proper system which will show the actual results of operation rather than a simple cash account.

The vouchers will probably be in very fair shape, as it is customary to have them examined, not only by the state examiners, but by committees of the Board.

Churches. In many respects the audit of church accounts is a peculiarly thankless task. Apart from the fact that they are hardly ever submitted to the auditor in anything approaching proper form, it is almost invariably the case that no effective internal supervision is exercised, and frequently large sums will pass through a treasurer's hands without any proper check being kept upon his dealings.

The auditor must check everything he can, and try to teach his clients the elements of commercial caution; but it is probable that he will never feel quite happy with a church audit.

At a recent church convention it was proposed in good faith by a disinterested individual that in all parishes having a certain minimum income, the treasurer's accounts be submitted to a certified public accountant for audit. Unfortunately the motion was voted down, but the seed has been sown, and no doubt the harvest will ripen at no distant date.

Colleges and Schools. These accounts call for but little comment. The usual method of audit may be said to consist of a *cross* between that employed in charities and hotels, but it may be added that only a detailed audit is likely to be found entirely satisfactory.

The income from tuition fees, room rents, etc., forms a large aggregate as a rule, but is usually recorded by single entry methods, and it, therefore, will bear careful checking. Obviously every student's name found in the annual catalogue must be accounted for, and it is sometimes found to be a good plan to report to the trustees all allowances and rebates, and the names of all *free students.* It may serve as a surprise to the Deans, but the Trustees will probably appreciate the report.

While it is not unusual for colleges to have professional audits, there is a wide difference in the methods adopted of stating the accounts, and there is a vast field for improvement. Most of the balance sheets and income and expense accounts are stated in such an involved way that it is hard to gather any definite information as to the actual *results of the operations.* In view of the immense sums which are contributed annually it is to be regretted that more attention is not given to the accounts, for the purpose, at least, of showing by comparisons and proofs that there has been a reasonable return from the *capital employed.*

Building and Loan Associations. The number of frauds—some of them of disastrous proportions—that have occurred in the accounts of building societies should suffice to make the auditor of these accounts more than usually cautious.

Although so far as known all these associations require the appointment of auditors annually, it has not been the custom to employ certified public accountants, chiefly on account of the expense involved; but in view of the losses which have fallen upon stockholders in the past, it would seem that by this time an investor would no longer be satisfied with the amateur auditor. In any event, the auditor's fee would not be more than a small fraction of the society's annual income, and if the matter could be put before the investors in a proper light the great majority no doubt would insist on proper audits.

It will usually be found that the whole management of a building society devolves upon one man who—besides having both books and cash under his entire control—turns the whole of the board round his little finger. Add to this the fact that the system of bookkeeping employed is generally of the most primitive kind, and some idea of the responsibility of the auditor's position may be gained. The complexion of affairs is hardly improved where there is more than one real worker upon the staff; any efficient system of internal check is all but unknown (except in a few—a very few—of the best and largest societies), while the class of men employed is usually very different and very inferior to the class of men employed in banks for work of a very similar nature.

The great majority of frauds that have been committed have remained undetected by reason of the very superficial examination bestowed upon the accounts by the auditors; but cases have occurred in which the most detailed audit (conducted by unskilled men truly but none the less detailed on that account) has failed to detect anything wrong.

The study of the reports on many associations can only convince an auditor of the extreme importance of checking every addition, posting, and voucher; of carefully verifying every amount received in redemption of mortgages or paid out to investing stockholders; of comparing *every* pass book with the ledgers, and both with the lists of balances; and of testing the latter at considerable length in respect to the calculation of interest. The income received from properties on hand, must be verified in every possible way; and, where such income does not seem to be a fair return upon the book-value of the various properties, the latter should be either revised or supported by independent valuation.

The papers relating to all mortgages, and the securities relating to whatever other investments there may be, must also be examined by the auditor, who will do well, in addition, to require the attorney to certify that such papers are all in order.

In the case of a building society of any pretensions, the number of deeds and mortgage papers that call for inspection will be very considerable, and accordingly a method of saving unnecessary labor will be found acceptable. In all well-managed concerns it will be found that the papers relating to each separate mortgage are enclosed in a separate envelope, upon the outside of which is endorsed a *resume* of its contents. If this endorsement has once been verified and the envelope has been sealed, it is thought that under normal circumstances no similarly detailed verification of the contents is necessary at subsequent audits. At each subsequent audit all fresh sets of papers must, of course, be verified in detail, as must also the contents of those envelopes which for one reason or another have been opened during the current period, and upon which, therefore, the auditor's seal is not intact, but it is thought that where the seal remains intact, and where a sufficiently distinctive seal has been employed, any further detailed investigation is unnecessary. It should be sufficient for practical purposes to verify the contents of a few envelopes, taken at random, and also, of course, the contents of all envelopes which in the opinion of the auditor may by any possibility have been tampered with.

It is more than probable that the fees attaching to his office will afford the auditor no adequate remuneration for an examination conducted on such lines as those laid down; but, be this as it may, the auditor who—under ordinary circumstances—omits any of the precautions named would be worse than foolish.

It must also be remembered that there is usually a statutory limit to the borrowing powers of a society, which must not be exceeded.

Professional Accounts. *Lawyers.* It is not easy to effectively audit the accounts of lawyers without devoting considerably more time to the task than clients would be willing to pay for, and nothing short of a continuous audit appears to meet the necessities of the case.

Almost all lawyers use the stock forms of books sold by law stationers, and these are designed rather to save time than for any other purpose, and as framed it is difficult to audit them.

The amount included in the balance sheet for outstanding charges should, in general, be verified by comparison with the ledger and this in turn with the bill copy book. Agent's accounts should, at all times, be carefully considered, and it is not a bad plan to compare every item of cost charged up with the copy of the bill rendered, the object being to make sure that the full amount chargeable has been debited, for the amount asked for may not (by reason of an amount having been received on account) be always the amount that has to be debited.

Of recent years the increasing number of fraudulent failures and defalcations on the part of lawyers has drawn attention to the importance of proper accounts being kept by those who wish to avoid any possible reflection upon their manner of dealing with the moneys entrusted to them by their clients.

It is impossible to overstate the importance of clients' moneys being kept quite distinct from the moneys of the practitioner himself; while it may be added that in many respects it materially simplifies the keeping of the accounts. Each large estate should have its own separate bank account and separate books, entirely independent of the books of the firm; while all other moneys received in trust for clients should be paid into a *Clients' Account*, and a separate column provided in the cash book for keeping this account distinct from the *general* bank account. Not the least important advantage of keeping the accounts of large estates quite separate from the general accounts is that the cost of keeping them, and of having them audited, may then frequently be charged against the estate in addition to other costs. Moreover, these accounts can be submitted to the clients (or their agents) for audit without disclosing any other transaction; and if they be so audited at regular intervals, it is frequently unnecessary for them to be also audited by the lawyers' auditors, and by this means a further saving of expenses may be effected.

Architects. The accounts of architects are, perhaps, less frequently the subject of professional audit than either of the two classes of accounts just discussed, but this is a state of affairs which is always undesirable, and particularly so in cases where two or more architects are practicing in partnership.

The accounts do not, as a rule, involve a particularly voluminous record, and it is, therefore, desirable that in all cases the audit should be a detailed one. The fact that architects are frequently not business men makes it important that the auditor should take every precaution to guard his client from loss, both through actual fraud and bad bookkeeping; it is therefore important for him to see that every item in the cash book is properly vouched, and, so far as possible, that all fees and commissions are duly accounted for. It may be mentioned here that, with regard to fees payable to an architect for supervising the erection of buildings, these fees are, as a rule, payable by way of a commission—generally at the uniform rate of five per cent—upon the value of the work done, as certified by the architect for the purpose of assessing the payments to be made on account to the builder. There will always, at balancing time, be a considerable amount of accruing fees, which, although not actually due for payment at the time, constitutes an asset; a schedule of these items should be prepared and certified by the principals for inclusion in the accounts. Many practitioners, however, work their accounts exclusively upon a cash basis, and the plan has much to recommend it when professions are concerned.

In all important undertakings in England, a *Clerk of the Works* is appointed to be on the spot, for the purpose of checking the material and workmanship employed by the builder. The Clerk of the Works is not infrequently appointed by the architect, but he is invariably paid by—and is the servant of—the architect's client; if, therefore, for reasons of convenience, his salary has been paid by the architect, it is important to see that it is subsequently recovered by him. This practice is not generally followed in the United States, but it has much to commend it, and in some respects, at least, the plan will, no doubt, be adopted here ultimately.

Medical Men. There are so many different systems of bookkeeping employed by medical men that it is difficult to afford any useful hints as to the method of audit in the space here available. It may be pointed out, however, that it is not, as a rule, either necessary or expedient for the auditor to go behind the debits in the patients' ledger, which, as often as not, are fixed at round sums by the practitioner without any strict reference to the number of visits. It is desirable, however, that the auditor should see that some efficient system of recording calls is in force, so that his client has all the facts before him when assessing the amount of his charges. The auditor should carefully check the credit side of the patients' ledger, noting in particular any allowances that have been made, and he should see that all cash credited to patients has been properly accounted for.

Where payments have been made on account of patients, whether for medicines, or for consultation fees, etc., it is very important that the auditor should see that they are properly charged up and collected in due course. Many practitioners employ one or more assistants, or dispensers, who are authorized to receive money, and where this is the case it is especially important that the system in use should, as far as possible, follow the ordinary commercial precautions against fraud. With those practitioners who supply their patients with medicines, it is also necessary that the accounts of druggists, etc., should be carefully checked, and an allowance will have to be made at balancing time for the value of drugs in stock.

It need hardly be added that where horses and carriages or automobiles are the property of the practitioner, an adequate allowance must be made for depreciation, probably at the rate of fifteen per cent or twenty per cent per annum. Where, however, these are rented by the month or any other definite period, it is equally important to see that the cost of hire to the date of balancing is included; or, if this has been paid in advance, that a proportionate part is held over as an asset.

CONSOLIDATED BALANCE SHEETS AND PROFIT AND LOSS STATEMENTS

The proper method of stating the accounts of corporations, which are generally known as *holding companies*, has received considerable attention recently because it is believed that the omission on the part of some corporations to take up the *losses* of subsidiary companies, when they have included among their own earnings all the profits, has resulted in erroneous opinions as to the actual net earnings of the corporations in question.

Frequently, the balance sheet of the holding company simply gives its own assets and liabilities, and these convey practically no information at all so far as the actual condition of the subsidiary companies is concerned. In many instances very large loans to underlying companies are included in the assets. In the absence of specific information as to the separate earnings or condition of such undertaking, it is impossible to judge whether such an advance is or is not a good asset. It becomes, therefore, a grave matter of principle for the auditor to decide, and the form of the accounts in this instance becomes of unusual importance.

The opinion of A. Lowes Dickinson, F. C. A., C. P. A., on the subject, as reflected in his paper read at the St. Louis Congress of Accountants, is of importance, as it is believed that the views there expressed represent the best accountancy practice:

During the last few years the correct statement of the earnings of a company controlling a number of subsidiary companies has required much consideration. Legally, the earnings of such a corporation consist of the results of its own operations, together with any dividends which may be declared on the stocks which it owns in the subsidiary companies; and so long as these stocks represent only minority interests in companies which are not in any way controlled or operated by the directors of the holding company, it would seem that a profit and loss account prepared in such a way would be a correct and proper statement from an accounting as well as from a legal point of view. During recent years, however, the practice of consolidating a number of concerns by a control of stock rather than by an absolute purchase of the business has grown into favor, and consequently it is usual to find the holding company owning either the whole or a large majority of the stocks of a number of companies doing a similar business, appointing the directors of these sub-companies, dictating their policy and generally acting in every way as if it absolutely owned the whole property. Under such conditions it is submitted that no statement of earnings can be considered correct which does not show in one account the profits or losses of the whole group of companies, irrespective of whether dividends have or have not been declared thereby. If this principle be not insisted upon, it is within the power of the directors of the holding company to regulate its profits according, not to facts, but to their own wishes, by distributing or withholding dividends of the subsidiary companies; or even to largely overstate the profits of the whole group by declaring large dividends in those sub-companies which have made profits, while entirely omitting to make provision for losses which have been made by other companies in the group. It is doubtful whether there is any existing law which could legally require a corporation to make up its statement of profits on the basis here suggested, but possibly it may eventually be found that the ordinary rule referred to at the commencement of this paper, of a reasonable valuation of assets, may be made to cover this point for the following reasons:

It is clear that whatever the value of an investment in a corporation may be at a particular date, its value at any subsequent date (other things being equal) must be greater or less by the amount of the profits or losses made during the intervening period. Even if other conditions at the two dates are not the same, and, quite apart from any consideration of the earnings or losses during the intervening period, there is a considerable appreciation or depreciation in the investment, that appreciation or depreciation must undoubtedly be more or less, respectively, by reason of profits earned or losses incurred. In this case the change in value of the asset is at any rate partly due to the result of the operations for the purpose of which the investment is held. On the general principle, therefore, that a profit and loss account should take into account all profits or losses resulting from the trading operations, but should not take into account the profits or losses arising from a revaluation of capital assets, it may eventually be held, on legal as well as on accounting principles, that the statement of earnings presented by a holding company is not correct unless it takes into account by way of either a reserve or a direct addition to or deduction from the capital value of the investment the profits or losses made in operating the subsidiary companies.

One other difficult point is the determination of what is or is not a constituent company whose profits and losses should be brought into account in this manner. It is suggested that this depends partly on the proportion of stock owned and partly upon the degree of control exercised by the holding company. When the latter owns at least a majority of the stock, operates the company, dictates its policy and practically treats its property as its own, subject only to the right of the minority stockholders to receive a share of the profits, the conditions would appear to be such as to require the proportion of profits and losses corresponding to the stock owned to be taken up; while, on the other hand, a mere majority ownership of stock without any effective control of the management and operation might properly be treated as an investment, only subject to the same rules as other investments of a similar character.

Very little need be added to the above except that the last clause may possibly be misunderstood. It is quite correct that its proportion of profits, only, should be taken up, but in many cases a holding company owning, say, ninety per cent of the stock of another company, which is being operated by it in connection with other companies, should take up *all* the loss of the latter rather than its proportion only, which in this case would be ninety per cent. The reason for this is obvious. If the subsidiary company is an important or necessary link in the group usually operated by holding companies, and is losing money in its operations, it almost invariably happens that the parent company will be compelled to make cash advances sufficient to cover the losses sustained. These advances will be carried as assets by the holding company, and should be scrutinized as carefully as other accounts receivable. Obviously, advances, especially those without security, to a company whose finances are unsatisfactory or whose operations have been uniformly unprofitable, cannot be looked upon as good unless a critical examination proves this to be a fact. The ordinary auditor, however, usually passes them without question.

If the suggestion that the entire loss be taken up in the manner advocated above is not acceptable to the directors, it might be stated in another way, viz, treat the ninety per cent and the ten per cent as separate items, covering the latter by charging profit and loss and crediting a reserve account in the same way that other bad or doubtful debts are treated.

Where the earnings of subsidiary companies have been carried into the books of the holding company, it follows, of course, that either some asset account, such as that representing the investment in the subsidiary company, has been correspondingly increased, or else it will be debited to an account called *Profits of Subsidiary Companies,* and the holding company's current profit and loss account credited. Following out the same line where a loss has been made, the investment account (or any other account which represents the cost of the underlying property), or the account *Profits of Subsidiary Companies,* should be correspondingly decreased and the current profit and loss account of the holding company debited.

The rule that the whole loss on operations of an underlying company must be taken up by the holding company cannot apply where the operations of the subsidiary company result in a profit. The only legitimate way by which the holding company can secure its proportion of this profit being through dividends, it follows, of course, that the minority interests, no matter how small, will receive their share, although they can never be depended upon to contribute any proportion whatever of the losses.

Where it has not been the practice to carry the results of the operations of subsidiary companies into the books of the holding company, but where a consolidated balance sheet and earnings statement is to be prepared, the latter should, for the reasons set forth, take up the entire loss of all companies where the interest is overwhelming. If this is done, there can be no objection to carrying the advances to such companies as good, but if the advances are greater than the aggregate losses taken up, great care must be taken to ascertain that the losses shown by the books of the subsidiary company are accurately determined.

Of course, this is a matter which naturally varies with the facts in each particular case. In the event of the loss being an extraordinary one, likely to be recouped in subsequent years, the question takes another aspect, as is also the case where the minority interest is considerable, and where the whole burden of advances, etc., does not fall upon the holding company.

It might be urged that if the unprofitable company is not a necessary part of the general undertaking, its operations could be suspended and further losses avoided; in such an event, if the losses on operations have, as a matter of fact, been taken care of by the holding company through its advances, the entire amount on such loss will still have to be taken up, because it cannot be assumed in such a case, any more than in a going concern, that the minority interests will contribute their share of the losses. This principle, however, does not cover any capital loss which may ensue, and it will have to be dealt with on its merits.

In considering these, and in fact all, matters involving the form in which accounts are, or should be, stated, it must be borne in mind that it is very exceptional for the form in which the accounts are stated for the stockholders to be actually under the control of the auditor. As a rule, by-laws provide that the accounts shall be rendered in such form as the directors shall think fit, and in such cases it is, of course, impossible for the auditor to dictate as to the precise form to be adopted. This, however, does not release him from the responsibility of judging as to the fitness of the form in which the accounts are rendered by the directors. In this respect he is placed in a position and furnished with information which is withheld from the general body of the stockholders, for the express purpose of satisfying himself that the accounts submitted by the directors to the stockholders are such as will reasonably disclose the position of the company. Considerations with regard to the form which accounts should take are frequently of a nature which the auditor must of necessity weigh for himself; for, inasmuch as the stockholders have no knowledge of the transactions or position of the company other than that which they gain from a perusal of the directors' accounts and the auditor's report, it stands to reason that if the accounts do not sufficiently disclose these things, it may frequently happen that the stockholders themselves would have no reason to suspect that the accounts were not all that they should be. It therefore follows that, although the auditor does not have the drafting of a company's accounts, it is necessary for him in all cases to consider the form in which they are submitted for his approval, and not merely to content himself with an examination of their technical correctness. It has been stated by some that, the accounts submitted to the stockholders being the accounts of the directors, they, and they only, are responsible to the stockholders for the form. This is true to the extent that the auditor has no power to compel the directors to modify the form of their accounts; but it is not true in the sense that if the accounts submitted are, so far as they go, correct, the auditor is under no responsibility to specially report in such cases, as they are insufficient to enable anyone examining them to obtain a correct idea of the company's position. Were this the case, it would, indeed, be difficult to see in what respect the stockholders gained by an audit of their accounts, for it is obvious that it would be possible to conceal almost anything in the shape of fraud or unjustifiable extravagance. The stockholders have, however, a clear right to such accounts as will enable them from time to time to judge of the value of their investment; and it is for the purpose of making the accounts reliable for this purpose that an auditor is appointed. And while there rests with him the serious responsibility of concealing such matters of internal detail as would, if divulged, tend to damage the position of the business, yet, on the other hand, he must not fail to remember that it is the stockholders, and not the directors, who are at least the theoretical masters of the fortune of the company, and that (except in matters of internal detail) they have an indisputable right to the fullest and clearest information.

DEPRECIATION — RESERVES AND RESERVE FUNDS

Depreciation. So much has been said and written on depreciation during the last few years that some of you must think that the principal part of an auditor's duty is to look after this point. Too much emphasis cannot be laid on its importance, and the prominence given to its consideration in accountancy circles is simply the result of the responsibility which has been thrust upon them. Business men know in a sort of undefined way that depreciation represents an actual rather than an imaginary expense, but because they believe that they cannot reduce this expense to dollars and cents with any degree of accuracy the entire item is omitted, or else the allowance is made *out of net profits.* The following illustration may serve in attempting to point out to the client the absurdity of considering for a moment that there can be a profit or a net profit *before* one of the big items of expense has been included or even mentioned. For example, in a shoe factory they use leather and other materials, labor and machinery to manufacture shoes. The machines are expensive and easily wear out and are often replaced with new ones before the old ones wear out. Let us assume that ten thousand dollars' worth of machines will, during their life and allowing for replacements on account of obsolescence, turn out one hundred thousand pairs of shoes, representing a cost of ten cents for each pair; assume that the leather and findings in each pair cost one dollar and that the labor costs forty cents; the total cost of these three elements is one dollar and fifty cents. Why should no account be taken of one while the the others are always charged in? The answer is that the ten cents is only an estimate and that the manufacturer wants something more definite than mere guesses. Already the point has been discussed that estimates play a large part in all balance sheets, and upon investigation it is found that the cost of the materials which have entered into particular lots of shoes has been an estimate, for costs fluctuate with the market, and many factories are compelled to average the costs of their raw materials. As a matter of fact, it is not difficult to make a close estimate as to the life of a machine nor is it impossible to make a fair estimate of the probable output of many machines. Certainly the estimates will be close enough to enable a cost clerk to include *some* amount for depreciation in his costs, and if the factory proposes to keep on doing business for any length of time it is not unreasonable to assume that experience will soon demonstrate any great fallacies in the original estimates.

Every one of you should start a file for the preservation of information on this subject. Start in by securing copies of the various articles which appear from time to time in accountancy publications. If you do not wish to mutilate the periodicals, write to the author for a copy and you will frequently find that he has had it printed in pamphlet form for distribution. If you cannot get a copy in this way start a loose-leaf binder and make a little summary of the articles on sheets of paper of uniform size and keep them carefully and note the references also. Wherever you find references to definite rates of depreciation on certain machinery, plant, etc., note the same in a book alphabetically arranged. Any student who will follow this suggestion not only with respect to depreciation but also in connection with other subjects, such as reserves, etc., will accumulate a stock of information which may be of great value later.

Before doing so, however, it may be well to remind the student of the distinction between depreciation and fluctuation.

Depreciation is a shrinkage in value, which, in the ordinary course of events, may be expected to take place, as being a necessary consequence of the possession and enjoyment of the asset; it consequently is a charge against revenue.

Fluctuation, on the other hand, arises from causes entirely outside the scope of the business, and may affect the value of its assets either adversely or favorably.

The operations of fluctuation cannot, however, affect true trading profits either one way or the other, and, as a rule, therefore, it is best to disregard it in the accounts.

A *favorable fluctuation* in the value of fixed assets seems to be a proper subject for a secret reserve, that is, there may be an appreciation in the value of the land upon which factory buildings are erected. This may be due to various causes, but it is not considered conservative accounting to write up the book value under such circumstance. A favorable fluctuation in floating assets is temporarily a secret reserve, which will be included in the trading profits when those assets are realized.

An *unfavorable fluctuation* in floating assets may be disregarded so long as there is every reason to believe that it is of a temporary character, but if it seems likely that conditions will remain unfavorable until the time comes for realizing those assets, then the loss should be anticipated; or, to speak more accurately, it should be charged against the period in which it actually occurred, rather than against the period in which it was realized. An unfavorable fluctuation in fixed assets need not, under normal circumstances, be charged against revenue before declaring dividends out of current profits. It may, therefore, be disregarded in the accounts; but, in order that the true position of affairs may be placed before the stockholders, it is desirable that either a note should be appended to the balance sheet, drawing attention to the shrinkage in value, or a paragraph to that effect be inserted in the auditor's report.

In connection with this distinction between depreciation and fluctuation, it should be added that in some quarters the practice has been strongly advocated of occasionally having fixed assets revalued as a check upon the annual provision for depreciation; and appraisal companies which make a specialty of valuations, particularly for the purpose of testing the adequacy of insurance carried, have met with considerable success in recent years. There is much to be said in favor of re-valuations, in that it is always desirable to take every reasonable opportunity of testing the sufficiency of estimated provisions; but, on the other hand, it must be borne in mind that a revaluation can hardly fail to take into consideration fluctuation as well as depreciation, and consequently may introduce into the accounts a disturbing element, obscuring the real result of the trading. It ought not, however, to be impossible to check the provision made for depreciation by means of re-valuation without introducing these complications.

In order to make it quite clear what is intended, it may be pointed out that a machine costing $500, and a further $100 to erect, may answer its purpose for six years, and then have to be sold as second-hand for $75 This leaves a cost of $525 to be written off over the six years' life. Under the circumstances it might be reasonable to charge this at the rate of $87.50 per annum (equals 14½ per cent), or the efficiency of the machine may be so high when new that the reasonable procedure would be to charge 27½ per cent on the reducing balance, which would reduce the $600 to (approximately) $75 at the end of the sixth year; but, whichever method be adopted, it is more than probable that the balance shown on the machinery account at the end of the first, second, third, fourth, and fifth years would not agree with the valuation made by an expert at those times. The reason for this is that the expert would take into consideration the value of the machine in the market, whereas the manufacturer is only concerned with its value to him. Moreover, the market value may be influenced by other considerations besides the actual condition and state of newness of the article in question. The existence of new and better types is. of course, a risk that ought to be provided for by depreciation, but fluctuations in the value caused by an increase or reduction in the *cost of producing* similar machines in no way affect the cost of the original machine that has to be written off over a term of years.

COMPARATIVE TABLE

	Reduced by 14½% on Cost	Reduced by 27½% per Annum	Re-valued
Cost (including Erection)	$600.00	$600.00	$600.00
Depreciation 1st year	87.50	165.00	200.00
	512.50	435.00	400.00
" 2nd year	87.50	119.60	75.00
	425.00	315.40	325.00
" 3rd year	87.50	86.75	75.00
	337.50	228.65	250.00
" 4th year	87.50	62.90	50.00
	250.00	165.75	200.00
" 5th year	87.50	45.60	50.00
	162.50	120.15	150.00
" 6th year	87.50	33.05	75.00
Estimated Break-up Value	$75.00	*$87.10	$75.00

With these preliminary remarks, the special features in connection with the depreciation of various classes of assets to be considered may now be discussed.

Land. Land may quickly be dismissed—it suffers no depreciation. Fencing, and other similar works, would, of course, depreciate, but the item would not usually be of sufficient importance to require consideration. If, however, it became a large item, it should be treated separately as Plant.

Buildings. Buildings depreciate to an extent varying greatly according to the quality of the workmanship and materials employed in their erection. The amount of the ledger account will frequently include land, which, as has been seen, does not depreciate; the depreciation will, therefore, be confined to the building itself. If the *installment plan* be adopted, from one and one-fourth to three (or even five) per cent of the original amount may be deducted annually; if the *annuity method* be used, a fixed sum debited to revenue, which, after crediting interest, will write the asset down to zero in from, say, fifty to one hundred and fifty years; or, if the *sinking fund system* be

*The estimate is (it will be seen) too large. It is, however, no serious matter to charge the whole of the deficit—$12.10—against the sixth year's profits, increasing that charge to $45.15.

preferred, such a sum may be set aside as will accumulate to the cost of the building in that time. In each case all repairs will have to be borne by revenue, in addition to the depreciation. With regard to the relative merits of the installment, annuity, and sinking fund methods, the latter two are distinctly preferable; although—on account of its greater simplicity—the installment method is frequently used. The annuity system differs from the sinking fund in that the installments are not invested; the (net) amount of each successive installment, therefore, requires to be increased to compensate for loss of interest on the previous uninvested installments.

The student who is not familiar with the best methods of calculating annuities, etc., is referred to a very good treatise on this and other subjects, entitled "The Accountancy of Investment," by Colonel Charles E. Sprague, Ph. D., C. P. A.

Goodwill. Goodwill does not *depreciate*. On the other hand, it will generally be conceded that it is liable to fluctuations, both continual and extreme; as, however, no one would think of calling its omission from a balance sheet a secret reserve, it will probably be most convenient to deal with the question of goodwill under the present heading. As a matter of fact, goodwill is not written down *because* its value is supposed to have become reduced—such a course is all but unknown. The amount at which goodwill is stated in a balance sheet is never supposed to represent either its maximum or its minimum value; no one who thought of purchasing a business would be in the least influenced by the amount at which the goodwill was stated in the accounts; in short, the amount is absolutely meaningless, except as an indication of what the goodwill may have *cost* in the first instance. Inasmuch, therefore, as nobody can be deceived by its retention, there is no *necessity* for the amount of goodwill account to be written down. On the other hand, the practice is not unusual, where sufficient profits are being made. The question is not, however, one upon which the auditor is required to express an opinion; and, so long as the item is separately stated on the balance sheet, it is scarcely desirable that he should interfere with the discretion of the management, although there is, of course, no objection to his offering an opinion when he is invited to do so.

Horses. Horses invariably depreciate, and—if heavily worked—very rapidly. The rate of depreciation will probably vary between fifteen and twenty-five per cent on the starting balance of the account. Until experience has shown the actual rate of depreciation, it will be safer to arrive at the result by a re-valuation (which with horses, can more accurately be done than with most things); and where only a small number of horses are employed (say, twenty or less) the re-valuation should often be resorted to, if only as a check upon the rate of depreciation employed.

Investments. Investments need not be depreciated unless of a wasting nature—such as shares in mines or timber lands. As to how far it is desirable that fluctuation in their value should be considered, the reader is referred to the paragraph on "Secret Reserves."

Leasehold Land and Premises. The premium paid for leases may be regarded as the purchase-money paid for a terminable annuity of the difference between the annual value of the property and the annual charges. In short-term leases the readiest method will be to charge a proportionate part of the term against each year's revenue; but the method is too rough to be employed if the term exceeds, say, eight or ten years. In the case of longer leases the annuity, or sinking fund methods which were discussed under the heading of "Buildings," should be adopted. All repairs are, of course, chargeable to revenue; but they may be averaged by the temporary or permanent employment of a repairs account through which revenue is charged with a fixed amount annually, the difference being brought forward as a liability, or (more rarely) as an asset.

Before leaving this point it is well to bear in mind that, in the case of exceptionally long leases, or exceptionally badly built premises, it may be necessary to increase the annual charges for depreciation beyond the usual rate, so as to provide for the re-building of the structure during the lease.

Machinery. Machinery depreciates by wear and tear, and by becoming obsolete. In addition to charging all repairs and (partial) renewals to revenue, from seven and one-half to twelve and one-half per cent should be written off annually from reducing balances. Boilers, which depreciate more rapidly, should be reduced from ten to fifteen per cent per annum. Loose tools are most conveniently dealt with by means of a re-valuation. It is desirable that a sound practical opinion be obtained as to the precise rate to be adopted in any particular case, and a thorough re-valuation from time to time is very desirable.

The practice of having a subsidiary ledger containing the details of the machinery account in the general ledger should always be advocated. It greatly facilitates the labor of securing rates of depreciation, and is invaluable in case of fire, and in fact for many other purposes, such as determining the amount to be written off in the event of sales.

Mines. Mines, undoubtedly, depreciate in direct proportion to the amount of mineral extracted. By a singular inconsistency of the law, however, no depreciation need be provided for by a mining company before declaring a dividend. Where depreciation is provided, the correct method appears to be to write off annually such proportion of the total cost (less residual value of plant) as the year's output bears to the estimated contents of the mine, or—in the case of a lease—such proportion of the total cost as the year's output bears to the estimated total output during the lease.

On the other hand, it must not be forgotten that there is so much uncertainty about mining ventures that it would be practically impossible, merely by the adoption of any system of accounts, to insure that the whole of the *capital* of the undertaking was always maintained intact; while the persons who invest in this class of concern would doubtless object to large funds accumulating in the hands of directors, and earning a low rate of interest, which might legally be distributed as dividend, even though in point of fact they constitute a return of *capital.* Perhaps, therefore, it is best that mines should be regarded as coming under a distinct category as *non-permanent undertakings,* the excess of current expenditure being distributed, irrespective of the value of the remaining assets as contrasted with the paid-up capital.

Plant. Plant other than machinery, generally runs comparatively little risk of becoming obsolete, and a deduction of from five to seven and one-half per cent will, therefore, usually suffice.

Furniture and *fittings* should, however, be subjected to a somewhat higher rate. In both cases an occasional re-valuation will be desirable.

Plant (or *Machinery*) acquired upon the *installment* or *hire purchase system* must, of course be depreciated. Under normal circumstances the depreciation will be in accordance with the nature of the asset, whatever it may be. It should be borne in mind, however, that if full depreciation be charged during the currency of the agreement, in addition to the proper interest installments, the consequence will not infrequently be to charge against the profits of the earlier years a sum in excess of what it would cost to merely hire the articles in question. The cost of simple hire may fairly be regarded as the maximum amount that need ever be charged against profits for the use of any asset, consequently the full provision for depreciation may require to be modified during the currency of the hire-purchase agreement.

Patents. Patents are virtually leases of a monopoly, and although it is possible that some value—in the nature of goodwill—may remain after the patent has run out, it seems desirable that the cost of a patent should be written off within the course of its life. Where a patent has not been purchased, but remains the property of the original patentee, it is very undesirable that the item should be treated as an asset at all, except to the extent of its actual cost in fees, etc.; such a course would seem to be every bit as artificial as a similar treatment of goodwill, which is a latent asset in every paying concern.

A similar mode of treatment will apply to *copyrights*, except that their commercial value has usually expired long before the copyright has run out. (See further under "Publishers' Accounts.")

Ships. Ships undeniably depreciate, although the rate at which they do so is so variable that no general rules can be given that would prove of any practical utility. The amount of depreciation is usually certified by a competent engineer, and, therefore—so long as his report looks plausible—the auditor is relieved from undue responsibility.

Theatrical Plant, etc Although there can be no reasonable doubt that theatrical scenery, *props.*, and other stock-in-trade are liable to depreciation, it is probable that few accountants would care to accept the responsibility of settling the actual amount. So far as the writer has been able to ascertain, the only practice in vogue is a periodical re-valuation, and it will very likely recommend itself to the auditor as being, perhaps, the safest course. *Copyrights* and *performing rights*, when not purchased upon *sharing* terms, will also require to be dealt with; but, unless there appear to be very good reasons for believing that a *revival* at no very distant date would prove remunerative, it would probably be considered safest to regard the whole cost as a mounting expense. Unless the auditor is acting on behalf of a company or creditor, the best plan will, no doubt, be to leave the whole question to his client's discretion.

Repairs. Repairs will, in all cases, require to be charged against *profit and loss;* but, with a view to equalizing profits, it is a very good plan to charge a fixed sum to profit and loss, and to credit that sum to a *reserve for repairs account,* against which account the actual repairs will be debited. Except in very special cases, however, a debit balance on the *reserve account* should not be passed as an asset. If the amount expended upon repairs is below the average of previous years, it may be desirable to reconsider the value of the property itself.

Landlord's Fixtures. In the case of plant, machinery, and fittings erected upon leasehold property, it is important not to lose sight of the fact that, so far as these become landlord's fixtures, the minimum rate of depreciation permissible is one that will entirely write off the book-value by the time the lease expires. The question as to what are, and what are not, landlord's fixtures is, however, far too intricate to be usefully dealt with here.

Numerous pamphlets, articles, and lectures on this subject by leading American accountants have appeared from time to time, and reference to them may readily be had.

RESERVE FOR BAD AND DOUBTFUL DEBTS

Unless the outstanding *book debts* are extremely numerous, it is desirable that the auditor should go over the list in company with his client, or the manager, or some equally responsible authority, and settle the amount of loss to be provided for. Where the number of accounts renders this feature impracticable, a certified list of amounts to be treated as bad, and a statement that the provision made is sufficient, signed by the aforesaid responsible authority, should be supplied to the auditor. It is a fact that sometimes an experienced accountant will give a far more reliable valuation to book accounts than the owner or manager of a business can do. No doubt the training and experience of an accountant help him in many ways to gauge the probable realizable value of *book debts;* but unless his experience be confined to one particular industry (or at most to a few industries), his knowledge of the financial standing of the customers can of necessity be only fragmentary at the best. It is, moreover, thought to be undesirable for an auditor to differ from the deliberate opinion of, say a manager, unless he is prepared to give solid reasons in support of his views. On the other hand, it is not intended to suggest that, merely because the auditor has been supplied with a certified list of the provision which it is thought necessary to make for bad and doubtful debts, all he has to do is to accept it without further comment or inquiry. It, of course, remains for the auditor to satisfy *himself* that the provision is one which appears to be both *bonâ fide* and reasonable. In this connection the following suggestions will be found useful:

With trading concerns debtors who always take a cash discount may, in the absence of information to the contrary, always be assumed to be good for any outstanding balance not greatly in excess of their ordinary amount.

Debtors who always give notes for their accounts may, under similar circumstances be regarded as good, provided the notes are always met at maturity without renewal. Where there are renewals, the accounts should be examined more carefully; and, as the number of cases would not be large, this detailed inquiry would not be impracticable.

Accounts showing an increasing debit balance require more careful scrutiny than those where the balance is reduced, more particularly if the number of transactions during the period be small.

In the case of interest-bearing debts, the punctual payment of the interest may be taken as presumptive evidence that the principal is good provided it be not in arrear; but where the interest is in arrear, the presumption is that the debt is at least doubtful, unless sufficient authority is held to cover the amount.

Dead accounts are more likely to be doubtful or bad than *live accounts;* and in this connection a debtor who, during the current year, has not paid enough cash to extinguish the balance against him at the commencement of the year, may generally be regarded as a *dead account*, and treated accordingly.

Apart from the open balance standing against the various debtors in the customers' ledgers, it is important not to lose sight of unmatured notes, whether these be on hand or have been discounted; but, as has already been stated, a customer who invariably meets his notes at maturity may usually be regarded as safe to continue to do so.

It may be added that, in many cases, there should be a fairly constant ratio between the amount of outstanding book debts and the total of the sales on credit during, say, the last three months.

Although it is very undesirable that an insufficient provision be made for bad debts, it should—on the other hand—be remembered that, when once a debt is written off, its chance of being eventually collected is greatly discounted; and, further, that there is at least a possibility of its being not accounted for, even if collected; hence the advisability of adopting the system already described.

Reserve for Outstanding Discounts. It is customary to provide for the usual cash discounts, upon both book debts and trade creditors, by means of a reserve account. Where, however, the amount is uncertain (by reason of the variable nature of the payments) and the difference between the two sides is but slight, the provision might be omitted without any great harm being done—indeed, it is a very open question whether the profit or loss, as the case may be, ought to be anticipated. *Trade discounts* are, however, a very different matter, and should always be provided for by deduction in the proper period, from the purchases and sales respectively.

It has been stated that every credit transaction involves the consideration of interest or discount—a statement which is, doubtless, theoretically unassailable, but practically inconvenient. As a matter of fact, a result almost ideally correct may be obtained with a tithe of the trouble. If the terms upon which goods are sold are, say, 2½ per cent discount at one month, or a three months' note net, it might, at first sight, appear that the trader gives credit at 15 per cent per annum interest, but in all probability he would only allow 3 per cent (or at most 3½ per cent) for cash, which is altogether a different rate. The real terms would thus be: 35 days' average credit (20th of month to 20th of month, payable 10th of following month), 3 per cent or 3½ per cent discount; 65 days' average credit, 2½ per cent off; 126 days' average credit, net. It will be seen that these terms do not actually represent any definite rate of interest, and further—the choice of terms being with the debtor—that no absolutely accurate apportionment can be made.

In such a case as that named, a better plan cannot be adopted than to reserve 2½ per cent on all open accounts, and carry over the *bills receivable* net. A similar method would apply to outstanding liabilities and *bills payable*. Where, however, a note has been discounted or renewed at interest, or granted for an exceptionally long term at interest, the question of interest should be no longer ignored, unless the amount involved be trifling.

In the case of *banks* and other *financial houses*, interest—which is no longer obscured by trade profits, but is itself the source of all profit—should, of course, be always taken into account and proper reserves created therefor; but as stated heretofore, the almost invariable practice for American banks is to ignore this matter.

Investment of Reserve Funds. It is very generally conceded, and therefore need not be discussed at length that it is not—under ordinary circumstances—desirable that a reserve fund be specially invested. Where, however, the fund is specially raised for a specific purpose (*e. g.*, the redemption of bonds), its investment would appear to be desirable for the purpose of insuring its being available at the appointed time. Of course, wherever a specific provision is made in a mortgage (as is frequently the case) requiring the fund to be invested, it will be necessary to carefully examine all the provisions relating thereto in order to be sure that the investments are properly made. Where the reserve fund exists for the purpose of strengthening the credit of the company—as in the case of banks—it is doubtless desirable that it should be invested in first-class securities; but it is no part of the auditor's functions to interfere with the management in this respect.

Unless there is a special provision in the by-laws, there is nothing to prevent directors from transferring the whole or any portion of the amount standing to the credit of any reserve account to the credit of profit and loss account, for the purpose of increasing the amount of profits available for dividends. Where such a course is being pursued, the auditor should, however, take steps, if in any way possible or feasible, to acquaint the stockholders with the facts, unless they are shown with sufficient clearness on the face of the accounts.

It is obviously desirable that premiums received on issues of stocks should be placed to the credit of a permanent reserve and not applied to the equalization of dividends; nor should they be included in the surplus, or current profit and loss account as ordinary earnings or income.

The proper account to credit with premiums is *capital surplus;* such a caption practically precludes the transfer of premiums to the current surplus account. In some corporations the directors have used premiums on stock issues for subsequent dividends, but such action is little short of criminal and any director who approves such a course should be held personally responsible for the dividend.

With respect to premiums received on bond issues (if the premium arises as a matter of fact from the rate of interest which the bonds bear), it would seem proper that the premiums so received should be set up and distributed ratably over the life of the bonds as a reduction of the current interest account. This, of course, follows the theory laid down with respect to bonds issued at a discount.

Forfeited Stock. Where shares have, for any reason, been forfeited to the company, and have not re-issued, they should be separately stated on the balance sheet, as a dividend declared would not be payable in respect thereof. Such shares may at any subsequent date be re-issued at any discount not exceeding the amount already paid (or so much thereof as represents profit) and any excess realized should be treated as a premium upon issue, and credited to reserve fund. The auditor should always make a point of seeing that the minutes as to forfeiture and as to the calls due are *primâ facie* in order.

Secret Reserves. The object of secret reserves is to equalize dividends, or to equalize apparent profits; and, in the case of banks and similar institutions, it must be admitted that, were accounts published showing considerable fluctuations in the amount of profits earned, the result might readily be to produce a feeling of disquietude which was altogether unwarranted by the actual facts. More particularly in the case of banks largely affected by fluctuations in exchange does it seem desirable that the temporary effect of such fluctuations should be excluded from published accounts. The understating of assets in profitable years (which is the ordinary means of providing a secret reserve) clearly contemplates, however, the possibility of their being written up in less profitable years, when it may be desired not to disclose the fact that the profit earned has been less than usual, or perhaps even insufficient to cover the proposed dividend.

Opinions differ greatly as to the extent to which the formation of secret reserves is permissible; but it is thought that within reasonable limits, the matter is one resting with the directors rather than with the auditor, so long as there is no suspicion of bad faith. It is when it is sought to have recourse to a secret reserve by writing up the assets which have hitherto been undervalued that the position requires the most serious consideration of the auditor.

With regard to the position of the auditor generally, it would appear that, in the absence of *malâ fide*, he incurs but little responsibility. He should, however, be very careful about the good faith with which the valuations or re-valuations are made, and although he has no power to influence the management in the exercise of their *bonâ fide* discretion, yet it would appear to be clearly his duty, in cases of doubt, to sufficiently acquaint the stockholders with the facts of the case to enable them to intelligently exercise their own discretion as to whether they will pass the accounts in the form in which they are presented to them or not. Thus, where the assets are stated below their certainly-known value (forming a secret reserve), or above their certainly-known value (forming a secret deficit), at least the bare fact should be mentioned in the auditor's report. Again, there are limits to the extent with which a secret reserve should be played with, for the sake of equalizing dividends; and it is very undesirable that valuable assets should be entirely omitted from the balance sheet, because in such a case the auditor is very liable to omit to verify their existence. In some balance sheets a note is appended to the effect that certain (specified) assets have not been included. Such a course appears to remove the most weighty objections that can be raised against the reduction of valuable assets to zero, but it does not altogether justify the course adopted.

LEGAL DEFINITIONS OF PROFITS

In connection with the question as to what are "profits available for distribution," it is of interest to note the definition given in *Buckley*, 8th Edition, pages 584 and 585, which is as follows:

The profits of the business of the company are the credit balance of a profit and loss account properly prepared, having regard to the definition of the business in the memorandum of association. They are the excess of revenue receipts over expenses properly chargeable to revenue account. As to what expenses are properly chargeable to capital and what to revenue it is necessarily impossible to lay down any general rule. In many cases it may be for the shareholders to determine this for themselves provided the determination be honest and within legal limits.

It will probably be admitted that this is one of the most diplomatic definitions that has ever been given upon a subject of such vast importance; inasmuch as it leaves the inquirer exactly where he started for it still remains for him to define what receipts are apportionable to capital and what to revenue, and what expenses are chargeable to capital and what to revenue. Could these questions be definitely answered in each case, it is obvious that the question of what the actual profits have been would be one capable of the most ready solution. In view of the close relation of the whole subject of "Profits" to the decisions of the courts it becomes necessary to ascertain the legal meaning of the word. In many undertakings the judgment of the professional auditor as to the question of actual profits may differ from most lawyers, but it is nevertheless important to have in mind all that may be said on the subject by competent authorities, and the following extract from a leading law textbook is therefore in order:

Cook on "Corporations," 5th Edition, Page 1164.

In view of the rule that dividends can be made only from profits, it becomes important to ascertain what part of the income of a corporation constitutes "profits" which may be used for a dividend. This question has caused the courts considerable difficulty. There have been various definitions, explanations, and different states of fact involved in the cases which have come before the courts. The Supreme Court of the United States has said that the term "profits," out of which dividends alone can properly be declared, denotes what remains after defraying every expense, including loans falling due, as well as interest on such loans. An English court says that profits are "the excess of the current gains over the working expenses as shown by revenue accounts as distinguished from capital accounts." A clear idea of what constitutes profits available for dividends can be obtained only by a study of the cases themselves.

There are some general principles connected with this subject which have been established by the adjudications. It is not necessary for a railroad or other corporation to use its profits to pay its funded or bonded debt instead of using those profits for a dividend. But it is necessary to pay the interest on such bonded debt before any dividend is declared.

The floating debt should be paid or funded before a dividend is declared. A corporation often owes large debts and still has its capital stock intact. So also outstanding and disputed claims need not be first paid.

A proper sum must first be expended or set aside for repairs and reconstruction to replace depreciation due to wear and tear. In other words, the fund available for dividends is ascertained by taking into account the cost of repairs and a reasonable allowance for depreciation, giving credit for all actual permanent improvements. But in the case of a company owning patent rights, or of a mining company whose product when once used can never be replaced, it is not necessary to set aside funds for the purpose of purchasing new patents or a new mine.

In estimating the profits for a year for the purpose of declaring a dividend, it is not necessary to take into account the decrease in the value of the assets and the impairment of the capital stock of the company prior to that year. The fact that in a year prior to the declaration of the dividend some portion of the capital has been lost and has not since been made good affords no ground for restraining the payment of a dividend out of profits subsequently earned. A corporation "which has lost part of its capital can lawfully declare or pay a dividend without first making good the capital which has been lost." Thus, although a mining company for several years is obliged to pay the interest on its debts out of the capital stock, nevertheless in subsequent years, when large profits are earned, it may use such profits for dividends in any year after paying the interest on the debt for that year. The company need not first restore the capital stock.

In Connecticut it is held that dividends may be declared on preferred stock where the net earnings since the issue of the stock are sufficient, even though prior to such issue the capital stock had been impaired, but that ordinarily, in declaring dividends, the directors are not justified in assuming that the value of property which was originally received in payment for stock is still worth that value, and if such property at the time of the dividend was not actually worth the par value of the stock which was issued for it, the dividend is illegal, and a director receiving such dividend as a stockholder may be compelled to pay it back at the instance of a receiver of the corporation. This rule is, of course, subject to statutory restrictions, as, for instance in New York state, where dividends can be made only from "surplus profits." A dividend may be declared, although the company has not yet completed its works. In the case of railroads, the cost of additional rolling stock and improvements may be charged to capital account, and need not be paid before a dividend is declared. Where one company buys out another and agrees to pay a certain salary to an officer of the latter, or a lump sum in lieu thereof, such lump sum, if paid, is a part of the capital stock, and need not be considered as expenses.

Insurance companies cannot declare dividends out of unearned premiums. Banks cannot declare dividends out of interest not yet received. The question of what constitutes profits applicable to dividends arises often in connection with preferred stock.

Another legal opinion is as follows:

In *Richardson vs. Buhl*, 77 Mich., 632 (1889), the court approved of the following statement:

That the first thing to be done by any manufacturer, who would ascertain his net earnings during the preceding year, is to take a careful inventory of what he has left, including his plant and machinery, and then make just and full allowances for all losses and shrinkages of every kind that he has suffered in his property during the year, and for all expenses of every kind, ordinary or extraordinary, that have occurred during the year; and, having made such inventory, and deducted such losses and shrinkages of every kind, his net earnings will be the difference between all his investments in his business and all his expenses of every kind on the other hand, and this new inventory, with the deductions properly made, and all that he has received of every kind, on the other hand; and if his books are properly kept and proper deductions made, these net earnings will finally appear on the balance sheet to the credit of the profit-and-loss account.

The reference to the necessity for charging depreciation before ascertaining profits available for dividends should be noted, and it would not be out of place for an auditor to quote from the opinions of the court when reporting to the board of directors of a company who have shown a disposition to ignore the question of depreciation.

It would seem to be clearly set forth in the law books and some of the opinions (even if not specifically stated) that depreciation *must* be provided for in ordinary undertakings before the fund available for dividend can be stated; and in view of the decisions in the American Malting case (as bearing upon the necessity of profits being actually earned before dividends can be paid) reference thereto might effect a change in the minds of some directors, more particularly with respect to New York and New Jersey corporations.

REVENUE RECEIPTS

These somewhat exceptional points being thus disposed of, the right conception of the effect of more ordinary transactions may now be considered. For this purpose it will be convenient to classify the various items appearing upon both sides of a revenue account, which in the aggregate show the profit alleged to be available for dividend. Upon the credit side these items may be conveniently classified under the following headings:

(a) Profit on transactions completed but not yet received in cash.

(b) Profit on transactions not completed, whether received in cash or not.

(c) Profit on transactions completed and received in cash.

(d) Profit arising from an estimated rise in the value of fixed or floating assets.

(e) Profit not properly incidental to the nature of the business carried on.

With regard to (a) it is hardly necessary to add to what has been already said in the preceding chapters, but the principles there enunciated may be summarized as follows:

It is necessary to consider

(1) Whether it may be fairly and reasonably anticipated that the debt will be discharged in due course.

(2) Whether any allowance or discount is likely to be claimed when the debt is discharged; and

(3) Whether it is necessary to allow for the loss of interest incidental to the deferred payment of such debt.

The points which arise on (b) may be considered under the headings of "Work in Progress" and "Goods Sold for Future Delivery," and "Underwritings."

Work in Progress. This should be certified by the factory manager, the chief cost clerk, and the general manager. In the case of readily salable goods manufactured in quantities, the usual rule is to value work in progress at cost—the term *cost* being defined as the cost shown by the cost accounts, which, as a rule, includes, of course, a certain amount of *loading for factory* and other standing expenses. When the work of any one manufacturing department has been completed, there seems no reason why that department should not be entitled to take full credit for the entire cost of the work performed, and in such cases care must be taken to see that the stock of unfinished goods represents items that will be finished and sold at the normal rate in due course.

When work in progress consists of single articles—as, for example, in the case of contract work—its valuation becomes both a more difficult and a more serious matter, partly because past experience is no longer available as a guide and partly on account of the magnitude of the figures involved. In the case of contracts extending over a number of years, it is clear that annual accounts can only approximately estimate the true net profit earned in each year. In the case of manufacturing firms it is for the partners to mutually agree on a basis for the valuation of work in progress, but the safest course would appear to be not to take credit for any profit on uncompleted work. In the case of companies, however, which require to produce annual accounts, and to pay annual dividends, this course is hardly practicable. A company is not obliged to wait until profits have been actually realized in cash before crediting anything to revenue. There is, therefore, no illegality in taking credit for estimated profit on work in progress; but, in view of the extreme difficulty of arriving at an accurate estimate, and the extreme uncertainty that often prevails as to what the ultimate result will be, it is clear that only very conservative estimates can be safely indulged in.

Here, again, the principle laid down in the American Malting case should be emphasized, and care taken to keep within the rule that dividends must not be paid out of anticipated profits. Cost accounts should, of course, in all cases be available to show the actual cost of each contract up to the date of the accounts. If the work has so far proceeded that it is possible for the manager to certify an outside figure, that will not be exceeded, for the cost of completing the work, it would not be unreasonable to apportion the profit between the two periods according to the expenditure incurred in each, providing, of course, ample reserves in all doubtful cases. In connection with work less far advanced it seems more questionable whether anything in excess of manufacturing cost can be safely treated as an asset. In this connection however, it may be borne in mind that all large contracts are readily capable of division into sections, the cost of each of which has already been estimated in advance. A comparison of the cost accounts in respect of the work performed with the original estimates will thus enable a very fairly reliable view to be obtained of the general position of the contract, more especially, of course, in those cases where the speculative part of the work is in the earlier stages.

In the majority of cases, where contracts extend over a lengthy period, it is usual for payments to be made on account, upon the certificate of the architect, or engineer, as the case may be. The amount of such payments would be from seventy-five per cent to ninety per cent of the value of the work actually performed, and it is clear, therefore, that the excess of money received over expenditure incurred may safely be regarded as the minimum profit earned up to date.

Sales for Future Delivery. The question has arisen more than once as to whether a company is entitled to take credit for profit expected to be earned in respect of orders booked for future delivery. The point is naturally one of considerable importance in some industries, as, for example, with automobile agents, who frequently book orders for future delivery, and also with regard to coal dealers, and the like, who enter into contracts to supply their goods for some time in advance The general rule which has been laid down in this work is, it is thought, unquestionably the safe one to adhere to in all cases, namely, that the profit on the sale of goods should be taken credit for at the time when the sale actually occurs; and where it is an essential portion of the contract of sale that the goods shall not be delivered until some future date, then the actual *sale* would certainly appear to be at the date of delivery, and not at the date of booking the order. Like many other matters, however, this is, perhaps, as much a matter of degree as a question of principle, and where orders have been actually booked so that a valid contract exists upon which the customer could be sued for payment, the mere fact that the goods have not been delivered might well be overlooked and the profit taken credit for in the period when the order was booked; this, however, could certainly only be applied where the goods were actually in stock, and not when they were still unmade. Even where it is decided that credit may reasonably be taken for such future sales, it is important to remember that when payment is delayed a reasonable rebate should be made for loss of interest, and under no circumstances could any harm be done by postponing the whole of the profit until the period when the goods were actually delivered.

Underwritings. In the case of financial companies underwriting issues of shares or bonds, it would appear to be clearly improper to take credit as a profit for any commission upon such underwriting in respect of that portion of the issue which had been allotted to—and still remained in the hands of—the company by reason of the subscriptions from the general public being insufficient. The nature of an underwriting agreement is that, in consideration of a certain commission, the underwriter agrees to take up a certain portion of the issue if the public do not subscribe enough among them to take up the whole amount among themselves. In the event of the public subscriptions being insufficient, therefore, the contract has the effect of the underwriter acquiring a certain portion of the issue at a discount; and that is the view which, it is submitted, the auditor should take of the transaction. If this view be adopted, it necessarily follows that until such shares or bonds are disposed of they should appear as an asset in the accounts of the underwriter, not at their face value, but at cost price; that is to say, the underwriting commission should be dealt with, not as a profit, but as a reduction from the actual cost of the shares or debentures, as the case may be. For the same reason, if assets are sold for payment in *paper*, no profit should be taken credit for until that paper is actually realized in cash.

Although it was held in one English case and is the opinion of some of the most prominent American lawyers that a company may take credit for an assumed rise in the value of its floating assets, should it think it expedient so to do, it is thought that accountants, as a body, will be more inclined to take the view that any profit arising in respect of dealing in such assets should only be taken credit for in the period during which such dealing actually occurs. That is to say, assuming that such floating assets have risen in value, the proper time to take credit for the profit is not when the rise may in point of fact have occurred, but at the time when such assets are sold.

The view referred to above, however, does not apply to an assumed appreciation in the value of *fixed* assets, and it need not be urged that good practice would never permit taking credit for the apparent profit so arising.

Full consideration of this point would, however, appear to be more conveniently dealt with under the following heading:

In some undertakings it may happen that earnings may arise from unusual transactions, and the question, therefore, arises as to the proper treatment of these earnings.

Leaving aside the most usual source of profit of this description —viz, the sale of a portion of the company's undertaking, which has already been dealt with—the most ordinary classes of profits to come under this heading would be premiums received upon stocks or bonds, and cash which has been paid upon shares forfeited. The proper practice with both these sources of profits is to credit the amount to a reserve account and it would be difficult to improve upon this. But, at the same time, it has already been pointed out that—in the absence of special by-laws, and in the absence of a by-law specially so providing—there is, unfortunately, nothing to prevent a company transferring the whole, or a portion, of its reserve account to profit and loss account, and declaring a dividend out of the increased balance so available.

It would surely seem reasonable to suppose that our legislatures will not much longer overlook this important point in the corporation laws.

REVENUE EXPENSES

Turning now to the expenses recorded upon the debit side of the revenue account, these may be conveniently classified under the following headings:

(a) Expenses that are properly chargeable to the period under review.
(b) Expenses which may properly be spread over a term of years.
(c) Undisclosed and contingent liabilities.
(d) Depreciation.
(e) Losses arising by fluctuation of floating assets.
(f) Losses arising by fluctuation of fixed assets.
(g) Reserves for losses.
(h) Organization expenses.

With regard to (a), it is obvious that these amounts should all be charged up against the current year's revenue, and the steps which have been indicated in the preceding chapters should be taken to see that everything coming under this heading has been so charged.

(b) It should be remembered that the onus rests upon the directors and auditor to justify this class of expenditure *not* being included as a charge against the current profits, and that the auditor must therefore, before passing the accounts, satisfy himself as to the sufficiency of the reasons advanced for its exclusion. Examples of items which may be properly held in reserve account are minimum rents paid in excess of royalties by collieries and similar undertakings, where there is a reasonable ground for supposing that they can be redeemed out of future earnings, and also special expenditure in the way of advertising some new venture or undertaking, which expenditure, it is estimated, need not be maintained after the venture has been once established. With regard to the latter, however, especial care is necessary, with a view to seeing that a sufficient sum is written off annually, as it not infrequently happens that the expectations of the managers are not realized, and that the permanent cost of advertising is far more than has been anticipated.

It is unnecessary to add anything upon either (c) or (d) to what has already been said in the preceding chapters, where both matters have already been very fully dealt with.

Passing on to (e), it may be pointed out that, inasmuch as the definition of *floating assets* is that class of assets which it is the object of the undertaking to convert with all convenient speed into cash, it is obvious that, so far as possible, nothing in excess of the actual current market value should be attached thereto upon the face of any balance sheet, and the conservative rule—"Cost or market, whichever is the lower," followed. Special circumstances may occasionally modify this, where at the moment of balancing there has been a wholly unexpected and *temporary* fall in value which has been recovered before the certifying of the accounts. It is probable, however, that it is only in connection with the treatment of foreign exchanges that this principle can generally be safely applied.

(f) Concerning this item, it is thought that, so long as the permanent earning capacity of the fixed asset has not diminished, it is quite unnecessary for any provision to be set aside, with a view of making good a loss which may have occurred by reason of the fluctuation of the value of such assets. Certainly the legal decisions which have been given in England under similar circumstances would appear to support this view, and the quotation from "Cook on Corporations" also bears it out. It is important to remember, however, that, if the views already expressed with regard to fluctuations *upwards* in fixed assets have been disregarded, and credit has been taken for such fluctuations as a profit, then for the same reason it is necessary that fluctuations *downwards* should be given effect to.

(g) With regard to reserves for losses, as has already been pointed out, it is very important that ample reserves should be made to meet all reasonable contingencies before allocating profit for purposes of payment of dividend. The only thing that appears to call for attention here is that in some cases—although, of course, quite improperly—what is really a reserve against loss is described upon the face of a balance sheet as a *reserve*; under no circumstances, however, must such so-called reserve be encroached upon for the purpose of equalizing dividends, unless the auditor is satisfied that a sufficient balance remains to meet any reasonable expectation of loss that may occur.

(h) Under almost any circumstances it will be found usual to write off a portion of the amount incurred by a company in organization expenses, say, one-third or one-fifth, in each year's accounts until the amount is wholly extinguished. There is no compulsion, however, that this course should be adopted, although it is certainly one to be recommended; and it may be added that, should the first year's accounts show a loss, it is distinctly preferable not to obscure the actual facts of the case by increasing such loss by writing off any portion of the organization expenses. It is, of course, impossible to write them off except out of profits, and the attempt should, therefore, not be made upon paper. *Per contra*, where there is a surplus and the accounts for the current period show a loss, a transfer of such loss should be made to the debit of surplus, so far as the latter is sufficient for the purpose, it being a contradiction in terms to state a loss upon one side of the balance sheet and a surplus (*i. e.*, an accumulation of undivided profits) upon the other side.

In conclusion, it may be pointed out that although the *cash basis*, as applied to commercial accounts, is in the nature of things most fallible, it has a very substantial utility, as applied to the revision of the results arrived at by means of the ordinary revenue account. The primary object of every revenue account is, of course, to arrive at the true net profit earned during the period under review; but, in the case of the vast majority of undertakings, by no means the least important use to which the revenue account will be put is to determine the amount of such profits *available to be drawn out of the business* and distributed among the proprietors in the case of a company or a partnership, or spent by the sole proprietor in the case of a business owned by an individual. The terms *net profit* and *profit safely divisible* are by no means interchangeable; for unless the working capital be abundant, profits cannot be prudently drawn out of the business until they have been actually realized in cash. It therefore follows that, in the great majority of cases, a safeguard—and at the same time an easily applied rough check upon the accuracy of the revenue account—is afforded by looking at the balance sheet, and seeing whether it would be practicable to draw out of the business the whole of the profits alleged to have been made, and whether there would then still remain a sufficient balance of *liquid* assets available to meet the ordinary requirements of the business. Unless such a sufficiency would remain after dividing profits up to the hilt, it is clear that such profits have not been realized, or else that they have been diverted from their proper course and applied as working capital, in either of which events it would be impossible to distribute them without causing financial embarrassment.

AUDITING

PART III

INVESTIGATIONS

It has been thought desirable to devote considerable space to that special phase of auditing which is usually known as an *investigation.* The subject is one intimately connected with auditing, and possesses many peculiar features which cannot afford to be overlooked.

Purposes of Investigations. An investigation—so far as present purposes are concerned—may be described as *A special audit, undertaken for a particular purpose.* The particular purposes for which an investigation is usually made are as follows:

I. *Upon the sale of an undertaking:*
- (a) To a public company.
- (b) To a private purchaser, or purchasers.
- (c) To a continuing partner, or partners, by a retiring partner or partners.

II. *For the purpose of obtaining special information as to the position of an undertaking:*
- (d) On behalf of a committee of investigation appointed by stockholders.
- (e) On behalf of a present or prospective creditor.
- (f) With a view to the discovery of suspected fraud.

The former group alone claims attention in these chapters.

Extent of Investigations. When making an investigation of any kind it must not be forgotten that those relying upon the accountant's report will naturally, and, indeed, reasonably take it for granted that, so long as they adequately explain their object in seeking his assistance, it is for him, as an expert, to decide both as to the nature and the extent of the examination itself; and in the event of its being subsequently discovered that an investigation had failed to achieve its intended object, the accountant would be required to show that such failure did not arise from any cause which could have been prevented by a more complete, or a more exhaustive examination. Cases are not unknown in which a faulty investigation has been attempted to be shielded under the plea that special instructions had been given by the client, and that such instructions had been duly carried out; it being argued that where the client has given special instructions as to the course to be pursued, the accountant must be exonerated from any mishap arising from the defectiveness of those instructions. This doctrine appears to be a most dangerous one. There can be no doubt that whatever instructions the accountant may have received were intended rather as a description of the object to be effected than as a definite requirement as to the means by which that object was to be attained. It goes without saying that the best authority as to the means to be employed must be the accountant himself (who receives his instructions by virtue of his being an expert in the matters requiring investigation), and it would thus seem that—however desirable it may be that he should receive, and even welcome, suggestions as to the *modus operandi* of his work—an accountant cannot submit his professional discretion to the dictation of his clients without sacrifice of self-respect and grave danger to his clients' interests. An accountant who undertakes the responsibility of an investigation ought not to seek to shield himself from the implied responsibility of proceeding upon that investigation on the lines which his professional experience convinces him are the proper ones.

The position of the investigating accountant, when only incomplete sets of books are available, is a question of very considerable importance. So long as the books are sufficiently complete to enable the accountant to reasonably arrive at the conclusion that (so far as they go) they are accurate, there can, it is thought, be no objection to his issuing a report confined to such matters as the books may show. But there is a danger of the whole system of investigation falling into discredit, if accountants go too far, and substitute for certificates of actually accomplished facts statements so qualified as to amount, in effect, to but little more than a carefully safeguarded expression of opinion. It should be borne in mind that the object of any form of accountant's certificate or report, included in a company prospectus, is to satisfy intending investors, and that such persons do not, as a matter of fact, by any means always carefully study the wording of the report, or certificate, referred to. Unless, therefore, an accountant has really something to certify he should studiously refrain from issuing any statement of opinion, or estimate, in the form of a certificate.

Detection of Errors in the Books. Before proceeding to consider the subject in further detail, it would appear desirable to clear up a point which is of the greatest importance, and upon which a considerable difference of opinion appears to exist—viz, the position of the accountant who has certified as to profits which, in consequence of the falsification of the accounts investigated, have subsequently proved to have been overstated. There appears to be no decision directly bearing upon this point; but a case which came before Lord Kyllachy at the Court of Session in Edinburgh, in 1892, is of considerable interest. The case was that of the *Edinburgh United Breweries, Lim., etc., vs. James A. Molleson (Nicholson's Trustees)*, etc., and the question then at issue was as to whether the circumstance that the profits disclosed by the books of the Palace Brewery, Edinburgh, were in excess of the amount actually made, was (in the absence of fraud on the part of the vendors) a sufficient ground for the cancellation of the purchase, or for damages. It will be seen that this case has only an indirect bearing upon the point now being considered; indeed, the interest which it possesses is dependent rather upon the nature of the evidence than upon the point actually at issue. At the original hearing of the case it was contended on the one side that books submitted to accountants for examination were to be taken as warranted free from falsification; while, on the other hand, it was argued that it was not the custom for any such warranty to be implied, and that a proper investigation of the accounts should have disclosed the fact that the profits had been, more or less, overstated. In giving his judgment, his Lordship stated that it appeared to him that the question was as to whether it was a condition of the contract of sale, expressed or implied, that the books of the brewery were to contain no errors, or, at least, no errors that were not easily to be discovered, and he confessed his inability to discover any reason for so holding. He could find no standard according to which the purchaser's examination of the books was to be conducted, and he was, therefore, unable to hold that the plaintiffs were entitled to re-open the contract, and now raise the question as to whether a condition as to the amount of profits had been fulfilled. The chief point in this decision, which is really of interest in the present inquiry, is the finding that there does not exist in a contract for sale based upon a statement of profits an implied condition that such statement is correct. Exception must, of course, be taken in the case of a fraudulent mis-statement, for naturally such contracts would be voidable upon proof of fraud. The question remains, however, that if the vendors have acted in good faith there is no redress for the purchasers if they have given too large a price for an undertaking in consequence of an incorrect statement of profits by the vendors (provided the purchasers have had an opportunity of verifying such statement), or in consequence of a statement of profits that has been falsified—it may be by some employe of the vendors, unknown to them. It would, therefore, appear that, in such a case, an investigation that failed to reveal the actual condition of affairs would have failed to achieve its most important object.

Opinions of Accountants Thereon. It is not proposed to fully discuss the legal position and responsibilities of an investigating accountant under such circumstances, nor to criticise the investigation that was made in the *Edinburgh United Breweries* case; but as there is much that is deserving of attention in the various opinions that were expressed by the expert witnesses who appeared in that case, the opinions of these witnesses are shortly stated here.

Each of the following extracts represents the opinion of a different accountant:

There is a difference between checking books and investigating profits, and an investigation of profits, even if properly conducted, would not always reveal an actual mis-statement thereof.

In making such investigations I do not consider it any part of my duty to go through all the books and vouchers as in the case of a regular audit.

In investigating the profits of a business with reference to a sale, my experience is that an accountant is not expected to check the books and entries for the purpose of tracking falsifications. There is a marked difference between an audit and an investigation with a view to profits. The falsifications in this case could not have been discovered without a comparison of the postings in one set of books into another, and I hold that is no part of the duty of an accountant turned on to investigate profits. Personally, I always insert the words "assuming the accuracy of the books" in my certificate.

It is not the custom in such cases to examine the books in detail. Accountants consider that they are entitled to assume the genuineness of the books.

A leading solicitor expressed the opinion that accountants, when instructed to investigate into the profits of a company, were not expected to go into such details as would have been necessary to discover the falsifications in this particular case.

On the other hand, accountants on the other side testified:

> A proper examination would have discovered the falsifications; I consider that an accountant pursuing an investigation that would be useful would wish *to analyze* the accounts, and if this had been done the frauds would have been discovered.
>
> The falsifications should have been discovered; I consider that an examination of the individual (trade) accounts was necessary to form a correct idea of the nature of a business, and had this been done the frauds would have been discovered.

It is altogether likely that if expressions of opinion upon this case were requested from the same number of American practitioners the answers would correspond very closely with those quoted above, *i. e.*, support would be given to both sides of the controversy.

In speaking of the subject of these examinations, the writer of an article that appeared in *The Accountant* at the time says:

> What the public seem to want is, not the nearest approach to facts that can be obtained in so many days or weeks, but the nearest approach to facts that is humanly possible.

This will be found to accurately express the views of the average layman.

Investigation on Behalf of Projected Company. (a) For the purpose of pursuing this inquiry in further detail, it is proposed to narrow the field down to the question of investigations made on behalf of a projected company. The following suggestions will, therefore, also cover sub-heading (b). The most convenient method of dealing with the subject will be to contrast the methods to be adopted in such an investigation with those ordinarily employed in a regular audit.

From a theoretical point of view there need, of course, be no difference of method; for both audits and investigations aim at a complete disclosure of the facts. In practice, however, it is usual to restrict the inquiry, so far as is possible, without imperiling the efficiency of the examination; and it is because the objects of an audit are not altogether the same as those of an investigation that the method adopted in each case—*i. e.*, the abbreviated, practical method—varies somewhat.

Limits of an Investigation. A regular audit professes to discover the true position of affairs. An investigation as to profits, made on behalf of a proposed company, professes to discover the position of affairs so far as they affect the particular object in view. In some respects the narrower field of an investigation will permit the accountant to reduce the scope of his examination; but, on the other hand, there would appear to be many points upon which a greater strictness of inquiry is necessary. Thus, supposing the accountant to be acting upon behalf of the purchasers of an undertaking, he may take it for granted that the accounts submitted to him by the vendors do not underestimate the profitable nature of the business, or the strength of its financial position. Consequently, it does not seem necessary that he should inquire with the same exhaustiveness that he would use in the case of an audit into the completeness with which every source of income has been duly accounted for; neither does it appear necessary for him to consider the validity of the various items of expenditure charged in the accounts, nor to check such expenditure minutely with the vouchers. On the other hand, if he is acting on behalf of the vendors, it is clearly desirable that both these points should receive careful attention, but in that case the investigation would not differ greatly from the complete audit; for it is obvious that he could not authorize the submission of accounts to the proposed purchasers until he was satisfied that such accounts were true in all respects.

Fraud in Accounts. Yet another difference between investigations and audits will not fail to strike the observer. An ordinary audit must always aim at the discovery of fraud; but an investigation as to profits would not appear to involve any such inquiry, except in so far as the assets or profits might have been fraudulently overstated for the purpose of concealing defalcations, or of deliberately making the accounts appear unduly favorable.

Broadly speaking, there are two ways in which books may be falsified for the purpose of concealing fraud. The first method is by falsifying the balance sheet, either overstating assets or understating liabilities to cover the amount stolen; the second method is by falsifying the revenue account, by understating income or overstating expenses, so that the profit shown by the books may be reduced to the profit which was actually netted by the proprietors, after deducting the amount misappropriated by the defaulting official.

If the first method has been adopted, the purchasers will not necessarily be prejudiced, for the profits shown by the books will have been the profits actually made; while the assets which appear in the books at an unduly inflated price will usually be guaranteed as to the value by the vendors, or else vouched for by the certificate of an independent valuer. Sometimes, however, the investigating accountant assumes responsibility for the accuracy of the scheduled book debts taken over by the proposed company, and in such cases it will, of course, be necessary for him to carefully inquire into their correctness.

On the other hand, the defalcations, if considerable, are likely to be concealed by a falsification of balance sheet items rather than of revenue items, for any material understatement of profits, such as would be involved by the last-named form of falsification, would be extremely dangerous, as drawing prominent attention to the existence of a leakage. A falsification of balance sheet items, with a view to concealing defalcations, ought not to escape the attention of the investigating accountant; not, of course, because he is necessarily responsible for the values attached to the various assets and liabilities in the balance sheet of the undertaking about to be purchased, but because he cannot safely include, in his certificate of past profits, profits actually earned by the undertaking which, owing to the dishonesty of its employes, never went into the pockets of its proprietors.

Under the second method it would appear that the purchasers would actually gain by the defalcations of an official of the vendors, for the profits earned would be in excess of those shown by the books, while the latter would form the basis upon which the purchase price for goodwill was calculated; and, as the balance sheet would correctly record the financial position, there would obviously be no injustice done to the purchasers if these figures were taken as a basis for valuation. It is thought, therefore, that the investigating accountant, acting on behalf of a proposed company, need not trouble to go exhaustively into the question of the *bonâ fide* of the various expenses debited, his great object being to make sure that the expenses are completely recorded in the books submitted to him. On the other hand, he will require to look carefully into the *bonâ fide* of many transactions, which the auditor would naturally pass either unquestioned, or, at all events, after due representation of the circumstances, to his clients. The difficulty of the investigating accountant's position arises from the fact that his real clients (*i. e.*, those in whose interests he is acting) are an unknown, and, at that time, non-existent body. It is, therefore, obviously impossible for him to consult them in any way during the course of his investigation, and his only means of acquainting them with the result of his inquiry will be by means of his certificate.

Scope of Certificate. In making an investigation as to profits, therefore, the accountant must be careful never to lose sight of the object for which his investigation is being made. That object may be said to be to ascertain:

(a) Whether the business of the vendors is worth purchasing.

(b) Whether such business is worth the price asked for it by the vendors.

The accountant is not actually asked to express a definite opinion upon either of these—points for it is obviously the business of each intending stockholder to answer these questions to his own satisfaction before applying for shares—but it is pointed out that the accountant's certificate forms almost the sole basis upon which the stockholder can judge of the prospects of the proposed company, and it is therefore argued that it should be the accountant's aim to so conduct his investigation, and so frame his certificate, that the materials necessary for a correct judgment may be placed before the public. At the same time it cannot be too strongly insisted upon that an accountant's certificate as to profits, relating as it does to past events, deals with a subject-matter that ought to be capable of absolute verification. The certificate, therefore, should be a clear and unconditional certificate of accomplished facts, and not a mere estimate of possible, or even probable, future results, misnamed a *certificate.* To the limited extent already mentioned it may be permissible, and even desirable, to modify the past results so that they may more usefully serve the purpose for which they are primarily intended—namely, provide a reliable index of future profits. But at the same time a certificate should relate not to the future, but to the past; and intending investors would do well to bear in mind that, unless a definite statement as to the past is *provided* in a company prospectus, the reasonable assumption is that the past profits have been unsatisfactory.

There is yet another point which the accountant must not fail to bear in mind. Inasmuch as he may be required at any future date to substantiate the statements that he has certified, he should not fail to make the most copious notes of all that transpires during the course of his investigation. These notes should not be confined to actual figures and calculations. Whatever explanations he may have received in reply to his inquiries should be committed to writing, so that they may be available if required. If this be not attended to, and legal proceedings are subsequently instituted requiring the accountant to substantiate his report, his position will not be an enviable one, for he will probably have to go over at least a portion of the ground a second time, and perhaps some of the evidence he formerly utilized may no longer be available.

Length of Period to Be Investigated. It is generally held that it is no part of the accountant's duty to prescribe the term of years over which his inquiry should extend. It is, however, desirable to bear in mind the importance of expressly stating in the certificate the period that has been covered by the investigation; and, further, it is absolutely essential that the inquiry should be brought reasonably up to date. It may be found convenient to report only upon the results of completed years, but the odd months elapsing between the date of the last balance sheet and the date of the investigation should not escape notice, and if they show any material falling off, the fact ought not to escape attention. It may be added here that it is very desirable that the accountant's certificate should separately state the profits of each year covered by the investigation.

Grave danger exists in stating average annual profits where the last year is *under* the average; in such a case the auditor must state the results of the last year's business as a separate item or notation. If he does not do so, he is guilty of deception, for no one wishes to invest in a declining business. Of course, the last year may cover a period during which a panic occurred, but in such a case the separate stating of the profits would be a matter of course.

Method of Procedure. *Standing of Vendors.* Before actually commencing an investigation it is very desirable to make inquiries as to the position and character both of the promoters and the proprietors of the undertaking. A man is always apt to be known by the company he keeps, and no one can afford to be mixed up with persons of more or less doubtful reputation. Moreover, if a man bears a really bad character, it may safely be taken as being at least probable that the company in which he is concerned is not likely to prove a very good investment to the public; and an accountant is not likely to do himself much good by mixing himself up with unprofitable companies.

System of Accounts. The next point that claims attention is the general system upon which the books have been kept. And, in this connection, it may be mentioned that—inasmuch as it is very desirable that the accountant should secure the coöperation of the employes of the establishment—it is a mistake for him to abuse the system of accounts which he finds in use, in the presence of the bookkeeper. Any such want of tact upon his part is almost certain to put the bookkeeper's back up, and then, instead of information flowing in smoothly, it has to be dragged out by a course of cross-examination that involves a heavy expenditure of both time and temper.

Audited Accounts. If the books have been regularly audited by a certified public accountant it is a good plan to seek an interview with him, and endeavor to gather the precise extent of his examination, and also his general opinion upon the matter This course is, perhaps, somewhat unusual; but clearly it cannot be regarded as objectionable, while cases may easily arise in which it might be a most useful course to adopt. For instance, if a thorough audit has been made at regular intervals by a competent and trustworthy accountant, the investigating accountant might feel fairly safe upon most matters of mere arithmetical accuracy, and confine his attention more exclusively to questions of principle and to values.

Unaudited Accounts. On the other hand, if there has been no regular audit, and if the books have not even been regularly balanced, it seems as though he could not, with safety, neglect an absolutely exhaustive inquiry into all the facts. Of course, objections may be raised to this position, the most important being the objection that such a complete examination would occupy a much longer time than is ordinarily available for the purpose. It is, however, submitted that it is the accountant's duty to make an effective investigation—not the most effective investigation practicable in a limited period of time—and further, that he should so conduct affairs that he need not shrink from accepting the fullest responsibility as to the extent of his investigations.

Necessity for Inspecting Balance Sheets. Another general point to which it is desirable to draw attention is the danger of looking only to the revenue account for information as to profits. Cases are not unknown in which—the assets being taken over at an agreed valuation—the investigating accountant has confined his attention entirely to the revenue account, without concerning himself with the sufficiency or otherwise of the amounts written off for depreciation and bad debts; the result being that the certified profits *as shown by the books* were greatly in excess of the profits actually earned. The accountant who aims at something more than pocketing his fees and keeping his skin whole will not rest satisfied with that sort of investigation.

General Course of Procedure. Assuming that the accountant is about to commence an investigation into the profits of a manufacturing or trading concern during the past three (or more) years, with a view to its being purchased by a private individual or a corporation; the land, buildings, plant, and stock-in-trade being specially valued for that purpose by an independent valuer; assuming further that the accounts have been continually audited by a firm of certified public accountants, who are satisfied as to their correctness, the question arises: What special points will the investigating accountant require to examine which do not arise in the ordinary course of a regular audit?

Taking first the several revenue accounts, he will compare these with each other, and see whether or not they indicate a steady or consistent condition of affairs; whether the turnover fluctuates materially, is increasing, is at a standstill, or is diminishing; whether the percentage of gross profit is fairly constant, and such as is usually earned in such undertakings; and whether the percentages of expenses and net profit to gross turnover are reasonably steady. A marked reduction of expenses during the last year must be viewed with the greatest suspicion, for such reduction, if excessive and not genuine, may have a very serious effect upon the future prospects of the undertaking.

So far as is reasonably practicable, the accountant must examine the *bonâ fide* of all sales, especially those recorded during the last few months. The prices of at least a portion should be compared with current rates, and any remarkable increase in the amount of sales or in the number of new accounts opened should be regarded with suspicion. All entries *on approval* must be disallowed, and where sales are postdated it seems essential to make sure that they have actually gone out of stock. The entries for the next few weeks after the closing of the books should be carefully scanned, and if they show an exceptionally large number of returns, or an exceptionally small amount of sales, he must draw his own conclusions as to the *bonâ fide* of such entries. In dealing with the question of consignments, he must remember that the goods have probably been invoiced out at selling prices, while the unsold balance can only be allowed for in the accounts at cost price, plus expenses, at most. Another point which must not be lost sight of is the question of salesmen's commissions; care must be taken to charge up commission upon all sales that are included in the accounts. Due allowance must also be made for all outstanding discounts; and empties which are returnable, but not yet returned, cannot safely be taken credit for at the full price charged.

With regard to the purchases, the problem is similar to the sales but somewhat simpler, because the accountant can usually get hold of the creditor's statements. It is, however, very necessary to be on one's guard against the omission of postdated invoices when the goods have actually gone into stock.

Where reliable stock accounts and cost accounts have been kept, there exists a very valuable corroboration of the contents of the trading account; but where these cannot be obtained, the accountant must do his best with the material available.

It is especially important that the various stock takings should be conducted upon similar lines; *i. e.*, they should be based upon the same scale of prices, due allowance being made for the depreciation of articles no longer in fashion, or in small quantities, or *odd sizes*.

If the various stock-lists have been prepared upon different scales of prices, they must be recast upon a uniform method, as any such difference may very materially alter the profits shown by the accounts. The valuation of the stock-in-trade made by the valuer should be compared with the vendor's stock-list, and if there is any material difference between the two, the accountant must not fail to examine the effect of such difference upon the accounts. Thus, supposing he arrives at the conclusion that throughout, say, the past three years, the stock has been consistently overvalued, say, 15 per cent, and supposing the stock is $15,000 heavier at the present time than it was three years ago, then during those three years the net profits will have been overstated \$7,500 or, say, \$2,500 a year, which is a material difference when one comes to pay eight or ten years' purchase for a goodwill.

When the stock consists of such articles as cotton, iron, grain, lead, etc., which have a definite but unstable market value, the question of the legitimacy of profits arising from such alterations in value as may have occurred is a consideration of no slight importance. This is a point upon which the writer would rather not express too decided a view at the present time, but it is his opinion that

(1) No profit should be taken credit for upon the rise in value of unsold stock, although revenue must be debited with the contingent loss arising from any fall;

(2) No profit should be included as part of the trading or manufacturing profits that has arisen out of a *gamble* pure and simple, but that gambling losses cannot safely be ignored;

(3) Where any material portion of the profits has arisen from favorable fluctuations of value—as opposed to true commercial profits—it is very desirable that the two sources of profit should be distinguished in the accountant's report.

If there are any further items to the credit of the profit and loss account, he will require to see that the profit has been actually netted, and that it is fairly incidental to the business of the undertaking. Even then, however, a purely exceptional source of profit, *e. g.*, the fact that an important exhibition had been held in that particular industry, or an altogether exceptional contract executed, should always be specially noted in the report.

Another point of no slight importance may be mentioned here, although it does not immediately arise from the preceding considerations. Where the undertaking is of such a nature that it cannot be advantageously carried on except in the present premises, the accountant should satisfy himself that those premises will be conveyed to the company for a reasonable term. No sensible man would buy the goodwill of a hotel unless he could get a long lease, if not the freehold, of the hotel premises; while the goodwill of a music hall held on a yearly tenancy would not usually be considered a good investment. If the lease to be granted to the company is at an increased rental, he must on no account forget to mention the fact.

Turning now to the expenses debited to profit and loss account, the accountant will require to satisfy himself that every legitimate expense has been actually included. The ordinary current expenses present no especial difficulty; if the accounts for the past three years, or more, are available they will show these fairly well, while a study of the accounts since the date of the last balance sheet will probably disclose any outstanding liabilities that have been improperly omitted. Attention has already been called to the danger of a *malâ fide* ruinous curtailment of expenses, so there is no occasion to again dwell upon that point.

There remain now the questions of bad debts, repairs, renewals, and depreciation. For the purpose of dealing with these points the accountant must refer to the balance sheets, as well as to the profit and loss accounts; and, inasmuch as he is no longer in the realm of cut-and-dried facts, he must use the greatest amount of circumspection in arriving at his ultimate opinion.

In dealing with bad debts, the circumstance that he is dealing with at least three years' accounts will help him to a certain extent, for it will enable him to strike an average, and he can compare that average with what his experience teaches him to be the average usually obtaining with similar classes of undertakings. Again, the book debts of the first year, at least, are almost certain to be either collected or else written off before the end of the third year, and he can compare the percentage of the first year's actual bad debts upon its sales with the percentage written off each year. Such a comparison is of necessity only tentative, but it is useful so far as it goes. Then he can carefully examine the last schedule of book debts; the chances are that he will know at least some of the names there set down, and if he finds that the schedule contains names that some of his other clients look upon as bad or doubtful, he must draw his conclusions accordingly, to the best of his judgment. In any case, and under all circumstances, he will require to satisfy himself that a sufficient provision for bad and doubtful debts has been debited to revenue.

With regard to the question of depreciation, his position is, perhaps, a little more difficult. Speaking generally, if the values set forth in the balance sheet submitted to him exceed the amount of the valuer's estimate, he may add such difference to the amount of the depreciation debited to revenue during the period under review. The method is not infallible, however, for the valuation at the commencement of the period may have been too high—in which case he will be charging an undue amount against the profits of the current period; or it may have been too low—in which case he will not have charged enough. There are, however, normal rates of depreciation which may be used to verify results, and previous experience, combined with sound judgment, will probably keep him from going far wrong. Repairs should in all cases be charged up to revenue, but actual renewals need not be, provided *due* allowance has been made for depreciation.

If part of the assets taken over consists of shares in other companies, care must be taken to see that these are included in the accounts at their proper value. Where shares (perhaps unlisted shares) have been received in payment of book debts, especial attention is necessary, as the trading results are directly affected. Under no circumstances should revenue be credited with more than the normal value of work done until the shares have been actually sold, and if the profits realized on such shares form any appreciable portion of the total profits the accountant should mention the fact in his report.

Where patents form part of the proposed purchase, and where such patents have not been submitted to a specialist for valuation, the accountant should make it his business to see—so far as possible—that the inventions purchased are actually protected. In a recent case, a so-called patent that had been purchased by the original proprietors of the undertaking in perfect good faith was not really patented at all.

Adjustments in Profits. For the purpose of a certificate attached to the prospectus of a new company it is usual to make certain adjustments in the statements of profits which would not ordinarily appear in the accounts of a going concern. This arises out of the difference between an investigation and an audit, the former being primarily with a view to verifying the revenue account (and so certifying the *normal* profit of the undertaking), while the latter is, speaking generally, confined to a verification of the present position of affairs, as shown by the balance sheet. In order to avoid any possibility of misconception, however, it is well to invariably state what adjustments have been made in connection with profits which would not be usual in the case of a going concern.

These adjustments would, in all ordinary cases, include the amounts paid for interest on capital, interest on loans, and partners' salaries, which may all properly be added to the net profits, provided the fact that they have been added is clearly stated. There are, however, other points which are possibly more debatable, and which will now be considered.

Depreciation. Under normal circumstances a certification as to the net profits would naturally assume that a reasonable amount had been written off such profits in respect of the depreciation of all assets necessary for the purpose of carrying on the business. It sometimes happens, however (especially where a large number of retail concerns are amalgamated, for the purpose of forming one large company), that the accounts which have to be investigated are incomplete, and that no reliable information can be obtained as to the actual value of the assets upon which depreciation ought properly to be charged; while it may be added that the normal depreciation would naturally to a large extent be based upon the actual cost of such assets to the present proprietors, whereas the depreciation which will have to be charged by the proposed company in the future will of necessity have to be based upon the amount which that company actually pays for the assets in question. Under these circumstances —and under all other circumstances where the same conditions apply—it is not merely difficult to assess the actual rate of depreciation, but sometimes actually misleading to deal with it, even where it can be assessed. That being so, it is thought better, where these conditions apply, to certify the amount of profits which have been earned *without* any provision whatever for depreciation, leaving the assessment of the amount necessary to provide for this contingency to those who may be interested in the matter.

Cash Discounts. Where the concern in question has hitherto been hampered by want of capital, and has therefore not been able to take full advantage of the cash discounts offered, it is permissible, where the scheme of the proposed company provides for sufficient working capital, to take credit for the maximum cash discounts that might have been obtained, had ample working capital been employed; but advantage should never be taken of this suggestion without fully explaining the fact that credit is being taken for profits which in point of fact have not been actually realized in the past.

It is, of course, unnecessary to add that there must be no question about the continuance of these discounts.

Exceptional Losses and Profits. It has already been indicated that the main object of any investigation is to arrive at the normal profits of an undertaking; and, that being so, it is important that any exceptional sources of profit should be excluded, while on the other hand, it is permissible that wholly exceptional sources of loss should be excluded. It is very difficult to define exhaustively either profits or losses coming under this category, but the following may be included.

Exceptional Losses. Losses not covered by insurance arising through fire, accidents to employes, or defalcations—provided a sufficient charge against profits is made to cover the amount which such insurance would have cost. Losses arising through actions at law not altogether incidental to the carrying on of the business, as, for instance, through breach of contract, infringements of patent, etc.; but, if the losses arising from these causes are excluded, it is essential that whatever profits may have been earned in connection with the subject-matter of the action should also be excluded, unless the litigation resulted in favor of the proprietors of the business being investigated.

Exceptional Profits. Under the heading of exceptional profits which ought to be excluded may be classified all such transactions as it is not reasonable in the ordinary course of events to anticipate will frequently *recur* in the carrying on of the existing business upon ordinary lines. It is naturally impossible to deal exhaustively with this class of item, but the following headings may be mentioned:

(1) Any profit received from a municipality or railway by way of compensation for compulsory removal of the business premises.

(2) Any profit received from an insurance company in respect of a risk covered by a policy of insurance.

(3) Any profit received in connection with the sale of a portion of the undertaking, as, for instance, the sale of a patent, or of any fixed assets that may have been acquired for the purpose of working any portion of the concern in question, whether that department may since have been abandoned or not.

Generally in matters of this description there is always a temptation to emphasize the saving which may be effected in the future by more skillful management, and by the economy which might reasonably be expected to result from the amalgamation of several concerns. These, however, are matters which, it is submitted, ought not to form the basis of any accountant's certificate as to profits—as a matter of fact most of the promises of this character which were held out on the flotation of many large industrial combinations a few years ago have not been realized, but, on the contrary, extravagance in management seems to have resulted in many enterprises which prior to consolidation had been most economically administered. Such certificate should be rigidly based upon facts, and although certain adjustments, as already indicated, may be desirable, and even necessary, so that a correct impression of these facts may be gathered, in view of the altered conditions which it is expected will obtain under a new company, under no circumstances whatever should the certificate as to profits degenerate into anything which could possibly be described as an estimate, or a guess of what may under certain circumstances be expected to happen in the future.

Conclusion. By this time the accountant will have arrived at an opinion as to the amount of profits ordinarily earned by the undertaking he is investigating, but his work does not quite end here. In practically all cases an accountant pursuing an investigation that would be useful would wish to analyze the accounts. Not only is it thought that such a course is most desirable as a safeguard against fraud—where a regular and satisfactory audit does not practically remove this contingency from the sphere of possibilities—but it is also extremely valuable for revealing the general nature of the business under review.

The accountant will now have collected sufficient data to enable him to form a fairly complete impression of the business which he has been investigating. He will have had ample opportunity to study the general mode upon which the business is conducted, and he will have formed his own opinion of the *personnel* of the management; he will have ascertained the amount of capital required to conduct the business upon its present lines, and have formed his own opinion as to the scope it offers for an increased capital (if such a thing be contemplated); he will have ascertained how far the continued success of the undertaking depends upon: (a) successful competition; (b) the continuance of a monopoly; (c) the caprice of public demand; and have formed his own opinion concerning their continuance. In a word, he will be able to gauge the probable success of the venture. The point now to be considered is how far, if at all, his personal opinion upon these points should influence his report.

If it be conceded that the object of the accountant's investigation is to supply the place of an independent examination by each proposed stockholder—as the object of a professional audit is to supersede and supply the place of a personal examination by each proprietor—it must be admitted that these opinions are entitled to some expression. Yet the expression of personal opinions should be cautious and not dogmatical, and should be very clearly separated, where expressed at all, from professional opinions given, as experts in matters of accounts; and further, it should never degenerate into either estimates or prophecies It is very difficult to lay down any general rules upon this point; but, so long as the question is considered upon its merits in each particular case, the accountant will probably not get far wrong.

Care must be taken that where the accounts of a group of undertakings are reported upon, and where they have been so closely allied that future operations would require each property to be taken care of, that a consolidated balance sheet and consolidated earnings statement be submitted. Cases have been known where separate reports have been made on each of a group of properties, and use has been made of the statements of the profitable undertakings, while the unprofitable ones have been suppressed—although an intending purchaser would have to operate the losing as well as the profitable enterprises.

Upon the Sale of an Undertaking To a Continuing Partner or Partners, by a Retiring Partner, or Partners. (e) There are several features connected with this heading which require special attention.

A *continuing* partner may also be a *liquidating* partner in cases where the death of his partner was the moving cause of retirement, or the retiring partner may be withdrawing from the business on account of sickness, old age, or some other indisposition. In each of these contingencies the continuing partner is charged with a much greater limit of responsibility than the vendee occupies in any other position, and it is therefore incumbent upon the auditor, who may be called in to represent either or both sides, to make a somewhat more thorough investigation than is necessary in (a) or (b).

Usually the auditor will represent the retiring partner or his representatives, for the continuing partner may be depended upon to look after his own interests. We will, therefore, proceed to discuss the procedure where the auditor has been retained to ascertain the exact financial condition of a concern as at a certain date, and where there are no provisions in the partnership agreement regulating the basis of values at which the assets shall be taken.

As a rule the accuracy of the revenue account is not so important as the balance sheet in such an investigation, although, of course, use must be made of the statement of profits wherever the value to be placed upon goodwill is based thereon.

Generally speaking, all of the work required of an auditor who is investigating for an intending purchaser will be required to be done for the seller in this case, but certain further duties will now be discussed. The valuation of the assets should be upon the basis of a going concern, and it devolves upon the auditor to see that they are not undervalued. Obviously, the continuing partner should on his own initiative, even if the representatives of the retiring partner do not suggest such action, secure the services of independent appraisers, who, after being acquainted with the facts, should proceed with their work, having due regard to the rights of each partner.

In many cases, however, no such action is taken, and the surviving or continuing partner liquidates the business and places his own values upon the assets. It is difficult to lay down any definite rules for him to follow, but it must be observed as a general maxim that in all cases where doubt exists as to values, the absent partner should have the benefit of such doubt. The reason for this is clear, for it must inevitably be true that the continuing partner will be fully alive to all of the advantages which according to his way of thinking belong to him, while on the other hand, death or absence having closed the lips of the retiring partner, his rights, if not clearly set forth, may escape attention entirely.

It is a well-known rule of law that a liquidating partner must not take the slightest advantage of his position, and this fact alone would compel him to settle all doubts in favor of the absent partner.

Probably the most difficult point to decide will be the value of the stock-in-trade; and as each case, of necessity, must stand on its merits, no general rules can be laid down.

Nevertheless, it can be observed that the ordinary conservative rule of pricing stock at "Market or Cost, whichever is the lower" cannot possibly apply here. The liquidating partner is bound in law and equity to realize the highest possible price for anything he may sell, and if he is selling to himself he is assuming the responsibility of putting himself in a position where he says to the world that he has given more for the stock than anyone else would have given. In other words, he declares himself to be the highest bidder. This, of course, does not mean a bidder at forced sale, for if the goods have never been offered to the public it is manifestly impossible to put a forced sale valuation upon them. The equitable valuation would probably be the cost of duplicating the entire stock as at a certain date, after allowing, perhaps, for *dead* or unsalable stock. The latter, however, is a dangerous doctrine, for the buyer has elected to take the business as it stands, and he should not be allowed to stipulate that part of the stock is good and part bad.

If the stock consists of staple goods, ascertaining the cost of duplication should not be unduly difficult, and if the goods are made to order, or the values difficult to estimate, it would seem that the fairest way to secure the valuations would be, wherever practicable, to trace the sales, and by applying the current rates of gross profit thus secure a basis of cost. The accuracy of this would have to be tested, but there should be no difficulty in making the tests.

If an agreement were reached to take the stock at cost, it should be borne in mind that the proper interpretation of the word "cost" in this case would be the original price paid plus all charges down to the date of inventory. The contention as to interest is rather a nice question, but as it may certainly be classed among the doubtful items, the general rule applicable to this class of cases would seem to require that the point should be decided in favor of the retiring partner.

The question of the valuation to be placed upon fixtures, etc., should be decided generally upon the lines laid down above. For the sake of convenience, cost less proper depreciation, would seem to be fair.

Regarding book debts, stocks, etc., the usual custom of *working them out* should be followed. No commission or other compensation to the continuing partner can be allowed for this, but the actual cost of clerical help is a proper charge.

Of course, the retiring partner is entitled to or responsible for his share of the profits earned or losses incurred in the carrying out of contracts executed before the date of dissolution or winding up. Necessarily all of the expenses of such contracts up to the time agreed upon have been charged to the business; therefore, it would be obviously unfair to the retiring partner to have to pay his proportion of the expenses of making a sale and then be deprived of any share of the profits. This applies with equal force to losses; the continuing partner is not liable for anything beyond his own share of losses incurred in executing contracts entered into in good faith prior to his purchase of the business.

It will be noted from the above that all of the expenses for a reasonable period prior to dissolution should be carefully examined to see that none of them are prepayments or apply to the subsequent period. As a matter of course the retiring partner will have to bear his full proportion of all liabilities, and it can be depended upon that all expenses chargeable to the old period, no matter how long afterwards they be presented, will be charged back where they belong.

Another point which will bear watching is discounts and other allowances granted upon book accounts. It may happen that a customer will return goods, upon which claim has been made, and these goods will, of course, not be found in the inventory. In ordinary cases they would be carried into the current stock of the *new business*, and it is quite likely that they would be overlooked. A careful analysis of all credits to the old customers, other than cash, would, of course, reveal the returns.

Many other points, such as partners' salaries, interest on partners' accounts, etc., will require attention, but it is believed that the above suggestions will suffice to put the auditor on his guard and enable him to sufficiently protect the interests of his client.

GENERAL SUMMARY

The question may very possibly be raised that the accountant who pursues the course here advocated is not likely to enjoy a very extensive investigating practice. It is thought that this conclusion offers an injustice to company promoters as a class. The profession of a company promoter is a mixed one, doubtless, but the black sheep —although naturally the most notorious—are decidedly in the minority, and there are very many promoters who would thoroughly appreciate a greater strictness in investigations, which could not fail to strengthen the confidence of the public in corporate enterprise as an advantageous mode of investment.

CAPITAL AND REVENUE

The distinction between capital expenditure and revenue expenditure is one of primary importance, as bearing upon the fundamental question of what profits have actually been made by an undertaking during any given period. But it is thought that much unnecessary complication has been introduced in discussing this subject, and that, when these wholly irrelevant matters are brushed aside, the fundamental question will be found to be simplicity itself.

Shortly stated, the question can in any event be answered by finding the answer to the following question: "Has the particular expenditure incurred in any individual case been incurred for the sake of improving the earning capacity of the undertaking?" If the answer to this question is in the affirmative, then, and to that extent, the expenditure in question is capital expenditure. But if it has only had the effect of putting the earning capacity of the undertaking upon the same footing as that which had previously obtained (and which has since declined by the ordinary process of wear and tear, or the effluxion of time, in respect of which no provision has been made), it must be charged against revenue. The precise meaning of this latter qualification is that the mere *renewal* of wasting assets, not otherwise provided for, cannot be called capital expenditure, but that any extension, or the acquiring of fresh assets, is in the nature of capital expenditure.

This definition of the terms is, however, not at all conclusive because it assumes that the auditor will be able to secure an answer to his question from authoritative source and that he can rely on such answer. In actual practice you will find that there is a tendency to load up the capital account, because about nine out of every ten managers are more concerned in exhibiting favorable statements of their own operations than in establishing sound methods which may benefit their successors more than themselves.

Obviously, it is not always possible for the auditor to judge as to the correctness with which, say, the cost of an improvement, or renewal, has been apportioned as between capital and revenue. It is largely an engineering question but the average engineer does not approach the division from the proper standpoint, because he ignores the accounting end of the proposition; therefore the auditor who *does* understand the proper apportionment from the point of view of the accounts, and who *appreciates* the engineering questions involved, usually reaches a sounder conclusion than the engineer. He accomplishes this result by making diligent inquiries and observations and the exercise of good judgment. Dicksee's "Auditing" gives the following example:

> If assets which originally cost \$100,000 were, on renewal, to cost \$125,000, the *whole* of the cost of such renewal would be a revenue charge. If, however, the assets which originally cost \$100,000 were replaced by assets of a higher revenue-earning capacity at a cost of \$150,000, the correct method of apportioning this \$150,000 would be, in the first place, to ascertain what the exact re-instatement of the original assets would have cost, to charge that sum to revenue, and to only capitalize the excess.

The policy which is more generally followed in the United States, however, does not agree with the foregoing views. It is argued that the best practice requires, or at least permits, the cost of plant account on the books to represent the *last* cost; that is to say, if assets which originally cost \$100,000, on renewal cost \$125,000, the excess is properly chargeable against capital.

In other words, it is claimed that *cost* is the only correct basis, for it must be assumed that an undertaking builds or replaces its plant at the lowest cost possible, and, if through any contingency, commodities increase in value and certain renewals cost more than the original assets, it is quite enough to charge the latter against revenue and allow the asset account to represent actual cost of the existing plant.

This subject is an interesting one and will repay further investigation on your part. Bear in mind that the object of your research in any given case should be to arrive at a true state of facts. Many curious explanations will be made of charges to one or the other of these accounts. One man will charge all additions to his plant to revenue because he wants to be conservative, and in such a case you have no more excuse for passing assets which, on their face, represent undervaluations than if you certified to a plant account to which had been charged original cost and all renewals thereof.

This is a very popular question with C. P. A. examiners so you will probably give more or less further attention to it; one additional point, however, suggests itself—viz, in dealing with a question of this sort on which reputable accountants are not all agreed, avoid taking any positive stand until you must report on a particular case; until then look at it and discuss it from every side and you will be better able to cope with difficult situations when they do arise.

SUMMARY OF RULES LAID DOWN BY THE COURTS WITH RESPECT TO, AND REPORTS OF CASES DEALING WITH, *THE RIGHTS AND LIABILITIES OF AUDITORS*

So far as it is known, no reported case in America has yet dealt with the liability of professional auditors. It is, therefore, necessary to resort to the English decisions, from which certain legal rules may be deduced.

It will be observed that the courts have laid down rules of liability which are by no means onerous; and indeed it would seem that the practice which has been advocated in the preceding pages of this book is considerably stricter than the courts require. However, it is always well to be on the safe side, and an auditor can have the satisfaction of knowing that if he follows the practice which has heretofore been laid down, he will be amply on the safe side of the law.

Remembering then that the following are simple rules of legal liability laid down by the courts, and not rules of practice which the best accountants would in all cases advocate, the English decisions are summarized as follows:

(1) An auditor must do more than ascertain the arithmetical accuracy of the balances. He must see that the books give a true and accurate representation of his client's financial affairs.

(2) In doing this, the auditor is not an absolute insurer of the accuracy or truthfulness of the books. He is bound only to use reasonable care, the care of an ordinarily skillful auditor under the particular circumstances.

(3) What is reasonable care in any given case must depend upon the circumstances of that case. Where there is nothing to excite suspicion very little inquiry may be sufficient. It is *legally* sufficient for the auditor to select a few cases haphazard, see that they are right, and assume that others like them are correct also; check the cash, examine vouchers for payments, see that the bills and securities entered in the books are correct, and take reasonable care to ascertain their value. But he is not bound to take stock; he should, however, satisfy himself as to its accuracy so far as he can. As to the other assets and liabilities he must use reasonable diligence in verifying them before certifying to the correctness of the balance sheet.

(4) Until the contrary is suggested by circumstances of obvious suspicion appearing on the books themselves, the auditor is justified in assuming that the client's clerks, bookkeepers, officers, *et al*, are honest.

(5) Unless some suspicious circumstance exists, the auditor is not legally bound to communicate with third parties (customers or creditors) to see if their accounts are accurately stated in the books. Unless he has been elected by the stockholders, he probably has no right to report to them directly at all.

(6) An auditor's report must plainly point out to the client any unsatisfactory features of the account. The auditor does not discharge his duty by simply giving the client so much information as is calculated to induce the client to ask for more. The auditor must convey information, not merely arouse inquiry

CERTIFICATES AND REPORTS

Perhaps the most essential item of qualification with respect to the report which almost invariably follows the examination of a professional auditor is the ability to write good, straightforward English. This also applies to the certificate of audit which very often is attached to a balance sheet or profit and loss account, and which may be only a few words in length. The auditor who writes *audited and found correct* may use up more brain matter in finally arriving at the conclusion that such a certificate is justified than the one who writes a certificate a dozen lines in length.

Necessarily, certificates and reports must depend on the work which has been done. A report should be a truthful narrative of facts which will be of value to those to whom it is addressed; a certificate should be brief and to the point and embody conclusions founded solely on the auditor's investigation.

The auditor should study his client's needs and attempt to meet them not only in the scope of the audit but in the report thereon. Therefore compile reports which will serve useful purposes and cut out all redundant matter.

The report is for the edification of your client and if you cannot make it interesting enough for him to read, you are the one to blame, not he. The most successful auditor keeps on improving in this respect until clients are glad to get their reports and read them.

Sometimes a good illustration of how *not* to do a thing is better, and makes more of an impression, than an affirmative treatment of the subject. This explains the following comments on auditors' reports.

Not long ago a treatise on auditing was published which purported to cover a complete program of an audit. A cursory glance over it seemed to indicate that about 90% of the procedure consisted in footing every book *in toto*, verifying all postings and proving the trial balance. The general work, which in the opinion of all good auditors is the most important, was hardly mentioned, and the client who would pay for the work performed in accordance with the instructions would not get the worth of his money. The pamphlet covered the entire field of auditing in about thirty pages and lays down specific instructions for a report*, even to the exact wording—the intention being, no doubt, that with such instructions any man or woman with or without previous training could make an audit, and the book having been designed for inexperienced people the form of report needs also be prescribed. Suppose you judge for yourselves as to whether an auditor would be justified in preparing and sending to his client (at *some* one's expense) the following data in addition to balance sheet, profit and loss, and other accounts and statements.

1. "Recapitulation of the cash balance."

In all except the largest concerns the balance sheet should show the cash on hand and in banks, and it is not usually necessary to make up a separate schedule of same.

It must be borne in mind here, as well as when discussing subsequent points, that as a rule reports are rendered some time after the date as of which the report is made, therefore many details which might have been of interest to the client at the time or immediately thereafter have lost their

*The references to the report in question are underlined and are, for convenience, numbered one to eight.

value on account of being completely changed by the time the report is submitted. Furthermore, many of these details are furnished to the client at the time and it is absurd to duplicate a lot of schedules at a considerable loss of time and money.

2. "List of outstanding checks at time of reconcilement with bank pass book."

The furnishing of this information to some clients would incline them to throw you out of their offices on your next visit, and who would blame them? The day has gone by when a business man employs an auditor to report such stuff. He assumes that the auditor proved the bank accounts in a proper way.

3. "List of unpaid vouchers."

This means, no doubt, "list of accounts payable." For some years public accountants as a rule furnished their clients with detailed schedules of accounts receivable and payable, believing that such information was desired by them and would be of value. They found, however, that in nine cases out of ten these schedules were not referred to, and in the one case remaining the schedules desired were the latest ones rather than the ones submitted by the auditors, which were usually one or two months old. They abandoned the practice pretty generally, therefore, and furnish these schedules now only on request; these requests by no means reach ten per cent.

Of course in many reports where special circumstances govern, such as changes in partnership, detailed schedules are submitted as a matter of course. The above remarks refer to the ordinary periodical audit.

4. "List of missing 'paid,' vouchers (if any)."

This list is sometimes of importance but, as a rule, it is more desirable to compare such a list before the end of the audit and hand a duplicate to the bookkeeper so that the missing vouchers may be located. After as many as possible *are located the corrected list should be handed to the proprietor with a request that he look it over. If further inquiry or search is requested, it should be made before the audit is completed; if no further attention is required the schedule is not important enough to put in a report.*

5. "List of missing returned bank checks (if any)."

This contingency should not arise once in a hundred times and then would either be of enough importance to warrant a special report, or else if the checks were burned or destroyed without fraudulent intent, the aggregate number might be mentioned in the body of the report, but the details would probably be ancient history by the time of the report. As intimated above, if a particular check was outstanding when it should have been returned a report on such particular item only would be in order.

6. "Trial balance of the initial date."
7. "Preliminary trial balance of the terminating date."
8. "Final trial balance of the terminating date."

These three need no comment. Perhaps you can picture the condition of mind an auditor would have to be in to prepare and submit in writing to his client three trial balances after having handed in a balance sheet and supporting schedules. It would mean that certain asset and liability items would be listed four or five times in the same report.

It is to be hoped that these hints *how not to do it* will suggest *how to do it right.* Remember that your client is not having you report on his accounts out of curiosity, but that he hopes to receive an equivalent for the fee he pays. If he receives a report which can be understood by a layman and which exhibits clearly his financial position and the results of his operations, he will not only be pleased personally but he will show it to his bank and others and it will be a good advertisement for you.

If you hand him the sort of stuff referred to above, he will be disgusted, for it will mean nothing to him and he will be ashamed to show a report to his bank or creditors which he cannot explain as a whole.

All of you have had some practical experience. How many of you think that an ordinary business man would care for a report which included three trial balances *in toto* in addition to a balance sheet?

No doubt you are expecting directions as to an ideal form of report, since criticisms of the form suggested by someone else have been so freely made, but there is a very good reason for not attempting it and at the same time being consistent, for as was stated in the beginning the profession you have embraced is the most exacting in existence and requires ability of the highest class; the study and work you are now doing will develop your powers of expression and, with a knowledge of the best theories, and some practical experience to enlarge the theories, you will be able after *completing* an engagement to put down in writing what you have covered. In other words, when the time arrives you will have the equipment necessary to compile a good report, or else you will have fallen by the way and it would be foolish to take time in discussing the ideal construction of a report on an engagement which might never materialize.

With one or two injunctions, therefore, the matter is passed along to you, with the advice that *preparation* is the keynote to keep in mind. The following comments are suggestive only:

1. Make a report just as short as you can. Do not submit trial balances and schedules which no one will read, other than the typist who writes them. You know that many speakers who are not at a loss for words *say* nothing, and the auditor who sends in a long report and many schedules with the fond hope that the client will innocently believe that much hard work preceded it, will deceive no one except himself, unless he has a fool for a client, and the business man who is smart enough to employ a public accountant is never a fool.

2. Let the balance sheet and the profit and loss statements which you do submit be readable, that is, ignore set forms if you find that a particular client can understand it better if you get it up a little differently. A trained accountant takes in a balance sheet as a whole and the position of its component parts is an element which disturbs him when they are not stated in approved form. The

average layman, however, must *read* it over and take it in section by section, so that if you have this in mind when setting it up you will provide the means for an intelligent use of your work.

Test this out a few times whenever you have an opportunity and you will soon find how hard it is for many business men to understand published reports. Public accountants are largely to blame for this because many of them have assumed the attitude that accounts should be set up in a certain uniform fashion which they conceive to be the only correct form, and that it would be a surrender of their independence to alter such methods. If *all* practitioners agreed on these forms, accountants as a whole might endorse the position, but there are almost as many different ways of stating accounts as there are public accountants, and so there always will be if we maintain our ground as *professional* men. When we are all agreed on uniform schedules and hard and fast rules for audits, such as have been criticised in these pages, we can arrange to have our work performed by machines; the original or constructive brain will have to find other fields.

Now we need not condemn certain improvements in accounting methods which are being agitated constantly and with good reason. At the St. Louis Congress of Accountants several years ago, the writer publicly advocated uniform methods of stating the accounts of public service corporations, but these suggestions deal with general principles and do not relate, except indirectly, to the construction of an auditor's report on a particular undertaking.

3. Be very careful in your criticisms and suggestions and in your schedules of errors. The former should be tried out on the office staff before being formally reported or you may come to grief through having jumped at conclusions, afterwards found to be unwarranted by actual conditions. You must be cautious, of course, in dealing with the men whose work you are about to criticise, and in disclosing too much of your hand; but if you have been able to bring up your points, perhaps casually, you will get the benefit of the defense in advance and thus prepare for it. Even then you may have some of your criticisms and suggestions knocked out by little objections which never occurred to you but which are vital. Never report an error which is immaterial and the word *immaterial* is used in its broadest sense. For instance, if there have been a number of

errors in postings, *discovered by yourself*, do not report them in detail unless you ascertain in advance that some actual use will be made of the schedule. Condemn the carelessness all you please in the body of the report, but bear in mind that clients do not as a rule hand over the reports to their bookkeepers, and the latter are the ones who should have the schedules of errors, provided they are to be corrected. If not, there is little use in reporting them in detail. The manuscript notes which have been prepared during the course of the audit can be shown to clients when necessary, and will then have a value because the facts are fresh, but by the time your formal report goes in, the question of errors is stale and your client will not thank you for rubbing it in, particularly when he wants to take the report to his bank. This practice has been condemned so frequently that there is no doubt that it exists, and you can take advantage of being warned against the danger of falling into such a habit. You will lose and never gain prestige by so doing.

OUTLINE OF AUDIT OF A PUBLISHING BUSINESS

We will assume for the purposes of a practical illustration that we have been called upon to audit the accounts of "The American Publishing Company" of New York for the year ended December 31st, 1916. It is a close corporation and the officers own most of the stock, but there is a minority interest and the financial condition of the company demands additional funds. It is proposed to form new banking relations so the officers desire a certified balance sheet, as well as an audit of the year's operations. The scope of the audit is left to the discretion of the auditor.

We are informed that the company is incorporated under the laws of the State of New York with a paid up capital of $300,000.00 of which $100,000.00 is 6 per cent cumulative preferred and $200,000.00 common. The company issues two magazines—one monthly and one weekly—and prints books, calendars, etc. It also buys and sells books. The plant is owned, subject to a real estate mortgage of $400,000.00 and debenture bonds which are a second mortgage on the real estate and a first lien on the machinery, equipment, plates, etc. The business is supposed to have been very profitable.

The system of accounts is reported to be first class and the management claim to be conservative in ascertaining profits and fixing valuations.

In order that we may form our own opinion as to the company's financial condition we ask for the last balance sheet and profit and loss account. We are furnished with the balance sheet which follows, together with a profit and loss statement which supports the item of net profit for the year shown on the balance sheet.

The form of the balance sheet is not material, nor are the figures of the earnings and expenses pertinent to our present inquiry; the latter statement will be discussed only with respect to the audit of each account entering therein.

THE AMERICAN PUBLISHING COMPANY

BALANCE SHEET, as at December 31st, 1917

ASSETS

Cash, Accounts, Notes, etc.:			
Cash on hand and in banks		$ 12,265.00	
Notes Receivable	$ 11,555.00		
Advertising Accounts Receivable	11,815.00		
Sales Ledgers' " "	88,120.00		
Petty Ledgers' " "	1,712.00		
Single Book " "	1,865.00		
Sundry Debtors	12,110.00		
Advances to Authors	5,526.00		
Agents' Advances and Balances	17,118.00		
Installment Accounts Receivable	218,000.00		
	367,821.00		
Less: Reserve	78,119.00	289,702.00	
New York Post Office Deposit	800.00		
Postage Stamps	625.00	1,425.00	$303,392.00
Bonds and Stocks			31,000.00
Inventories:			
Book Stock	61,800.00		
" " in process	78,450.00		
Prints	10,402.00		
Paper Stock	8,145.00	158,797.00	
Stationery	2,975.00		
Less: Reserve	1,850.00	1,125.00	
Future Material: Art	17,700.00		
" " Literary	19,100.00	36,800.00	
Ca ry forward		$196,722.00	$334,392.00

Brought forward		$196,722.00	$334,392.00
Back numbers and bound volumes		1,000.00	197,722.00
Unexpired Insurance Premiums			1,612.00
Real Estate and Plant:			
Land and Buildings	605,000.00		
Less: Mortgage	400,000.00	205,000.00	
Book Plates	181,693.00		
Less: Reserve	167,249.00	17,444.00	
Magazine Plates		500.00	
Building Equipment	187,960.00		
Less: Reserve	19,000.00	168,960.00	
Furniture and Fixtures	10,044.00		
Less: Reserve	5,200.00	4,844.00	396,748.00
Goodwill			125,000.00
Total Assets			$1,055,474.00

LIABILITIES

Notes and Accounts Payable:			
Notes Payable: Banks	$ 60,000.00		
Purchases	31,212.00		
Directors	40,000.00		
Accounts Payable	63,740.00		
" " Authors	34,416.00	$229,368.00	
Accrued Items:			
Wages	1,875.00		
Interest on Mortgage	10,000.00		
" " Loans	1,812.00		
Taxes	3,119.00		
Commissions	3,450.00	20,256.00	
Unexpired Subscriptions: "A"	64,118.00		
" " "B"	18,750.00	82,868.00	
Reserve for Returned Magazines		3,150.00	
Debenture Bonds		200,000.00	535,642.00
Excess of Assets			$519,832.00
Capital and Surplus:			
Capital Stock: Preferred 6%	100,000.00		
Capital Stock: Common	200,000.00	300,000.00	
Carry forward		$300,000.00	

Brought forward			$300,000.00	
Surplus 1st Jany., 1916		$159,450.00		
Less: Dividends:				
6% on Pfd.	$ 6,000.00			
15% on Com.	30,000.00	36,000.00		
		123,450.00		
Net Profit 12 months ended 31st December, 1916, details annexed		96,382.00	219,832.00	$519,832.00

Instead of going into details of the manufacturing and profit and loss statements it will be sufficient for our purpose to simply indicate the sources of earnings and expenses. With these fully understood the building up of schedules is a matter of detail only.

SOURCES OF EARNINGS

Subscriptions "A"
" "B"

News Stand Sales
Special Agents

Advertising

Sales of Books
" " Prints

Sales of Copyrights
" " Cuts
" " Paper and Waste

Income on Real Estate, net
" " Investments

EXPENSES, ETC.

Costs of Issue: Editorial
Circulation
Accounting
Shipping
Paper
Contributions and Illustrations

	Composition and Plates
	Printing and Binding
Book Department:	Composing Room
	Binding and Mailing
	Press Room and Paper
	Editorial
	Selling
	Advertising
	Accounting
	Shipping
	Manufacturing
	Royalty
	Plate Depreciation

Subscription Department

Stationery and Supplies
Interest and Discount

Office Expenses
Salaries
Postage
Legal

Officers' Salaries
Dividends

PROCEDURE

Cash Balances. The work is commenced on the tenth of February and we immediately count the cash on hand and send the bank pass books to the banks to be written up; we secure orders on the banks to deliver the pass books to us after they have been balanced. We find that the cashier is carrying as cash on hand certain memoranda consisting of advances to employes and petty bills paid but not charged up. Some of the former are dated prior to January 1st and several cover advances to clerks who are no longer connected with the company. We take a sheet of paper, cap size, and head it *Criticisms to be Reported* and note the practice of carrying memoranda as cash on hand, calling attention to the danger of actual loss as exemplified by the items of advances which cannot be collected and the evils of procrastination evidenced by the number of small current cash items carried as cash which are legitimate in themselves, but which should be entered finally at the time of the transaction so that they can be more readily located afterwards and also to cut down the time required in handling them over and over again.

Take another sheet and head it *Balance Sheet Adjustments* and list the uncollectible items. This schedule is, of course, tentative as the aggregate of the items may not be large enough to warrant any alteration of the figures shown by the balance sheet and profit and loss statement. Until the audit is completed, however, the schedule should be continued.

Cap size memorandum paper is mentioned because the auditor should use paper of a uniform size with various rulings. The temporary use of small scraps of any old size cannot be condemned too severely. The scraps are easily lost and, while the intention to transfer the data to larger sheets may be good, yet the tendency is to put this off. In any event, if it *is* done it means a complete rewriting and no auditor can afford to use *sloppy methods* which he criticises in others. Furthermore, it may be desirable within a few hours to show the memorandum to your clients for prompt action. If your record is in good shape you can do this safely, but if in rough or incomplete form you may be tempted to wait until it is rewritten or until your report is submitted. Once for all, you are advised to *use* your findings during the audit if they are worth while and do not accumulate a lot of stuff for post mortem purposes.

Prove the *footings* of the petty cash book back to the first of January and see to it that all checks to petty cash from January 1st to February 10th are charged properly. Strike a balance on the general cash which should agree with the bank balances. When the pass books are returned prove their accuracy.

Postage. Count stamps on hand and examine entries back to January 1st to test accuracy of stock at that time.

Bonds and Stocks. Examine the securities themselves or if out as collateral, secure confirmations.

Postage Deposit. Send memorandum to postmaster asking for confirmation of amount claimed to be on deposit.

Notes Receivable. Examine same and note due dates and makers. If any are out for collection, secure confirmation.

Trial Balances. It is very important for the auditor to get a good working knowledge of the company as soon as possible. For this reason it is frequently advisable to verify immediately the *after closing* trial balance and check the closing entries to the profit and loss account. This refers to the general ledger only. Use your own judgment as to footing the ledger accounts for the year. As the company in question is a fairly large one it will be wise to use two or three men on it so that different parts of the work can be carried on simultaneously, *e. g.*, two men can be examining vouchers or checking postings while a third can be proving footings or trial balances.

Bank Accounts and Vouchers. Compare paid returned checks with stubs or check register for entire year, noting that same are properly endorsed and listing those which are drawn to bearer or to office employes. Compare pass book with stubs or register to ascertain that deposits were made on the dates shown.

Compare stubs with cash book and indicate on the latter by the letter *C*, or some like sign, that a properly endorsed check supports the item. Where the checks were drawn to bearer or to an employe mark them some other way and after the process is complete obtain further evidence to support such items.

Follow this up at once by calling for the pay-rolls, petty cash, and all other vouchers not covered by checks, the endorsements of which can be accepted.

The manufacturing department pay-rolls should be submitted for the entire year. Check the totals of every other week to the cash book and prove the footings of every fourth week.

Call for the time sheets or original workmen's cards and time clock records for July and December, and compare the time thereon with the pay-rolls, taking one or two weeks out of each month.

Inquire carefully as to the method of keeping the time and paying off and, if the safeguards are not ample, note your comments on your *Suggestions for Report* sheet.

Look into the distribution of time into departments to see that the principles followed are sound.

Call for the petty cash and postage vouchers for March, June, September, and December. Before examining them obtain a list of persons authorized to approve and if you find any not clearly authorized lay them aside, and follow up the authority afterwards. As soon as this work is complete, go back over the four months and scan the items for which vouchers were not submitted. If any are questionable, note same and follow them up *at once*. If they are for car fares, suppers, etc., turn to your sheet of suggestions and write out what you think should be done in the future. Then mention the point to the cashier or treasurer and find out how much difference it makes, and how they feel about following your suggestion that authority be shown for all such payments. After this information is secured you will know how to word your report.

Call for the postage vouchers for February, May, August, and December, and compare same with postage book. Bear in mind that postoffice employes will always sign vouchers for stamps. Call for department requisitions and compare two or three months with postage record. Stamps should be as carefully accounted for as cash and if the records do not indicate the purposes for which used, and if the requisitions are not checked by some responsible person, note same for criticism.

Postage received for subscriptions, etc., will be entered as cash received and charged out as purchases of stamps. These entries must be followed to the postage book for the same period and accounted for as rigidly as cash purchases.

Call for invoices for all purchases for May, August, and December and compare same with voucher record. Note that they have been properly initialed as to receipt of goods, quality, quantity, discounts, freights, extensions, etc. If there is any carelessness, note for criticism.

Also note the missing invoices for *immediate* attention. If for important items secure duplicates if originals cannot be located. Do not leave this until the close of the audit.

After the above is complete go back over the months not covered in detail and *read* each item. If for some special purpose of which you should be informed to make your knowledge of the business more complete, call for that voucher. This will cover *all* extraordinary payments.

Subscription Receipts. Cash received for subscriptions will be entered in detail on sheets. From this record individual cards will be written and placed in the files. Systems vary but the point to bear in mind is the correlation between the records of cash and the mailing lists. No name should reach the latter unless cash has been accounted for or the same has been "franked" by some one authorized to pass the free list. If the mail room is entirely separate from the subscription department it may be that the cards will be written from the original order which is also the source for the list. In such a case the daily totals of subscriptions received per the mail room must agree with the aggregate shown by the subscription department sheets. These reconciliations should be checked for, say, every fourth or fifth day. The totals should then be checked *to* the cash-book, say, every third day, or it might be preferable to compare each day.

While on the matter of subscriptions the auditor should look into the system of apportioning the receipts over the year. Many publishing houses do not attempt this and carry to earnings all receipts as collected. This is obviously unscientific and deprives the proprietors of accurate knowledge with respect to the actual earnings of any one month of the year The proper course is to credit all receipts to an accrual amount and then transfer from this account monthly to an earning account the earned subscriptions for the month. It is not necessary to allocate each item of receipt but an accurate apportionment can be arrived at by keeping track of expirations and summarizing the receipts applicable to various expiration periods. Another method in use is to base the earnings on the number of copies actually mailed. That is, the *average* price received is ascertained; at the end of the month an entry is made debiting the accrual account and crediting earnings with an amount arrived at by multiplying the total copies mailed by one-twelfth of the average annual rate. This plan if carefully followed up can be used with safety.

The auditor must check the results by going back over the figures for the year and it will not be difficult to detect any grave error of principle if it exists. In any event, do not fail to make use of the records of the shipping department, the press room, and also the post-office receipts for second-class postage. There should be some direct connection between the total number of copies sent out and the earnings accounts in the ledger.

News Stand Sales. Check the weekly or monthly charges and the special sales to the News Company by the delivery records. Verify the returns in the same manner. Confirm the price per copy charged.

Special Agents. Check the subscriptions secured by special agents by means of their periodical reports and look up the authority for commissions deducted.

Each agent's last report for the period should agree with his balance per ledger. If you find that the debit balances of certain agents are increasing, investigate the same.

Advertising. Select on your own initiative several issues of each publication and see to it that *every* insertion is charged to someone, or else, if *dead head,* that it has been duly reported and passed.

If a monthly publication, select, say, June and December—always December because it is the largest. If you find errors or omissions you should, of course, verify other issues.

After you have checked the issues selected, call for the contracts and orders for a certain number of advertisers or advertising agents and compare these with the charges actually made, noting all discrepancies and immediately thereafter following them up.

Book Sales. *On Credit;* Examine the system in use and see what internal check there may be. Endeavor to test the sales records by means of the orders from customers, the requisitions to the stock room, the records of the stock room and the delivery department. It is hardly worth while to attempt to check the prices or the extensions but you must inquire as to the attention given to these details before the bills are sent out, and if there is any laxity note same for your report.

Sales of Prints, Etc. Follow the same course as with books. Most publishing houses are obliged to keep records of books, etc., bound, and the disposition of the same. These records are kept chiefly as a basis for royalties, which makes them all the more important to have accurate. You may, by careful tests, detect errors due to carelessness and a report on same will demonstrate the value of the examination. You may find on these stock records some reference to costs. If so, examine some of them closely and verify their accuracy. Be sure to see that *all* direct and indirect costs are entered, as the book or print may be handled on the basis of a division of net profits.

Miscellaneous Sales. Inquire of the head of each department, and of anyone else from whom information can be secured, as to what sales of a miscellaneous nature *may* have been made during the year. The delivery department may have such a record. As a general rule the memoranda relating to occasional sales should be kept in bound books; a loose-leaf record does not accomplish the purpose as a portion of the record might be removed without discovery. In the publishing business there will be many sales which are not of sufficient frequency to justify elaborate records. If you will take the various accounts of the ledger and prepare therefrom a list of *possible* sales and then search for the records mentioned above, you will not be likely to miss anything.

Income on Real Estate. Ascertain what portion, if any, of the premises may be leased; secure the leases and compare same with charges to tenants. Go over the building and note that there *is* a lease for every space occupied.

Income on Investments. Prepare a list of securities on hand at the beginning of the period and all purchases during the period and then see that all income thereon has found its way into the bank.

The above suggestions cover roughly the plan advocated in former pages of verifying income and earnings from outside sources *to* the cash book, rather than using the latter as a basis and working backward.

Of course every particular business will have ramifications peculiar to itself but we have now covered the principal divisions of earnings, and in actual practice you can readily pick up any additional sources.

For the routine verification of cash book and other footings, postings ,etc., you are referred to the general remarks on these points in other lessons which apply as well to publishing houses as to other lines of business.

THE BALANCE SHEET VERIFICATION

Cash, Accounts, Notes, Etc. Verify as suggested in prior lessons, except that you will find some out-of-the-ordinary accounts.

Advances to Authors. Confirm balances if possible but also examine contracts to see that payments are being made in accordance therewith and that excessive advances have not slipped through.

Agents' Balances. Call for and examine at least a portion of the original reports from agents and ascertain that the balances acknowledged by the agents agree with home office balances.

If agents are charged with stock, see to it that such stocks are not carried as accounts receivable, and if stock is charged to agents at selling price, see to it that a reserve is set up for the difference between cost and selling price.

Installment Accounts. These are extremely difficult to verify, chiefly because they are very numerous and the average item is small. Two points should be covered in particular: the first being to ascertain that the outstanding balances are, as a matter of fact, uncollected; and second to see that, if uncollected, the accounts are good. The fact that the title does not pass until collection is made is an unimportant factor, as it usually costs about as much to reclaim books sold on installments as they are worth.

It would probably be impracticable to attempt to confirm by correspondence all of the outstandings, but, in view of the numerous irregularities incident to such accounts, cover if possible several letters of the alphabet. For instance, if you will send out requests to confirm to, say, all customers whose names commence with D, L, and W, you would probably run down any systematic manipulation.

As to bad debts, be guided somewhat by the condition of the accounts with respect to prompt collection or otherwise.

Such sales are usually made on a large margin of profit in order to cover the losses which always occur—therefore bear this in mind when verifying the reserve and be liberal.

In the balance sheet in question, the reserve may not be sufficient. If the sales accounts and the installment balances have been accumulating for years, the reserve would have to be heavy.

Inventories. *Book Stock.* For their own protection as bearing on the current conduct of the business and for insurance purposes every well-ordered concern owning a stock of books will have in use some kind of stock records. Check these with the inventories submitted to verify quantities and then consult the cost records for valuations. Books for which there is a constant and stable demand may be included at cost; books which have outlived the first demand, which was probably stimulated by liberal advertising and for which there are sure to be reorders, may be taken in at cost *if the stock on* *hand is comparatively small;* books for which the demand is small and where the records show that recent sales, even if continued, would not exhaust the stock within a reasonable period, should be cut down to a fraction of their cost, and unsalable books should be valued at *nil.*

Book Stock in Progress. This item is supposed to represent cost to date and if the auditor is satisfied with the accuracy of the cost accounts he can pass such valuation. Cost, of course, can include a proper charge for overhead or fixed manufacturing expenses but no manufacturing profit.

Prints. Where high prices have been paid for illustrations and where it is the custom to sell reproductions as well as the originals, this asset is an actual one. In some instances, however, there is a tendency to overstate values for balance sheet purposes. Therefore insist on seeing an actual inventory and scan it closely, also examine the sales for the period under review to ascertain exactly what has been accomplished. You may find that high valuations are based on sentiment rather than on market prices, and with respect to originals you may find that there is no intention to sell them but to use them to adorn the walls. In such a case their value as a "fixed" asset is considerably less than if the intention is to place them on sale.

Paper Stock. This account, while a book inventory, should be susceptible of verification, for paper stock is a vital matter with printing houses and must be kept track of. The valuation should be based on cost or the market value at date of closing.

Stationery. This is always a large item and it is customary to charge all purchases to a ledger account representing a running inventory, the stock used being credited monthly. Much of the stock, however, will consist of forms, advertising matter, etc., which may be abandoned before being exhausted and a very fair reserve should be created to bring the balance sheet valuation to a realizable value.

Future Material—Art and Literary. These items should also be supported by actual inventories, and the auditor should seek assistance in arriving at valuations from someone from the editorial department who will be frank enough to admit that certain articles and illustrations will never be used. Take it for granted that all editors, including the art editor, make mistakes of judgment and when you find that contributions, for which a high price has been paid because the author was for a time in the public view, have been stored away and not used, assume that some of them never will be used and are therefore not worth cost.

By the time you arrive at this point the February and March numbers of the monthly publication will have been issued and of course all manuscripts and illustrations used therein were a good asset if paid for, or included as liabilities on December 31st. With respect to the others, be critical.

Back Numbers and Bound Volumes. Here is another item upon which sentimental valuations are placed. As a check on the values, analyze the sales for twelve months and you will thus gain a good idea of how much is ordinarily realized from this source. There is, of course, a certain demand for back numbers and bound volumes, but as a rule they are used for samples and gifts more frequently than sold for cash, so that a low valuation is more likely to represent the cash worth than any figure which may be arrived at by the inclusion of "so many" copies or volumes at "so much" each.

Unexpired Insurance Premiums. This asset is easily verified. Where the insurance is heavy and placed with many companies but through one agency, you can often get the agents to calculate the unexpired premiums for you and save yourself a somewhat tedious task.

Land and Buildings. Analyze the account and, if you can find actual cost, apply depreciation based on your experience. If you have compiled a memorandum book setting forth rates of depreciation on various classes of machinery, buildings, etc., consult it with respect to the various items. Persuade your client wherever possible to keep a subsidiary ledger containing the details of the plant and machinery accounts grouped as to class and location. In case of fire such a book would be invaluable and for revaluation purposes almost indispensable. Where there is a mortgage consult the mortgagee and secure a memorandum of the latest appraisement made on his behalf.

If the books or your investigations or conversations indicate that an appraisal company has been employed *insist* on seeing its report. It may be startling and there may be a good reason for keeping it hidden.

Book Plates. A conservative publisher will charge the major part of his plates to the first editions of books published and where this is not done the auditor must do so before he can certify to the balance sheet. It is warning enough to know that several large failures in the publishing business in past years were due very largely to the failure on the part of the management to write off against the cost of books a proper proportion of the cost of plates. Large profits were shown and a corresponding amount of cash was withdrawn, whereas the actual profits were small—due to a constantly increasing fictitious investment in book plates, etc. If a book is a good seller and will justify several editions the cost of the plates can easily be recouped out of the profits on sales; if, on the other hand, a book is not popular and there is no prospect of a second edition it is the limit of folly to carry the plates as an asset. Under no circumstances, therefore, certify to a publishing house balance sheet unless the valuation of plates is practically on a scrap basis.

Magazine Plates. These should all be charged off except that certain plates for covers, advertisements covering long contracts, and other standing matter may be carried at actual value or else at a small fixed sum which represents a conservative valuation of live stock at any time.

Building Equipment. This includes all movable machinery, presses, and general equipment. This account should be supported by a subsidiary ledger as with plant and fixed machinery. On its face, the reserve for depreciation shown by the balance sheet is insufficient. Unless every dollar of the $188,000.00 were new within a year a reserve of 10% would not cover twelve months' use. Remember that the theory of depreciation is that each year's operations should bear its proper share of the cost of the plant and equipment which it uses and that this share must be charged immediately, or before the year's operations are closed, or else the account will not represent actual conditions. Now a printing plant contains some easily-used-up machines, and, as a whole, 10% is not sufficient. To arrive at an accurate figure for any given establishment where the various classes of equipment are not stated, you must analyze the asset accounts, apply any renewals during the period, inquire as to the conditions under which the plant is operated (for adverse conditions will directly affect the life of machinery), and then do the best you can with the data before you.

Strikes have been frequent in the printing trade and many green men have been employed who cannot be expected to handle delicate machinery with the same care as more skilfull men; some plants are equipped with the latest models of up-to-date machines; others have old models of ancient patterns, so that it is beyond anyone's power to name a fair rate of depreciation to be applied to the equipment of a publishing plant as a whole, but without specific information you should require pretty good proof before you would be justified in passing 10%.

Furniture and Fixtures. Here the rate of depreciation should be heavy for there are so many changes in management, removals of the place of doing business, new fads in furniture, etc., that the sooner this account is reduced the better. A valuation of less than 50% in the balance sheet before us could no doubt be passed safely.

Goodwill. The only excuse for this account is where it represents a purchase either for cash or its equivalent. This equivalent usually consists of common stock, but so long as the results of the operations justifies the cost there is no sound accounting principle violated in carrying the account indefinitely. If the results are such as would indicate an overvaluation at time of purchase, there will be no surplus or profits against which the account can be written off so it still stands. The question before the auditor, therefore, resolves itself into a mere inquiry as to how and when the account was set up.

LIABILITIES

In considering the liabilities of a publishing company there is little that is peculiar to this line of business, so that we will not take in detail the various liabilities which have been referred to in previous chapters, but those which do not appear on the balance sheets of other companies will be discussed briefly.

Accounts Payable. *Authors.* The ordinary author is a genius, therefore *his* books may not help you in your audit of the accounts of the publisher. We refer here to the importance that we have placed on the reconciliation of the accounts payable of the business under audit with the books or statements of the creditors. Authors' accounts are, therefore, more susceptible to manipulation than ordinary trade accounts. Underpayments to authors are, as a rule, reported by them very promptly for they are all keen for money and they want it early and often. Overpayments will never be reported;

who ever heard of an author or an artist who admitted that he had been overpaid? Check these accounts carefully therefore; test the credits thoroughly to see that quantities disposed of were accurately determined and that the rate per copy is according to contract. If on a profit sharing basis, see that *all* costs have been included. Verify the debits to see that payments are in accordance with the contract and that any charges provided for therein have been debited to the account.

Commissions. As relating to advertising and subscriptions you should refer to contracts with the agents. As many of these contracts or agreements provide that the agent is to receive his commissions on *collections,* see to it that he has not been credited with items *not* collected, or on gross rather than on net collections.

See to it that where advances are being made on prospective collections that the latter are being realized within the agreed time. For instance, the balances on December 31st as compared with results up to the date of audit will establish the standing at that time.

These accounts are frequently the source of loss because advances are often made on the verbal assertions of agents and the treasurer does not verify these assertions by the actual records. You may therefore find in these accounts a fruitful source of error and consequent necessity for report.

Unexpired Subscriptions. Some publishing houses do not carry this item as a liability because they say that it never will have to be liquidated in the sense that a note or account payable must be provided for; that in case of trouble not one subscriber out of ten would demand a return of his money. The answer to this is that we are dealing with a running business, that there is a definite obligation to be met, that the *receipts* for subscriptions do not become *earnings* until the obligation has been met, that in order to arrive at monthly earnings the receipts must be allocated to the period they cover and that in the meantime the books should show the advance receipts. There are other arguments pro and con but the best accountants always insist on this item being placed on the books where it did not appear before, and you should be equally successful in your arguments so that we need not exhaust the subject.

We have considered the different methods of arriving at the amount of this liability so we need not consider them again.

Reserve for Returned Magazines. With few exceptions magazines are returnable by the News Companies and this is an important item to consider.

As with unfilled subscriptions some publishers dislike to set up this account as a liability, but in this case we have only to point out the actual returns between January 1st and the date of the audit to demonstrate our claim. It is not always fair to use past results as a basis, for recent issues may have been more salable than a year ago, but this is usually offset by the increased number sent to the News Company when a greater demand is anticipated, so that in the best of times you can count on a fair quantity of returns.

ACCOUNTING FOR MODERN CORPORATIONS

INTRODUCTION

The history of business development during the last few years shows an unmistakable tendency toward the formation of large combinations of capital. That such combinations are destined to exert a controlling influence on our future industrial progress, seems to be a settled fact.

Where once small manufacturers, operating independently, produced goods in sufficient quantities to supply the trade in a limited territory, the tendency of the more modern plan is to concentrate production in large plants located with reference to sources of supply and the market for the finished product. The object of this centralized control of manufacturing industries is, primarily, economy of production, coupled with a desire to maintain greater stability in the general condition of a given industry.

Centralized control attains these objects in several ways. Economy of production results from a more even distribution of manufacturing orders among the several plants, insuring a more nearly uniform rate of production, and the placing of orders with those plants best equipped to handle a particular class of work. One plant may be equipped to perform certain operations in the process of manufacture at less cost than any other in the group. By a judicious distribution of orders each plant can be kept running full time on work that can be produced most cheaply. The cost of marketing the product is reduced by a distribution of orders with reference to the location of the plants, resulting in lower transportation charges. Stability of prices is maintained by a regulation of production at a point that will meet all demands but prevent over production. Selling costs are lessened because one salesman can cover a given territory for the entire group.

Several plans of organization intended to bring about these conditions have been tried. The most practical of these plans, and the one that seems destined to become the accepted plan, is the holding company. Without combining all plants under the absolute ownership of one corporation, the holding company plan insures centralized control through the ownership by the parent company of a majority of the stock of the subsidiary company; amounting to a practical ownership of the companies themselves.

The formation of these combinations of capital has brought with it new problems in corporation accounting. Since accounting of this class is destined to increase in importance, a knowledge of the special problems involved and how to solve them has become a very necessary part of the knowledge of the accountant. And likewise a knowledge of the accounting problems of these enterprises is of the utmost importance to the investor, that he may intelligently analyze their financial statements and determine the real value of their stocks and securities.

Experience in solving these problems is by no means common, even among public accountants. Realizing the importance of the subject, and the danger of its being treated in a superficial manner if intrusted to an accountant lacking in practical experience, it was decided to secure the opinions of some of the best-known men in the profession, who are experienced in this very class of accounting.

The views of three men whose right to be considered authorities on this subject is unquestioned are presented herein. Mr. Lybrand presents a valuable paper on the subject, "The Accounts of Holding Companies;" Mr. Macpherson writes on "Corporation Accounting and Investigations," illustrated with a worked-out problem; Mr. Dickinson presents a paper entitled "The Profits of a Corporation," and in his treatment of accounting problems includes an illustrative example.

These papers are submitted as the expressions of men who are specialists, and with full confidence in their value to every student of business and accountancy.

THE ACCOUNTS OF HOLDING COMPANIES

1. While it may be true that many of the industrial enterprises now in existence remain as partnerships or as independent corporations, a very large number of undertakings of that character have been consolidated into that form of organization represented by the holding companies. It is with accounts of the latter class of industrial enterprises, therefore, that this paper will deal principally, because accounting principles, if sound, do not change with their application to any particular form of accounts, while accounting methods, if good, when modified to conform to the requirements of the different kinds of business operations, are applicable to small as well as to large undertakings.

POOLS

2. In the revival of industry which succeeded the industrial depression of 1873, the corporate form of organization began to be used more and more. The holding company had not then made its appearance and the great combinations of the present day did not then exist. In the meantime the corporations, not having consolidated, and therefore being competitors, were led to adopt various devices designed to eliminate the evils of competition from which they suffered. The formation of pools was one of the commonest and most popular methods employed. The pools were associations of manufacturers who agreed to place the marketing of their product under some central association, hoping thereby to secure the benefits of stable prices and a regulated output. The inherent weakness of the pools was that their provisions were not enforceable at common law, and good faith on the part of the members could be compelled only by the forfeiture of deposits, the imposition of fines and expedients of a similar character. Mutual distrust was apt to exist, withdrawal of members was possible, and in times of depression, when business at profitable prices was hard to obtain, and when the pool was most needed, it was usually most difficult to control the members or to keep them together.

TRUSTS

3. The failure of the pools to accomplish the object for which they were organized, led to the creation of a form of organization which was intended to have a legal foundation and a permanent existence, namely, the Trust. Under the trust form, the capital stocks of the constituent companies were assigned to a board of trustees, who issued trust certificates in lieu of the shares so assigned. The trustees, having been vested with the control of the corporations through the assignment of their capital stocks, became responsible for the management of the several companies and were thus in a position to adopt a settled policy in all matters pertaining to the limitation of output and the upholding of prices. The trust, as an expedient for lessening or obviating the evil of competition, and for securing the benefits of consolidation, was by reason of its authority, stability and permanent organization a decided advance over the temporary and ineffective pool. Its legal position was, however, found to be open to attack, and adverse judicial decisions in cases brought to test whether or not it was a combination in restraint of trade, finally drove the trust out of existence as a legal means of effecting combinations.

HOLDING COMPANIES

4. About the time the test cases to prove whether or not the trust was to be allowed to exist were in progress, a new legal expedient for accomplishing combination was provided through the enactment by the State of New Jersey of a revised General Corporation Act, under which the right was granted to one corporation to purchase and hold stocks of another, a right which prior to that time seems to have been held by the corporations only by virtue of their being organized under special laws. It has been said that, "for momentous consequences, this statute of New Jersey is hardly equaled in the annals of legislation; corporate organization could henceforth be promoted, not to serve the ends of industrial management, but solely in order that financial combinations might indirectly control operating companies through ownership of their capital stock." Thus the holding company originated, and under this law one consolidation followed another, until at the present time there exist the gigantic in-

dustrial combinations which virtually control the several lines of industry in which they are engaged.

ADVANTAGES OF COMBINATION

5. The principal factor leading to the formation of the industrial combinations was doubtless the desire to eliminate ruinous competition by obtaining so large a control over any one class of merchandise that it was possible virtually to regulate the price at which it could be sold. Contrary to the accepted idea, the control of prices does not necessarily mean their exorbitant advancement, but under enlightened management, exemplified, we believe, in one of the largest combinations, it enforces a policy of stability in prices, under which business in times of depression suffers vastly less than if indiscriminate price cutting were in effect. However, other causes than the control of prices were instrumental in hastening the formation of combinations. In a territory as extensive as the United States, the transportation of raw materials to the seat of manufacture, and the finished product thence to the place of its disposal, constitutes a large element of cost. Under a combination, the orders may be so distributed that the mills most advantageously situated as respects transportation facilities can be worked to their full capacity, while others less favorably located may, except in times of unusual activity, be closed temporarily. Orders for certain classes of merchandise may be concentrated in one plant so that it may run continuously with few changes of appliances, and thus turn out the largest output at a minimum of cost. Sources of raw materials may be controlled through the large financial resources of the combination, or by the amalgamation with it of the companies controlling such raw materials. Labor may be dealt with in larger groups and more advantageously; expenses of distribution of goods may be curtailed by dispensing with salesmen who traverse each others' territory; duplicate offices may be eliminated; stocks of merchandise may be reduced; management and office expenses may be decreased by concentration—these are some of the other advantages which it was believed would accrue to the properly constituted combinations, and which have in many instances, doubtless been realized to a considerable extent.

EVILS OF MONOPOLY

6. Without devoting undue space to a discussion of the ethical features of trusts or combinations, it may not be inappropriate to consider for a moment the evils which in the public mind seem to be indissolubly associated with them. First of all is the dread of monopoly. To what extent this fear is justifiable it is difficult to determine. Even where a combination has a virtual monopoly, there is a practical limit beyond which it cannot advance its prices. If this limit is exceeded, demand for the article ceases, substitutes therefor are devised, or the pressure of public opinion becomes so great that the most strongly intrenched monopoly must be effected by it. On the other hand a monopoly is probably effective in influencing prices in that they can be maintained at substantially the same level, in the face of reduced costs of production due to the introduction of improved manufacturing processes, thus depriving the consumer of the benefit of at least a part of the widening margin between cost and selling price which would probably accrue to him under the regime of competition. It will be argued by others, however, that the greater profit results entirely from the economies of combination, and that therefore the additional margin equitably belongs to the producer, as the consumer, under competition, would have been no better off than is now the case.

At a meeting for the discussion of economic questions, a prominent socialist recently described the material advantages which, he argued, would accrue to the workingmen, if the productive agencies of the industrial world were placed under their control and operated for their benefit. A well-known political economist in reply expressed his belief that if these agencies were so controlled and operated, the net results under the relatively unskillful management that would then ensue would be so much less than under the present conditions, that each workingman would receive no more than he does at the present time. The same thought may be true as to prices; if under competition there is economic waste, and in combination there is economy, would not the increase in costs under the former necessitate prices equal to those under a monopolistic regime? These questions of costs, prices, and monopoly are, of course, too far reaching to be properly discussed within the limits of a paragraph, but they are now the source of so much public debate, with the possibility of an attempted public control, that they demand our thoughtful consideration.

The temptations of fraudulent promotion and speculative management are other evils ascribed to the combinations. It is claimed that earnings which were used as a basis of capitalization have been overstated, either intentionally or ignorantly, by the failure to include among the expenses of operating the full cost of maintaining the property, or a proper provision for renewal of the plant through whose operation the earnings were produced, but which must obviously deteriorate in value because of that use, or become obsolete through the introduction of improved appliances. The more serious charge has been made and proved to the satisfaction of many, that constituent companies acquired at one price by the members of a syndicate have been sold directly or indirectly to themselves as directors of the holding company at greatly enhanced amounts. Speculative management, with one eye on the ticker, and the other on the profit and loss statement, has been alleged, with the attendant evils of a property "skinned" to show large earnings, or the payment of dividends unearned, or at least unwarranted from the standpoint of financial expediency.

It is alleged that the holding company adds to the complexity of corporate organization, admits of the accumulation of debts in the affiliated companies, the piling up of deficits in some companies without provision therefor in the accounts of the parent company, and by other devices tends to obscure the real profits or losses, thus leaving the stockholder utterly in the dark as to the actual value of his holdings.

Numerous remedies have been proposed to prevent some of the foregoing evils. The trend of public opinion at present seems to be toward federal regulation and compulsory publicity. It would appear that a reasonable degree of federal supervision, or at least the issuance of a federal license to do business, would be welcomed by the larger corporations in preference to regulation by the individual states, each one imposing different conditions. Publicity, within reasonable limits, is rapidly being voluntarily adopted, and it seems reasonably certain that corporations conducted as "blind pools" will ultimately be relegated to the past.

ACCOUNTS OF A CORPORATION

7. It was stated at the beginning of this paper that accounting principles, if sound, are applicable to any particular form of accounts; therefore, with a subject as comprehensive as the one now under consideration, it does not seem feasible to do more than discuss those accounting principles which should control in the inauguration, administration and presentation of the accounts of industrial enterprises, without attempting to deal with details or to describe the particular form which the accounts should assume.

The accounts of a corporation may be called the history of its financial transactions, or, as the writer's perceptor was accustomed to remind him constantly, they should be "records of the facts." A fact would seem to be capable of but one interpretation, and we should therefore, if not otherwise informed, be led to expect that a statement prepared from the books would be an exact reflection of the facts of its financial transactions. But in practice no such simple or ideal condition will be found to exist. The modern business organization is so complex, and its transactions so numerous and so varied, that the facts are sometimes difficult to ascertain, and frequently are of such a character that they fall under the category of opinions rather than certainties. Further, the operations of a business are intended to be continuous, and at no time is it contemplated that there will be a final cleaning up in which every asset will be realized on and every liability disposed of; therefore, while the fact as to the current transaction may be known, the amount to be ultimately realized may be uncertain, and the best that can be done with the accounts is to organize them intelligently and administer them on sound accounting principles, so that when a statement is prepared it will reflect an honest opinion as to the company's financial position and the results of its operations.

BALANCE SHEET OF HOLDING COMPANY

8. The principal accounts of a corporation, or, at least, those which are perhaps of the greatest interest to the management, are the balance sheet and the income and profit and loss statement.

The balance sheet of a holding company is not necessarily a particularly complicated statement. If the holding or parent corporation is a finance company simply, as distinguished from an operating company, its chief assets will usually consist of the securities of the subsidiary companies of which it is the owner. Quite frequently the entire capital stocks of these subsidiary companies will have been acquired by the parent company, and the latter may also be in possession of some of the bonds which lie against the property of the subsidiary companies.

Frequently, other large items of assets are advances made to the subsidiary companies for which the latter may have issued their notes in favor of the parent company. Such advances are usually made to provide for extensions or additions to the plants of the subsidiary companies after they have been acquired by the holding company, or they may have been made for the purpose of furnishing additional funds to purchase larger stocks of materials, to carry contracts requiring considerable time to complete, or for any other legitimate business purpose. If the moneys advanced have been for the purpose of adding to the plants of the subsidiary companies, it may be that these loans will subsequently be funded by the subsidiary companies through the medium of mortgage bonds, which if sold to the public will enable the subsidiary companies to discharge their debts to the parent company. Or possibly, if the whole of the authorized stock of the subsidiary company is not outstanding, a further amount may be issued and delivered to the parent company in settlement of the advances, thus changing the form of the asset on the holding company's books from an account receivable to a security ownership. It is improbable that such a course would be pursued except in very special instances, as the holding company would doubtless prefer to appear as a creditor of the subsidiary company, rather than as an owner of more shares of its capital stock, because, if the subsidiary company were unprofitable and it became necessary to wind it up, the holding company would claim, with the other creditors, its proportion of the realizations from the subsidiary company's assets. Such a position, we believe, would be assumed by the holding company in the absence of direct ruling to the contrary, but serious doubt has been cast recently on the ability of a holding company to sustain such a contention, where it is the owner of the entire capital stock issue of the underlying company.

Advances made by a parent company to its subsidiary companies are not always represented in the latter by tangible property. Such advances may have been made to recoup the subsidiary company for losses sustained by it in operating. The advances appearing on the books of the parent company would, under such conditions, be nominal assets only, and as such, in a balance sheet of the holding company they should be offset by a reserve sufficient to provide for the whole or such part of them as may be represented by losses.

It is probable that among the assets of the holding company there will be included capital stocks of companies, a minority interest in which may be all that is owned by the holding company, or at most it may be a majority holding and not a complete ownership. Unless there has been a marked depreciation in the value of such holdings, they would be included in the balance sheet at their respective costs, but if it is apparent that they have suffered a radical and permanent decline, they should be written down to an amount which will represent their actual worth.

The liabilities usually call for no particular comment, as, if they are clearly stated, they will be self-explanatory. The capital stocks and bonds issued by the company will generally appear as major items, followed by loans payable and accounts payable due by the company. It is possible that some of the subsidiary companies may, through funding operations, have acquired a temporary surplus of cash, which they have deposited with the parent company, and which consequently will appear as liabilities of the latter. The other liabilities will include the reserve and sinking fund accounts and miscellaneous items.

9. **Consolidated Balance Sheet.** The foregoing remarks are intended to apply to the balance sheet of the holding company *per se.* It is now very generally recognized, however, that the submission of the balance sheet of the holding company only, does not furnish the owners of the company with the information as to its real financial position to which they may justly consider themselves entitled.

The holding company was, as heretofore stated, organized for the purpose of acquiring the capital stocks of affiliated companies, and thus affecting a combination which would bear the test of adverse legal scrutiny. While each company under this scheme retains its corporate identity, and is in the eyes of the law a separate corporation, yet there is a virtual consolidation of ownership, the results of which can be properly expressed in a statement of their accounts only by consolidating the balance sheets of all the companies into one balance sheet, eliminating therefrom the inter-company stocks, bonds and accounts, which indicate the relation of one company to another, and not to the public.

A consolidated balance sheet therefore is intended to reflect the financial position of the whole group of affiliated companies, considered as one undertaking. In a typical balance sheet of this character, the following grouping of the assets and liabilities has been adopted:

Assets	*Liabilities*
Property Account.	Capital Stock of Holding Corporation.
Deferred Charges to Operation.	Capital Stocks of Subsidiary Companies not owned by Holding Corporation.
Investments.	Bonded Indebtedness.
Sinking and Reserve Fund Assets.	Current Liabilities.
	Sinking and Reserve Funds.
Current Assets.	Surplus.

When a holding company purchases the capital stock of another company, the price paid for this capital stock presumably represents the holding company's estimate of the value of the equity in the subsidiary company's asset. This price may be greater than the combined capital stock and surplus account of the subsidiary company, in which event the difference must be assumed to denote the value of the subsidiary company's goodwill, or other assets not appearing on its balance sheet, otherwise, if they were included there, the cost of the capital stock to the holding company would be exactly equal to the combined capital and surplus of the subsidiary company. On the other hand, if the price paid by the holding company, for the capital stock of the subsidiary company, is less than the combined capital and surplus, the difference must be assumed to express the amount at which the assets of the subsidiary company are overvalued on its books.

In consolidating the "Property" accounts of the subsidiary companies (their property accounts including goodwill, trademarks, franchises, etc., as well as tangible property), the total must, therefore, be increased or reduced by as much as the cost of the capital stocks of the respective subsidiary companies, as at the date of their purchase by the holding company exceeds or falls below their combined capital and surplus account.

It might seem at first thought that the surplus accounts of the subsidiary companies should not be applied as stated in the foregoing paragraph, but that they together with the surplus accrued subsequent to the purchase by the holding company, should be combined, and their aggregate entered on the consolidated balance sheet as the surplus of the whole undertaking. The fallacy of this statement has been proven in various ways. Perhaps the most simple and direct argument is somewhat along the following lines: the surplus of a corporation, generally speaking, represents the balance of earnings which have accumulated from its operations, and which have not been paid out to the stockholders, applied in immediate reduction of valuation of assets or reserved for the ultimate replacement thereof. As a surplus can accrue only during the operating of a company, it is fairly obvious that the holding corporation prior to its organization cannot have earned such a fund, and that therefore it would be entitled to merge into its consolidated surplus account only the balances of profits accumulated by the subsidiary companies during the period of their ownership by the holding corporation.

Further, as the amount paid by the holding company for the capital stock of a subsidiary company represents the holding company's estimate of the equity in the subsidiary company, and as that equity is presumed to be represented by its capital stock and surplus account, it follows that in the process of consolidating, the capital stocks of the subsidiary company in the holding company's books will be eliminated, as will be the capital stock and surplus account on the subsidiary company's books. The surplus account being thus absorbed, cannot of course, appear again as a surplus in the consolidated balance sheet.

10. **Inventories.** The consolidation of the other items of assets, which would be included under the groups noted on a previous page, will probably call for no particular comment, except in the case of the inventories. Some of the industrial enterprises of the present day begin their ownership with the raw materials, and manufacture their output all the way from the first stage to the last. Necessarily this manufacturing cannot, in every instance be performed in one continuous operation or by one plant, and there will be constant transfer from one company to another of product finished up to a certain point, but subject to further manipulation in order that it may be disposed

of in a different form. At the end of the fiscal year or other balance-sheet period, there will doubtless be a quantity of such merchandise in the inventories of the several subsidiary companies, purchased by one company from another at a price greater than the actual cost of manufacturing. As the companies are entirely distinct from each other, it may be argued that the purchasing company will be justified in including such merchandise in its inventory, at the price paid to the company from which it was acquired. The purchase, however, having been made by one subsidiary company from another, is in effect merely a transfer from department to department of virtually the same corporation, and not a sale on which the profit can be said to have been realized. The principle that profits must not be anticipated would seem therefore to be applicable in such instances, and it would follow that a reserve should be provided equal to the amount by which such merchandise at inter-company prices exceeds its actual manufacturing cost.

Too hard and fast a rule should not be drawn, however, even when conditions are such as have been outlined above. In the case of an iron and steel combination, for instance, controlling the manufacture of its products from the ore in the ground to the sale of the finished merchandise, it will be appreciated that there are a number of points in the process of manufacture, where the merchandise reaches a finished and marketable stage. While at each stage in the manufacturing process some of the merchandise is sold to outsiders, much of it is transferred to other mills for further manipulation at a price which includes some profit to the subsidiary company by which it was handled. Is it entirely unreasonable to claim that where the manufacturing processes are distinct and complete, some manufacturing profit shall be taken in the current income account on merchandise finished by one company, but remaining in the inventory of another company while awaiting further transformation. In the balance sheet of a large industrial enterprise, such profits are applied as a separate part of the surplus account, distinct from the ordinary accumulation of surplus, with a note appended setting forth clearly the nature of the item.

11. **Capital Surplus.** In the organization of many corporations, it has been the practice to issue bonds or stock equal to the amount at which the property purchased is offered by the vendors, and accepted

by the directors, subject to the cash requirement of the state in which the corporation may have been chartered. In addition, a sum of money is sometimes provided by the vendors for working capital, or a certain number of shares of stock may be turned back into the company's treasury, to be sold and the proceeds used for the same purpose. It has been held by the legal profession, that inasmuch as the property purchased, for which the company's securities were issued, has been declared to be of a reasonable value and necessary for the purposes of the corporation, any contribution which may be made by the vendors is in the nature of a donation, and as such is surplus or profit to the company. While technically, this may be true, yet practically it cannot be a profit, first because a corporation cannot earn a profit before it has begun operating, and second, such a return of cash or securities on the part of the vendors is really in the nature of an abatement of the purchase price, and as such would be deductible from the cost of the property acquired. It has been held, that if the item is noted as capital surplus or designated by some synonymous expression which will clearly distinguish it from the surplus accumulated out of the earnings during the operation of the company, this will be sufficient, but it would seem to be more logical to apply it as a reserve or as a deduction from the cost of the properties purchased.

12. **Subsidiary Company Balance Sheet.** In preparing the consolidated balance sheet from the holding company's and subsidiary companies' balance sheets, it is, of course, essential that the latter shall have been correctly stated.

The first item or group of assets in the subsidiary company's balance sheet that claims attention will be the account or accounts representing the fixed assets owned by the corporation, which may appear under the inclusive title of "Property" or which may be entered under the several captions of land, buildings, machinery, goodwill, franchises, etc.

As long as the present method of capitalizing on the basis of earnings is in vogue, and the property acquired by the new corporation is valued at a lump sum, it is improbable that a separation thereof will be made into accounts which will show the value of its land, buildings, and other tangible assets, apart from the so-called "water." So much loose talk has been indulged in respecting the evils of overcapitalization, as to lead to the idea in the mind of the public that the whole difference between the value of the tangible property and total of the property account is "water" only, which ought to be squeezed out.

That there is water in many of the stock issues, no one will deny. Capitalization has been determined in many instances, not on earnings reasonably certain of realization, but on prospective earnings of years to come, or on economies of combination and profits of monopoly that could not possibly be realized. But when the capitalization of a concern is based on an average of earnings, and fixed at such an aggregate sum that reasonable dividends may be paid, proper reserves provided, and a sufficient surplus accumulated, then it can hardly be said that it is overcapitalized, even though the value of the tangible assets may not measure up to its capitalization. The difference between the two simply measures the then value of the goodwill, patents, trademarks, franchises, or other intangible assets of the company, but such assets in a case of that kind cannot be considered as "water." As long as the business continues under conditions not less favorable than at its beginning, the intangible assets will retain their value. If the business fails, their value will probably disappear, as will also disappear the major part of the value of the so-called tangible assets. The worth of each depends on the continuance of the business, but as it is contemplated that a business will continue there is a real equity existing in such a case which cannot be ignored or of which the owners cannot justly be deprived.

There is, however, a strong tendency at the present time to attempt, with respect to the railroads at least, an appraisement of their physical property to ascertain how it compares with their capital obligations. How far reaching this movement may prove to be cannot be foreseen, but it may not be unsafe to predict that ultimately the capitalization of corporations taking over a going business will represent the actual tangible property plus what the results of past operation will show to be a reasonable amount for goodwill, franchises, etc. When that time is reached it will likewise doubtless be required that the balance sheet shall set forth separately each class of property, and the valuation at which it was acquired.

13. **Charges to Fixed Asset Accounts.** In the consideration of accounts of land, buildings, and machinery, arises numerous questions, respecting depreciation, obsolescence additions, improvements, etc.,

all of which have a direct bearing on the balance sheet in that the proper valuation of the said assets therein depends on the correct solution of these questions. It is necessarily difficult to dissociate them from the income account as well, because that account will likewise be affected according to the way these questions are decided.

With respect to items which may properly be considered as capital expenditures, it has been suggested as a working basis that no additions should be made to the property accounts unless it can be clearly shown that they have increased the earning capacity of the plant. A simple, positive rule such as this might be all that is required, if the changes in the plant and the resulting increase in earning capacity were occasioned only by actual extensions or additions of property which had never before existed. But such is not the case. In every progressive manufacturing concern, alterations or additions to the plant are constantly being made for the purpose of simplifying the manufacturing processes and thereby increasing the output with the same expenditure for labor and materials, or in order to decrease those operating charges which are in the nature of overhead expenses required to be taken up in the cost of the product. As no alteration or addition to a plant is probably ever undertaken except for the purpose of increasing the earning capacity thereof, directly or indirectly, the literal application of the rule referred to is not possible, and it will be necessary to consider the nature of the various alterations, improvements, and additions, before an intelligent decision can be made as to their ultimate disposition.

At the outset, it may be conceded that actual extensions or additions to plant which did not exist before, will be properly chargeable to capital account, assuming that such additions do not render useless an existing but less efficient plant producing a similar kind of product.

The large class of expenditures consisting not of certain definite additions, but rather of alterations and improvements, is more difficult to deal with. In the case of improved appliances displacing less efficient ones, it has been held that the latter should be written off and the former added to the property account. Technically, this would seem to be correct, and if there is a direct saving in operation, or a relative increase in output, this course would seem to be justifiable. But if the new appliances are required in order to cope with a competitor having like facilities, or to meet the demand of the trade for improved articles at the same price, it would be more conservative to consider such additions as having the nature of extraordinary renewals, whose cost would be charged off within a reasonable period through the depreciation or renewal reserve appropriations.

Improvements to the plant which indirectly tend to simplify manufacturing processes or to lessen fixed operating expenses would also technically be chargeable to capital account, but a conservative application would call for their absorption in the current profit and loss account.

In so far as the records of the foregoing expenditures are concerned, it is clear that the cost of each should be clearly set forth in the accounts, distinct from ordinary renewals and repairs. If one is furnished with a brief explanation of the improvement, the saving sought to be accomplished by its use, the cost of the improvement and the cost of the property displaced, it is possible to decide intelligently whether the item should remain as a permanent capital addition, be absorbed through a renewal reserve fund, or be charged off immediately in the current year's operations.

A discussion as to whether or not specific amounts should be written off goodwill, franchises, patents, trademarks, etc., would, under present conditions, probably be little more than academic. Nevertheless, the policy in force in the most conservatively managed of the large corporations of absorbing a part of their earnings in adding to the physical property, is in effect a writing off of such intangible assets. If continued for a sufficient number of years, the additions to the property charged against the surplus account, would ultimately take the place in the property account of the goodwill, franchises, etc., so that the property account would consist of tangible physical assets only. Assuming that the accounts have been kept in such a manner as to show clearly the cost of the additions so written off this practice is to be commended. The stockholders thereby become accustomed to these charges against the profits, and are less likely to demand larger dividend distributions, while the application of the earnings to the improvement of the property tends to maintain the earning power, admits of continuity and stability in dividend disbursements, and prevents to a considerable extent violent fluctuations in the market values of a corporation's securities.

14. **Deferred Charges to Operations.** In the development of a corporation's property and in connection with its current operations, there are frequently certain expenditures made of such a character that they are not justly chargeable immediately to the operating costs, nor on the other hand should they be included with the permanent property or the current assets. Instances of important items of this class are advance payments of royalties and costs of exploration and testing preliminary to the development of properties containing raw materials. Other examples of relatively less important items are unexpired insurance premiums, rentals paid in advance, prepaid discounts, etc. Advance payments of this character are usually found grouped under the caption of "Deferred Charges to Operations," the purpose being to carry them temporarily as assets, and then charge them off to the operations of the periods during which the benefit of the expenditures is reaped.

In addition to expenditures which are without doubt chargeable against future operations, there are certain others which are not so clearly defined, but which may with some degree of reason, be included therein. Business operations of certain kinds run in seasons—that is, during spring and early summer the whole effort of the sales department and to some extent the administrative forces, may be engaged in booking orders for delivery during the winter. Before the winter delivery begins the end of the fiscal period arrives, with the result that there will appear among the expenses of the fiscal period, a large amount incurred directly in connection with the next season's output. It would seem, under such conditions, not unreasonable to carry over such expenses as deferred charges, and write them off during the succeeding year. It may be argued that the expenses of of one season will offset another, and that it is easier to absorb such items in the operation of the fiscal period during which they happen to have been incurred. This is unquestionably the more conservative method, but in the event of the transfer of the business at any fiscal period, there is an equity existing not shown on the books, which must be taken into consideration.

Occasionally a corporation, perhaps engaged in the manufacture of some patented or trademarked article, may inaugurate a campaign of advertising, in which it is proposed to concentrate in one year the advertising that would usually be spread over two or three years.

Here again it may be claimed with some show of reason that a part of the advertising cost should be carried over to be charged off in the following years. If there is a reasonable prospect that the effect of the advertising will continue during the succeeding one or two years, probably no valid objection could be made to such action, provided it is done in good faith.

Discounts on bonds have, in the past, usually been considered a proper charge to capital, and as such have been added to the cost of the property. The price at which a bond may be sold depends primarily on the rate of interest paid and on the security afforded. If the security is unusually good the rate may be low and the bond still sell at par; if the security is good but not unusually so, and the rate fairly low, the bond will sell at a discount; if the security is poor the bond will sell below par, even though the rate is high. The cost to the corporation of obtaining funds from the sale of its bonds therefore depends largely on the assurance which it can afford the investors that the interest payments will be maintained and the principal paid at maturity. Convinced of these two factors, the selling price of the bond becomes to a considerable extent a matter of interest rate. If the rate is high the bond should sell at a premium, in which event the company will receive a sum in excess of the amount it will eventually have to repay, and this excess sum or premium will in effect act in reduction of the the high interest rate. If the rate is low and the bond sold at a discount, the company will he obliged to bear the expense of the interest and ultimately also the difference between the realization from the bond and its par value—*i. e.*, the discount. A discount on a bond is therefore an adjustment of the interest rate, and as such should be spread over the term of the bond, the balance not charged off to be carried in the meantime as an asset of the deferred charges class.

15. **Liabilities.** In stating the consolidated liabilities, few questions of principle are likely to be encountered. Under capital stocks will be included the stock issues of the holding company, and, separately stated, such part of the stocks of the subsidiary companies as are not owned by the holding company. The balance of the capital stocks of the subsidiary companies, being virtually inter-company accounts, will be eliminated in the process of consolidating.

The bonded debt of the holding company, as well as that of the subsidiary companies, whether guaranteed or not by the holding company, will appear, excepting that bonds of the subsidiary companies owned by the holding company will be eliminated, as it is the purpose of the consolidated balance sheet to show the financial position of the affiliated group of companies with respect to the public and not to each other.

16. **Sinking Fund.** A sinking fund for the redemption of bonds is in effect a surplus accumulation because the fund is not disbursed for current expenses, but is used merely to retire liabilities, thereby increasing the stockholders' equity in the property. The usual sinking fund provision requires, however, that a stipulated amount shall be provided out of the profits each year, hence it is necessary that a transfer of the required amount be made from the profit and loss account to a sinking fund reserve. If the sinking fund theory is carried out, funds equal to the amount so transferred will either be paid over to the trustees, placed on deposit and earmarked as being for sinking fund uses, or invested temporarily until required for the redemption of the bonds. If the value of the property on which the bonds were based is maintained without impairment, the sinking fund accumulation will, when the bonds are redeemed, properly revert to the surplus account; but if the property is of a wasting character and has depreciated in value to substantially the same amount that the sinking fund account has accumulated, then the latter is really in the nature of a depreciation reserve and should be so applied.

The investments made out of sinking fund accretions and the unexpended balances of cash will appear among the assets under the classification of sinking and reserve fund assets. Bonds redeemed by the trustees of the sinking fund will be applied among the liabilities in reduction of the respective bond issues in which they originated, the effect being to show under the funded debt liability only the balance actually outstanding.

17. **Reserve Accounts.** It is quite likely that among the liabilities will be found, in addition to the sinking fund accounts, numerous reserve accounts accumulated out of current profits or surplus, to provide for renewals or replacements of plant, losses by fire or accidents, shrinkages in receivables, and for any other contingency which may arise.

With respect to these reserves which are collected as a preparation against fire losses, accident claims, bad debts, etc., there are probably no accounting principles involved which merit particular attention. Experience will, no doubt, have demonstrated in each of these cases the amount which should be set aside from year to year to cover losses arising therefrom. It is true that unusual and unexpected losses may be incurred through fires or accidents, but if the reserves therefor are based on sound principles, the amounts set aside and the losses charged against them ought to be fairly equal during a series of years. Even if this should prove not to be the case, the losses from such sources admit of being definitely ascertained after they have been incurred, and the reserve accounts may then be adjusted accordingly. If the reserve is more than exhausted the balance should be written off and not carried forward with the hope that during the succeeding period the losses may be so small that the account will be recouped.

18. **Depreciation.** When the subject of reserve for depreciation and renewals is approached, discussion thereof is attempted by the writer with some hesitation. Books and pamphlets are being published thereon, the best accounting thought of the country is being directed thereto, Federal and State accounting authorities are struggling with the problem, and the whole matter seems at present to be in a formative state. Happily, material progress has been made in that the *fact* of depreciation is now generally admitted, whereas it was formerly strenuously denied or at least ignored. Once there is brought home to the management a realization of the absolute necessity of providing reserves for the depreciation or obsolescence of their property, it leaves open only the question of determining the methods and rates by means of which the reserves will be accumulated.

Depreciation may be defined as the impairment of the value of an asset by reason of wear and tear. Exception has frequently been taken to the recommendation that a charge be made against the profits to provide for depreciation, on the ground that the repairs and renewals charged to operating have been sufficient to maintain the effectiveness of the asset unimpaired. In the case of business long established, which is managed along conservative lines as respects charges to capital account, and which maintains its plant at a high level of efficiency, it is probable that the renewals charged to operating will aggregate an amount substantially equal to that which would be considered a fair charge for depreciation. So far then as the statement of profits or losses of a particular period is concerned, there would then be no material difference in the results, if the depreciation charge were substituted for the renewal costs, and the latter applied against the depreciation reserve fund previously created, assuming that the renewals were fairly well equalized from year to year. From the standpoint of the balance sheet, however, such a method is unsatisfactory, in that there will then have been made no provision for accrued depreciation, with the result that the assets will appear at cost, notwithstanding the fact they must have deteriorated in value because of wear and tear.

Further, during the earlier years of an enterprise when the plant is new, the maintenance and renewal costs will naturally be much smaller than will be the case when the effects of its use are being felt, and if no charge is made against the profits for depreciation, there will be a virtual overstatement of profits and possibly an excessive distribution of dividends, which will have to be made good in one way or another later on.

It may be argued that when an enterprise is in its infancy its earning power will naturally be small, and therefore the charges made against it for future provisions should be correspondingly light; the theory being that the increase in profits will be sufficient to meet the cost of the renewals as they become necessary and still leave the net earnings unimpaired, while the enhancement in the value of the enterprise as a whole, due to the larger earnings, will offset any accrued depreciation that may exist. While this was doubtless true of some of the earlier enterprises, notably the street railways, its continued application is fraught with danger. Combinations of undertakings which have themselves been established for some time, are certainly not new enterprises in the sense that they are about to cultivate a virgin field, from which they anticipate the reaping of increasing profits. Assuming that additional profits are realized through the consolidation, they have usually been more than anticipated, and the charges against them have been fixed accordingly. It would therefore seem to be extremely unsafe for a combination of industries to fail to provide liberally for accrued depreciation, and in the meantime to pay out practically all its earnings in dividends, on the ground that the increase in profits from year to year will be sufficient to take care of the necessary renewals and replacements.

A more important factor than wear and tear in determining the effective life of an operating asset is that of obsolescence. Buildings or machinery are seldom abandoned because they are worn out. Usually long before that condition is reached they have become antiquated or otherwise so unfitted to cope with current requirements that their effective life is at an end, notwithstanding their actual condition may still be good. In making provision for the renewal or replacement of an asset, obsolescence, as well as wear and tear, must therefore be taken into consideration.

If the life of a property were maintained merely by ordinary repairs, its value would decrease year by year until it arrived at the scrap stage, if in the meantime it had not become obsolete. Provision for renewal under such conditions would be based on an estimate of effective life, which had regard only for the factors of diminishing value due to ordinary wear and tear, and possible obsolescence. But in practice, it will be found that a property does not lessen in value from year to year in regular gradations. When a part of the plant reaches a comparatively ineffective stage, it is quite likely that it may be substantially rebuilt and perhaps positively improved by the addition of new devices, so that it practically begins a new lease of life, and its effective existence is correspondingly lengthened. The question then arises as to whether the provision for renewal shall be sufficient to cover the cost of the property spread over the life term thus augmented, and the cost of rebuilding or renewal, or whether the reserve shall have regard only for the first cost of the item, leaving the rebuilding or renewal charges as they occur to be taken care of in current operating.

The former has been suggested as the correct method, since charges against operating will otherwise be less each year than should be the case except in those years when the rebuilding or renewal takes place, during which periods it would be excessive.

The practical objection met with will doubtless be that it will be very difficult to estimate with any degree of accuracy the probable cost of rebuilding and the length of the augmented life term; also, that having estimated these factors and established a reserve fund, it will be equally perplexing to distinguish between repairs which should be charged direct to current operating, and renewals which are chargeable against the reserve fund.

It is impossible to lay down any hard and fast rule which will apply to all cases. Industrial statistics respecting renewals and depreciation covering any considerable period are probably not yet available, and changes in manufacturing methods have been so frequent up to this time, that obsolescence would seem to have been the determining factor in limiting the life of a plant unit, rather than depreciation due to wear and tear.

As to the value and term on which to estimate the renewal reserve charge, would it not be reasonable, at least for the present, to endeavor to estimate the life of a machine or other part of the property, on the assumption that it will continue to be used in the same form as when acquired, in the meantime being maintained by ordinary repairs, but not rebuilt or redesigned; then over such estimated life term, spread the first cost of the machine. If a machine is rebuilt, the value that has been exhausted will presumably have been provided for through the renewal reserve. The first cost of the machine may therefore be reduced by the renewal provision, and the cost of rebuilding or a part thereof added, thus arriving at a new valuation for the rejuvenated appliance, on which a new estimate of life will be made and for the exhaustion of which a new renewal reserve will be provided. At the best, the depreciation reserve charge will be an estimate and one can hardly do more than use the best information available, exercise good judgment, and make the appropriation in good faith, with a due regard for conservatism.

As to the expenditures chargeable to operating as ordinary repairs, and those properly applicable to the reserve fund provided for renewals, there will also be a divergence of opinion. It might be laid down as a working rule, that if the operation of a machine or other property unit is discontinued in order that it may be overhauled thoroughly, and substantial parts replaced or improved devices added so that only minor repairs will be necessary for a long time to come, such work would constitute a renewal or rebuilding, the cost of which would be chargeable against the fund.

19. **Income of Holding Company.** The income of the holding company is derived principally from dividends on the stocks of the subsidiary companies owned by it. If the dividends declared by the underlying companies whose operations have been profitable exhaust substantially all their earnings for the fiscal period, and if the provision

is made in the holding company's accounts for losses incurred by those underlying companies whose operations have been unprofitable, then the net income account of the holding company will show correctly its profit for the fiscal period which may be under consideration.

From the point of view of the stockholder, however, an income statement so prepared is unsatisfactory, while from the standpoint of the directors, such a form is inadvisable because it does not disclose the information that it is reasonable to assume should be furnished to the owners, and in the case of reckless or dishonest management it paves the way for manipulation.

Since the major part of the income will be derived from dividends of underlying companies, it would be quite possible for them to declare dividends which more than exhaust their earnings, and which encroach upon the surplus earned during a previous period, or accumulated prior to their acquisition by the parent company. In either event, a dividend under such conditions would not represent the earnings of the year, and the income of the holding company would therefore be overstated to the extent that the dividend exceeds the current earnings of the underlying company. On the other hand, if the operations of the subsidiary companies have resulted unfavorably, the withholding from the income account of a reserve for the subsidiary company's losses will also result in an overstatement of the holding company's profits. The understatement of the profits would, under such conditions, also be quite feasible. Further, the very much condensed exhibit of net earnings which appears in the income account of the holding company, provides the stockholders with no data relating to the gross receipts, operating expenses, fixed charges, appropriations for reserves, and other matters pertaining to the administration of the group of companies of which they should be informed in order to judge intelligently as to the efficiency of the management.

20. **Consolidated Profit and Loss Account.** It is therefore generally recognized by accountants that as the consolidated balance sheet should be substituted for the balance sheet of the holding company, there should likewise be submitted a consolidated profit and loss account in place of that of the holding company.

Most of the comment that is applicable to the consolidated balance sheet is pertinent to the consolidated profit and loss account.

In the consolidated profit and loss account transfer of profits from subsidiary companies to the holding company, through the medium of dividends, will be ignored, and the earnings, expenses, and charges of the several companies will be combined and stated as though the corporation were one enterprise.

In the consolidated statement, therefore, will appear the entire gross earnings of the group of affiliated companies. Such gross earnings will represent cumulatively the operations of the several underlying companies—*i. e.*, merchandise transformed into a marketable condition by one company and transferred to a second company for further manipulation and sale in a different form, would appear in the gross earnings of each company, and their aggregate in the consolidated profit and loss account. While on the surface it would seem that there is a duplication of gross earnings under this method, it is probably the only practical way in which to state them where there is a large number of companies with very many manufacturing processes.

Again, as the property accounts of the various subsidiary companies are consolidated in the balance sheet, it would seem that the gross operations of those companies should likewise be aggregated in order to show the relation of the volume of business to the property investment.

From such gross earnings will be deducted the entire operating costs incurred in producing those earnings, the balance resulting being then subject to the addition of income of a miscellaneous nature, and the deduction of expenses which are not applicable directly to the manufacturing and producing operations.

In stating the consolidated income and profit and loss account, there will probably be some difference of opinion as to the point at which charges other than for ordinary operating should rest, in order that the current net earnings of the undertaking may be shown. It is fairly clear that from the gross earnings must first be deducted the costs in labor, materials, and operating expenses, incurred in producing those earnings, in order that what we shall call a manufacturing profit may be shown. It is true, that in industrial enterprises, including mining, land and water transportation, as well as many forms of manufacturing, such an expression is in a sense a misnomer, but as the mining and transportation are really tributary to the manufacturing, the title may stand. It is true also that there are so many different kinds of products, with varying rates of profits, included in the gross earnings, that comparatively little use can be made of the figures as a basis of comparison from year to year. Nevertheless, as it is impossible in a condensed statement to show the volume and profit of each line of business, the aggregate figures will give the stockholder some information as to the total business, and, in a rough way, the rate of profit thereon for comparison with preceding periods.

From the gross profit so ascertained, should be deducted the administrative, selling and general expenses, virtually common to the whole enterprise, and chargeable against the operations as a whole. The resulting balance would be subject to adjustments because of extraordinary items relating to operating, but which cannot be included fairly in the current operating costs; and by income from investments, other than those representing the holding company's ownership of the subsidiary companies.

At this point it would seem that the profit and loss account as such should rest, the resulting balance being a profit or loss that may be said to represent the operating earnings or losses of the group for the fiscal period. These figures are the ones with which those interested in the enterprise are most concerned, as they reflect the rising or falling prosperity of the company.

The balance then carried forward from the current profit and loss to the income or general profit and loss account will be reduced by reason of reserves for depreciation, replacement, sinking fund requirements, etc., which are properly appropriated out of current earnings. Logically, such items should be deducted before the balance of current profits is struck, because the depreciation and replacement reserve at least are charges directly connected with operating, but as heretofore remarked, depreciation statistics are not sufficiently accurate, and the practice of reserving for depreciation is not yet common enough to justify the inclusion of such charges with the ordinary operating costs. Further, if they are stated separately, attention is drawn to the fact that reserve for depreciation has been made, and to the amount of that provision.

The balance of profits, after deducting the foregoing reserves, shows the position of the earnings with respect to the interest payable on the debt of the subsidiary and holding companies. It may be held that interest on bonds of subsidiary companies (being a lien which must be deducted by the subsidiary company from its earnings before it can appropriate the remainder to the holding company) should be applied before the balance of current earnings is shown. It is suggested, however, that it is preferable to embrace all of the interest on the funded debt of the companies in one group, in order that the total thereof may appear; also because the bonded debt of the subsidiary companies may change by reason of new securities of the holding company being issued in lieu thereof, or it may be reduced through the operation of the sinking funds, in either of which events the interest charge would be lessened, and a comparison of operating profits from year to year disturbed.

After the deduction of interest on the bonded debt, the balance remaining represents the profits available for dividends. The advisability of distributing it in dividends is another matter, however, and if the management is conservative, a large sum will doubtless be applied towards new construction work, thus, as has already been remarked, "squeezing out the water," or, to put it more fairly perhaps, replacing the intangible assets with tangible physical property.

21. **Monthly Balance Sheet.** The accounts of a corporation are intended to disclose the company's position as respects its debtors, its creditors, and its owners.

Its relations to its debtors arise through the charges made to them for the sales of its products, or from the debits of various kinds. Its liability to its creditors is created through the purchase from them of moneys, services, and materials, required in the conduct of its business operations. No abstruse accounting theories are involved in either of these two relations, as their ascertainment is dependent only on the correct use of the proper means.

The accounts which exhibit the company's position as respects its owners, or their representatives, the management, are more involved, and for that reason the discussion in this paper has been limited substantially to accounting problems or principles relating to these internal accounts.

Not many years ago it was considered that if the results of the operations of a business and its financial position could be shown once a year, or, at most, at the end of semi-annual periods, a more frequent statement was not necessary. When business units were much smaller than at present, competition less keen, and the number of those interested in each enterprise fewer, such a practice was fairly satisfactory, although there were apt to be surprises in store when the results of the fiscal period were disclosed.

In this present era of huge enterprises, however, a year, or even six months, is too long to conduct a business without knowing definitely the result; therefore, each month the management requires that there be placed before it statements showing how the company stands, and what it has earned or lost. Hence there have been introduced the monthly balance sheet and profit and loss account.

In preparing these monthly reports, it is, of necessity, essential that accrual accounts of various kinds shall be established, by means of which such expenditures as interest, taxes, insurance, and items of a similar character, which are paid at more or less infrequent intervals may be "spread" equitably over the year's operations and only the proper proportions of each appear in the monthly statements. No particular difficulty will be encountered with respect to these charges, as it will be quite possible to determine them with reasonable accuracy.

22. **Stock Accounts.** The part of the work that occasions the most embarrassment and the one in which the possibility of error is greatest, is the ascertainment of the monthly inventory of the company's product finished and in process, and its current materials and supplies. It is comparatively easy to formulate a plan for handling stock accounts, by which the unused or unsold balances of materials and product may be shown from time to time, but the practical application of the scheme will be much more difficult.

In theory, all that is necessary is that accounts shall be kept with the several articles, singly or in groups, into which accounts will be charged all of the items purchased or made at their cost, while out of the account will be credited those used or sold at the same average of cost, the balance representing those remaining on hand and their cost.

Assuming that proper allowance is made for waste, and that suitable provision is made for obsolete merchandise or for shrinkages in value, the remainder would be the inventory value which would be included in the balance sheet. In practice, it will be found that many possibilities of error exist, and that eternal vigilance is necessary if the book inventory is to be accepted as correct.

Materials stored in large quantities may lose in weight or value; some are of such a character that the manufacturing operations will not permit of the ascertainment accurately of the quantities used from time to time; others, while nominally under the control of the stock-keeper, may be physically located in various parts of the plant, and when used may not be reported; stock clerks may be careless and issue materials without making a record thereof; in these and many other ways errors occur which disturb the correctness of the book balances. While it may be admitted that only a certain percentage of efficiency can be expected in stock accounts, nevertheless the information obtained from them and the saving effected through their use, far outweigh the possible weaknesses. If kept with reasonable accuracy they show the quantity of each kind of supplies or product on hand from time to time and thus tend to limit overbuying, while at the same time directing attention to merchandise in danger of becoming obsolete; they discourage waste by requiring accountability, either by bringing the physical control of the materials under the storekeeper, or at least under his supervision, so that when used they become a matter of record; they are virtually indispensable if correct cost accounts are to be kept, and they are essential in preparing the monthly balance sheet.

23. **Cost Accounts.** Closely associated with the stock accounts and the monthly reports of operations are the cost accounts. While the matter of cost accounting is still in a formative state, it must be recognized that great progress has been made in this department of accounts within the last few years. It has doubtless been the experience of every one, that, being called upon to audit the accounts of a manufacturing concern, the accountant might during the course of his work discover that in some corner of the office or shop, there were being kept some mysterious books which purported to be cost accounts. Not the slightest trace of this system would be found in the general books of account, and no attempt was made to reconcile or test the results shown by the cost accounts with those appearing in the commercial books. As a result, the cost accounts would sometimes show that large profits were being earned, but when the commercial books were closed, this alleged profit would melt away in some strange fashion, until the balance might even be upon the other side.

As the necessity of securing accuracy in cost accounting became more apparent, it was recognized that a cost system conducted upon practically a single entry basis throughout was unreliable, and that it should dovetail into and be controlled by the general books of account. Hence, in the modern system of costs, instead of the stock records, the cost system and the general books of account being carried on as independent groups, they interweave one with the other and thus become what may truthfully be called a system.

It is impossible to frame a cast-iron system that will be applicable to every line of business, and one should beware of attempting to make the business fit the system, rather than adapting the system to the requirements of the business. Where the manufacturing units are large, it may be relatively easy to keep the cost of each, charging thereto the materials used and the labor spent in constructing it, together with its proportion of the general expenses. When the articles are small and the number of each large, it will be feasible to ascertain the cost in lots only.

Probably no great difference of opinion will exist with respect to the items which should be included in that part of the cost made up of materials and direct labor. As to materials there is usually no doubt, but in the case of labor there is sometimes a twilight zone between productive and non-productive labor, which makes it difficult to determine how they shall be apportioned. As a general proposition, it is perhaps safe to say that all labor that can be definitely identified as belonging to a particular piece of work, should be charged thereto, but no rule can be formulated that will cover every case. Wages of foreman or laborers might in one instance be classified as productive, if the operations were such that they were limited exclusively to one piece of work at a time, whereas ordinarily such expenditures would be included in the non-productive classification.

The proper distribution of the so-called "overhead" expenses is one problem that causes the accountant much anxious thought. A large manufacturing establishment has many departments, in some of which are used machines costly to purchase and expensive to operate; while in others the equipment may be limited to small tools, representing a small investment and occasioning but little expense in their operation.

The productive labor in the first instance may be small in proportion to the cost of maintaining and operating the equipment; while in the latter case the reverse would be true. If the combined expenses of the two departments are distributed on the basis of direct labor, it will manifestly result in the one case in charging too little to the cost, while unduly loading it up in the other. However, when all of the product of the factory passes through substantially all the departments, the productive labor basis is perhaps the most convenient and equitable way of apportioning the expenses. An excessive charge in one department will be corrected when the product reaches the next stage, so that in the end a reasonably correct distribution will have been made if the volume of work is fairly uniform and the expenses do not fluctuate violently. A concern manufacturing small tools which successively pass through the forging, grinding, polishing, and handling departments, might be cited as an example of the foregoing method.

The distribution of departmental or machine group expenses on the basis of the productive labor of each department or group of machines might be used advantageously in the case of a concern whose manufacturing processes are relatively simple, and whose product passes from the raw material to the finished stage with comparatively few rests.

If the manufacturing processes are complex and the cost of each part at every stage must be ascertained, the machine rate basis is probably the most accurate method of apportioning the expenses. Under this plan the cost of maintaining and operating each machine tool is determined as accurately as possible, the number of hours it will be used under normal conditions estimated, and then the resulting rate per hour is assessed on each piece of work passing through the machine.

CORPORATION ACCOUNTING AND INVESTIGATIONS

24. Preliminary to taking up the question which has been placed in my hands, as the basis of this paper, I think it well that we should give consideration to the principles involved in an examination of the accounts of concerns where amalgamation or consolidation is being discussed.

The nature and extent of the accountant's investigation will depend, of course, largely upon his instructions; but we will assume that manufacturing concerns in the same line of business contemplate consolidation; that the report of the accountant upon each of the plants is to form the basis of the consolidation, and that the accountant's instructions are general and not specific; and that they include the determining of the assets and liabilities as well as the earnings.

Accountants differ as to the scope of an investigation. There tare those who take the position that the accountant is not expected to make the thorough examination that a regular audit would entail, but that the genuineness of the books and of the balance sheet should be assumed. Most accountants, however, believe that the investigating accountant should analyze the accounts thoroughly, in the doing of which, fraud, if any, would be discovered.

Regular audits and special investigations have, or ought to have, the same end in view—the obtaining of a correct statement of facts.

ACCOUNTANT'S REPORT

25. I cannot well see how an accountant can accept and prepare a report from any balance sheet without satisfying himself by a sufficient analysis of the regularity of the accounts and of the methods followed by which the various items which enter into the assets of a concern, or which go to make up the revenue and expenditure accounts, are produced.

Statements covering each of the concerns examined should be included in the report of the accountants independent of each other, and based upon the specifications which have been set out, should contain information as follows:

(1) *Assets*, as of a given date (the same in each instance), divided as to:
- (*a*) Realty.
- (*b*) Plant and machinery.
- (*c*) Merchandise (raw material).
- (*d*) Merchandise (in process).
- (*e*) Merchandise (finished product)
- (*f*) Leasehold.
- (*g*) Goodwill.
- (*h*) Patents.
- (*i*) Accounts receivable.
- (*j*) Bills receivable.
- (*k*) Cash on hand and in bank.
- (*l*) Bills receivable under discount (indirect).
- (*m*) Accrued interest, insurance, etc.
- (*n*) Such other divisions of the assets as the nature of the business may demand.

(2) *Liabilities*, as of a given date (the same in each instance), divided as to:
- (*a*) Bills payable.
- (*b*) Accounts payable.
- (*c*) Mortgage indebtedness.
- (*d*) Bills receivable under discount (indirect).
- (*e*) Other indirect liabilities.
- (*f*) Capital account.
- (*g*) Such other division of the liabilities as the nature of the business may demand.

(3) *Revenues and Expenses* of each business showing earning power of each in a given time (usually three years if the business has been in operation so long) and preferably covering the same period.

Taking the items in these divisions in their order, the accountant will ordinarily not be called upon to verify items *a* to *h*, the land, buildings, stock in-trade, leasehold, etc., being specially valued by independent valuers. If not, and these are subject to verification by the auditor, he should in the case of:
- (*a*) Realty. Call for the title deeds and see that the account is not charged with fictitious increases in value, or with the annual taxes, as I have found in certain instances.
- (*b*) And that a sufficient allowance has been made for depreciation (in buildings, etc.).
- (*c*), (*d*), (*e*) Merchandise, raw, in process, and the finished product. Get certified inventories, which should be checked both as to extensions and additions; an independent appraisement is altogether preferable. Compare inventory with invoices in the case of raw material. To see that profits are not anticipated, a careful inspection of cost accounts is required. In case of manufactured stock care must be exercised to see that office and selling expenses are not pro-rated and added to the costs of goods appearing in the inventory. Note should be taken of the "dead wood" in the stock and that proper allowance has been made to cover.

(*f*) Leasehold is not usually a consideration, but if found to exist, a special valuation to ascertain present value is best; otherwise, the original cost, less proportionate reduction for the expired period should be taken.

(*g*) Goodwill. This item can only be determined by agreement between the parties, and is one which does not seriously concern the accountant, except that if it is put in at an arbitrary sum by the vendors, he should see to it that the price be set forth separately and distinctly in the "assets" so that the purchasers may know just how much they are expected to pay.

(*h*) Patents. See that these are entered at their proper present worth —which will be determined by the remaining life thereof, and the present "state of the art" in that particular connection.

(*i*) Accounts receivable. A careful examination should be made to ascertain the condition of these, that they are alive and collectible, and that proper provision has been made for bad and doubtful; also that secreted in the accounts receivable may not be found charges for "goods on consignment" billed out at the usual profit and going to swell the volume of output, thus unduly increasing the earnings by the "anticipation of profits."

(*j*) Bills receivable. Same examination as in the case of accounts, so far as prospects of realization are concerned.

(*k*) Cash on hand and in bank. The same verification as in a regular audit.

(*l*) Bills receivable under discount. This is an indirect asset as well as an indirect liability, and it is important in the case of an amalgamation, where the liabilities are being assumed, that information on this point should be given. It may be necessary that some allowance should be made in anticipation of "loss upon realization."

(*m*) Accrued interest, insurance, etc. That the claim for these is fair and proper.

Turning next to the question of liabilities, we take up:

(*a*), (*b*), Bills payable and accounts payable. The verification will be the same as in a regular audit. In this connection it may be proper to say that there is not much danger of the liabilities being overstated. The principal danger lies in the understating or not taking to account of the outstanding liabilities, and this must be carefully guarded against if the transfer of the business involves the assuming of all the liabilities.

(*c*) Mortgage indebtedness. Verification by the obtaining of a statement from the mortgagees, both as to principal and arrears or accrued interest.

(*d*) Bills receivable under discount. The remarks under item *l* in assets would properly apply here, being applicable in both cases.

(*e*) Other indirect liabilities. These may be in the nature of endorsements (although a strictly improper and illegal proceeding in the case of joint stock companies) claims for damages, disputed accounts for materials, services or commissions. A distinct statement in writing as to the existence or non-existence of these should be obtained from the proper officers of the company.

(*f*) The value of the business to the purchasers will be represented by the difference between the assets and liabilities in each case and if profitable should equal the issue of capital stock with an addition to the assets of any undivided profits, which would enchance the value of the equity to be transferred to the amalgamation.

SPECIAL POINTS INVESTIGATED

26. The question of revenue and expenses of operation will in all probability more particularly occupy the attention of the accountant, rather than the ascertaining of the value of the assets and liabilities; in fact, as I have stated before, his instructions may limit him to the determining of these without regard to the other. Taking the revenue accounts first: the accountant will require to make a careful investigation of the receipts for the period (usually three years) under examination. He will see that no extraneous revenue has been introduced and that the progress in the revenue account has been consistent and steady, or otherwise. He must be watchful that the revenue account has not been increased by credits for goods "on consignment" with an off-setting entry to accounts receivable.

Other points which require to be looked into are: that goods "on approval" likely to be returned to stock afterwards have not found their way into the sales account; that fictitious sales, for the purpose of swelling the revenue have not been put through the books, and shipments not made before close of inventory; that incompleted and unshipped orders have not been credited to sales account, thus inflating revenue by ungained profits; that rebates and allowances are a charge against sales and not an addition to merchandise account. In a word, the *bona fides* of all sales especially near the end of the period should be determined to the satisfaction of the accountant.

It is the duty of the accountant to see that all the expenses entered are a proper charge against the business and that they are made within the proper period; that there is no reduction in expenses towards the close of the term under inspection; that the expenses are regular and consistent and bear a steady ratio to the turnover; that proper and reasonable allowances have been made for repairs and renewals, and that these are charged against revenue and not as an increase of capital.

Excessive profits from any particular cause should be noted, as, for instance, those which might arise from the making of heavy purchases in anticipation of an upward tendency in prices, and which anticipation had been fulfilled. He should be satisfied that all profits earned and taken to account are incidental to the business. A sale of real estate not required for the purposes of the business, and made at a substantial profit, forms an example. On the other hand expenditures of exceptional and unusual character which have gone to reduce the profits below normal should be noted.

In the consideration of the cost of operation heed should be given to the effect which a limited capital has had upon the expenses of operation. Lack of capital is naturally followed by increased borrowings, and increased borrowings augment the interest account. Operation is thus charged with a sum, which, had adequate capital been invested, would have been in the nature of a dividend. By way of illustration, I have in mind a business in which every dollar of capital invested was borrowed. This may appear an extreme case, but such is, nevertheless, sometimes to be found. The borrowed capital represented $100,000. Upon this sum interest was paid out of the business and charged to operating expenses. I am asked to investigate and find this condition. In the preparation of the profit and loss account I eliminate the $6,000 interest paid on this sum in order to arrive at the earning power of the business. It can readily be seen how unfair any other course would have been, and how lack of sufficient capital in any business will impair the earning power and affect the showing as to profits, unless allowance be made therefor. There is no room here for the exercise of a display of good judgment on the part of the auditor in determining what the "adequate capital" should be.

Reports in detail upon each business should be prepared and furnished the principals, and these should form the basis upon which the amalgamation is carried out. Regard, of course, will also be had to the introduction of other interests where more extensive operations are contemplated by the amalgamating company.

FORM OF CERTIFICATE

27. In addition to the report in detail a certificate is usually prepared for use in the prospectus. This certificate is generally barren of all information except as to the revenues, expenses of operation, and profit-earning power of the various businesses entering the amalgamation, and these in the aggregate. Indeed, certificates are not uncom-

mon where information is given only as to the profits earned by the several businesses. It is unusual to see any reference to the amount of capital invested. It occurs to me that a model certificate would be one framed somewhat after the following style:

CERTIFICATION

Gentlemen—I beg to advise that I have examined the records of The Brown Manufacturing Company, Limited, and of the Jones Manufacturing Company, Limited, each for a period of three years, and certify to the correctness of the underwritten statements, as to Capital, Earnings, Expenses of Operation, and Net Earnings, covering the period given:

BROWN MANUFACTURING CO., LIMITED

	Net Capital Employed	Earnings	Expenses of Operation	Net Earnings
1898........	$...........	$...........	$...........	$...........
1899........	....	....	....	....
1900........	....	....	....	....
Total..		$...........	$...........	$...........

JONES MANUFACTURING CO., LIMITED

	Net Capital Employed	Earnings	Expenses of Operation	Net Earnings
1898........	$...........	$...........	$...........	$...........
1899........	....	....	....	....
1900........	....	....	....	....
Total..		$...........	$...........	$...........

COMBINED COMPANIES

	Net Capital Employed	Earnings	Expenses of Operation	Net Earnings
1898........	$...........	$...........	$...........	$...........
1899........	....	....	....	....
1900........	....	....	....	....
Total..	$...........	$...........	$...........	$...........

For further information reference is made to my reports in detail herewith.

JOHN THOMPSON,
Accountant.

I fully appreciate that the less detail there is in the report the better, for the obvious reason that much of it would not be understood by the average individual, and the tendency would be to befog rather than enlighten, and that is very undesirable. But I do think that an accountant issuing a certificate framed as above, with a simple qualifying reference to a report for further and detailed information will be placing himself upon safe and sure ground.

EXAMPLE

Illustrative of the fact that the ground which I have covered up to this point includes practically all that is necessary in connection with the examination of the accounts for the purposes mentioned, I now present for your benefit a memorandum of agreement, which was the basis of a recent consolidation with which we had to do.

BASIS OF CONSOLIDATION

A corporation is to be formed under the laws of the State of Michigan, with a paid-up capital of ten million dollars, to be apportioned into six per cent preferred stock and common stock, as the parties interested may hereafter determine.

This corporation is to purchase all the assets, property, goodwill, etc., of all the four companies and to pay therefor in preferred and common stock and by an assumption of the indebtedness of each company.

The amount of preferred and common stock, to be paid to each company, to be determined by the value of the net tangible assets and the valuation placed upon the earning power of each company.

In placing a value upon the tangible assets, same to be reached as follows:

(1) The land, buildings, machinery, tools, and patterns, to be determined by appraisers, to be chosen by a majority of the committee made up of one appointed by each of the companies; on failure of this committee to agree on appraisers the selection to be left to the committee who present their suggestions.

(2) Inventories of raw materials, work in progress and manufactured stock to be taken, and valuations placed thereon by the individual companies, and this to be done under the supervision of a disinterested party, to be named by the committee.

The inventories are to be made as of the same date, and to be taken at substantially the same time.

When completed the inventories are to be passed and agreed upon by a committee consisting of a representative of each of the companies and one to be named by the committee. The decision of these five to be binding.

(3) In reaching the value of the earning power of the several companies, consideration is to be given to the following details:

(*a*) That profits are incidental to the business and have not been anticipated.

(*b*) To the charging to operating expenses of items, exceptional or unusual, and which have had the effect of reducing profits below normal.

(*c*) The effect upon the earnings of the money paid out as interest upon borrowed capital, in case it be found that the borrowings (loans) made by the several companies are disproportionate to each other.

(*d*) That all charges to operating expenses are proper charges against the business and that they are made for and during the proper period.

(*e*) That proper and reasonable allowances have been made for repairs and renewals and that these have been charged against earnings.

(*f*) That charges against earnings for depreciation are adjusted upon an equitable basis.

(*g*) Such other matters as appear from an examination of the accounts and which would prejudicially affect the earnings of any of the companies, either advantageously or disadvantageously.

(*h*) The value of the earning power to be determined by a consideration of the business done by each of the several companies for the three years, 1903, 1904, and 1905.

(*i*) Accountants to be selected by the committee and questions which may arise as to treatment of various matters and about which there is difference of opinion, to be determined by the committee.

(*j*) All costs and expenses incurred in making appraisals, examination of accounts, or of performing the other duties in connection with the formation of the proposed new company to be charged to and borne by the new company; should the new company not be formed, then such costs, expenses, and disbursements to be borne by the four individual companies in proportion to the number of men employed by each.

A. C. P. A. PROBLEM

28. We will now take up the question which I have been asked to work out.

This question evidently originated in the State of Pennsylvania, as I should assume, from the fact that reference is made to the payment by the corporation, of taxes, etc., due the State of Pennsylvania on the formation of the corporation. To make this question applicable to that state, I have included instead the franchise fees required under the laws of the State of Michigan, which are paid to the Secretary of State upon the basis of one-half of one mill upon each dollar of the authorized capital stock. Following is the question:

PRACTICAL ACCOUNTING

The following statement of affairs which was taken as being correct, was made to the proposed underwriters for the consolidation of four corporations, under a corporation to be formed to take over all the four corporations.

It was understood and agreed that the stock of Corporation No. 1, par value of which $100.00 should be purchased at $135.00 per share.

Corporation No. 2,	Stock per	$100.00 at	$120.00	per share.
Corporation No. 3	" "	50.00 at	50.00	per share.
Corporation No. 4	" "	25.00 at	41.00	per share.

It was also agreed by the underwriters that they would advance sufficient money to purchase said stock, the whole of the stock of the proposed corporation to be turned over to them, together with $200,000.00 of the bonds of the new company.

That sufficient bonds is issued to retire the bonds of the old corporation and provide for $500,000.00 of treasury bonds to be used in betterments.

In addition to the above it was agreed that the underwriters would purchase at least $250,000.00 of the new bonds at 85%.

It was agreed also that the par value of the stock of the new corporation should be $100.00 per share, and that sufficient stock should be issued to cover 20% more than the cash outlay of the underwriters for the purchase of the stock of the old corporations.

It was also agreed that the new corporation should take over the assets of the old corporations, but that each of the old corporations should be clear of indebtedness except for bonds issued.

The assets turned over to the new corporation were to be as follows:

CORPORATION No. 1

Cash	$ 48,000.00	
Plant	450,000.00	
Supplies	90,000.00	
Book % Receivable	184,000.00	$772,000.00
Bonds	350,000.00	
Capital Stock	350,000.00	$700,000.00

COPORATION No. 2

Cash	$ 70,000.00	
Plant	820,000.00	
Supplies	80,000.00	
Book % Receivable	270,000.00	$1,240,000.00
Capital Stock	850,000.00	
Bonds	390,000.00	$1,240,000.00

CORPORATION No 3

Cash	$ 28,000.00	
Plant	420,000.00	
Supplies	42,000.00	
Book % Receivable	135,000.00	$625,000.00
Bonds	280,000.00	
Capital Stock	350,000.00	$630,000.00

CORPORATION No. 4

Cash	$ 110,000.00	
Plant	1,475,000.00	
Supplies	86,000.00	
Book % Receivable	432,000.00	$2,103,000.00
Capital Stock	150,000.00	
Bonds	1,890,000.00	$2,040,000.00

Form the new corporation with sufficient stock and bonds, the bonds to draw 5% interest, to meet the requirements of this agreement, charging into plant a/c all taxes and fees due to the State of Michigan, on formation of the corporation, together with a counsel fee of $20,000, as well as other compensation under this agreement, and give a statement showing the result.

At the end of the year it is found that $250,000 of the bonds of the corporation have been sold to the underwriters and used for betterments.

The results of the business for the first year show a profit of $1,000,000, after charging off 10% for depreciation on plant.

Declare such a dividend as in your judgment is reasonable, crediting surplus with whatever balance remains, and give a statement of condition, using your own figures in ascertaining the profit.

SOLUTION

Capital Stock		
No. 1 – $350000.00 @ 135	472500 00	
No. 2 – 850000.00 @ 120	1020000 00	
No. 3 – 350000.00 @ 100	350000 00	
No. 4 – 150000.00 @ 164	246000 00	
Cash value of stock	2088500 00	
Add 20%	417700 00	
Stock of new corporation		2506200 00
Bonds		
No. 1 –	350000 00	
No. 2 –	390000 00	
No. 3 –	280000 00	
No. 4 –	1890000 00	
	2910000 00	
Treasury Bonds	500000 00	
To Underwriters	200000 00	
Total		3610000 00
Assets		
Cash No. 1 –	48000 00	
No. 2 –	70000 00	
No. 3 –	28000 00	
No. 4 –	110000 00	256000 00
Plant No. 1 –	450000 00	
No. 2 –	820000 00	
No. 3 –	420000 00	
No. 4 –	1475000 00	
	3165000 00	
Counsel Fee	20000 00	
Compensation to underwriters	612700 00	
Compensation to shareholders	258500 00	
Franchise Fee Mich.	1253 10	4062457 12

Supplies No. 1—	90000.00	
No. 2—	80000.00	
No. 3—	42000.00	
No. 4—	86000.00	298000.00
Accts. Rec. No. 1.—	184000.00	
No. 2.—	270000.00	
No. 3.—	135000.00	
No. 4.—	432000.00	1021000.00
Assets and Liabilities of New Corporation at Commencement		
Assets		
Cash	256000.00	
Less Counsel Fee 20000.00		
Less Incorporation Fee 1253.10	21253.10	234746.90
Plant		4002453.10
Supplies		298000.00
Accounts Receivable		1021000.00
Bonds in Treasury		500000.00
		6116200.00
Liabilities		
Capital Stock	2506200.00	
Bonded Indebtedness	3610000.00	6116200.00

ASSETS AND LIABILITIES OF NEW CORPORATION AT END OF YEAR

ASSETS			LIABILITIES		
Cash	327500.00		Accounts Payable	132300.00	
Accounts and Notes Re-			Dividend No. 1 on Common		
ceivable	2074292.21	2401792.21	Stock, 10%	250620.00	382920.00
Inventories		510000.00	Bonded Indebtedness		3610000.00
Plant Account	4062453.10		Capital Stock		2506200.00
Additions thereto	250000.00		Surplus:		
	4312453.10		Profit & Loss for year	1000000.00	
Less 10% for Depreciation	406245.31	3906207.79	Less 5% Interest paid		
Bonds in Treasury		250000.00	on Bonded Indebtedness 180500.00		
			Less Dividend No. 1 250620.00	431120.00	568880.00
		7068000.00			7068000.00

MANUFACTURING, TRADING, AND PROFIT AND LOSS ACCOUNT.

DR.

Inventory at commencement	2,474,000.00		
Purchases	3,044,000.00		
	5,518,000.00		
Inventory at end of year	510,000.00	5,008,000.00	
Labor		2,750,000.00	
Freight and Express		66,500.00	
Power, Heat and Water		63,000.00	
Repairs and Renewals		14,660.00	
Factory Expenses		46,000.00	5,017,660.00
Office Salaries		12,000.00	
Executive Salaries		40,000.00	
Office Expenses		9,260.00	
General Expenses		3,250.00	
Taxes, Insurance		74,250.00	
Discounts allowed		6,740.00	217,000.00
Advertising		12,000.00	
Travelers Salaries		106,000.00	
Travelers Expenses		42,000.00	
Special Discounts		725.00	
Commissions		1,400.00	
Accounts written off		7,340.00	229,465.00
Depreciation of 10%			406,245.31
			5,770,370.31
Balance (net profit)			1,000,000.00
			6,770,370.31

CR.

Sales	6,738,750.31	
Less Returns	17,420.00	6,721,330.31
Discounts taken		44,800.00
Sundry Revenues (Royalties)		4,240.00
		6,770,370.31
Balance carried to Surplus		1,000,000.00

PROFITS OF A CORPORATION

DEFINITION OF PROFITS

29. In the widest possible view, profits may be stated as the realized increment in value of the whole amount invested in an undertaking; and, conversely, loss is the realized decrement in such value. Inasmuch, however, as the ultimate realization of the original investment is from the nature of things deferred for a long period of years, during which partial realizations are continually taking place, it becomes necessary to fall back on estimates of value at certain definite periods, and to consider as profit or loss the increase or decrease between any two such periods. Hence, it follows that, as stated in Buckley's treatise on the English Companies' Acts, "the ascertainment of profit is in every case necessarily a matter of estimate and opinion. * * * The legitimate way is to take the facts as they actually stand and after forming an estimate of the assets as they actually exist" (and presumably, although it is not so stated, of the liabilities) "show a balance so as to ascertain the result in the shape of profit and loss."

This definition would permit any business concern to revalue periodically the whole of its assets and liabilities and to record the difference between its surplus so ascertained at the commencement and the end of the year as its profit or loss, respectively; and provided that this estimate were fairly and reasonably made, there would be no objection to such a course. In other words, every appreciation of assets is a profit, and every depreciation a loss; and in many private concerns this method, technically known as "Single Entry," of ascertaining profits has been regularly adopted for years without bad results. A corporation, however, being endowed by statute with special privileges is subject to special restrictions, among others that of a definite fixed capital stock upon which dividends are declared out of the profits of the undertaking. Hence, the consideration of profits as applied to a corporation involves the consideration also of the limitations placed either by law or by sound principles of accounting upon their distribution as dividends. It is in the legal interpretation of the term profits of a corporation (which has come to mean profits available for dividends), and in the distinction between the strictly legal and conservative accounting view of the principles upon which they should be ascertained that the difficulties of the subject chiefly lie.

LEGAL PRINCIPLES

30. The law, represented mainly by Case Law, has considerably modified the definition given above; and as up to the present time a larger number of cases have been decided and more definite results arrived at by the English than by the American Courts, it will be useful here to consider briefly the present condition of the English Law on the subject. The decisions given there have been based on the principles of Common Law rather than on statutes relating to corporations, and these decisions are freely quoted in American text books, which, though in slightly different form, appear to arrive at substantially the same conclusions. The summaries which follow are given with some hesitation in view of the difficulty of extracting definite principles from a number of more or less conflicting decisions, but they will at any rate serve to illustrate the difficulties which have to be met.

31. **English Law.** The regulations of a corporation in England usually provide that no dividends shall be paid except out of *profits arising from the business of the corporation.* In order to carry on its business a corporation requires certain capital or fixed assets, which must be maintained in a reasonable state of efficiency as long as the business continues; while its profits or losses arise from the employment of its fixed assets in continuously changing the condition of its current or circulating assets from one form to another, and consist of the difference between the realizable value in the final and in the original condition, subject to deduction of the cost of the change and the expenses of realization.

Changes in the value of capital assets are not generally realizable during the continuance of the business, and hence in the determination of profits available for dividend under the above regulation no increment in the value of its capital assets can be considered; but it would seem to be legally permissible to divide among stockholders as dividend a realized profit on the sale of a fixed asset if there were no depreciation on other fixed assets to be made good. On the other hand, it is not necessary to charge trading profits with any decrement of value not due to causes arising directly out of the business; but any waste of fixed assets taking place in the operation of deriving profits out of the circulating assets must, generally speaking, be made good out of profits. There is, however, an exception to this rule when the constitution of the corporation contemplates the investment of its capital in certain specified wasting assets—such for instance as mines—and its regulations do not call for any provision out of profits to replace this waste by means of a sinking fund or otherwise; in such cases the English Courts have held that there is no legal obligation to charge the waste against profits earned from the operations. But this exception does not cover depreciation of capital assets due to wear and tear which has not been, but must at some future date, be repaired if efficiency is to be maintained. In the case of circulating assets the position is different. The enhancement in the value of these assets being the source of the profits of the business, it is necessary and the law requires that they shall be maintained intact, and that only the surplus realizable in excess of the amount invested is profit; or, conversely, that any deficit is a loss.

The exact distinction between capital and current assets depends necessarily on the nature of the business of the corporation. What are capital assets for one business may be current assets for another, according as the business of the corporation is to make a profit by using them continuously in their existing shape or by converting them into some other shape. For instance, if a corporation owns investments for the purpose merely of collecting the dividends thereon, and dividing these among its stockholders, it is not legally bound to make good out of profits a fall in the value of the investments. But if its business were to traffic in investments, or if it were in fact trafficking in them, any fall in value would be a loss, and any rise in value a profit, chargeable or creditable to profit and loss.

Apart from the distinction between capital and current assets, the following legal principles would seem to be fairly established:

The ascertainment of profit being necessarily a matter of estimate and opinion, all that is required is that the estimates be fairly and honestly made without any fraudulent intention or purpose of deceiving anyone, and that they conform to the constitution of the corporation.

The payment of interest to stockholders before any profits have been realized is stated to be *ultra vires;* but interest paid on borrowed capital employed in the construction of the works, and in the meantime unproductive, may be properly chargeable to capital account; and it is perhaps doubtful (although there appears to be no decision on this point) whether under such circumstances interest might not be paid to stockholders and charged to capital if the regulations expressly provided therefor.

It also seems probable that a corporation having made a loss on the operations of the previous years, and commencing the year with a deficit in its circulating capital, may legally distribute dividends to its stockholders out of current year's profits without making good such deficit. In one decision on this point a deficit of previous years is treated as a loss of capital assets, and it is stated that the capital having been lost a distribution of subsequently earned profits cannot be a payment of dividend out of capital that had been previously lost.

32. **American Law.** The general law of this country as laid down in the chief text books is based as before stated to a considerable extent on the English Courts referred to above.

Dividends can be paid only out of profits—that is, out of the net increase in the original investment after deducting from the assets all present debts and making provision for future or contingent claims reduced to their present value. But in arriving at this increase the permanent or fixed capital may be valued at the price actually paid for it, although at the time of estimating said increase it could only be sold at a loss. All that is required is that the whole capital originally contributed by the stockholders shall be put into the business and kept there, and that no part of it shall be taken out again directly or indirectly and given back to them. On the other hand, any depreciation due to wear and tear arising out of the use of the fixed assets must be made good out of the earnings before the surplus can be applied to the payment of any dividend, unless these fixed assets are of a wasting nature, such as mines. There seems also to be a consensus of opinion that dividends can only be paid out of the surplus profits derived from the use of the capital of the company for those purposes for which the corporation was constituted.

The Statute Laws vary in every state, but the above principles seem to apply generally, with the exception of certain classes of business governed by special laws — such as banks, which may not pay dividends out of the interest accrued, but not received, however well secured, and insurance companies, which may not distribute unearned premiums; and in Connecticut it has been held that if at the time of declaration of a dividend the property is not actually worth the par value of the stock which was issued for it, the dividend is illegal.

ACCOUNTING PRINCIPLES

33. From an accounting standpoint, perhaps the only exception that can be taken to the law as at present interpreted is that the latter does not require the maintenance of wasting fixed assets which are used up by slow degrees in the process of earning profits. On practical if not on theoretical grounds the principle must be accepted that a decrease in value of fixed assets not of a wasting character arising otherwise than in the process of earning profits need not be provided for. It is true that in the long run all shrinkage of these assets is a loss, and that no profits can be earned over the whole life of a corporation unless its capital, both fixed and circulating, is maintained intact. But the changes in actual values of capital assets due to lower range of prices, introduction of improved processes of manufacture, etc., may be so great and at the same time so indefinite, and the actual realization thereof is as a rule deferred to such distant periods that it becomes quite impracticable to provide for it as a direct charge against profits; although it is a prudent course to accumulate a sufficiently large *Reserve or Surplus Fund*, and to make liberal provision for *Depreciation*, as will insure the integrity of the investment and provide ample funds for keeping it continually in the highest state of efficiency.

The sound accounting principles for the determination of profits may be summed up as follows:

(1) All waste, both of fixed and circulating assets, incident to the process of earning profits by the conversion of circulating assets must be made good out of the profits earned.

(2) Profits realized on sales of fixed assets should be first applied to make good estimated depreciation (if any) in other fixed assets not resulting from the ordinary conduct of the business. If there is no such depreciation, such profits may be distributed as dividends, but should be distinguished from the operating profits.

(3) A sufficient surplus should be accumulated (in addition to the provisions required to maintain wasting capital assets under clause 1) for the purpose of making good losses due to shrinkage in values of fixed assets arising from causes other than the ordinary operations of the company.

ACCOUNTING PRACTICE

34. Turning now to the practical, as opposed to the theoretical view of the question, it will be useful to consider the different elements which enter into the determination of the profits of a corporation from the point of view of the maintenance of assets, discussing shortly the principles of valuation which should be adopted for the various assets and liabilities in a balance sheet, and the effect which each would have on the profits. If the balance sheets at the beginning and end of a period are theoretically and practically accurate, and show the true financial position at those dates, the increase or decrease of the surplus, after allowing for distributions of profit during the interval, represents the true profit or loss for the period. The different captions will be dealt with in the order in which they would usually be stated.

CAPITAL OR FIXED ASSETS

35. These would in general consist of one or more of the following classes: Real Estate, Buildings, Plant, Machinery, Tools, Patents, and last but not always least, Goodwill and Franchises.

36. **Real Estate, Buildings, Plant, Machinery, and Tools.** Dealing with the first five items it may be stated generally that it is not proper for a corporation to take credit for a profit, nor on the other hand is it necessary for it to charge itself with a loss, arising out of a revaluation of such items as long as they are in actual use for the purposes of the business; but here it should be noted that if the business includes among its objects the purchase and sale of assets of this class they should then be considered not as *Fixed* but as *Current or Circulating Assets*, being in fact stock in trade, the turning over of which is expected to result in profits or losses to the company. The fixed assets now under consideration are those which during the life of the business will remain, whether in their present or some other shape, in a permanent condition, provided that due provision is made for wear and tear or other waste due to operations.

37. **Depreciation.** This raises an issue of great importance, so far as profit is concerned, in dealing with this portion of the company's property. As distinct from fluctuations due to rise or fall in values, there is continually in progress in the case of all property except land, a waste due to the use of these properties for the purpose of

earning profits. In accordance with the accounting principles already laid down, this waste must be provided for out of the resulting profits, or if there have been no profits, the losses are really so much more by the amount of waste resulting from the operations.

No provision as a rule requires to be made for depreciation of real estate, except in the case of leaseholds, minerals, timber or other similar property. A purchase of leasehold property is in effect a payment of rent in advance, and the equivalent rent on an actuarial basis should be charged each year against profits.

In the case of minerals, the product taken out of the land becomes the stock in trade of a corporation as soon as it is extracted, and whatever the land was worth before its extraction it is clearly worth an appreciable amount less thereafter. The provision to be made should be on the basis of the number of tons extracted, having regard to the total tonnage available and to the realizable value of the property after the minerals have all been extracted. The same principle would also apply to timberlands, where no provision is made for re-foresting. The contention is sometimes made that no provision need be made for exhaustion of minerals where the amount of mineral known to be in a definite tract at the end of any period is largely in excess of that which has been discovered at the beginning of the period. This argument cannot, however, for a moment be admitted except as a reason for reducing the tonnage rate to be provided. As a general principle, whatever there was in the land, whether known or unknown, has been reduced during the period under consideration by whatever amount has been extracted; and while the new discoveries may be accepted as reducing the necessary rate of provision for extinction from (say) one dollar to one cent per ton, the original principle that provision must be made holds good on the smaller figure, whatever it is. It may be, of course, that the provisions made in earlier years have been sufficient to cover a number of future years on the basis, from the commencement, of the rate subsequently found to be sufficient in view of the new discoveries, and in this case there is obviously no necessity to provide further for extinction until the total production at the new rate is equal to the total amount written off.

It would be beyond the scope of this paper to discuss what the different rates of depreciation on different classes of property should be, but it is necessary to emphasize the fact that however long the life of the buildings or plant, and however much may be spent year by year in the actual upkeep thereof, there must be a gradual depreciation in value, due either to direct wear and tear or to the necessity of replacing old and obsolete articles by new and up-to-date ones. It is probable, however, that in any going concern which is maintained in an efficient condition there is a limit to the total amount of this depreciation as between original cost and present value; in fact, the theory that any piece of machinery or any building continues in use until it reaches an absolute scrap value is not in accord with practical experience, taking any plant as a whole. When the plant is entirely new it may be considered as being worth its cost. It will never again attain this standard, because never again will the whole of it be absolutely new; on the other hand, it can never fall below a certain percentage of this standard without becoming so inefficient that it could not be operated at all. Between these limits, therefore, would seem to lie the total amount of depreciation to be provided out of earnings over a long period of years, assuming that all renewal expenditure tending to increase the life of the plant is charged against the depreciation so provided. It is submitted that perhaps the most satisfactory way of making such provision is in the first instance to estimate the life of the different assets, assuming that ordinary recurring maintenance and renewal charges are provided out of profits as they occur, and to set aside each year the corresponding proportion of the original cost, crediting the same to a depreciation fund. From time to time expenditures which may be termed "extraordinary renewals" or "periodical renewals" will require to be made, which from their nature increase the original life of the plant. These should be charged against the fund provided. In this manner an equitable charge would be made against earnings each year to represent the amount of wear and tear that has accrued during the year. In many cases, in place of a basis of life in years, one in tons operated will be found preferable, in which case the charge against profits would take the form of a rate per ton of production rather than a rate per year of life. There are other methods in force for properly providing for this wear and tear, but there is one method which it may safely be stated is an entirely erroneous one, and that is to set aside such sums as the Directors may decide upon out of the profits of each year upon no definite basis whatever. A decision as to the period at which the necessary charge should be made against profits must be admitted to be largely within the discretion of the managers, for the reason that they have to consider not only sound principles of accounting, but also policy; but it is not inconsistent with this proposition, and is certainly more scientific, to adopt a sound and conservative basis in the first instance and create in the books a subsidiary Suspense Account of the proper amount each year which would be discharged by appropriations made from time to time out of surplus profits. Such a course is, however, at best, a makeshift and it is the duty of all accountants, though they cannot compel, at least to urge, corporations to make adequate provision for depreciation each year.

38. **Patents, Goodwill and Franchises.** The remaining items included in Capital Assets—Patents, Goodwill and Franchises, are very much akin to one another. Theoretically it would seem that if a patent be granted for a term of years the amount paid for it should be written off against the profits earned during those years. But practically it is found that by the time the original patent has expired the corporation may have built up a practical monopoly, or at any rate such a lucrative business that the original cost of the patent is now replaced by the admitted value of the goodwill. Moreover, it is seldom the case that one patent stands by itself; during its life probably many others have been taken out representing modifications which extend the life of the original in an improved form, and these may have cost small sums as compared with the very much larger cost of the original.

Goodwill represents the value of the trade name, business connection and organization of the corporation's undertaking. As long as the earnings of the business are maintained at not less than the level contemplated at date of purchase, it is impossible to allege any depreciation of value or the necessity of any provision therefor. On the other hand, if any serious depreciation has taken place, the profits are probably so much reduced that it is not possible to make such provision. Goodwill is in fact a *Fixed Asset* whose value is to some extent dependent upon the profits earned, its fluctuations being consequent upon and not a cause of the earning of profits, as are wasting or partially wasting assets, and not therefore to be taken into account in ascertaining them.

Franchises may be either perpetual or for a fixed term. In the former case, the same considerations would apply as in the case of goodwill. In the latter case, they may be renewed or terminated at the expiry of the fixed term, and prudence would dictate a reasonable provision each year out of surplus profits, although no definite amount may be ascertainable.

Provided therefore that the wise policy is followed of writing off at once all expenditure on new patents which do not turn out useful, or which supersede or modify older ones, and provided also that the principle is admitted of building up a substantial reserve fund against whatever portion of the capital is invested in this class of assets, it would seem reasonable to merge the three items into one and treat them as part of the permanent invested capital of the business, which may be left to continue at its original value as long as the business is a going concern.

39. **Capital Expenditure.** In completing the survey of the conditions so far as regards Capital Assets, it is well to consider what expenditures may reasonably be added to the original investment of capital, instead of being charged against profits. These expenditures may be divided into the following general classes:

(*a*) Actual additions to the property, such as new buildings, new engines or new tools, which did not exist before, or additions to existing articles of this class. All such expenditure would be at once admitted as a proper charge to Capital Account.

(*b*) Alterations to capital assets resulting in increased capacity, some portion but not the whole of which may in most cases be charged to Capital Account.

(*c*) Alterations to capital assets resulting not in increased capacity but in a lower cost of output. Such items are frequently treated as additions to Capital Account, even by conservative corporations, but it may be doubted whether they should not rather be considered as operating expenses paid in advance, especially if, as in most manufacturing concerns, the processes to which the improvements are applied have only a limited life, after which they will be superseded by other and more modern ways of doing the same thing. In other words, the most conservative way of treating this class of expenditures would be to consider them as deferred charges to operating to be written off over a definite term of years against profits. Among this class may be mentioned change of grade or alignment in railroads which is too frequently treated as a capital charge; the shifting of machinery from one position to another, or a general re-arrangement of a factory; as well as stripping and development work on mineral lands, which is of a capital nature in so far as it is money sunk in the property prior to taking anything out of it, but in all conservatively managed mines is treated in the way indicated above.

(*d*) Alterations to capital assets resulting partly in increased output and partly in decreased operating expenses. In this class much must depend on the nature of the expenditure, but a division between Capital and Operating Accounts on some definite basis arrived at on the principles outlined in (*b*) and (*c*) would as a rule be fair and conservative treatment.

(*e*) Exceptional and extraordinary renewals of existing assets resulting partly in the increased capacity necessary in order to keep pace with more modern plants, partly in diminished operating expenses and partly in a mere replacement. Such expenditures include the modernizing of a property necessary to prevent or to repair a deterioration in its value, due either to the competition of more modern properties or to the greater demands of the public, and consequently not resulting in increased earnings. Here again many corporations will charge part of such expenditures to Capital Account, and would be legally justified in so doing; but undoubtedly the safe and conservative course is to charge them wholly against profits through the medium of a Depreciation or Improvement Fund.

(*f*) Finally, we have ordinary replacements, repairs and renewals recurrent either at long or short intervals, and resulting neither in increased capacity nor in saving in operating expenses. Such would always be a charge against profits, either through the Depreciation Fund or direct, according to the nature of the outlay.

It is important to note that the charges made under any of the above headings should be cost only and should not include any addition by way of profit. The operation is merely a conversion of current into fixed assets, upon which no profit can be realized as long as the asset is maintained. Possibly, however, where a corporation employs in the erection of plant for its own purposes facilities which it would otherwise be employing in similar erections for outsiders at a profit, it would be fair, although not conservative, to consider a reasonable charge for the use of these facilities as part of the cost of erection. Also when special loans are raised for construction purposes, the interest on such loans during the period of construction would fairly be part of the cost.

40. **Sale of Fixed Assets.** If fixed assets, becoming unnecessary for the purpose of the business, are sold or are abandoned and dismantled, the question arises whether profit or loss arising therefrom should be added to or deducted from the profit arising from the general operations. Legally, if as a result of a revaluation of capital assets a surplus was found to exist, the realized portion thereof may probably be treated as a profit, but not otherwise; and on the other hand there would not appear to be any legal necessity to provide for a loss. As a matter of accounting, the safe policy is to carry forward profits and provide for losses, but the circumstances in each case must be considered. Where the losses are large, as in the case of the dismantling of a whole plant, it would be sufficient to provide for it gradually out of the profits of a series of years.

CURRENT ASSETS

41. Current assets may be dealt with under the following main headings:

Stocks on hand, including Raw Materials, Work in Progress and Partly Finished and Finished Products.
Bills and Accounts Receivable.
Marketable investments.
Cash.

42. **Stocks on Hand.** Perhaps one of the most difficult questions which accountants have to decide is the correct enumeration and valuation of stocks on hand. The theory governing the valuation of this asset is that, inasmuch as no profits can be realized until the goods are actually sold, it is not safe to take credit for any profit thereon until a sale has been effected; that therefore it should be carried forward at the exact cost and no profit thereon brought into the accounts of the fiscal period. On the other hand, it may be found that the prices both of the raw materials and the finished product have at the close of the fiscal period fallen below their cost, and while it is impossible to say until the goods have been sold whether any

loss will unltimately be made thereon, at any rate there is a possibility thereof. It is therefore conservative to set aside a sufficient reserve out of profits which have been realized on goods already sold to provide for the accruing loss on those which remain in hand. Hence the general rule for valuation of stocks on hand—namely, "cost or market, whichever is the lower," has been evolved and is adopted by the most conservative commercial institutions. Unfortunately, in practice, many concerns are unable to ascertain the cost of their various products, with the result that their stock valuations are based entirely on estimates of costs made with more or less accuracy. There does not appear to be any legal obligation on a corporation to adopt any particular basis, provided that the price adopted is not in excess of that ultimately realized after deduction of any subsequent cost of completion, storage and sale; but the absence of approximately exact knowledge as to the cost frequently leads to disappointment, both to the directors and stockholders, and even to serious financial loss. It is obvious that a constantly changing basis of cost must lead to serious inequalities in the profits shown between one period and another, but it is not equally obvious to the commercial community that an erroneous basis of valuation consistently adopted year after year, even if that basis be a conservative one and really below true cost, may result in large and unexpected discrepancies between the profits shown in different periods. For instance, if stocks be valued on a basis exceeding cost and the trade, and consequently the materials and products on hand, increase very rapidly for one or more years, the profits during those years of increase will be abnormally inflated; but when the trade settles down to a comparatively steady turn-over there will be a considerable drop in the profits as compared with the preceding year on the same amount of business done—a drop which the management as a rule will be unable to account for until an investigation by the Public Accountant discloses the true cause. On the other hand, if the stocks be conservatively valued considerably below cost, the profits of a year in which a small quantity of goods is carried over at the close of the year in comparison with the beginning will be inflated as compared with a succeeding year, when an opposite condition prevailed, although the sales and profit thereon may have been the same in both years; thus entirely upsetting all the calculations and estimates of the managers. The essentials therefore for ascertaining correct profits so far as stocks on hand are concerned are:

(*a*) An accurate enumeration of the quantities on hand.

(*b*) An accurate ascertainment of the actual cost of the different manufactured articles, either completed or in progress.

(*c*) A specific reduction in the prices of raw materials of the amount by which the market valuations at the close of the fiscal period fell short of the cost.

(*d*) A proper provision for all stock which is old or depreciated or for any reason likely to be unsaleable.

The more exactly these different elements are ascertained, the more accurate will be the resulting statements of profits, and if the special reserves be made separately, it will be an easy matter to compare usefully one period with another.

Finally, it should be noted that it is not essential, and in fact it will frequently be incorrect, to value materials and products on hand at the end of the fiscal period upon the same price basis as at the commencement of that period; all that is necessary or proper is that the basis of valuation—that is to say, the principles on which the values are arrived at—should be the same at the beginning and end of the period, the actual prices usually varying from one year to another.

In this connection, it is important to consider to what extent it is permissible to anticipate profits on work in progress, particularly when the work is being carried out under definite contracts, and when it may perhaps reasonably be contended that at any rate some portion of the profit is earned at the time when the work is performed. It is quite a frequent practice where contract work extends over long periods of time to estimate and bring into account some portion of the profit proportionate to the cost for any period, and there does not appear to be any objection in principle to the adoption of this practice. On the other hand it is undoubtedly more conservative not to take credit for any such profit until the whole contract is completed. An added reason for this course is that unforeseen contingencies are continually arising during the progress of the work with the result that what was originally expected to realize a profit may in the end result in a loss. It is true that the more conservative course may cause large inequalities in the amount of profit shown for successive periods; but if the accounts are stated on a basis of total work completed less cost thereof, the reasons for the fluctuations, as well as the advantages of more rapid completion, are apparent.

If, however, estimates of profits on pending contracts are to be taken into account, it is of the utmost importance that such should be made on an ultra-conservative basis, and further, that estimated losses should be fully provided for. Neglect of this precaution may easily lead to disaster.

While therefore under certain conditions no objection can be taken to the inclusion in a profit and loss account of profits on work in progress, a sound conservative policy would be against such a practice on the ground:

That the best estimates are misleading.

That such profits are not in most cases yet realized and cannot therefore be employed in payment of dividends except by a corresponding increase in working capital.

That the asset of work in progress is unduly swelled by an addition that may perhaps never be realized.

43. **Accounts and Bills Receivable.** Profits cannot be definitely ascertained until they have been converted into cash or into some recognized form of negotiable instrument of definite and fixed value, but the usual practice is to consider the profit realized when a sale takes place and the amount of the sale price is charged to the purchaser. It is essential to an exact determination of profits to ascertain that as far as possible the purchaser's obligation is good for the face value of the charge made. This is necessarily a matter of estimate and involves two considerations:

An estimate of the ability of the purchaser to pay the amount he has contracted to pay within the time contemplated.

(*b*) An estimate of the amount which a debt incurred in a foreign currency may be expected to realize in the standard of the home country at the time when the debt is paid by the purchaser.

On the principle of cost or market valuation, whichever is the lower, the conservative and safe course it to make a reserve sufficient to provide for all discounts that will be allowed and for any debts known to be of a doubtful character; or to build up a general reserve fund against such losses, on the basis of a percentage on the sales of each year. From the legal point of view, all that would seem necessary would be to make a fair estimate of what each debt might be expected to realize in the currency of the home country, allowing for the time estimated to elapse before collection; but a corporation should aim at a more conservative policy than this, and should not be contented with the minimum amount of reserve which it might be legally called upon to make.

44. **Marketable Investments.** The term Marketable Investments is intended to include only such investments as are part of the *Circulating* as distinct from the Fixed Assets. The latter class of investments may be defined as those which cannot be disposed of without affecting the operations, for the reason that the ownership thereof in a permanent form is necessary, however remotely, to the business which the corporation is carrying on. Their valuation would be governed by the same principles as have been outlined above for other Fixed Assets.

Marketable Investments, on the other hand, may be either:

(*a*) The stock in trade of the corporation, or

(*b*) The investment of surplus cash held in this form until required for ordinary operating purposes, or

(*c*) The investment of a reserve or other special fund.

In case (*a*) the rule of cost or market value, whichever is the lower, applied to each individual investment and not to the group as a whole, is undoubtedly the most conservative. That is to say, no profit could be taken up on any investment until it is sold, but on the other hand, where the value has clearly fallen, some provision should be made therefor. Where, however, the investments all have a definitely ascertainable market value at any time, it is perhaps fair and reasonable to allow a fall in value of some individual investments to be set off against a rise in value of others, provided that the aggregate valuation is not above original cost or market value, whichever is the lower.

In case (*b*) the usual custom is to value at the mean market price on the last day of the fiscal period for the reason that the investments represent the equivalent of cash and should therefore be maintained at their cash value in the Balance Sheet.

In case (*c*) any profit or loss, either realized or estimated, would be a credit or charge to that fund, and not to the Profit and Loss Account. But in the Balance Sheet such investments should either be clearly stated as maintained at cost or preferably be adjusted each year to the aggregate market value if below cost.

Another method of dealing with the fluctuations of marketable investments of classes (*b*) and (*c*) is to create an investment fluctuation reserve, either out of estimated or realized profits on investments, or by a charge to Profit and Loss of such an amount as may be necessary to prevent this reserve from showing a debit balance, and by charges or credits to this reserve to maintain the asset at market value.

47. **Cash.** This item is the only one which may be said really to represent actual fact as expressed in money value, except when it consists of currency of a foreign country, at a variable rate of exchange. This latter subject is referred to later.

LIABILITIES

46. Inasmuch as the liabilities of a corporation are with very few exceptions definitely ascertainable amounts, no question of principle arises thereon in connection with the ascertainment of profits or losses except that the omission of any liabilities or an overstatement thereof would necessarily increase or diminish the profits respectively. There are, however, some important questions in connection therewith, that is, the proper treatment of premiums and discounts on stocks and bonds issued, sinking funds and secret reserves.

47. **Premiums and Discounts on Stocks and Bonds.** If stocks or bonds are issued for the purchase of any definite property, it may be presumed that the property is worth the par value thereof. But when they are issued for cash or a cash equivalent differing from their face value, important questions arise.

So far as stocks are concerned, it is doubtful how far an issue thereof at a discount is legal at all, and whether if so issued the purchaser or holder is not liable to pay up the whole of the discount, at any rate on liquidation of the corporation. This is the law in England with the exception that it is now legal for a corporation to pay a reasonable commission for services in placing its stock, and it is also the statute law of some states in this country, notably New York. Discount on stock would therefore either be an asset of the corporation recoverable from some person or persons and not chargeable to profit and loss, or the liability on the stock would be the amount actually paid for it. Premiums on stocks issued are clearly a source of surplus to the corporation eventually, because they are cash received in excess of the authorized capital which must be maintained intact, but they are not profit on operations and should not therefore be credited to profit and loss, although they may presumably be applied to make good depreciation in fixed assets or exceptional losses, not arising out of the ordinary business of the corporation.

Premium and discount on bonds is a deduction from or addition to the rate of interest which the bond carries; that is to say, there is a rate at which any corporation can place its bonds at par; if it elects to place them at any other rate the bonds will sell at a premium or discount as the case may be; but the true rate remains the same and this true rate is the proper charge to Profit and Loss Account. Hence, the premium or discount should be spread over the term of the bonds and the annual installment thereof credited or charged to Profit and Loss each year.

48. **Sinking Funds for Redemption of Debt.** Sinking funds or debt extinguishment funds are not in theory a charge against Profit and Loss, for the reason that they do not represent a loss or expense, but the extinction of an existing liability. Inasmuch, however, as in most cases the only source out of which such redemption fund can be provided is the surplus earnings, it is usual to insert a provision in trust deeds that the sinking fund is to be provided out of the profits of the year. The discharge of liabilities involves either a corresponding reduction in assets or the accumulation of other liabilities or surplus. A reduction in current assets or the accumulation of other liabilities as a substitute for bonded indebtedness is clearly undesirable, and it is therefore necessary that the amount applied each year to sinking fund purposes should be transferred from Profit and Loss either to a special Reserve Fund or in reduction of some Fixed Asset account by way of provision for depreciation or otherwise. It must, however, be remembered that such provision for depreciation will be to that extent represented by capital instead of current assets, and while there is no theoretical objection to this if the depreciation fund is sufficiently large, the latter necessarily ceases to be available in cash for one of its principal purposes, that is, the renewal of various capital assets from time to time. If, however, part of the fixed assets are of a wasting character, the sinking fund may be quite safely applied in reduction thereof, or it may with

equal propriety be applied in reduction of goodwill or patents. The safest way undoubtedly therefore in every case is to charge the sinking fund installment to Profit and Loss each year, and either credit it to a special Sinking Fund Reserve or apply it as depreciation of some fixed asset for the renewal of which no cash expenditure will be required in the future.

49. Secret Reserves. There is a general consensus of opinion that an overstatement of profits knowingly made is improper, but the opposite proposition as to an understatement of profits has so far received little consideration, and yet is it of considerable importance. Corporations are the property of the stockholders, and therefore primarily anything which the stockholders or the directors elected by them may approve may be considered to be within their power to decide as they like, provided that it is within the law; and it is not suggested that there is any general law which would prohibit an understatement of profits, as it would undoubtedly prohibit an overstatement. But inasmuch as the stocks of the majority of corporations are quoted on the Stock Exchanges throughout the country, the corporation is in some sense the property also of the public. It becomes therefore a great question to what extent it is legitimate or proper that it should publish a statement of its earnings or its position which materially underestimates either; and yet it is obviously within the discretion of the managers or directors to make reserves to meet possible contingencies, and the constitution and by-laws of most corporations give them such powers. Secret reserves may take several forms, such as writing down to a comparatively small figure valuable assets, providing excessive depreciation, providing excessive reserves for bad debts, or contingencies, valuing stocks of materials and products on hand at a large reduction from cost, or including special reserves under the head of Accounts Payable. Inasmuch as the majority of industrial corporations do not publish their gross earnings, such reserves can easily be made and are made continually in a form in which they do not appear in any way in the accounts, and are known therefore only to the directors and managers.

Each case must be judged on its own merits. Where the directors or managers have exercised a wise discretion in providing in advance for contingent losses which are incident to the nature of the business and cannot, from a reasonable point of view, be considered as in excess of the amounts which a wise foresight would provide, it would seem that no exception should be taken to the undisclosed provision thereof. Where, however, reserves are made largely in excess of any possible contingencies, the amounts provided should be disclosed in the Profit and Loss Account and probably also in the Balance Sheet, so that all those interested may be in a position to form a reasonably correct opinion as to the financial position. For instance, a business such as banking is from its nature peculiarly liable to large and unexpected losses, the disclosure of which might prejudicially affect its credit and position in the eyes of the public and of its depositors, and possibly cause a disaster out of all proportion to the cause; and it is therefore obviously sound policy to accumulate such ample reserves as will enable losses to be met without any apparent disturbance of normal conditions; but so far as the majority of corporations and businesses are concerned, publicity in such matters is undoubtedly most desirable, and all reserves to meet contingencies which may occur in the future, but have not yet occurred, should be fully disclosed.

FLUCTUATIONS IN EXCHANGE

50. When a corporation is carrying on business in a foreign country the rate of exchange exercises a considerable effect on the valuation of its assets and consequently on its profits. This question is sufficient in itself to form the subject of an entire paper, and it is only possible here to state quite shortly the general principles which should govern its treatment. Where operations are carried on in a foreign country, the object should be to obtain as nearly as possible an exact equivalent in the home country of all revenue earned or expenditure incurred in the foreign country. So long as a transaction originates and is completed in the foreign country, no question of exchange comes into the calculation. Where, however, in the process of its completion it passes from one country to another, a change in the basis of value occurs, which must be reflected in the accounts. The nearest approach to accuracy will be obtained by taking up the foreign item into the home currency at the rate of exchange of the day on which the transaction represented by that value passed from one country to the other. This would result over a given period

in a certain average rate of exchange for all transactions In the case of capital expenditure, it is probably wise to make that period as short as possible, say monthly. In the case of profit and loss items, it is probably sufficient to make it a year or half year. If the conversions at monthly intervals be used in arriving at the average rate of exchange for the year and the current assets and liabilities existing at the end of the year as well as the profit and loss items be converted at that average rate, all the operations in the foreign country will be found to have been converted into the home currency at very close to the true rate and there will be no difference, or as it is commonly called, Profit or Loss on Exchange. Inasmuch, however, as this average rate may vary considerably from the actual rate on the last day of the fiscal year, it is further customary in preparing a Balance Sheet to reconvert the current assets and liabilities at the latter rate, and the difference between this conversion and that made at the average rate for the year represents an actual profit or loss which would be made if the whole of the assets or liabilities were converted into the home currency on that day. This revaluation is necessary in order that the Balance Sheet may show the actual net realizable value of the corporation's current assets; and the profit or loss thereon is invariably considered a credit or charge to the Profit and Loss Account for the fiscal period. Fixed capital, on the contrary, if recorded permanently in the currency of the foreign country, should be maintained on the basis of original cost without any change from the original rate; and as this gives rise to difficulties it is preferable that such assets should always be permanently recorded in the home currency.

FORM OF PROFIT AND LOSS ACCOUNT

51. Although the question of profits has been considered from a Balance Sheet point of view, their presentation will always take the form of an Earnings Statement, each element in which will be accurately determined if due effect be given to the principles of valuations of assets and liabilities hitherto discussed. It will be useful now to consider shortly the form which such a statement of earnings should take.

The following, already in fairly general use, is submitted as perhaps the most complete short form, and by means of exhibits it is capable of amplification to any extent desirable:

Gross earnings (whether sales of products, transportation earnings, professional earnings, etc.)		$........
Deduct—Cost of Manufacture or Operation:		
(*a*) Manufacture (for a manufacturing concern):		
Labor	$........	
Material	....	
General Manufacturing Expenses	....	
(*b*) Cost of operation (for concerns not manufacturing): (Under suitable headings according to the nature of the business)	....	
		....
Gross Profits		$........
Other Earnings		....
		$........
Deduct—		
Expenses of sale (manufacturing business only)	$........	
Expenses of management (if distinct from operation)	....	
		....
Net Profits from Operations		$........
Deduct—		
Interest on Bonds	$..........	
Other Fixed Charges	....	
		....
Surplus for the year		$........
Extraordinary Profits (detailed)		....
Surplus brought forward from preceding year		....
		$........
Deduct—		
Extraordinary charges not applicable to the operations of the year	$........	
Interest and Dividends on Stocks	....	
		....
Surplus carried forward	....	$........

A word of warning may not be out of place against the too common practice of throwing back extraordinary charges on to the previous year's surplus without sufficiently disclosing the same. Cases are frequent in which the earnings for a series of years have been made use of in the public press to show the operating results, and therefore incidentally the earning capacity of a business, while charges made in any year against surplus, on the ground that they appertain to the operations of a preceding year, have been altogether ignored. The form suggested above, if generally adopted, would prevent the possibility of any such misstatements, at any rate without a clear knowledge on the part of those making them that they were altogether misleading.

SPECIAL POINTS IN CORPORATION ACCOUNTING

52. Accounting problems may be divided into two groups:

Firstly. Bookkeeping questions, being those which deal with the correct method of recording any given set of facts, or involve a correct interpretation of facts already recorded; and

Secondly. The more difficult and important problems of ascertaining upon a proper interpretation of legal and other documents, and upon sound commercial and financial principles, the actual facts which have to be or should have been recorded in the books.

In this paper it is proposed to deal briefly with some of the more common of the questions falling under the second of these heads, commencing with the consideration of some special points in connection with the organization of a corporation and the opening of its books.

ORGANIZATION OF A CORPORATION

53. The facts which have to be ascertained and made the basis of the opening entries will be found firstly in the Articles of Incorporation and By-Laws of the corporation which should be carefully studied and all provisions relating to the financial affairs of the business noted; and secondly, in agreements or contracts either for the purchase of some business concern, manufacturing or otherwise, or in relation to the business which the corporation intends to carry on; and out of the provisions of these contracts difficult accounting questions frequently arise.

For the purpose of illustration it will be useful to consider in detail the following assumed case:

A corporation is formed on January 1st, 1909, with an authorized capital of $1,000,000, for the purpose, among other things, of purchasing a manufacturing business as a going concern. The contract between the corporation and its promoters, dated January 1st, 1909, provides that the business to be purchased shall be taken over as from July 1st, 1908, and that interest on the purchase money of $900,000 shall be paid to the vendors in lieu of the profits which may have been earned from July 1st up to the date of completion of the purchase. The Statement submitted to the purchasers as of July 1st, 1908, and accepted by them as the basis of the contract, shows the following figures extracted from the books:

CAPITAL ASSETS		
Land	$ 30,000	
Buildings	90,000	
Fixed Plant and Machinery	180,000	
Loose Tools	25,000	
		$325,000
CURRENT ASSETS		
Inventories of Manufactured Products, Stores and Material, on hand	$125,000	
Accounts Receivable	90,000	
Cash	10,000	
	$225,000	
Less:		
CURRENT LIABILITIES		
For Accounts Payable	25,000	
		200,000
Net Total Assets after deducting Liabilities		$525,000

The books also show that the profits for the three years ending July 1st, 1908, have averaged $75,000 per annum, and after the purchase has been completed under the contract, it is ascertained that the profits from July 1st, 1908, to January 1st, 1909, have, according to the books kept by the vendors, amounted to $50,000, and that during those six months a sum of $20,000 was distributed among the partners or stockholders of the vendor concern.

The net tangible assets to be acquired amounting to $525,000, and the purchase money to $900,000, the difference, namely, $375,000, might at first sight be taken to represent the cost of the goodwill of the business purchased, being the equivalent, it will be seen, of five years' purchase of the average profits, and it is quite probable that this was the actual basis of the contract.

It is no exaggeration to say that in the majority of cases the books of the new corporation would have been opened as of July 1st, 1908, on the basis of that Statement, and the profits earned during the next six months, after deduction of the interest, amounting to $22,500, payable to the vendors under the contract, would be treated as its profits. A little consideration will, however, show that this is not a correct basis of facts for opening the books of the new company. To begin with, the company did not come into existence until January 1st, 1909, and as it obviously could not acquire property before it existed, it is clear that what it has really purchased is the property not as it was at July 1st, 1908, but as it was at the date of the contract to purchase, which happens also to be that of the formation of the company, viz., January 1st, 1909. Moreover, the contract specifically provides for the inclusion in the purchase of the profits earned (less the interest payable) for the preceding six months; and as the profits so earned, less the sum of $20,000 distributed, have remained in the business, the surplus assets will have increased by $30,000 during that period; or rather by $27,500, since the interest due to vendors up to January 1st, 1909, exceeds the profits withdrawn by $2,500, which is, therefore, a Liability on that date, and must be taken into account. This increase may be represented either by additional construction expenditure made during that period, or by increased current assets, or by both, and there will probably also be a variation in the current liabilities; but the new corporation is certainly getting in property of one kind or another $27,500 more than it would have got if the contract had not provided for the acquisition by it of the profits accrued during the six months. It must be assumed, therefore, that the purchase price of $900,000 is greater by this amount than it would have been if the accrued profits, which are turned over to the corporation when it obtains possession of the property, had not been acquired; or, in other words, that the price actually paid for the goodwill is not $375,000, but $347,500.

The importance should here be noted of the three following dates:

(*a*) The date of the contract;
(*b*) The date as at which the property was to be acquired; and
(*c*) The date of the formation of the corporation.

If, for instance, the company had been incorporated on July 1st, 1908, and a contract had been made on the same date and on the basis of the Balance Sheet of July 1st, but the business was not actually taken over until January 1st, 1909, then clearly, after July 1st, 1908, the business would have been carried on for the benefit of the corporation, and the accruing profits, less interest, amounting to $22,500, would be profits of the corporation. But under the conditions assumed to exist, it would seem evident that a corporation cannot earn profits when it is not in existence and that therefore if it in any way acquires profits which were earned before the date of its formation, it must in some way have purchased them, as the alternative supposition of a free gift hardly merits consideration.

And yet there is considerable contention at the present time over this apparently simple point. Even where a corporation has contracted to purchase property at an agreed price, and the vendors have further undertaken to provide a certain sum in cash for working capital, some lawyers have maintained that this sum is a profit to the corporation, and can be used for the payment of dividends. But vendors are men of business, and it is not their practice to give something for nothing. A contract must be assumed to be the result of a bargain between purchaser and seller, and whatever the purchaser is to receive under the contract must be set off exactly against what the vendor is to receive; and although in the formation of a large number of modern corporations, the vendors and purchasers, through the intervention of syndicates, are one and the same, the only safe and sound method of accounting is to assume that the same principles apply as in the case of an ordinary sale. It is difficult to believe that, if such a contract formed the subject of legal proceedings, any other view could be taken that the so-called gift for working capital were merely a return to the purchaser of a portion of his purchase money, and should be so treated in the accounts. If the reverse principle were upheld, the sum of $27,500 in our hypothetical case could be treated as a clear profit to the corporation and distributed in dividends, whereby, it would seem, a portion of the subscribed capital would be returned to the stockholders.

Having disposed of this important preliminary point, it is now clear that the figures of assets and liabilities at July 1st, 1908, are not a proper basis for opening the books of the new corporation, and that a fresh Balance Sheet as at January 1st, 1909, must be prepared. On being advised to this effect, the officers decide on February 28th to have a revaluation made of all the companies' assets, having reason to doubt the accuracy of this July Statement. It may be remarked that the accuracy of this Statement had surely been substantiated on behalf of the corporation before the contract for purchase had been entered into. But it is a matter for surprise that such contracts involving large sums are still frequently made in sole reliance on statements of financial position furnished by the vendors, who, without any intent to deceive, will naturally make the best showing they can, and may be and frequently are deceived by errors of principle made by their own subordinates. The insistance on the part of the purchasers of an impartial investigation of all such statements by Public Accountants before the contracts are completed, would certainly save large sums of money to future stockholders.

In our case it is assumed that no investigation was made, and fortunately for the stockholders the results of the revaluation prove that they have secured a better bargain than they thought; as the following statement as at February 28th, 1909, shows:

CAPITAL ASSETS			
Land		$ 50,000	
Buildings, etc		100,000	
Fixed Plant and Machinery		200,000	
Loose Tools		30,000	
			$380,000
CURRENT ASSETS			
Inventories and Manufactured Products, Stores and Material, on hand		$120,000	
Accounts Receivable		100,000	
Cash		27,500	
Less:		$247,500	
CURRENT LIABILITIES			
For Accounts Payable	$20,000		
For Interest to Vendors	2,500		
		22,500	
			225,000
Total Net Assets			$605,000

At January 1, 1909, the net total valuation might have been expected to amount to $552,500, being the valuation of July 1st, 1908, with the addition of $27,500 undivided profits. At February 28th it actually exceeds this figure by $52,500. This excess is found, by comparison with previous statements, to be made up as regards $50,000 of increase in capital assets over and above the actual expenditures made, and as regards $2,500 of the profit for the two months of January and February, 1909.

This profit is, however, so much less than that in previous periods as to call for further investigation, and the fact is then disclosed that liabilities for expenses, etc., to the amount of $3,000, chargeable against the period previous to January 1st, 1909, had not been provided for at that date, but have been charged against the subsequent period, and also that, while the manufactured products on hand at February 28th had been properly valued at cost, those on hand at January 1st had been taken at the market value, which was $10,000 in excess of cost. Correcting these errors, the trading profits for the two months are ascertained to be $15,500.

The Directors of the new corporation, however, claim that they are also entitled to treat as profit the increase in the value placed on the capital assets, on the ground that if they were willing to purchase on the basis of the July, 1908, Statement for $900,000 they have made a profit by acquiring assets to the value of $50,000 more than they expected. But it must be remembered that an expression of values in figures is at best an estimate, more or less accurate, while the price paid is an actual tangible fact; and the principle previously stated applies here also, that whatever property is acquired under the contract must be held to be the exact equivalent of the price paid. If it eventually appears that there is more or less value than was supposed, so much the better or worse for the purchaser, but the fact remains that he paid a certain price for a certain property. If the tangible assets acquired turn out to be of greater or less value, the cost of the intangible asset of goodwill must be less or greater by an equal amount. Hence, in the present case, the overvaluation of $10,000 in the Inventory, and the understatement of liabilities by $3,000 on the one hand, and the undervaluation of $50,000 in capital assets on the other, represent a net reduction of $37,000 in the amount paid for goodwill, which is thus found to amount to $310,500. Finally, as a result of these various adjustments the financial position at January 1st, 1909, is ascertained to be as follows, and upon this basis the books of the new corporation should be opened:

CAPITAL ASSETS

Land		$ 50,000	
Buildings		100,000	
Fixed Plants and Machinery		200,000	
Loose Tools		30,000	
			$380,000
CURRENT ASSETS			
Inventories of Manufactured Products, Stores and Material, on hand		$112,000	
Accounts Receivable		95,000	
Cash		28,000	
Less:		$235,000	
CURRENT LIABILITIES			
For Accounts Payable	$23,500		
For Interest to Vendors	2,500		
		26,000	
			209,000
Total Net Tangible Assets			$589,500
Leaving to represent Goodwill			310,000
			$900,000

The overvaluation of inventories found to exist above is a frequent occurrence on the sale or transfer of a business. In selling stocks of material and partly and wholly manufactured products on hand, the vendor is clearly entitled, in default of any provision to the contrary, to claim the full market price. On the other hand the purchaser, if he pays the full market price, runs the risk of making no profits, or even of making a loss, on the realization of these products. Hence, it is usual for the contract to contain a provision that the goods on hand shall be valued at cost. In the case under consideration the whole undertaking was of course purchased for a lump sum, but although in the Balance Sheet on which the contract was based market values were used, still in opening the books cost is the correct basis, and the adjustment made is the only fair way of dealing with the matter.

Accounts receivable should be, and usually are, guaranteed by the vendors to the full amount; but if not, a loss may be incurred on the realization thereof, and this again would mean that the corporation has acquired less in the way of book debts and paid more for goodwill than it originally anticipated. Similarly, where, as in the illustration, liabilities are found to have existed at the date of purchase in addition to those included in the Statement furnished to the purchasers, the excess, if not recoverable from the vendors, will mean a further addition to the price paid for goodwill.

In our assumed case it will be noted that the corporation was easily able to adjust the accounts to a proper basis, as the books were well kept and the inventory valuations at previous dates were available. Unfortunately in practice this state of affairs is the exception rather than the rule, and it is consequently often a matter of great difficulty to arrive at any basis for a proper adjustment, even when it is obvious that the books do not disclose the real facts. It is in such cases that the experience of the Public Accountant stands him in good stead, and a knowledge of where to look, and of the elements involved, enables him to arrive at a substantially correct solution.

INVENTORY VALUATIONS

54. An error in an inventory valuation has been incidentally noted in the assumed purchase dealt with above and it will be useful now to consider in more detail the important accounting principles involved in the accurate determination of such valuations.

Profits can only be made out of the sale or exchange of one commodity for another of a definite and realizable cash value. The mere increase in the market value of an article, which it is not intended to sell at that time, cannot be considered as a profit; for the reason that the article may never be sold at that price, and the paper profit may never be realized. The object of the Profit and Loss Account of a manufacturing or trading concern is to ascertain as closely as possible the profits which have been realized on sales actually made; and for this reason raw materials on hand, and products partly or wholly manufactured, but not sold, should be entirely eliminated. In practice this result is obtained by valuing them at cost, no more and no less, and so exactly offsetting the charges to profit and loss for materials, labor and expenses, in so far as the result of their combination in manufacturing processes is still uncompleted and unsold.

On the other hand, a Balance Sheet is required to show the true financial position as a going concern. The inventory at actual cost may represent more or less than the market value, and, therefore, overstate or understate the assets; but to change the valuation would be to take up a profit or provide for a loss which might never be realized owing to subsequent changes in the market value. Sound commercial principles require that no credit be taken for profits until they are realized; and further, that if there is any possibility that what remains unsold may not realize its cost, a proportion of the realized profits on sales which have been made should be carried forward to cover these possible losses. It is accordingly generally recognized as a correct accounting principle, that if the cost value of the inventory exceeds the market value, a reserve should be created to bring it down to that value, while, on the other hand, if the market valuation exceeds the cost, no credit should be taken for the profits until they are realized by an actual sale. This rule is of considerable importance where the inventories at the end of successive years show a progressive increase. If they be valued above cost, profits are shown in each year, which are an anticipation of those of succeeding years; and a large fictitious asset is created, which, on a subsequent fall in market values, may prove entirely valueless. In a quite recent case the Directors of a corporation have been held personally liable for a sum of $1,000,000 in respect of dividends distributed to stockholders out of fictitious profits created in just this way.

The importance of a valuation at cost emphasizes the necessity of such a system of accounting as will enable cost to be accurately ascertained. The theory of cost accounting is merely an elaboration of ordinary bookkeeping, and its difficulty lies almost entirely in a correct ascertainment of the elements that enter into it. There is no theoretical difficulty in keeping a record of the number of hours, human and machine, and the quantity of material that enter into any process of manufacture; but practical difficulties arise from the large number of operations, the chances of error in the tabulation of hours worked and quantities consumed, loss of weight in process and many other minor points, coupled with the necessity of an economical operation of the cost accounting system.

When the actual quantities of material and number of hours worked in the direct process of manufacture are known, there are innumerable other expenses which cannot be allocated to any particular operation and yet are essential to all operations, such as Steam Power, Light, Heat, Taxes, Insurance, General Supervision and Cost Accounting; and the determination of the proportion in which these expenses should be distributed to the different processes is a problem which is incapable of an absolutely accurate solution. Almost every business differs in this respect, and various methods are adopted for arriving at an approximation to the result. The essentials are that the total amount absorbed in the cost over any period should not materially exceed, nor fall short of, the total of all such expenses incurred during that period; and that the method of distribution, once settled, should be consistently maintained regardless of the effect on the operations, unless and until a more accurate method can be substituted therefor.

A further difficulty lies in the fact that is it not always possible to draw a hard and fast dividing line between expenses directly chargeable to manufacture and expenses not so chargeable. There are expenses of Supervision, Bookkeeping and General Management, which cannot be specifically divided between the different departments of manufacture, sale, and collection, and the general management of the corporate organization. The expense of the first department only would enter into the cost of manufacture, while that of the second and third would be chargeable only against the gross profits resulting from the sales, and that of the fourth would be chargeable against the profits of the whole undertaking. A thorough understanding of the business, a careful analysis and apportionment of the studies of individuals, and a general knowledge of the manner in which each item of expense affects the different departments is necessary to arrive at even an approximate division, and at best the basis adopted is somewhat arbitrary.

The question continually arises whether interest in any form should be considered as part of the cost of manufacture. It is true that manufacture takes time and involves the lock-up of money for certain periods, and that this money should for those periods be earning interest. On the other hand, it must be remembered that interest is only one form of profit, that the object of any business is to earn profit, and that each operation, as well as each department, is only one in a series, none of which is complete in itself, and the whole of which are necessary to the complete process of manufacture and sale out of which alone can any profit be earned. To charge interest into costs is in effect to add to those costs a certain amount of profit before it has been made, and is, therefore, against sound commercial and accounting principles. It is sometimes claimed that as interest on loan capital, from the point of view of the owner or stockholder is an expense, it therefore should be treated as part of the cost of manufacture; but such a contention entirely loses sight of the fact that such capital is raised for the purpose of conducting the business, and is remunerated by a strictly defined share of the profits earned in that business. It is true that interest is usually payable, whether there are profits earned or not, but it must ultimately be met out of profits, and it is merely one of the incidental conditions of the loan that the lender is to be paid his share of profits at regular dates, and frequently in advance of any such profits being earned.

Here it may be well to point out a distinction which should be more widely recognized than it is between the profits of an undertaking and the profits of a particular section of those who contribute the capital required, as for instance the stockholders of a corporation. The profit of an undertaking is the difference between the sale price and the cost of its products after deducting therefrom the expense of disposing of the same. The manner in which the capital is raised affects not the profit, but merely the distribution thereof between the different interests by which the capital is contributed; and interest on borrowed capital is as much a part of the profit of the undertaking as is dividend on capital stock of a corporation, or the profits which accrue to an individual owner.

The accuracy of the periodical Statements of Earnings of manufacturing concerns depends to a large extent upon that of the inventory, both as to quantity and value. Without correct information as to the value of the stocks, it is impossible to ascertain the earnings; and yet the delay and expense involved prohibit the frequent taking of physical inventories, which in most cases would necessitate the closing of the works for a period sometimes of weeks, and a consequent loss of business. Up to comparatively recent times, it was the practice to take such inventories once a year, closing the works at a suitable date for that purpose; but the demand, on the part of directors and stockholders, for more frequent Statements of Earnings has necessitated some method of arriving at the approximate value of stocks on hand without the expense and delay involved in a physical enumeration thereof. The skill of Accountants has by degrees evolved a system of book records, continuous throughout the year, of materials, work in process, and manufactured products, which enables a book inventory to be obtained each month so accurately that the closing down of large works for this purpose is now, unless in exceptional circumstances, almost unknown.

These book records consist of accounts, both of quantity and value, kept for each class of material and manufactured product, based on accurate returns of the quantities received and consumed, and of the time expended, and balancing with the principal books, so far as money values are concerned. The quantity and values of materials received are obtained from the original bills, analyzed, and charged to the respective store accounts. The consumption records are obtained from a very large number of small individual records of time and material expended in the various productive operations; these are collected, classified and summarized, and are charged and credited to the production and material accounts respectively on ordinary bookkeeping principles; with the result that the balance left on any material account represents the stock on hand, and the balance on any production account, after crediting the finished product, represents the cost of the uncompleted work.

It might be supposed that the consumption reports made up by working men, often illiterate, and with no idea of the purpose for which the records are required, would be so inaccurate as to be useless for practical purposes, but a little consideration will show that, apart from any deliberate attempt at falsification, errors would tend to offset each other, and the resulting difference should be comparatively small in proportion to the totals involved. In fact, as in so many other problems of every-day life, the principle of averages obtains, and if ordinary precautions are adopted the final results are as a rule found to be surprisingly accurate.

As any particular material in stock is reduced to a low point, a physical inventory thereof is easily taken, compared with the book records, and any discrepancies adjusted; and in this way almost the whole of the material accounts are verified physically at least once in the course of each year without any interruption of the ordinary business. In the case of large bulk stocks, such as ore, pig-iron, etc., the problem is a more difficult one, because it may be, and frequently is, a period of some years before the piles in which these articles are kept are reduced to a sufficiently small quantity to enable any accurate inventory to be taken. In these cases, however, it is usual to allow a small extra percentage on the consumption to cover waste or loss, with the result that in practice the physical test more often shows an excess over the book record than otherwise.

Material in process of manufacture can usually only be physically verified when the process is entirely completed, which may be after weeks, months or, in large contracts, even years. But by a subdivision of accounts into different processes and small units, the book records are being continually verified at each end, that is, by the labor and material which is known to have gone in and by the finished product which is known to have come out, and provided that the values at which the material is charged in, and the finished product credited out, are approximately in accordance with the facts, the resulting balance of work still in progress must be substantially correct also.

In all these accounts the month is the unit of time most usually adopted, and the value at which a month's consumption of material should be charged out is of some importance. The safest rule is to assume that the stocks on hand at the beginning of the month are first exhausted, and to value the stock at the close at the average cost of the month, except where such stock is greater than the total receipts for the month, in which case the excess should be taken at the price at which the commencing stock was valued. Having thus obtained the value of the inventory at the close of the month, the consumption for the month should be credited to the material account, and charged to the proper cost accounts, at a figure which will leave a balance on the material account equal to such inventory value. But this rule requires to be followed with care, because it might happen, for exceptional reasons, that the cost for that month was either very much above or very much below the average, and in such a case the stocks should be adjusted to a more normal valuation.

The system here roughly outlined has not only obviated the loss and expense involved in taking a complete physical inventory once a year, but has also enabled book records to be maintained of sufficient accuracy to justify the declaration of dividends out of profits ascertained therefrom.

CONSTRUCTION EXPENDITURE

55. In the assumed case already dealt with it appeared incidentally that the purchased business had, between the date of the contract and the date of transfer to the new corporation, converted a certain portion of its current into capital assets. Some general rules have been laid down as to different classes of expenditures, which might be legitimately considered as an addition to capital assets, and it is now proposed to consider the equally important point of the method of ascertaining the amount of such expenditures when the work is carried out by the corporation itself.

The problems involved in the determination of the proper charges to be made for construction work are:

Firstly, To correctly ascertain the actual labor and material expended thereon, which, if proper records be kept, is a comparatively easy matter, and

Secondly, To determine the amount, if any, which should be added to these direct costs for general and management expenses, and possibly for interest.

In a going concern a conservative course is generally adopted, and no charge is made beyond the labor and material cost, for expenditures of moderate amount on additions to the property; but, on the other hand, if a new and distinct plant were in course of construction, and producing no earnings from operation, the whole of the administration expenses and the interest paid on loans raised for this special purpose, would be charged to construction account, and rightly so, being necessary elements of completing the work. This at once suggests the argument that what is reasonable and proper in the latter case should also be reasonable and proper in the former, particularly if facilities are employed which would otherwise be used on profitable work for outside parties. It must, however, be remembered that profits can only be made out of the sale of products; and that it is, therefore, incorrect that a concern should take credit for profits on work which is not intended for sale, and will, in all probability, never be sold as long as the concern is continuing to carry on business.

It would follow then that no charges should be made to construction for expenses which would have been equally incurred if there had been no such construction, and would in that case have been charged against profits; although if special loans have been raised to provide funds for construction purposes, and a special staff of employees maintained for this sole purpose, it would seem quite legitimate that the interest paid on such loans, and the salaries of the special staff, should be charged to Construction Account until the work under construction is in full operation. Any further method might result in the creation of paper or fictitious profits, which would not be realized as long as the property was operated, and might never be realized on an ultimate sale thereof. A good instance is the case of a railroad building large extensions, the material for which in considerable quantities is carried over its own road. The freight on this material forms part of the earnings of the road, and if the new construction bears a large proportion to the mileage in operation, the earnings will be swelled to abnormal proportions by the additional traffic so created, and the road will appear, for a short period, to be earning profits entirely out of proportion to those derived from its normal operations. The whole of this increase is really fictitious and does not add to the value of the stock in any way.

Managers of the operating departments of a factory frequently claim that they should be allowed to charge a profit on construction work carried out for their own mills, on the ground that if the work were done outside they would have to pay a profit, and at the same time would set free their own facilities to carry out additional work at a profit for outside customers; and they even go so far as to say that if they cannot charge a profit on construction work so carried out, they will in future have the work done on outside contracts. It must be admitted that this is a plausible argument, but a little further consideration will show that it is fallacious. There is here a confusion between a *Profit* and a *Saving*. The reason that a concern undertakes its own construction work in place of letting outside contracts therefor, is that it can by that means effect a saving in its expenditure, by taking advantage of its own capital and facilities to carry out the work instead of using the organization and the capital of others, upon which it would have to pay a profit. The saving so effected is of considerable advantage in that it reduces the amount of capital invested and future earnings will represent a larger return on the investment. Moreover, it is seldom true that the use of a corporation's own facilities for construction expenditure really means the throwing away of profitable work for outsiders, which would otherwise have been undertaken. It is doubtful if any well managed concern ever refuses profitable orders, because of its own construction work; its organization can and will, almost automatically, expand sufficiently to provide for any increase in its operations which is likely to be thrown upon it. Moreover, if a sum be added to the cost of construction and credited to Profit and Loss, to represent the profit which would have been earned by the company if the work had been done for outsiders instead of for itself, this profit can only be made available for distribution by increasing the amount of capital contributed for new construction work; and it can hardly be considered good financial policy to increase indebtedness for the purpose of paying dividends. The only sound principle that can be adopted is to charge to construction all costs and expenses which are directly attributable to that construction, but nothing for indirect expenses, interest, or profit.

CONSOLIDATED BALANCE SHEETS AND EARNING ACCOUNTS

56. It frequently happens that a corporation in place of purchasing the properties outright as in the assumed case, purchases only the stocks of one or more existing corporations, leaving the properties themselves vested in these corporations.

This growing tendency to form large aggregations of capital on the basis of a control by one corporation of the whole or the majority of the stocks of a number of others has led to important developments in accountancy practice. It has generally been considered that the Balance Sheet of any corporation, prepared from books and records properly kept, would disclose its true financial position, but the development of this system of control has shown that such a Balance Sheet will no longer suffice for this purpose; and it is important now to realize the difference between an investment in a company representing only a small proportion of its capital stock, and an investment representing the whole or practically the whole, and carrying with it the absolute control of the operations. Thus corporation "A" may own the whole stock of corporation "B," both carrying on a similar business. Stockholders in "A" may know this fact, but have no means of ascertaining the real position of corporation "B." "A" having the control of "B" may turn over to "B" all its unremunerative work, with the result of showing large profits on its own accounts, while the accounts of "B" show correspondingly large losses. Corporation "A" in its Balance Sheet carries its investments as cost, probably merged under the general head of "Cost of Properties," with all its other capital assets. Corporation "B" may obtain loans from corporation "A," which largely exceed its current assets, and may be expended in construction work, or even lost in operations, while corporation "A" carries in its Balance Sheet these same loans as current assets recoverable on demand. It is only necessary to point out that many of the railroad receiverships twelve years ago arose out of a state of affairs very similar to that described, to show that this is not an imaginary condition.

Realizing the misleading character of the ordinary Balance Sheet in such cases, the Public Accountant has evolved the Consolidated Balance Sheet; the basis of which is the recognition of the common-sense fact that a network of companies connected with each other by control of stockholdings, is still in effect one undertaking, and that if the stockholders in the holding company are to have before them a clear statement of its position, legal technicalities must be brushed to one side, and the position of the holding company shown in its relation, not to these sub-companies, but to the general public. To give a pictorial illustration of this position, imagine a large cube containing a number of smaller ones; no change in size or position of the smaller cubes which arises inside the larger one, can in any way affect the latter, in which no change can take place except by the entry of something from outside, or the abstraction of something from inside. Thus the whole position can only be changed by outside influences and not by any relative changes of its component parts. The Consolidated Balance Sheet represents the true position of the whole group of cubes to the outside world, and is thus not the Balance Sheet of a corporation, but of a condition after eliminating all the relations of the cubes one to another. Debts due by one company of the group to another; stocks of one company owned by another; earnings of one company at the expense of another, are all eliminated. The amount by which the value of the stocks of any company on the books of another exceeds or falls short of the par value thereof, represents an addition to or diminution of the asset of goodwill in the final Balance Sheet; and as a result the capital assets in the Consolidated Balance Sheet consist of the total physical assets of all the companies (that is, land, buildings, plant, machinery, etc.), and in addition an item of goodwill represented by

(*a*) the goodwill asset in the Balance Sheets of the subsidiary companies, and

(*b*) the amount by which the aggregate book value to the holding company of the stocks of the subsidiary companies exceeds the par value of that stock.

Similarly, the capital liabilities represent the stocks and bonds of all the companies in the hands of the public, those owned between companies being eliminated.

The Consolidated Earnings Account should be made up on the same principles. Profits resulting to one company out of sales to another should be eliminated. Only sales and purchases to and from the outside public should be included, so that no profits are considered such except those made on deliveries outside the organization.

In other words, the whole organization is considered as merely a series of separate works under the same ownership, and the same accounting principles which would apply to a corporation owning one small factory, are applied to the large corporation owning the whole stocks of a number of subsidiary companies, which in turn own the stocks of other subsidiary companies, all the companies in the group themselves owning and operating their own factories. It will readily be supposed that in practice the preparation of a Statement of Earnings exactly on the basis here laid down is a difficult matter, and probably in all its elements has never yet been attempted; but inasmuch as a neglect of these principles, so far as the Profit and Loss Account is concerned, only means the swelling of the totals both of gross earnings and cost of operation, it is not of so much importance, provided that the valuation of the stocks of goods on hand is made on the basis of actual labor, material and expense involved therein, without any proportion of the profit of the different companies in the organization through which these products may have come.

A Balance Sheet of a corporation, whose only or principal assets are stated to be investments in other companies, should be looked upon with suspicion, unless the names of the other companies are given, and clear statements are also given of their financial position; and even then a collection of Balance Sheets cannot show the true financial position of the whole group until they are all combined into one and the inter-company interests eliminated.

ACCOUNTING PRACTICE AND PROCEDURE

INTRODUCTORY

1. The subject suggested for this treatise is so broad that it must be assumed that the intention was that the writer should have a free hand to deal with any matters relating to the profession of the Public Accountant, which might seem to him to be either of interest to its members, or of value in extending throughout the community generally a proper understanding of the part which that profession must necessarily take, even more in the future than in the past, in the development and regulation of commercial affairs.

A particular class to whom this subject should particularly appeal, and whose interest the author has especially in view, is the large and increasing number of student members who are entering the profession and into whose hands the custody of its high standards and ideals must necessarily pass in due course. To this class, therefore, the paper now submitted is intended particularly to appeal; and if in this endeavor matters of common knowledge to some of its readers may seem to occupy an undue portion of its space, they will, perhaps, accept the excuse that these matters may be of benefit and interest to others and may thus advance the best interests of the profession.

It is clearly impossible within reasonable limits to discuss fully all the various types of cases which come before the Public Accountant in his daily practice. The few here discussed have been selected as being among the most important and most valuable to the general public, and must not be considered as more than a small fraction of those many services which are rendered daily to individual clients in their private affairs, whether they involve weeks or months of arduous investigation, or merely consultations and discussions on important matters of daily occurrence.

ANNUAL EXAMINATION AND CERTIFICATION OR AUDIT OF ACCOUNTS

2. Among the most important of the public duties must be considered what is generally known as an Audit of Accounts of Corporations. Unfortunately this term "Audit" has obtained currency in a much more limited sense, being applied to the internal check upon transactions involved in the passing of accounts for payment; and the corresponding term "Auditor" more often than not is applied to or is held to describe an individual holding the position of Comptroller or Chief Accountant, or Head Bookkeeper of a Corporation. It is, perhaps, worthy of consideration, whether it is desirable to continue to use the term "Audit" as applied to work done and certificates given by Public Accountants; but in default of any better term and in view of the legal sanction given to its use in that respect in other countries, it is generally adopted in this treatise as applying entirely to the work performed by the Public Accountant to enable him to certify to the accuracy of periodical statements of account. Such an audit is of far-reaching importance, not only to the Directors and Stockholders of the Corporation interested, but also, to the general public who may frequently purchase the stock of the Corporation, relying on the certificate given by the Public Accountant.

Some important considerations affecting audit practice are suggested by the English Companies' Act of 1907, which was passed after an inquiry by a Royal Commission on which accountants were represented by one of their number, and which may be said to crystallize into law the customs of the most reputable companies adopted as the result of the forty-five years' experience under the law of limited liability in that country. Before considering the provisions of this act it may be interesting and useful here to state briefly the history of the independent and impartial audit of the accounts of corporations in England, where the practice, starting from small beginnings, has now become universal, and has at last received the indorsement of the law.

Until the passage in England of the Companies' Act of 1900, there was no law compelling a company registered under the Companies' Act to have an audit of its accounts, with the exception of banking companies, which were required, under the Companies'

Act of 1879 to have an independent audit, evidenced by a certificate in a form which has practically become the standard for all companies, and to which reference will hereafter be made. The original Limited Liability or Joint Stock Companies' Act of 1862 contained in a schedule, known as Table "A," a set of "Articles of Association" (here known as "By-Laws"), which was not compulsory, but which could be adopted by any company so desiring and was binding upon any company which did not adopt an alternative set. This Table "A" exercised a great influence, and where not adopted in its entirety, became the model for the Articles of Association of the best companies. It included a clause requiring an annual audit of accounts by persons appointed by stockholders, and the elimination of this clause in any substituted articles came to be regarded with more and more disfavor, so that in time this provision became practically universal.

The first stage of this audit consisted in the appointment by the stockholders, at the Annual Meeting, of certain of their number to conduct it. These lay Auditors had no qualifications for the position, either by training or experience; and while the fees paid them for their services were usually small, there can be little doubt that the money was, as a rule, practically wasted.

The next stage appears to have been the employment by the elected Auditors of Public Accountants to assist them in their work, provision being frequently found in the Articles of Association permitting this, and providing that the remuneration of the individuals so employed should be paid by the company. The next step was to recognize the fact that it was better for the stockholders themselves to make the appointment of Public Accountants, instead of delegating it to their own Auditing Committee, and the Articles of Association in their most modern form usually provided that at least one of the Auditors should be a Public Accountant. In this condition matters continued until the passage of the Companies' Act of 1900, which, for the first time, gave parliamentary sanction to the practice which had already become established in the majority of cases by the action of corporations and their stockholders.

The provisions relating to audit are contained in Sections 21 and 22 of that Act, the text of which is given in full on P. 37 of this paper. The general effect of these provisions is that at each Annual Meeting of the company the shareholders are required to appoint one or more Auditors, none of whom must be a Director or Officer of the company; that these Auditors shall hold office until the next Annual Meeting, and that their remuneration shall be fixed by the shareholders. Provision is made for appointment by the Board of Trade (a Government Department) in default of any appointment by shareholders. Appointment by the Directors is permitted only in the case of a newly organized company, and such appointees can hold office until the first Annual Meeting, with power, however, to the shareholders to remove them by a majority vote at a previous general meeting.

The Auditor being appointed by the stockholders, his responsibility was entirely to the stockholders, but he was subject to election each year, and cases frequently arose in which, owing to his making a report adverse to some action which the Directors may have taken, the latter, controlling the majority of stock, were able to prevent his re-election. This feature of the Appointment of Auditors was recognized as a defect, and the form of certificate called for in Section 23 of the Act of 1900 was also not entirely satisfactory; and in 1907 a new Act was passed amending various provisions of the Act of 1900, so that at the present time Sections 21 and 22 of the Act of 1900, together with Section 19 of the Act of 1907 (see P. 41), comprise the law in England on this subject.

The latter section establishes the Auditor's right of access at all times to the books, accounts and vouchers of the company, and empowers him to require from the Directors and Officers such information and explanations as he may think necessary. It requires the Auditor to make a report to the shareholders, stating whether or no he has obtained all such information and explanations, and whether or no the Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the company's affairs, according to the best of his information and the explanations given to him, and as shown by the books of the company.

The Auditor's Report must be read at the Annual Meeting and be open to the inspection of any shareholder, who is also entitled to a copy of both Balance Sheet and Report, at a specified charge.

The Act also provides that no other than a retiring Auditor can be elected at an Annual Meeting unless previous notice has been given of the intention to nominate another person, and a copy of such notice has been given to the retiring Auditor.

It will be noted that there is still no provision in the law requiring that the audit should be made by a Public Accountant, but it has become so universally recognized that a lay audit is generally worse than useless, that it is now quite the exception to find the certificate of any but a Public Accountant affixed to the Balance Sheet.

There is one other very important point of distinction between the position of the Public Accountant acting as Auditor of a corporation in England and in this country, viz: that in England he has always been appointed by the shareholders, while in America, at present, with a few notable exceptions, he is appointed by the Directors or Officers, although in most cases the Directors hold the control of the company and the appointment by the stockholders would practically have the same result. The position of the Accountant in such a case is widely different. When appointed by the Directors his legal responsibility is to them instead of—as it should be—to the stockholders and to the public, and while this should not affect his moral responsibility to the latter, it places such a limitation upon his powers as to seriously diminish his usefulness; for if he reports adversely upon any of the actions of the Directors they can suppress his report and publish the accounts of the company as prepared by themselves without any certificate, and the Auditor has no right whatever to communicate the true facts to the stockholders. On the other hand, if he be appointed by the stockholders, it is not only his right but his duty to bring before them—preferably in his certificate affixed to the Balance Sheet, but certainly in some way—any material facts with which they should be acquainted. Furthermore, if the Directors appoint the Auditor they can limit the scope of his inquiry in any way they think fit, while appointment by the stockholders would carry with it no limitations and the whole responsibility as to the work which he shall do or not do is thrown—and properly thrown—upon the Auditor.

Fortunately, so far, there has been no tendency here on the part of stockholders or Directors to appoint lay Auditors and the objections thereto, which might under other conditions require much emphasis, can now be noted in a few words, viz: that they have no training and not sufficient knowledge of the principles involved in a correct statement of account, and that, on the other hand, they may have that dangerous kind of superficial knowledge, such as, in the case of a quack doctor, might lead to a wrong diagnosis of the case, or, in an amateur engineer, to the preparation of designs of a bridge without any proper consideration of the strains and stresses involved. As an individual or corporation would not think of employing an unqualified doctor or engineer, so it may be hoped that they would not employ an unqualified Auditor.

There is, however, another danger in prospect, viz: the compulsory Government audit. In uttering a warning against Government audits the profession is not merely protecting its own interests, although these might be temporarily affected if the practice continued to increase; the real objection lies in the certainty that such examinations must, on the whole be inefficient. The duties of the Government Auditor, as he exists at the present time in the shape of Bank Examiners, Insurance Commissioners, Public Service Commissions, and last, but not least, the Interstate Commerce Commission, are necessarily defined and limited by law, and tied and bound by precedents, and have none of that elasticity which is necessary if an audit is to advance with the times and to suit itself to the changing conditions which arise, not merely from decade to decade, but from year to year, and even from day to day.

Moreover the system of filling Government appointments is not conducive to the creation or maintainance of an experienced and efficient staff. While the pay for the lower positions is probably higher than obtains in commercial circles, that for the higher is low; and the higher the positon the smaller, proportionately to the responsibilities, is the amount of remuneration. Consequently, there is little inducement to the better man to remain in the service, and it becomes practically impossible for such a service to attain to anything like the level of efficiency which will be found in the office of a practicing Public Accountant. Another and greater objection, from the stockholders' point of view, is that the Government Auditor must necessarily confine his duties to insisting upon the observance of the law and has little, if any, care for the interests of the stockholders.

The insufficiency of Government examinations as audits, in the proper sense of the word, has been frequently recognized by Comptrollers of the Currency and State Banking Superintendents, who have in their official reports gone on record as being in favor of independent examinations of banks and trust companies by Public Accountants on behalf of Directors and stockholders, in addition to the usual official examination. There can be little doubt that there will sooner or later be a reaction against the extension of Government control, which is now so much in evidence; and that reaction, when it comes, will probably take the form of the opposite extreme of little or no control—a condition equally to be deprecated unless it be accompanied by the growth of control by stockholders, exercised through Public Accountants, appointed by them as Auditors. The requirement of regular and efficient audits of the accounts of corporations by qualified Public Accountants must depend largely upon public opinion; and it is better that the practice should become a regular one as a result of pressure exercised by stockholders upon Directors, rather than as a result of hasty and possibly inefficient legislation.

The natural and healthy growth of a sound practice on its own merits, and because it is found to be a protection to the stockholders and to the public, is alone likely to be permanent; and it is to be hoped that the experience in England already quoted will be found to be the experience here. The great importance of independent periodical audits by Public Accountants is now recognized by the Directors and Managers of many commercial institutions, as well as the increasing value which attaches to their certificates. If this movement, now well started, be supported by public opinion, as represented by stockholders, there is no doubt that the practice will grow at least as fast as the profession, by its own natural growth, can take care of the work.

The responsibility which the Public Accountant assumes in certifying to the accounts of a corporation will be found on careful consideration to be well defined in the form of certificate required by the English Companies' Act of 1907, above quoted, viz: that he shall report whether, in his opinion, the Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the company's affairs, according to the best of his information and the explanations given him, and as shown by the books of the company. The several phrases in this certificate deserve special attention.

(*a*) "In his opinion," as a skilled professional man, endowed with special qualifications resulting from his training and experience.

Every Balance Sheet must be largely a matter of opinion; for example: the value of the Debts Receivable, the Inventories of Materials and Supplies, and particularly of Work in Progress, and the division of Expenditures between Capital and Revenue; the inclusion in the books of all necessary information with regard to the affairs of the company, the sufficiency of the provision made for Maintenance Charges and Depreciation, and for Reserves for possible Losses; the efficiency of the System of Organization and Accounting as a reasonable protection against fraud or defalcation—all of these matters require, for their decision, skill and experience.

The criticism is often made that this phrase weakens the certificate; but if the necessities of the case be considered, and if it be remembered that the opinion is one formed after an exhaustive and careful study of all the facts and evidence obtainable by a man whose whole training and experience has especially qualified him to give such an opinion, it will be seen that the words are not a mere empty phrase but an essential part of the certificate. So far from weakening the certificate they may rather be considered as strengthening it, in that they imply that the signer has given his certificate, not with foolhardy assurance, but with a realization of the inherent impossibility of saying, absolutely, that one Balance Sheet is correct and another incorrect.

(*b*) "Properly drawn up." This implies that the different headings in the accounts submitted are proper descriptions of the items included thereunder; that there is no concealment of material facts, the knowledge of which is essential in enabling the present or prospective stockholders to form a judgment of the value of the investment, and the omission of which would be prejudicial to their interests. In deciding whether this requirement has been met, the Auditor must recognize that there are often facts as to which it would be of interest and value to stockholders to be informed, but the public disclosure of which might severely damage the company and its stockholders, and yet which, in the opinion of the Public Accountant, are perfectly proper transactions, and in the best interests of the company. The Public Accountant should be the best judge as to what should or should not be disclosed, and be able to satisfy his clients that his views are correct and should be adopted.

(*c*) "True and correct view of the state of the company's affairs." This phrase involves, not only the mere clerical accuracy of the figures, but their substantial business accuracy, independently of the books, subject always to the necessary qualification that the Public Accountant, even with his special training and experience, is, after all, human and cannot discover facts of which no trace is to be found on the books or records of which he has knowledge. Such matters, as the Valuation of Inventories, Investments, Book Debts, etc.; the full estimate of all ascertainable Liabilities and Obligations, contingent or otherwise; the full and correct statement of the Profits for the period covered by the examination; and the clear and separate disclosure therein of any unusual items not incident to the ordinary business of the company, are all involved in the term "true and correct view of the state of the company's affairs."

(*d*) "As shown by the books of the company." This phrase does not imply that the duties of the Auditor are properly fulfilled if he satisfies himself that the Balance Sheet agrees with the books, as it is sometimes supposed. The phrase immediately preceding, "according to the best of my information and the explanations given to me," shows clearly that a much wider duty rests upon the Auditor, namely: to satisfy himself that the Balance Sheet, as already stated, sets forth a true and correct view of the state of the company's affairs, according to all the information obtainable; and, further, that the books also set forth this same condition. It is, therefore, incumbent upon the Auditor, if he certifies the accounts of a company, to see that the books are correct as well as the Balance Sheet, and that any changes which he may have to make in the Balance Sheet have been properly recorded and put through the books.

There are many other matters frequently touched upon in the certificate in addition to the above which may be described as the "operative" phrases; but whatever the form may be it is essential that the certificate should be clear, specific, and, above all, accurate, and that any qualifications, which it may be necessary to insert, should be set forth in unmistakable terms, so as to put those who read it upon their guard, and to suggest to them the questions which shall be put to the management of the corporation if further information is desired.

It may be useful here to state a few general principles in connection with the form a qualification should take. Various expressions are used, such as "accepting" or "subject to" such a condition of things. The former words should imply that while the accountant is not in a position to verify the statement to which it relates, yet he has no reason to believe that it is inaccurate in any respect; while the expression "subject to" should imply that the accountant is not satisfied with the conditions disclosed, and is prepared only to certify to the accuracy of the statement excluding the item to which he takes exception.

It must never be forgotten that the Public Accountant has no right or duty to dictate the policy of the company; he cannot compel it to make sufficient provision for all necessary charges, such as Maintenance, Depreciation, Bad Debt Reserves, etc., but he can and must call attention in his certificate to the fact of the omission or insufficiency of any such provisions, leaving it to those interested as stockholders, or in any other capacity, to take the question up directly with the officials and satisfy themselves on these doubtful points. If the Public Accountant has the necessary qualifications; if the work of his subordinates is properly directed and supervised; and if his examination has been as thorough as it should have been—in other words, if he has done his whole duty as a Public Accountant—it is hardly possible for any substantial or material errors of omission or commission to be afterwards found in a Balance Sheet so certified.

The Public Accountant's responsibility in respect of his certificates is largely moral, and only to a small extent legal. It is commonly supposed that his work is a mere ascertainment of facts, and yet that is the simplest and frequently the smallest and least important part of the work involved in his periodical examinations. He is rather employing his trained mind and organization to make as near an approximation to actual facts as is humanly possible or practicable, but he has also to consider degrees of approximation, or, in other words, it is the percentage and not the amount of the possible error by which he must be guided. His legal responsibility is necessarily limited to gross errors of omission or commission, and would hardly extend to errors of judgment; but it must be remembered that what might be merely errors of judgment on the part of an individual, without his training and experience, may easily be gross errors on the part of the Public Accountant.

RELATIONS WITH THE BANKER

3. An important development in the relations of the Public Accountant to the Banker seems likely to result, partly from the provisions of the Currency Law passed by Congress in 1908, and partly from a report made by the Committee on Credit Information of the American Bankers' Association. The law provides that the National Currency Associations therein provided for shall have power to render available, as a basis for additional circulation, commercial paper held by the national banks.

The term "commercial paper" is defined as including only notes representing actual commercial transactions bearing the names of at least two responsible parties, and having no more than four months to run, and upon such paper it is provided that circulating notes may be issued to an extent not exceeding 75 per cent. of the cash value thereof. It is a curious factor in the banking situation that commercial bills as here defined have hitherto formed a very small part of the assets held by national banks, which consist mainly of one or two-name paper representing mere loans and not in any sense completed commercial transactions; and yet all authorities on banking practice have agreed that such commercial paper is the best class of asset that a bank can hold, and in European countries it forms, by far, the largest proportion of the total assets.

One effect of the present practice has been to reduce to comparatively small dimensions the operations of exchange represented by drawing upon a customer for the amount of his indebtedness. All Public Accountants will realize that Bills Receivable and Bills Payable, representing drafts drawn against products and accepted by the producer, are quite rare; and that instead of considering that such a method of financing is especially sound and practicable, the desire of most commercial businesses is to claim that they have accepted no such paper, while there does not appear to be any similar objection taken to a large amount of pure loan paper given direct to their bankers in the shape of promissory notes. Another result of this state of affairs has been that institutions have grown up whose business is to advance money on Book Debts, involving the borrower in a large amount of unnecessary expense, and even then probably leaving little or no profit to the lender by reason of the great amount of clerical work involved in keeping a proper account of the assignment, and collection of the actual debts which form the security for the advances.

Coincidently with the passage of the new law, the Committee on Credit Information of the American Bankers' Association has submitted a somewhat noteworthy report, in which an extension of the practice of discounting commercial bills is advocated in preference to the present more usual form of making straight loans, secured by what is in effect a promissory note; and coupled with this recommendation comes, entirely unsought and uninfluenced by the accounting profession, a strong recommendation that bankers require a report by a Public Accountant on the financial condition of those concerns whose paper they are asked to buy. While such examinations are not unknown, the competition between banks has prevented the practice becoming at all general; for, as bankers have frequently admitted, if they were to insist upon the production of statements certified by Public Accountants the prospective borrower would quickly remove his account to an opposition bank, and would there obtain all the accommodation he needed without any such "red tape" restrictions.

If the new currency law eventually proves to have re-introduced and made popular the old-fashioned, but highly practicable Domestic Bill of Exchange, it will, on this account alone, deserve the gratitude of the community.

The importance to the banker of the certificate which the Public Accountant can give him can hardly be over-estimated, provided, that it is clearly understood that the accountant is responsible in such cases, directly to the banker, even more than to his client, and provided also that the banker will assist accountants by drawing up a form of the statement which they would require to be certified, setting forth clearly and without the possibility of concealment all the essential facts which the banker requires to know. Such action on the part of the banks as is now contemplated, while it must tend still further to increase the work and responsibilities of the Public Accountant, will, at the same time, aid the moral and financial wellbeing of the community, not only by preventing clear cases of contributory negligence, or even fraud on the part of borrowers, but also by reducing to a minimum their tendency to put forward only the most optimistic side of their affairs, and to slur over the bad features.

FORM OF ACCOUNTS

4. Another question closely related to the audit of accounts, is the form in which they should be stated. It is the Directors who submit the accounts to the stockholders, and they have the right to decide upon the form in which those accounts shall be submitted, and to require the Public Accountant to certify to them in that form, or to state in what respect he finds them incorrect. The latter will have his own ideas as to the best method of stating the accounts, and is fully entitled to put his views before the company's officials and endeavor, in so far as he can, to mould their ideas to his; but he must remember that the object of the accounts is to set forth the "true financial condition" and there is no stereotyped way in which this should be done. There is a good deal to be said for uniformity in the matter of the form of statement of similar companies, but this is a matter of convenience more than a necessity, and no preconceived ideas as to the superiority of one form over another should be allowed to interfere with the rights of the Directors or Managers to state the accounts in any form they please and to call upon the accountant to certify them or not.

The standard form of Balance Sheet, which has a great deal to be said in its favor, divides the assets into three classes, namely: Capital, representing the fixed investment in the property; Current, representing the assets which are being turned over and converted into a different form day by day; and Deferred, representing expenses incurred in advance for some succeeding period; and to these three is frequently added a fourth, representing the assets held for special funds which may have been set aside out of the profits or otherwise for specific purposes.

On the liability side a similar classification prevails, namely: Capital Liabilities, representing the Capital Stock and Funded Debt which have been contributed and remain fixed at any rate for a number of years; Current Liabilities, including Floating Debt, which have to be paid off in the ordinary course of business from day to day; Special Funds set aside for various purposes, such as Depreciation, Sinking Fund, etc.; and, finally, Surplus or Profit and Loss Account, representing the accumulation of undistributed profits. This form is that most commonly adopted here, each of the principal headings being again divided into such sub-accounts as may be desired. In

England, however the standard form is of a different nature altogether. Each separate class of asset is set out by itself in the Balance Sheet and arranged in the order of ease of liquidation—that is to say, the most fixed assets are stated first, followed by those which are slightly more realizable and ending with the most realizable of all, namely: Cash.

It is worth noting here that Section 21 of the English Companies Act of 1907 (See P. 41) requires the publication of the Balance Sheet of every company drawn up so as to show the general nature of such liabilities and assets, and how the values of the fixed assets have been arrived at.

Reference is made to these two forms because they are probably more widely divergent than any two Balance Sheets that will be commonly found here, while both classes are certified—and quite properly certified—as representing the true, financial condition by Public Accountants of the highest standing.

The same differences will apply in the statement of Profits, whether they shall be detailed or not, divided into one or more subdivisions, or stated all in one total. The main and important question is: Are the Profits correct and does the method of statement correctly set forth all the material elements which go to compose them. The most satisfactory form will probably be considered that in which Profit and Loss Account is divided into three portions, known respectively as: Operating Account, Income Account, and Profit and Loss Account. The first portion will give the actual results of the operations of the property; the second will contain the net operating results, and in addition any miscellaneous income derived from outside sources, and on the other side the charges against the total income, in the shape of amounts paid for use of any part of the operated property, losses on miscellaneous investments and other items of such character, together with interest on temporary loans and bonded debt; and in the third portion, or Profit and Loss Account, would appear the balance brought forward from the preceding year, the net surplus income or profit for the year after paying all necessary expenses and fixed charges, and on the other side the disposition of the resulting balance in dividends and other voluntary appropriations.

There is much variety in the class of items which are charged to this third portion of the account; and as the practice of charging to Profit and Loss in preference to Income is to be deprecated, unless in exceptional cases, it is perhaps better to state generally what items may properly be so charged, with the inference that everything which does not come within this classification should go to either Operating Account or Income Account. Proper charges or credits to Profit and Loss may be defined as follows:

(1) Extraordinary items of receipt or expense not applicable to any particular year, such as profits realized on sales of property, or losses on sales or dismantlement of property, or due to its reconstruction. The loss in this class of cases is closely related to the renewal or depreciation charges on the same property, which should properly go to the operations of a particular year. Frequently a property is abandoned for purposes of reconstruction, which, if it had not been for such reconstruction, would have remained in service for a long period to come and have been maintained in a perfectly efficient condition at a small fraction only of the loss caused by its abandonment. In such cases it would seem that the proper distribution of the charges between the Operating Account and Profit and Loss Account should be to charge to the Operating Account so much of the difference between the original cost and the value at the time of abandonment as has not already been provided for through charges to Operating, and to charge the balance, namely: the difference between the depreciated value at the time of abandonment and the scrap value realized, to Profit and Loss Account. This is a principle fairly easy of application, which might well be adopted in the various classifications which are now being put forward by Government departments for use by railroads and public utility corporations.

(2) Expenditures on improvements and betterments representing the creation of actual additional property. The propriety of charging these items to Capital Account from a strictly accounting point of view cannot be denied; but where such expenditures, though resulting in additional property, are incurred, not for the purpose of increasing the earnings, but with the view only of reducing future operating expenses, it may well be doubted whether, as a matter of business policy, the charge to capital is wise or prudent. Such expenses may be looked upon rather in effect as advanced payment of operating charges, and yet not being operating charges they cannot fairly be placed in the Operating Account. To charge such ex-

penditures to the surplus resulting out of previous years' operations may be considered fair and conservative treatment.

(3) Discounts and premiums on bonds. Discounts and premiums on bonds are in effect an addition to or deduction from the interest rate paid on the bonds over their life, and as such should strictly be included with interest charges in the Income Account by proper installments each year. In practice, however, it is frequently desired to write off the whole of the discount at as early a date as possible in preference to carrying it as a deferred and unrealizable asset for a long period of years, and no possible objection can be raised in such a case to providing for the full amount out of the surplus earnings of previous years.

(4) Discounts and premiums on stocks. The treatment of discounts and premiums on stocks, however, requires somewhat different consideration. In the first place it is somewhat questionable whether stock can be issued at a discount; and in the case of both discounts and premiums, the more correct view would seem to be that the stock is sold for whatever it will fetch, and that any discount or premium should be considered as a deduction from, or addition to the par value of the stock on the face of the Balance Sheet.

Incidentally there is a great deal to be said in theory for requiring that the capital stock of a corporation should not have any specific par value, but should merely provide for so many shares, these shares being sold from time to time for whatever they will fetch. In fact, this is done at the present time by individual stockholders through the medium of the Stock Exchange, but the objection has always been raised to the absence of a par value for the reason that it would provide unlimited opportunities for improper manipulation by unscrupulous promoters. As long, however, as it is permissible, as it still is in many cases, either legally or by legal fiction, to sell stock at a discount, the prevention of such abuses hardly seems possible; and the present method of a fixed par value is no better, and in many ways a good deal more inconvenient, than the old method in force in the early part of the last century. As long as stock has a fixed par value it is better, theoretically, to treat premiums thereon as Receipts on Capital Account, but no serious objection can be raised to crediting them to Profit and Loss Surplus.

The above four classes of items would seem to cover all those which may or should with propriety be eliminated from the Income Account of a particular year, from which it follows that the common practice of charging to Surplus Account ordinary items of operating expenses which happen to have been omitted by accident from the preceding year's accounts is incorrect and misleading in that, over a series of years, it understates the total operating cost of the business. This is a feature in the form of the statement of accounts which might well receive more attention from the profession than hitherto.

CERTIFYING THE PROFITS AND DETERMINING THE PURCHASE PRICE FOR A BUSINESS

5. While an important part of the practice of a Public Accountant consists in the examination of the accounts of corporations for the purpose of the issue of additional stocks or bonds, or for the sale of the business, these reports almost universally have been made on behalf of and under instructions from the promoters or vendors interested in disposing of the property. In such cases the responsibility and the rights of the Public Accountant cease when he has submitted his report, and he is usually not consulted at all as to the means or methods by which the securities are offered to the public for subscription. In place of a regular prospectus giving the fullest particulars of the property, supported by reports and valuations of independent accountants, engineers, valuers, etc., and issued on the direct authority of the Directors of the new corporation and the bankers interested in its flotation, there is usually found a letter from the president of the selling or borrowing company containing bare statements of the alleged facts, with no supporting evidence of any kind. The bankers interested in the flotation relieve themselves of responsibility by a specific reference to the letter as their authority for the statements put forth, and no doubt they are thus legally, if not morally, safeguarded. The objections to this method of advertising public issues are very numerous and the following may be given as the most important:

(1) The president or other officer of the borrowing or selling company is necessarily biased in favor of the deal which it is proposed to put through, and represents entirely the company and its stockholders, and not in any way the public, who are being invited to furnish new capital.

(2) Very few of the important facts in connection with the assets and the earnings are within his own knowledge or have been made by him the subject of any special investigation.

(3) He may be deceived:

(*a*) By his own excessive optimism;

(*b*) By the excessive optimism of his subordinates;

(*c*) By the mistakes of his subordinates;

(*d*) By the frauds of his subordinates, or

(4) He himself may deceive:

(*a*) By his own mistakes, or

(*b*) By his own fraud.

The English practice, with reference to the issue of prospectuses, is worth a reference. Under the English Companies' Acts of 1900 and 1907 (See P. 39), every company inviting subscriptions for capital is required to file with the Registrar of Joint Stock Companies a copy of its prospectus, or, if there is no prospectus, a statement in lieu of the prospectus, containing the following, among other information: the names and addresses of the Directors; the names and addresses of the vendors of the property purchased or proposed to be purchased or acquired; the purchase price, distinguishing the amount paid for Good-will; the amount of commission payable for procuring subscriptions for any of the capital offered for subscription; the estimated amount of the organization, and other expenses preliminary to commencing operations; the amount to be paid to the promoter and the consideration for such payment; the dates of and parties to every material contract, and the time and place at which such contracts may be inspected; the names and addresses of the Auditors; and particulars of the nature and extent of the interest of every Director in the promotion of the company or in the property proposed to be acquired. In addition, it is the regular practice in all cases, except that of an entirely new business not yet established, to incorporate in the prospectus a certificate of a Public Accountant, as to the earnings for a period of years, and frequently as to the value of the net Current Assets, where these are to be taken over.

Bankers interested in the flotation of new securities frequently, for their own protection, have required reports from Public Accountants, but it is seldom that these reports have been incorporated in the prospectus; although now there is a slight tendency observable to adopt this practice, and, within the last year or two, a few prospectuses of the kind so familiar on the other side of the Atlantic have been issued.

It would seem highly desirable that there should be included in every prospectus, or offer of stocks or bonds for sale, certificates of a Public Accountant as to the Profits, Current Assets and Current Liabilities, and reports by engineers or other experts as to the value of the Capital Assets acquired or to be acquired; and, furthermore, that the amount paid for Goodwill, which is largely represented by the optimism of the promoter, should be clearly and separately set forth in the prospectus and not, as is now invariably the case, covered up under the vague term "Cost of Properties." With such additional protection over that now given them, the public will gradually become aware of the fact that many of the so-called bond issues of the present day have little, if any security, better than that of common stock, and are often, in fact, saddled with all the risks of the business in order that common stock of no intrinsic value may reap the eventual profit.

In the belief that such certification by a Public Accountant must form a large part of his practice within a very few years, the following outline of his duties in this respect may be of interest:

In the first place his responsibility is solely and entirely to the public. If he is not honestly satisfied as to the good faith of the promoters and as to the prospects of obtaining the expected results held forth in the prospectus, he should decline to be identified with it or to certify to any figures contained therein. In order that the public, as well as himself, may judge of the results, the period covered by his examination and certificate should be long enough to give a true reflection of the earning capacity of the business, or, if for any reason a sufficiently long period is not available, the reasons should be stated. In no case should the average profits alone be certified, unless the stating of an average in place of the separate years is of no material importance; but it will usually be found that where the promoters desire to have an average stated instead of the separate years' results, it is for the purpose of making a better showing than is really justified.

On the other hand, while the Public Accountant is bound to see that all material facts are set out in his certificate, he is equally bound to see that they are not set out in such a way as to unduly prejudice the promoter's or vendor's legitimate interests by reducing the earnings below the figure at which they may be fairly stated, or by omitting to adjust extraordinary items of Expense or Revenue. The effect of a change in import or export duties or bounties, the nature and term of contracts in force, the tenure of the property in which the business is carried on, the credit of the concern, the effect of possible competition on what is at present a monopoly or of a cessation of competition resulting from a consolidation, must all be carefully considered and a fair balance held all through between the seller and the purchaser. It will frequently be found necessary also to average certain profits or losses taken up in the books in a specific year over a period of years longer or shorter than those covered by the examination.

It should here be noted that there is a marked difference between a statement of profits prepared for and certified to an Annual Meeting of Stockholders, and one that is prepared for the purpose of showing to prospective investors the earning capacity of the business. In the former case the accounts are adopted by the stockholders at each Annual Meeting, reserves of various kinds are made from the profits of good years to be carried forward to bad years, changes in methods of valuations of different classes of assets are made from year to year, and, generally, the accounts are drawn up more with a view of determining the amount which can safely be divided among the stockholders in dividends, than of showing the actual earning capacity of the business. In the latter cases, however, it is essential that the profits certified for each separate year be those actually earned from the operations of that year, any arbitrary additions or deductions due to changes in bases of valuations or otherwise being taken into consideration, and that they be free also from abnormal fluctuations due to unavoidable contingencies which should be provided for proportionately over a period of years.

Careful consideration must also be given to the effect that large adjustments made or omitted to be made would have upon the purchase price paid for the business, where that depends, as is usually the case with Goodwill, upon a certain number of years' purchase of the certified profits. For instance it is usual that the vendor should guarantee collection of the Accounts Receivable and the maximum amount of Liabilities Payable; but such a guarantee is not sufficient when the payment to be made for Goodwill is dependent upon the profits, for the reason that an addition to the purchase price of, say, five years' purchase on a bad debt or omitted liability of $1,000 may be cheaply obtained by the vendor repaying the $1,000 so represented. Similarly, if there is a change in the basis of Inventory valuations at the beginning and end of a period covered by the certificate of earnings, any such error would, in arriving at the purchase price for the Goodwill, be multiplied if the period upon which the Goodwill is based exceeds that covered by the certificate.

In carrying through a consolidation of a number of businesses into one corporation, the following plan has been found by experience to be the most satisfactory, and to give the fairest results to all parties:

There should be a Valuation Committee selected from the different companies, whose duties should be to supervise the taking and pricing of the Inventories. The Capital Assets should be appraised by competent engineers or other experts; statements of the Profits and Losses of the different companies should be certified to by a Public Accountant, the same accountant being employed for all companies; and all the book Debts and Liabilities of his company should be guaranteed by each vendor. The whole work, including the immediate taking of the Inventories and the making of the appraisals, should be under the entire direction and supervision of a Public Accountant agreed upon by all parties, who would also supervise the preparation of the Liquidation Accounts for each of the old companies, and thereupon certify the final amount to be paid to each, a proportion of the purchase price being retained from each vendor pending such final liquidation.

The Goodwill should be based upon a certain number of years' purchase, previously agreed upon, of the average profits for the period covered by the investigation, and the allowance of such an amount involves also that in cases where a loss is shown instead of a profit an equivalent deduction, frequently termed "bad-will," should be made.

Such a plan of consolidation as that laid down is the only one which can be carried through without injustice to the parties, who will otherwise haggle as to prices, each endeavoring to obtain the best of the bargain, with the result that there might be friction and bad feeling in the new organization, leading to an inefficient organization, and probably in the end to loss and disaster.

The experience of the Public Accountant, acquired during years of practice, qualify him to a greater extent than any other member of the community for dealing in a broad and scientific manner with all the varied problems involved, requiring the exercise of the same ability, judgment, and integrity, in carrying out such duties as already demanded in the case of audits if he is to do full justice—and no more than justice—to both present and prospective owners.

RECEIVERS AND ASSIGNEES IN BANKRUPTCY AND PLANS OF REORGANIZATION

6. The Public Accountant is peculiarly fitted by his ability and training and administrative experience to take hold of and manage large industrial undertakings, protecting alike the interests of creditors and owners, avoiding unnecessary sacrifice and tedious delay in liquidating the property, investigating the facts, probing into irregularities due to ignorance or crime which may have contributed to the collapse of the undertaking, and seeing that the interests of the community are preserved by the punishment of those, if any, who may be criminally responsible for the conditions found; and finally, as a result of his investigations, forming his conclusions, reporting to the courts, the creditors and the stockholders, and, if possible, preparing and carrying through plans for the reorganization and rehabilitation of the business.

The frequency of the necessity for the reorganization of large corporations is one of the natural results of the present methods of their formation, and in nearly all cases will be found to be due mainly to over-capitalization resulting from the unduly optimistic views or the greed of promoters, frequently accentuated by large expenditures incurred for new construction exceeding the financial ability of the company and consequently defrayed to a much too large extent out of borrowed money.

The consideration of a plan for the reorganization of a property which has been reduced to a condition of insolvency requires a full and accurate knowledge of all the existing conditions with regard to the property and its past and probable future earning capacity. The elements to be investigated and determined will therefore be as follows:

(1) The sources and nature of the Gross Earnings and the prospects of any increase therein without further expenditures for development.

(2) The cost of operation, with particular reference to the effect thereon of bad management or bad organization, and to the possibility of remedying these conditions; and the proportion which the cost of operation has borne and may be expected to bear to the Gross Earnings.

(3) A comparison of the Gross and Net Earnings and Capitalization of the property, with some actual or desirable standard, so as to determine the proportion which one should bear to the other if the reorganization is to prove successful.

(4) Hence to arrive at the total interest-bearing and dividend-paying capital, which the reorganized property will stand on some fixed interest basis.

(5) The rank of the different classes of obligations having regard to the property pledged as security therefor; the margin of security; the rate of interest; the date of maturity; the equivalent par value on the basis of the standard rate of interest adopted for all classes; and, if practicable, the extent to which the properties specifically mortgaged show sufficient earnings to meet interest on the indebtedness secured thereon. This class of information will probably require a report from an engineer or other expert on the value and the condition of the physical property.

(6) Following upon the determination of these factors a consideration of the various separately mortgaged divisions of the property, with a view to determining whether any should be abandoned to the bondholders, rather than be included in a reorganization; and here it is important to observe that the contribution of any specific piece of property to the general organization is not necessarily measured by its ability by itself to earn interest on the obligations secured thereon. Numerous other factors will enter into a consideration of this point, and it may easily appear that a property earning little or nothing towards payment of its obligations is sufficiently valuable to the organization, as a whole, to be retained if possible.

(7) Another important factor is the amount of new money required

to be introduced for the purpose of paying off the floating debt and rehabilitating the property, and the best method of raising such money—whether by the issue of new prior lien securities ranking in front of or on an equality with those issued in exchange for existing mortgages, or by assessments on junior classes of securities. In the latter case it is important that sufficient inducement be given to the junior classes, in the proportion of new securities issued for old, to induce them to pay these assessments; while for the assessments themselves, the securities issued should represent the par value of the cash paid in on some reasonable market valuation.

Upon the information and facts so ascertained will depend the final allocation to be made of new securities in exchange for old, as far as possible, in equitable proportions to the different classes of security holders, although at this final stage an element of bargain must necessarily be introduced by reason of the different interests involved and the necessity of the reorganization managers coming to terms, separately, with each class of holders.

Enough has been said to show that the whole of the work involved in the preparation and carrying out of such a scheme may well be entrusted to the Public Accountant; and while a strong reorganization committee is, perhaps, a necessity in order that all classes of security holders may feel that they are represented in the preparation of the scheme, no such committee should proceed without keeping in close touch and consultation with some representative member of the accounting profession, who should be retained as their technical adviser.

In other countries accountants have in many cases established and maintained their reputation as leading figures in the commercial community in the class of work here described, and have thereby acquired so high a reputation and standing for the profession, that it is only in rare cases that an accountant is not, as a matter of course, appointed to the position of receiver or liquidator, and entrusted with the entire work of either liquidating or reorganizing the business.

COST ACCOUNTING AND SYSTEMS

7. Increasing competition resulting in a narrow margin of profits and the greater magnitude of business undertakings, making impossi-

ble a close supervision of all details by the responsible managers, have raised to a matter of first importance the quick determination of accurate costs of processes of manufacture and finished products.

Modern systems, based upon the cost of the service rendered by the manufacturer to the public and so showing the amount of material, labor, and other expense put into completed work, are rapidly superseding the old forms, based upon the cost of the service rendered by the public to the manufacturer, *i. e.*, upon the quantities of goods purchased or of labor paid for; and if such systems are to be of the greatest possible use, it is further essential that the results should be available promptly and in concise form, so that defects disclosed in organization, management, or detail may be quickly remedied.

The principle objects to be attained by a modern cost system may be stated as follows:

(1) To ascertain the cost of the same product at different periods in the same mill or at the same period in different mills, and so to remedy inequalities in cost by reducing all to the results shown by the best.

(2) By an accurate ascertainment of the cost of output to maintain running book inventories, which will show at any time, without a physical inspection, how much of each class of materials, supplies, etc., is on hand, and so reducing stocks and capital invested to the lowest level consistent with efficiency; and at the same time avoiding the delay, expense and interruption to business consequent upon the old method of taking a complete physical inventory at a specific date in each year.

(3) The preparation of statistical information as to costs of parts, quantity, and variety of output; relative efficiency of different classes of labor and relative costs of labor; and material, between different mills and periods.

(4) The preparation of periodical statements of Profit and Loss in a condensed form, readily giving Directors all material information as to the results of the business. This is, perhaps, the least important of all the objects aimed at; and it may safely be said that the cost of a system designed merely to produce periodical statements of Profit and Loss, without providing for the other and far more important objects set out above, may be considered as money thrown away.

In devising such systems it is important to avoid too great multiplication of detail, giving theoretical rather than practical accuracy, and a very high cost of installation and operation; and it is equally important that the system installed should take into account local conditions.

The preliminary step to the devising of any cost system should be a careful study on the ground of all conditions governing the operation of the factory, not omitting a consideration of the personnel of the managers and staff, to whom the completed system must be eventually handed over, and without whose thorough and hearty co-operation no ultimate success is possible.

There is a tendency to attach undue importance to the terms "cost accounting," "cost department," "production accounting," and similar terms applied to and held out as a special definition of this class of work, and to believe that it is separate and distinct from the practice of accounting. While in many respects cost accounting work is of a highly technical character and different from other branches of the work of the profession, yet those same qualities and that same training, ability, and experience, which are called for in the latter, are equally necessary for the successful construction and installation of a complicated system of cost accounting; and if the best results are to be obtained, the designer and operator of a cost system must be first of all and pre-eminently a Public Accountant.

CONSULTING ACCOUNTANTS

8. It is a common practice on the part of corporations and individuals to retain counsel on the basis of a yearly consultation fee, which gives them the right to call upon him for legal advice at any time. This practice might, with advantage to his clients, be extended to the Public Accountant, and there are signs already that such a course is beginning to be more seriously considered. There can be little doubt that agreements dependent upon accounts or the interpretation of accounts would frequently be better drawn and lead to less confusion, difficulty and litigation afterwards, if, before being finally settled, they were submitted to a Public Accountant familiar with all the facts. Similarly, the examination of witnesses in cases involving accounts or figures would be much facilitated and the necessary points more clearly brought out if an accountant were retained

in every such case to thoroughly investigate the principles involved and to be at counsel's elbow, during the whole of the proceedings, to prompt him on these technical questions.

Such work, and many other matters of similar character, form the duties of a Consulting Accountant. This position, which represents only a small part of the field which the Public Acountant's practice should cover, is withal, not only an important, but an interesting one. It calls for continuous exercise of all those higher faculties required in the profession and may be likened in some degree to the position of a judge in relation to the members of the bar. Just as a lawyer, after a long, useful and busy career at the bar, is promoted to the bench as a position of greater responsibility but less physical effort, in which he may continue to devote his abilities to the services of the community, so the Public Accountant, who has for many years carried the burden of work and responsibility involved in the conduct of a large practice, might equally assume the honorable and responsible, but less onerous, position of Consulting Accountant, so keeping in touch with his profession and placing his ability and experience still at the disposal of his clients.

OFFICE ORGANIZATION

9. In considering the method by which the Public Accountant is enabled to perform for his clients the various services already shortly outlined, the most important is, undoubtedly, the organization of the office. This may be divided into the following essential departments:

(1) A Staff of Accountants is absolutely necessary unless the principal is to waste his own time or his client's money in performing detail work which can quite as well be done by others of less experience or ability, or, as an alternative, is to accept without verification all the facts and figures submitted to him by his client, merely forming his own conclusions based upon these figures. While the latter course may be at times justifiable, it forms the work of a Consulting Accountant more than a Public Accountant, in the full sense, and can be considered only as a small branch of his work; nor would it be safe or proper for him to certify statements of accounts prepared on such data without expressing clearly in his certificate these limitations upon its value.

(2) A Correspondence or Stenographic Department is necessary to enable him to turn out the best kind of work of this class, accurately and quickly; but it must always be remembered that such a department is an auxiliary and not a principal department, and that the contents of the documents produced are of very much greater importance than the manner of their production. While this may seem a truism, a word of caution is not altogether unnecessary, as there appears to be a tendency (from which, unfortunately, those for whom the reports are made are not always free) to judge of their value rather by the outside appearance than by the contents. Provided, however, the latter be always considered the more important, there is no question that on the principle that "what is worth doing at all is worth doing well," the outside appearance should be made as attractive as possible.

(3) A Statistical Department will be found of great value in tabulating results of different kinds of business; collecting books of reference, reports and other documents of interest, or value; maintaining a complete library similar, but of different character, to that of the lawyer, and keeping and maintaining the whole in such a condition as to be ready for reference at any time. It has been truly said that in these modern days it is impossible for one individual to keep all information in his head, but that he should at least know where to obtain it quickly when required. The Statistical Department in an accountant's office stores information and holds it ready on demand, leaving the minds of the principals and their staff free for more important matter.

(4) The Filing Department is of especial importance by reason of the confidential character of the Public Accountant's work. The papers should be preserved in such a way that access can only be obtained to them by two or three people authorized for their custody; and at the same time the system must be such that papers required for reference in connection with pending work can be obtained at a minute's notice.

(5) The Finance Department has the control of the accounts of the business, consisting of the time records of the staff (forming the basis for the cost accounts), the rendering of bills for work per-

formed, the keeping of the necessary books of accounts, the preparation of periodical statements of business done and the profit or loss thereon. The importance of a proper system of cost accounts is not always recognized among the profession, and it may, perhaps, be said that is it the exception rather than the rule for any records to be kept in addition to the number of hours expended upon any case. The value of a complete ascertainment of cost cannot be overstated, especially in view of the different grades of salary paid for different classes of work and the consequent unreliability as a basis of charges of the number of hours expended without the introduction of some equivalent to represent the money value of those hours.

The above form the essential features of an office organization, whether large or small. Although in the latter case the lines of division between the different departments will not be so clearly defined and much of the office work may even be done by the principal himself, yet it is all equally necessary for his complete equipment. Some may, perhaps, be disposed to add to this a Promotion Department, whose work might consist entirely in endeavors to obtain new business. Such a development, however, is one to be deprecated as not being consistent with the professional character of the Public Accountant's work, and especially as being derogatory to his high standing and to his confidential relations with his clients. Such methods are usually confined to so-called Audit Companies, whose object seems to be to carry on a purely commercial business on commercial lines, rather than to practice an honorable professional calling. It may well be asked what respect can be expected for professional work carried on under such conditions; and it is certain that the high aims set forth in this paper on behalf of the profession—aims which have been largely realized in other countries and are in a fair way to realization here—will never be attained if such purely commercial ideas are permitted to obtain a foothold among the general body of what should be an honorable and distinguished profession.

The selection and maintenance of a thoroughly trained and experienced staff is essential to a proper conduct of the accountant's work, and necessarily involves carrying that staff through regularly recurring periods of slack work or business depression.

Universities and colleges are now maintaining special courses of study designed to train men for the accounting profession. These courses are usually laid out on excellent lines and undoubtedly are of great value as a preliminary education, but enough has probably now been said to show that any such education can only be considered as preliminary and that the student who has passed through such a course and its accompanying qualifying examinations is only then on the threshold of his profession. His real experience begins when he enters the office of an accountant and settles down to hard, practical work, much of which must necessarily for a year or so, at any rate, seem to him mere drudgery. It is, however, none the less essential, and long experience brings the conviction that the only way to build up a thoroughly valuable organization is to start men at the bottom rung of the office ladder and let them gradually work up to higher positions, step by step, as they can demonstrate their ability to fill them. The whole progress of a member of the staff through the office is a continuous education, lasting, though perhaps in a lesser degree, even after he has reached the highest available positions. It is for this reason that the salaries paid in the junior positions in accountants' offices are, as a rule, lower than would be paid for somewhat similar work in a commercial business, and that the exacting and responsible work which the accountant performs for his clients is carried out on a lower basis of remuneration than in many other professions.

Another essential feature in the staff organization is that it should aim at general experience in all kinds of business rather than at specialization in one or two subjects. Specialization to a certain extent is bound to exist; certain men will be found to be fitted for or to take a fancy to some particular class of work rather than another and will be preferably allocated to such work; but to carry this principle to any extreme, to create certain departments for certain work and to give the staff engaged thereon no opportunities of obtaining a wider experience in other branches of business, is to deprive them of opportunities for acquiring knowledge and experience, and that many-sidedness which forms one of the most important qualifications for future success. Methods of accounting, books of account, systems of internal check, preparation of systems and forms, defalcations and embezzlements, and, in fact, nearly all matters which come before the Public Accountant, in the course of his practice, involve the same basic principles, and with the exception of a few technical terms peculiar to each class, which are easily mastered in a few hours, apply equally to all kinds of commercial, industrial, and general business. It is in the accountant's knowledge of these general principles, in his full experience in their application, and in his power and ability to adapt them to all the varied cases that may come before him that his real usefulness to his client lies; to specialize in one particular class of business, or one particular class of work, is to deprive himself of a very large proportion of that usefulness.

The Public Accountant employs his staff for the purpose of—

(1) Ascertaining the facts, and

(2) Preparing statements of such facts in any desired form.

In this work close supervision and direction of a principal is essential to good work, and he cannot exercise this supervision properly unless he knows more than his assistants, and is fully competent to take up the work and do it himself if necessary. Hence the necessity for the assistant to work his way up steadily from the bottom to the top, so that when it comes to his turn to organize and direct his own business he may be eminently fitted to show his assistants the best way to do everything, from adding up a column of figures or counting securities, to preparing complicated accounts or devising systems and forms.

The practice of the Public Accountant involves highly difficult and responsible duties and calls for qualifications of no mean order, and the importance of the training of the accountant's clerk will be seen from the following statements of those qualifications which long experience has shown to be the most essential:

(1) A thorough and complete knowledge of accounting principles, gained partly from theory, but to a much greater extent from practice and experience under the supervision and direction of his seniors.

(2) Familiarity with figures; the faculty of quickly grasping the meaning and purport of financial statements and accounts and the principles, commercial or legal, upon which they are based.

(3) A legal and judicial mind, accustomed to weigh facts and to attach to them their relative importance, and so quickly to reach the core of the case and form a conclusion as to the equities involved.

(4) The ability to argue and discuss a point, either as an advocate for the purpose of getting at the other side of the question or as a judge in order to put all sides of the question in their proper light.

(5) A sound knowledge of business and financial methods, and the principles, economic and legal, which govern them, derived mainly from a varied experience.

(6) Above all, absolute integrity combined with a superabundance of tact and good temper.

This list of qualifications merely illustrates an ideal which every member should have steadily before him, but which few can hope to attain completely; but it suffices to show that the qualifications for conspicuous success in this profession are in the main the same as in any other, and that no one can hope to become a leading Public Accountant by short cuts any more than he can so become a great judge, a great lawyer or a great doctor, or, in fact, can attain eminence in any other profession.

FORMS OF REPORT

10. The facts having been obtained and placed into desired shape, it remains for the principals to determine upon the form in which the information should be transmitted to the client. This is the moment at which the training, experience and ability of many years is most necessary, and the work cannot, therefore, with justice to the client's interests, be delegated to others.

The facts as ascertained must not be colored in favor of his client or against his client's opponent, if there be one. His report must be based upon a statement, to use an old expression which in these modern days is too often neglected, of "the truth, the whole truth and nothing but the truth," and should be irrespective entirely of the party for whom the report is made.

It is not permissible for an accountant to conceal or to be a party to the concealment of any material fact, nor must he so state the material facts as to give them greater importance than they deserve relative to other facts. He is not an advocate but a judge, and like a judge, in all his public acts he must not take sides but must remain absolutely impartial. In giving evidence the same attitude is necessary, with this difference—that, like any other witness an accountant should not volunteer information, but his client must understand that he will not aid in concealing the facts, but will truly express his own opinion if the questions of the opposing counsel require answers on such points.

His position is an absolutely confidential one; no information obtained during the progress of his work, either directly or indirectly, must be imparted to others, whether they be individuals or courts of justice, without the authority of his client. The law in this country has not generally recognized this privilege; but inasmuch as the accountant is in most cases called as an "expert," he cannot be compelled to testify, and it will usually be found that the courts are prepared to admit this claim of privilege. At the same time he may, according to the present status of the law, be put in the position of answering questions and so disclosing information which he has obtained in his confidential capacity, or in default be committed for contempt of court; in such cases his duty and interests are identical and he has the alternative before him of refusing to answer or seriously damaging his practice. It is to be hoped that this unfortunate position may be generally avoided by the courtesy of the courts, if not by statute law, and that he may be placed on the same ground as other professional men and be permitted to plead that the communications made to him are privileged and not to be reported without the consent of his clients.

As to the form in which his report should be rendered the Public Accountant must, of course, be guided largely by the subject matter, but it is possible to lay down a few general principles which should be adhered to as far as possible. Careful attention should be given to the literary character of the documents; figures make dull reading even to the initiated and a style which will deal with them in concise narrative form will undoubtedly appeal to clients. At the same time a literary effort designed merely to please the ear by stringing together a number of pretty phrases, which on careful analysis mean little or nothing, is to be deprecated.

The order in which subjects are dealt with is of material importance; a little preliminary thought as to the order in which items in the accounts are usually stated and as to the relative importance of the points discussed will usually establish the logical sequence of the report; and since the writer's endeavor is to attract and hold the attention of the reader from the outset, the more important conclusions and points should, if possible, be brought out early in the report. Where a report deals with an undertaking with which the client is not familiar it may with advantage begin with a short historical section which will make later comment more readily appreciated. Remembering also that the client is usually a busy man of affairs, care should be taken that the statements of figures embodied in the report should be those, and those only, which will suffice to set forth the salient features disclosed by the examination. To include in the body of the report masses of dry detail figures which are merely the material upon which the findings are based, or to relegate to exhibits those figures which are essential to a proper understanding of the subject detracts from the value of the report. Detail figures indeed, unless specially required, should be eliminated from both report and exhibits. They cost money to produce and time to read and understand, and frequently are entirely unimportant in considering the situation or conditions for which the report is required.

And finally there should be no appearance throughout the report of any attempt to make out a case, or to attribute undue importance to any point, for the purpose of currying favor with any one. The tone of the report should be marked by justice and moderation and it is a good rule for the accountant in making his final revision to imagine himself under cross-examination, and then to expunge or modify any statements which under such cross-examination he may feel he could not substantiate.

The importance of the ability to write a good report cannot be overestimated, especially when it is considered that in the majority of cases the only opportunity the client has of judging of the value of the work for which he is paying is by the contents of the report. Many a good piece of work has failed of the appreciation which it deserved, owing to inability to express the results in a good report, which would carry conviction with it; and on the other hand, unfortunately, many a poor piece of work has received more than due credit, owing to the excellence of the form in which the final conclusions were embodied.

Bearing this importance in mind it is a most essential part in the training of a young accountant that he should acquire ease and facility in converting the results of his work into just the right kind of report, and many firms make it a practice to require their assistants to put into report form the results of every small piece of individual work with which they may be intrusted. These subsidiary reports form a good record to be filed with the working papers of the work that has been done, and of the way in which it has been done, and are also an invaluable training for the assistants themselves.

In concluding this paper the hope may be expressed that it will be of some interest to each of the various classes of readers to whom it is intended to appeal. Necessarily general in its character it may perhaps suggest to practicing accountants some subjects which might be more fully dealt with in future papers to the advantage of the whole profession. If at the same time it helps in some small degree towards the realization by the student members of the fact that they are entering into a profession full of difficult problems, and calling for the exercise of all their ability, tact, and courage; and by the larger public of the growing importance of the Accountant in the business world, the labor involved in its preparation will have been amply repaid.

SECTIONS OF THE ENGLISH LAWS RELATING TO THE AUDIT OF ACCOUNTS

COMPANIES' ACT, 1862

Schedule I (known as Table "A")

Section 83: Once at the least in every year, the accounts of the company shall be examined, and the correctness of the balance sheet ascertained, by one or more auditor or auditors.

Section 84: The first auditors shall be appointed by the directors; subsequent auditors shall be appointed by the company in general meeting.

Section 85: If one auditor only is appointed, all the provisions herein contained relating to auditors shall apply to him.

Section 86: The auditors may be members of the company, but no person is eligible as an auditor who is interested otherwise than as a member in any transaction of the company, and no director or other officer of the company is eligible during his continuance in office.

Section 87: The election of auditors shall be made by the company at their ordinary meeting in each year.

Section 88: The remuneration of the first auditors shall be fixed by the directors, that of subsequent auditors shall be fixed by the company in general meeting.

Section 89: Any auditor shall be re-eligible on his quitting office.

Section 90: If any casual vacancy occurs in the office of any auditor appointed by the company, the directors shall forthwith call an extraordinary general meeting for the purpose of supplying the same.

Section 91: If no election of auditors is made in manner aforesaid, the Board of Trade may, on the application of not less than five members of the company, appoint an auditor for the current year, and fix the remuneration to be paid to him by the company for his services.

Section 92: Every auditor shall be supplied with a copy of the balance sheet, and it shall be his duty to examine the same, with the accounts and vouchers relating thereto.

Section 93: Every auditor shall have a list delivered to him of all books kept by the company, and shall at all reasonable times have access to the books and accounts of the company; he may, at the expense of the company, employ accountants or other persons to assist him in investigating such accounts, and he may, in relation to such accounts, examine the directors or any other officer of the company.

Section 94: The auditors shall make a report to the members upon the balance sheet and accounts, and in every such report they shall state whether, in their opinion, the balance is a full and fair balance sheet containing the particulars required by these regulations, and properly drawn up so as to exhibit a true and correct view of the state of the company's affairs, and, in case they have called for explanations or information from the directors, whether such explanations or information have been given by the directors, and whether they have been satisfactory; and such report shall be read, together with the report of the directors, at the ordinary meeting.

COMPANIES' ACT, 1879

SECTION 7: (1) Once, at the least, in every year, the accounts of every banking company registered after the passing of this act as a limited company shall be examined by an auditor or auditors, who shall be elected annually by the company in general meeting

(2) A director or officer of the company shall not be capable of being elected auditor of such company.

(3) An auditor on quitting office shall be re-eligible.

(4) If any casual vacancy occurs in the office of any auditor, the surviving auditor or auditors (if any) may act, but if there is no surviving auditor, the directors shall forthwith call an extraordinary general meeting for the purpose of supplying the vacancy or vacancies in the auditorship.

(5) Every auditor shall have a list delivered to him of all books kept by the company, and shall at all reasonable times have access to the books and accounts of the company; and any auditor may, in relation to such books and accounts, examine the directors or any other officer of the company. Provided, that, if a banking company has branch banks beyond the limits of Europe, it shall be sufficient if the auditor is allowed access to such copies of and extracts from the books and accounts of any such branch as may have been transmitted to the head office of the banking company in the United Kingdom.

(6) The auditor or auditors shall make a report to the members on the accounts examined by him or them, and on every balance sheet laid before the company in general meeting during his or their tenure of office, and, in every such report, shall state whether, in his or their opinion, the balance sheet referred to in the report is a full and fair balance sheet properly drawn up, so as to exhibit a true and correct view of the state of the company's affairs, as shown by the books of the company; and such report shall be read before the company in general meeting.

(7) The remuneration of the auditor or auditors shall be fixed by the general meeting appointing such auditor or auditors, and shall be paid by the company.

SECTION 8: Every balance sheet submitted to the annual or other meeting of the members of every banking company registered after the passing of this act as a limited company shall be signed by the auditor or auditors, and by the secretary or manager (if any) and by the directors of the company, or three of such directors at the least.

COMPANIES' ACT, 1900

SECTION 21: (1) Every company shall, at each annual general meeting appoint an auditor or auditors to hold office until the next annual general meeting.

(2) If an appointment of auditors is not made at an annual general meeting, the Board of Trade may, on the application of any member of the company, appoint an auditor of the company for the current year, and fix the remuneration to be paid to him by the company for his services.

(3) A director or officer of the company shall not be capable of being appointed auditor of the company.

(4) The first auditors of the company may be appointed by the directors before the statutory meeting, and, if so appointed, shall hold office until the first annual general meeting, unless previously removed by a resolution of the shareholders in general meeting, in which case the shareholders at such meeting may appoint auditors.

(5) The directors of a company may fill any casual vacancy in the office of auditor, but, while any such vacancy continues, the surviving or continuing auditor or auditors (if any) may act.

SECTION 22: The remuneration of the auditors of a company shall be fixed by the company in general meeting, except that the remuneration of any auditors appointed before the statutory meeting, or to fill any casual vacancy may be fixed by the directors.

*SECTION 23: Every auditor of a company shall have a right of access at all times to the books and accounts and vouchers of the company, and shall be entitled to require from the directors and officers of the company such information and explanation as may be necessary for the performance of the duties of the auditors, and the auditors shall sign a certificate at the foot of the balance stating whether or not all their requirements as auditors have been complied with, and shall make a report to the shareholders on the accounts examined by them, and on every balance sheet laid before the company in general meeting during their tenure of office; and in every such report shall state whether, in their opinion, the balance sheet referred to in the report is properly drawn up so as to exhibit a true and correct view of the state of the company's affairs as shown by the books of the company, and such report shall be read before the company in general meeting.

COMPANIES' ACT, 1907

SECTION 19: (1) Every auditor of the company shall have a right of access at all times to the books and accounts and vouchers of the company, and shall be entitled to require from the directors and officers of the company such information and explanation as may be necessary for the performance of the duties of the auditors.

(2) The auditors shall make a report to the shareholders on the accounts examined by them, and on every balance sheet laid before the company in general meeting during their tenure of office, and the report shall state:

(a) Whether or not they have obtained all the information and explanations they have required; and

(b) Whether, in their opinion, the balance sheet referred to in the report is properly drawn up so as to exhibit a true and correct view of the state of the company's affairs according to the best of their information and the explanations given to them, and as shown by the books of the company.

(3) The balance sheet shall be signed on behalf of the board by two of the directors of the company, or, if there is only one director, by that director, and the auditors' report shall be attached to the balance sheet with a reference to the report, and the report shall be read before the company in general meeting, and shall be open to inspection by any shareholder, who shall

*This section is repealed by Section 19 of Companies' Act, 1907.

be entitled to be furnished with a copy of the balance sheet and auditors' report at a charge not exceeding sixpence for every hundred words.

(4) A person, other than a retiring auditor, shall not be capable of being appointed auditor at an annual general meeting unless notice of an intention to nominate that person to the office of auditor has been given by a shareholder to the company not less than fourteen days before the annual general meeting, and the company shall send a copy of any such notice to the retiring auditor, and shall give notice thereof to the shareholders, either by advertisement, or in any other mode allowed by the articles, not less than seven days before the annual general meeting. Provided, that if, after a notice of the intention to nominate an auditor has been so given, an annual general meeting is called for a date fourteen days or less after that notice has been given, the notice, though not given within the time required by this provision, shall be deemed to have been properly given for the purposes thereof, and the notice to be sent or given by the company may, instead of being sent or given within the time required by this provision, be sent or given at the same time as the notice of the general annual meeting.

(5) If any copy of the balance sheet which has not been signed as required by this section is issued, circulated, or published, or, if any copy of a balance sheet is issued, circulated, or published without either having a copy of the auditors' report attached thereto, or containing such reference to that report, as is required by this section, the company, and every director, manager, secretary, or other officer of the company, who is knowingly a party to the default, shall on conviction be liable to a fine not exceeding fifty pounds.

Section 21: Every company required to forward to the Registrar a summary under Section 26 of the Companies' Act, 1862, shall include in that summary a statement, made up to such date as may be specified in the statement, in the form of a balance sheet, audited by the company's auditors, and containing a summary of its capital, its liabilities, and its assets, giving such particulars as will disclose the general nature of such liabilities and assets, and how the values of the fixed assets have been arrived at, but the balance sheet need not include a statement of profit and loss. Provided that this section shall not apply to any private company.

SECTIONS OF THE ENGLISH LAWS RELATING TO PROSPECTUSES

COMPANIES' ACT, 1900

Section 9: (1) Every prospectus issued by or on behalf of a company or in relation to any intended company shall be dated, and that date shall, unless the contrary be proved, be taken as the date of publication of the prospectus.

(2) A copy of every such prospectus shall be signed by every person who is named therein as a director or proposed director of the company, or by his agent authorized in writing, and shall be filed with the Registrar on or before the date of its publication.

(3) The Registrar shall not register any prospectus unless it is so dated and signed. No prospectus shall be issued until so filed for registration, and every prospectus shall state on the face of it that it has been so filed.

COMPANIES' ACT, 1907

SECTION 2: (1) Every prospectus issued by or on behalf of a company or by or on behalf of any person who is or has been engaged or interested in the formation of the company, must state:

(a) The contents of the memorandum of association, with the names, descriptions, and addresses of the signatories, and the number of shares subscribed by them respectively; and the number of founders or management or deferred shares, if any, and the nature and extent of the interest of the holders in the property and profits of the company; and

(b) The number of shares, if any, fixed by the articles of association as the qualification of a director, and any provision in the articles of association as to the remuneration of the directors; and

(c) The names, descriptions, and addresses of the directors or proposed directors; and

(d) The minimum subscription on which the directors may proceed to allotment, and the amount payable on application and allotment on each share; and, in the case of a second or subsequent offer of shares, the amount offered for subscription on each previous allotment made within the two preceding years, and the amount actually alloted; and the amount, if any, paid on such shares; and

(e) The number and amount of shares and debentures which within the two preceding years have been issued, or agreed to be issued, as fully or partly paid up otherwise than in cash, and, in the latter case, the extent to which they are so paid up; and, in either case, the consideration for which such shares or debentures have been issued or are proposed or intended to be issued; and

(f) The names and addresses of the vendors of any property purchased or acquired by the company, or proposed so to be purchased or acquired, which is to be paid for wholly or partly out of the proceeds of the issue offered for subcription by the prospectus, or the purchase or acquisition of which has not been completed at the date of publication of the prospectus, and the amount payable in cash, shares, or debentures to the vendor, and, where there is more than one separate vendor, or the company is a sub-purchaser, the amount so payable to each vendor; provided that, where the vendors or any of them are a firm, the members of the firm shall not be treated as separate vendors; and

(g) The amount (if any) paid or payable as purchase money in cash, shares, or debentures of any property such as aforesaid, specifying the amount (if any) payable for goodwill; and

(h) The amount (if any) paid within the two preceding years, or payable as commission for subscribing or agreeing to subscribe, or procuring or agreeing to procure subscriptions, for any shares in, or debentures of, the company, or the rate of any such commission provided that it shall not be necessary to state the commission payable to sub-underwriters; and

(i) The amount or estimated amount of preliminary expenses; and

(j) The amount paid within the two preceding years, or intended to be paid to any promoter, and the consideration for any such payments; and

(k) The dates of and parties to every material contract, and a reasonable time and place at which any material contract or a copy thereof may be inspected: Provided, that this requirement shall not apply to a contract entered into in the ordinary course of the business carried on or intended to be carried on by the company, or to any contract entered into more than two years before the date of publication of the prospectus; and

(l) The names and addresses of the auditors (if any) of the company; and

(m) Full particulars of the nature and extent of the interest (if any) of every director in the promotion of, or in the property proposed to be acquired by the company, or, where the interest of such a director consists in being a partner in a firm, the nature and extent of the interest of the firm, with a statement of all sums paid or agreed to be paid to him or to the firm in cash or shares or otherwise by any person either to induce him to become, or to qualify him as a director, or otherwise for services rendered by him or by the firm in connection with the promotion or formation of the company; and

(n) Where the company is a company having shares of more than one class, the right of voting at meetings of the company conferred by the several classes of shares respectively.

(2) The said section of the Companies' Act, 1900, shall not apply to a circular or notice inviting existing members or debenture holders of the company to subcribe for shares or debentures of the company, whether with or without the right to renounce in favor of other persons, and accordingly in subsection four of that section for the words "for further shares or debentures" there shall be substituted the words "for shares or debentures of the company, whether with or without the right to renounce in favor of other persons."

OTHER PROVISIONS RELATING TO ACCOUNTS

COMPANIES' ACT, 1907

SECTION 7: The total amount of the sums paid by way of commission in respect of any shares or debentures or allowed by way of discount in respect of any debentures shall be stated in the summary made under Section 26 of the Companies' Act, 1862, next made after the payment of the commission or the allowance of the discount, and the total amount thereof, or so much thereof as has not been written off, shall be stated in every balance sheet until the whole amount thereof has been written off.

SECTION 9: Where any shares of a company are issued for the purpose of raising money to defray the expenses of the construction of any works or buildings or the provision of any plant which cannot be made profitable for a lengthened period, the company may pay interest on so much of such share capital as it is for the time being paid up for the period and subject to the conditions and restrictions in this section mentioned, and may charge the same to capital as part of the cost of construction of the work, building, or plant:

Provided that: (1) No such payment shall be made unless the same is authorized by the company's articles of association or by special resolution of the company

(2) No such payment, whether authorized by the articles of association or by special resolution, shall be made without the previous sanction of the Board of Trade.

(3) Before sanctioning any such payment, the Board of Trade may, at the expense of the company, appoint a person to inquire and report to them as to the circumstances of the case, and may, before making the appointment, require the company to give security for payment of the costs of the inquiry.

(4) The payment shall be made only for such period as may be determined by the Board of Trade; and such period shall in no case extend beyond the close of the half year next after the half year during which the words or buildings have been actually completed or the plant provided:

(5) The rate of interest shall in no case exceed four per cent per annum or such lower rate as may for the time being prescribed by Order in Council.

(6) The payment of such interest shall not operate as a reduction of the amount paid up on the shares in respect of which it is paid.

(7) The accounts of the company shall show the capital on which, and the rate at which, interest has been paid out of capital during the period to which the accounts relate.

(8) Nothing in this section shall effect any company to which the Indian Railways Act, 1894, as amended by any subsequent enactment, applies.

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The theoretical man knows *why*. The practical man knows how. The ... ould ... ow ... w.