## Journal of Accountancy

## Students' Department

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# Students' Department 

Edited by H. A. Finney

(Note-The fact that these solutions appear in The Journal of Accountancy should not lead the reader to assume that they are the official solutions of the American Institute of Accountants. They merely represent the personal opinion of the editor of the Students' Department.)

Solution of consolidated income-tax problem: The solution to the consolidated tax return problem (Problem 1, Part II of the American Institute examination) appearing on pages 128, 129 and 130 of the Students' Department for February was prepared by the editor of the Income-tax Department and should have been credited to him.

# AMERICAN INSTITUTE OF ACCOUNTANTS EXAMINATION IN AUDITING 

November 15, 1921, 9 A.M. to 12.30 P.M.
Answer all of the following questions:

1. Name and describe the principal groups in which the financial transactions of a municipality are summarized in its annual statement.

Answer. The financial condition should be shown in two balancesheets, one of the general account (or current account) and one of the capital account. While statements are not called for they will furnish the best description of the items which comprise the two groups. The following typical statements are copied from A Handbook of Municipal Accounting prepared by the Bureau of Municipal Research of the Metz Fund. (Published by D. Appleton and Company.)

## City of New Rochelle, N. Y. <br> Balance-sheet as at December 31, 1910 <br> General Account <br> Assets

| Cash in bank and on hand |  | \$138,295.72 |
| :---: | :---: | :---: |
| Taxes receivable, current year only |  | 155,923.05 |
| Total assets-general account |  | . \$294,218.77 |
| Liabilities and Surplus |  |  |
| Audited vouchers payable |  | \$ 5,000.00 |
| Loans in anticipation of taxes: |  |  |
| Against taxes of 1910 | \$185,000.00 |  |
| Against taxes of 1909 | 55,000.00 |  |
| Against taxes of 1906 | 17,000.00 |  |
| Against taxes of 1905 | 11,000.00 |  |
| Against taxes of 1904 | 10,000.00 | 278,000.00 |
| Total liabilities-general account |  | \$283,000.00 |
| Excess of cash over immediate demands for cash | \$133,295.72 |  |
| Excess of other liabilities over other assets.. | 122,076.95 |  |

Surplus of assets over liabilities-general account $\quad 11,218.77$

| Against this surplus are commitments as shown by fund balance-sheet, amounting to <br> Leaving a deficit to be provided for amounting to $\quad 129,156.28$ |  |  |
| :---: | :---: | :---: |
| Total liabilities and surplus-general account. |  | \$294,218.77 |
| City of New Rochelle, N. Y. <br> Balance-sheet as at December 31, 1910 Capital Account |  |  |
| Assets |  |  |
| Cash |  | \$279,304.79 |
| Assessments receivable: |  |  |
| Sidewalk | \$ 37,886,67 |  |
| Sewer | 61,932.54 |  |
| Paving | 31,297.23 | 131,116.44 |
| Local improvements in progress |  | 91,866.43 |
| Lands, buildings, equipment and other permanent im | provements | 2,588,346.82 |
| Total assets-capital account |  | \$3,090,634.48 |
| Liabilities and Surplus |  |  |
| Audited vouchers payable ..................................... \$ 3,000.00 Certificates of indebtedness issued for: |  |  |
|  |  |  |
| Sidewalk improvements | \$100,000.00 |  |
| Sewer improvements .. | 93,062.20 |  |
| Street paving improvements | 37,000.00 | 230,062.20 |
| Certificates of indebtedness issued for construction |  | 26,252.82 |
| Bonded debt ................................... | 2,499,658.46 |  |
| Less sinking fund cash | 78,267.80 | 2,421,390.66 |
| Surplus-Cash over immediate demands for cash \$276,304.79 Surplus-Properties and other assets over certificates of indebtedness and net funded debt. . 133,624.01 |  |  |
| Total surplus-capital account ........................ $409,928.80$ |  |  |
| Total liabilities and surplus-capital account ................ $\$ 3,090,634.48$ |  |  |
| The general account balance-sheet shows the financial condition resulting from transactions relating to current revenues and expenses. The capital account balance-sheet shows the financial condition resulting from transactions relating to assessments and outlays for permanent improvements. |  |  |
| 2. In auditing the books of the Moving Pict you find the total balance due from customers trolling account in the general ledger is less thas | are Produc as shown half the | Company by the contotal debi |

balances shown by the list you have taken from the customers' ledger. What does this indicate? How should the facts be shown on the balancesheet?

Answer. A few clerical errors could scarcely account for a discrepancy so large as to make the balance of the controlling account scarcely half the total of the debit balances of the subsidiary ledger. The trouble probably arises from a total failure on the bookkeeper's part to realize the relation which should exist between the controlling account and the subsidary ledger. If he did not realize this relation he might make entries in the subsidiary ledger independently of the controlling account. For instance, contract totals may be entered in the customers' accounts, while current billings are charged to the controlling account and also to the subsidiary ledger. Or detailed postings may be made in the subsidiary ledger without posting the column totals of the books of original entry to the controlling account.

The question states that the balance of the controlling account is less than half the total debit balances of the subsidiary ledger; this raises the possibility that there may be credit balances in the subsidiary ledger, the offsetting of which would bring the net balance of the subsidiary ledger into agreement with the controlling account. If the credit balances represent deposits, they should be separately accounted for.

The controlling account should be brought into agreement with the subsidiary ledger before the preparation of the balance-sheet. It might seem permissible to waive this if the individual balances of the subsidiary ledger can be verified, but it would be dangerous to do so, for the verification of the subsidiary ledger would indicate errors in the controlling account with a presumption of correlative errors in other accounts in the general ledger.
3. What are the principal objects for which auditors' working-sheets are made and preserved?

Answer. Auditors' working papers are prepared to provide him with a record of the work done, the accounts analyzed and verified, and the errors located and corrected. They also provide the information essential for the preparation of the statements and the comments which comprise the report.

The working papers are preserved so that the auditor will have a permanent record of the work done and the reasons for the conclusions which he stated in his report. This information will be of value if the auditor is called upon to defend his report, and the working papers of past audits will serve as a guide to the work to be done in subsequent audits.
4. Entering upon the audit of the A. B. C. Co. you are handed the general books of account. You learn that the company has several departments and practically owns several subsidiary companies. State what influence this knowledge would have upon you in respect to proving the accuracy of the trial balance given to you, and what steps you would take, and why.

Answer. Two important questions arise in the audit of a business with departments. One is the basis of the distribution of overhead among

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the departments, and the other is the effect of inter-departmental profits added to goods transferred from one department to another and remaining in the inventory at the end of the period. The auditor, in dealing with the first of these questions, should satisfy himself that the overhead has been distributed on an equitable basis; otherwise, false conclusions may be reached as to the relative profitableness of the several departments. The point is particularly important when managers and other employees share in the profits of their respective departments. As to the second point, he must assure himself that the inventories do not contain unrealized profits which have been added by one department when transferring goods to or rendering services for another department.

Since the company practically owns a number of subsidiary companies, the auditor should recommend the preparation of a consolidated balancesheet as the best way of dealing with inter-company receivables and payables, inter-company profits in inventories and construction, and subsidiary profits and losses. A balance-sheet of the holding company alone will not reflect the true condition of the holding company because it will show the investment and advances account instead of the net assets which these accounts represent, and because the holding company's surplus account may include dividends received from the subsidiary instead of the true proportion of the subsidiary's profit or loss since acquisition. Of course an audit of the subsidiaries' accounts is a prerequisite to the certifying of a consolidated balance-sheet.
5. State what you conceive to be the legal duties, responsibilities and liabilities of the professional auditor.

Answer. The duties and liabilities of accountants are not specifically defined in the United States by statute nor by court decisions. The common law provisions may be stated somewhat as follows: The auditor is liable if he does not disclose essential facts known to him, and he is held responsible for the ascertainment of such facts if they could have been discovered by an auditor exercising ordinary diligence and skill. Since tests, as distinguished from detailed checking of all entries, are customary among skilful and diligent members of the profession, the auditor would not be liable for the failure to discover irregularities if he made the customary tests. Of course when fraud is suspected tests would not be considered sufficient. The auditor's relation with his client is a confidential one and he may be held liable for any unwarranted disclosure of information obtained in the exercise of his duties. The accountant does not, however, enjoy the attorney's privilege of refusing to testify in court when the testimony involves confidential information obtained professionally.
6. Describe a good method of keeping a detailed record of
(a) Salaries paid
(b) Wages paid

Answer. A card file or list should be kept by the secretary or some other officer, showing the names of all employees on salary, the nature
of their duties and the amount of the monthly or weekly salary. This file or list will furnish the information for making up the salary payroll, which should show the salary for the month, the advances drawn by the employees, and the amount still due. The successive payrolls for salaries should be filed together where they will be readily accessible to support the vouchers for salary checks.

As to wages, presumably in a factory, the job time tickets filled out by the workmen and approved by the foreman should be turned over to the time-keeper. Each day the timekeeper should enter on the weekly payroll the hours or pieces for the day for each employee. The total hours or pieces of all workmen for the day should be proved by comparison with the cost clerk's total daily charges of labor to jobs. The weekly payroll lists prepared by the time-keeper should be sent to the accounting office where the total hours or pieces for each workman should be re-computed and the week's wages computed, or re-computed if the work has already been done by the time-keeper. The payroll as thus prepared and checked will then furnish the information for the voucher which should be handed to the cashier. After the payroll check has been cashed the envelopes should be made up by someone not hitherto engaged in any of the work connected with preparing the payroll, and the wages should be paid to the workmen by still another person. This method requires the services of enough people to necessitate extensive collusion to accomplish fraud.
7. State what particular matters should be ascertained and verified in auditing the revenue and expense accounts of
(a) Shipping companies
(b) Taxicab companies

Answer. (a) The items of income peculiar to shipping companies are freight and passenger earnings and revenue from carrying mail and express. Various risks covering cargo damages, laying-up of vessels, etc., are covered by insurance and the collection of such insurance should be verified. The question of unearned income becomes important when there are uncompleted voyages at the end of the accounting period.

In addition to ordinary expenses for material and labor there are items of maintenance which may have been capitalized, and depreciation may have been ignored. If vessels are rented the contracts with the owners should be examined to ascertain the elements of expense from rentals.

The question asks only for particular matters and does not ask for the procedure in verifying them.
(b) The principal income of a taxicab company is of course the earning from fares. The principal items of expense are drivers' salaries or commissions, maintenance and depreciation of garage and cars, oil and gasoline, licenses, instruction, insurance and damages.
8. One of the larger church denominations in the United States now requires the annual statements of its parishes to be audited by a certified public accountant. Bearing in mind that in the majority of parishes the church treasurer is custodian of all the church funds, disburses them practically at will and keeps the church books himself. how would you proceed to audit his annual report?

Answer. The three chief sources of income of churches are contributions of members on pledges, loose collection and income from endowments. Where the pledge system is in operation personal accounts are kept with members, who are charged with their pledges and credited with the payments. This furnishes some check on the collections. The loose collection not on pledges is impossible of verification, but in some churches a financial secretary acts with the treasurer. The secretary counts the collection and keeps the members' accounts and turns the money over to the treasurer. With such a system in operation, collusion would be necessary to take the proceeds of pledges but not the loose collections unless the secretary and the treasurer count the collection together.

The treasurer should have vouchers for his disbursements, and it is customary for him to render reports at the regular monthly meeting of the officials of the church.

If pledges instead of actual cash collections are treated as income, liberal provision should be made for loss on pledges in arrears.

If the church owns endowment funds, a schedule of the property should be drawn up and the treasurer's accounts examined to see that he has accounted for the income which the funds have produced. In many cases property is given to a church by a member under an agreement that the church shall pay him an annuity until his death. Under such circumstances there will of course be an offset against the income.
9. State in detail how you would proceed to audit the accounts of a bank.

Answer. Count all cash, being careful to prevent duplication.
Inspect and list all stock and bond security holdings.
Inspect and list all time and demand notes held, and verify by correspondence with borrowers.

Inspect and list securities held as collateral.
Inspect clearing house items and obtain verification from clearing house to detect unpaid items.

Reconcile correspondents' accounts including the Federal Reserve bank and rediscounts.

Agree detail of depositors' accounts, certified checks and certificates of deposit with respective controlling accounts.

Verify the outstanding capital stock.
Verify the collection of income on securities owned and see that proper provision has been made for unearned discount on loans.

In connection with the verification of the profits of the bond department examine the valuation of unsold securities at the end of the period.

Verify the expenses.
10. In what circumstances should paid cheques be treated as vouchers? Are cheques always proper and sufficient vouchers for purchases? Give reasons.

Answer. A paid cheque is an adequate voucher only in case it bears evidence on its face or back of the purpose for which it was issued. This is usually the case with payroll cheques. If there is no evidence
on the cheque itself of the purpose for which it was issued, the cheque merely shows that money has been spent, but it does not show that the concern received value for it. Therefore the auditor should examine the invoices and other documents supporting the cheques. Even a voucher cheque unsupported by an invoice is not a thoroughly adequate voucher. To illustrate, several cheques payable to a garage were found in an audit. The vouchers were authorized by the general manager and purported to represent disbursements for repairs and other service in connection with the delivery equipment. Some of the vouchers were supported by bills while others were not. Requests for duplicates of the missing bills brought out the fact that they represented charges for services on the general manager's own car. The same possibility of fraud in connection with payments charged to purchases makes it important for the auditor to require supporting invoices for all paid cheques.

## Returned Purchases and Cash Discount

## Editor, Students' Department:

SIR: Will you kindly give me your opinion upon the following:
Our account with a wholesaler was balanced, or in other words we owed them nothing. We returned merchandise to the value of $\$ 15.00$. This was acknowledged by a credit memorandum issued by the wholesaler, dated November 26th. The account then stood upon their books showing us with a credit balance of $\$ 15.00$. On December 5th we purchased merchandise from them to the amount of $\$ 22.54$. It is their custom to allow $2 \%$ cash discount on all invoices paid within 30 days from date of invoice. We took discount on the entire amount of \$22.54. They maintain that the only portion upon which we were entitled to cash discount was the amount, still unpaid, of $\$ 7.54$. The writer is perfectly sure of his contention but seeks your opinion to support it.

Very truly yours,
Miles City, Montana.
A. J. S.

It would seem that strict equity would make it necessary to know how the previous invoice was paid. If the discount was taken on this invoice the $\$ 15.00$ credit for goods returned represents $\$ 14.70$ for cash and $\$ .30$ for discount already allowed to you. If this is the case the wholesaler is right for you have already been allowed one cash discount of $2 \%$. Cash discount is allowed for cash, not for returned merchandise. If you carried your theory to its logical conclusion you could purchase $\$ 100.00$ worth of goods, return $\$ 98.00$ worth of them in settlement of your bill and keep $\$ 2.00$ worth of them. If you were able to do this often enough and in large enough quantities you could purchase all the goods you need for nothing and make a fortune by taking cash discounts without using any cash.

## Weight Shrinkage in Process

## Editor, Students' Department:

SIR: Will you kindly answer the following through the columns of The Journal:
(1) Is the statement annexed hereto correct for use with a coffee roasting plant? If not, wherein is it incorrect, and what would be correct?

| Statement of Manufacturing Cost of Roasting Coffee Showing Shrinkage During Process of Roasting |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Pounds Aver.cents Amount per pound |  |  |
| Inventory green coffee first of year | 32,760 | . 13883 | \$4,426.88 |
| Plus purchases of green coffee during year. | 24,609 | . 12230 | 3,009.86 |
| Green coffee to be accounted for | 57,369 | . 12963 | \$7,436.74 |
| Less inventory green coffee end of year | 30,483 | . 13110 | 4,296.39 |
| Amount put in process of roasting | 26,886 | . 11680 | \$3,140.35 |
| Plus inventory roasted coffee first of yea | 3,415 | . 10382 | 354.55 |
|  | 30,301 | . 11534 | \$3,494.90 |
| Less inventory roasted coffee end of year | 4,476 | . 11759 | 525.37 |
| Total produced, should be net cost coffee sold | 25,825 | . 11498 | \$2,969.53 |
| Less shrinkage during process of roasting (carried to manufacturing expenses).... | 4,676 | . 12187 | 569.87 |
| Cost of roasted coffee sold | 21,149 | . 11347 | \$2,399.66 |
| Plus manufacturing expenses: |  |  |  |
| Boxes, bags, paper, twine, tape, etc. |  | . 001765 | \$ 37.32 |
| Depreciation machinery |  | . 004836 | 102.28 |
| Gas, fuel for roaster |  | . 002713 | 57.38 |
| Maintenance and repairs |  | . 000776 | 16.40 |
| Miscellaneous |  | . 000008 | . 15 |
| Power, electric for roaster |  | . 000868 | 18.36 |
| Salaries and wages, to roaster crew ...... |  | . 005768 | 122.00 |
| Shrinkage during process of roasting (from above) |  | . 026945 | 569.87 |
| Water ..... |  | . 000141 | 3.00 |
|  | 21,149 | . 043820 | \$ 926.76 |
| Manufacturing cost of coffee roasted and sold | 21,149 | . 15729 | \$3,326.42 |

(2) In taking a physical inventory at the end of an accounting period should the loss in value due to shrinkage in weight during the process of roasting be added to the price of roasted coffee inventoried? For instance: the inventory of roasted coffee at end of year amounts to 4,476 pounds valued at invoice price $\$ 525.37$; to add the value in loss due to shrinkage say of $15 \%$ would be 4,476 pounds valued at invoice price plus loss in weight due to shrinkage during process of roasting, $\$ 525.37$ plus $\$ 92.71$ equals $\$ 618.08$, value of 4,476 pounds.

Very truly yours,
Greenville, South Carolina.
W. M. F.

The first thing which should be done is to determine whether the total shrinkage took place in roasting, or part of it in roasting and part in inaccurate weight of sales. The coffee should be weighed after roasting to determine the total weight of roasted coffee obtained. The cost per pound of roasted coffee can then be computed as follows:
26,886 pounds put into process of roasting ..... $\$ 3,140.35$
Add manufacturing expenses:
Total per schedule ...................... $\$ 926.76$
Less shrinkage item in schedule ......... 569.87 ..... 356.89
Total ..... \$3,497.24
4,676 pounds shinkage (assuming that total loss oc- curred in roasting and none in over-weight

    sales)
    22,210 pounds roasted coffee obtained.

Then $\$ 3,497.24 \div 22,210=\$ .1575$ cost per pound of roasted coffee. The inventory should be valued at $\$ .1575 \times 4,476$, or $\$ 704.97$.

## Partnership Interest Adjustments

Editor, Students' Department:
Sir: In a recent examination this question was asked:
$\mathrm{E}, \mathrm{F}$ and G are equal partners, each having subscribed 5,000 dollars to the partnership. E pays in 3,000 dollars, leaving 2,000 dollars still due to the partnership on his capital account. It is agreed that for the present this 2,000 dollars can remain unpaid provided $E$ pays interest on it, which he does. Later a dispute arises as to how this interest should be credited. E claims that it should be included with the other earnings of the business and be divided equally among the three partners. $F$ and G claim that this interest should be divided between them only, as they have fully lived up to their obligations under the partnership agreement, while $E$ has only partially done so. To what account should the interest on the deferred payment be credited?

The answer given was that the interest should be divided between F and G and the reasons therefor were stated. This answer, however, was marked wrong, receiving no credit. In view of this I would be pleased to receive your opinion regarding its correctness. The following argument is given to support the answer given above.

First-from business standpoint-the partners did not agree in advance how the interest was to be credited. Therefore there is no agreement to go by. As the partners are the ones interested and the ones to decide any issue that may arise and they are in this case all equal partners, it would appear that the majority vote (in this case two to one) except where a fraud was perpetrated or a great injustice would result therefrom (which is not the case here) would decide to which account the interest should be credited.

Second-from accounting standpoint-the company made no loan to E on which interest is to be paid as no funds have been paid out by the company. Assume that the company made a profit for the year of 3,000 dollars, eliminating the interest paid by E for the time being. Each partner would receive 1,000 dollars as his share of the profits. This would give $F$ and $G$ a return on their invested capital equal to $20 \%$ and a return to E on his invested capital equal to $331 / 3 \%$. Here we have a situation where one partner receives a greater return from the partnership than his fellow partners while his investment is considerably less and they are by agreement all equal partners. If the interest paid by $E$ is divided among the three partners, this procedure would again favor $E$ as he would be returned part of the interest on his 2,000 dollars and would alter the ratio of return on investment slightly.

Is it not proper to assume that if $E$ had paid in the additional 2,000 dollars this investment would also have earned additional profit

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in the same ratio as the 13,000 dollars already invested? If so, twothirds of this profit has been kept from the other partners because of this. Or if $F$ and $G$ had each withheld 2,000 dollars the profits would have been reduced and the three partners would have received the same return on their investments. Would it not therefore appear that E's debt was a personal one to $F$ and $G$ rather than to the company and the interest should be divided between $F$ and $G$ only? In the case of a corporation, interest paid by delinquent subscribers is credited to the income account but in most all cases the delinquent subscribers do not receive dividends until they have paid their subscriptions in full. In the above case, therefore, it would appear that if the interest paid by $E$ is to be divided between the three partners, E's portion of the profits should have been reduced to give him the same return on his investment as received by the other partners. This would make the accounting for the distribution of profits similar for both corporations and partnerships. However, in this problem $E$ has received an equal share of profits and it would appear that the interest should be divided equally between $F$ and $G$.

New London, Connecticut.
Student.
$E$ was correct in his contention and you are wrong in yours. The interest should be included with the other profits and income and be divided equally among $E, F$ and $G$. This can be shown in two ways.

In the first place, $E$ has not agreed to pay $\$ 2,000$ to $F$ and $G$, but to the partnership of which he is a member. Failing to make the payment of his full capital contribution to the partnership, he pays interest to the partnership. In other words (and this is the point which must be remembered in deciding this and similar questions), E is acting in two capacities: as an individual debtor of the partnership paying interest on an obligation, and in the second place as a partner entitled to receive one-third of all of the income of the partnership. Therefore, as a partner, he is entitled to his share of the interest which he pays as a debtor, just as he would be entitled to receive his share of the interest paid by anyone else.

In the second place, $E$ has agreed to contribute $\$ 5,000$ of assets to the partnership; he contributes $\$ 3,000$ in cash and $\$ 2,000$ in an interestbearing obligation. He is entitled to his third of the income from the $\$ 2,000$ as well as from the $\$ 3,000$.

The reasons you give in support of your position are not logical. Your first reason merely means that you think $F$ and $G$ can compel $E$ to take what they give him, right or wrong. Suppose that a partnership is formed without a definite agreement as to the sharing of profits; the law states that the profits shall be shared equally. You might as well contend that two partners could come to an agreement among themselves as to what they will allow the third. The law provides otherwise, just as the law provides that interest on money loaned by the partnership is an earning of the partnership instead of an earning of one or two of the partners.

The second reason, that the rates of earning on investment will vary among the partners, has nothing to do with the case. $F$ and $G$ should have realized that the rates would be different when they made the agreement. In order to share profits equally it is not essential that partners contribute equal amounts of cash.

The third reason is not conclusive either. If three men organized a corporation and two paid for their stock while the third gave an interestbearing note for his, they might agree that the third man should receive no dividends until his stock had been paid for in full, or they might let him have his dividends. But that is beside the point. The essential thing is that this third man owes interest to the corporation and not to the other stockholders.

## Interest and Construction Cost <br> Subsidiary Losses and Loans

Editor, Students' Department:
Sir: Will you kindly answer the following problems?
(1) A corporation is formed to engage in manufacturing. Pending the sale of unwritten capital stock, money is borrowed for the erection and equipment of plant. How should the interest on this loan be treated in the books of account?
(2) Holding company A owns 80 per cent. of the stock of Company B. Company B loses $\$ 50,000.00$ in a year's operation. Holding Company A loans Company B $\$ 50,000.00$ and takes its notes for the amount. How would the whole transaction appear in holding company A's books and in its balance-sheet, and profit-and-loss account?

Yours truly,
Philadelphia, Pennsylvania. C. D. Z.
(1) While it is perhaps difficult to justify the procedure on the basis of principle, it is customary to capitalize interest actually paid or accrued on money borrowed for construction. The charge should be limited to the interest applicable to the construction period. Accountants sanction this custom, and would permit the interest in this case to be charged to the plant.
(2) This question raises the point as to whether the holding company should take up $80 \%$ of the subsidiary's loss or all of it. In this connection Mr. Montgomery* says:
"If a profit is shown, the amount to be included as the share of the holding company is the proportion the stock, owned by the holding company, bears to the total capital outstanding. It must be assumed that the minority stockholders will eventually receive through dividends their share of the profits.
"If a loss is shown, and if losses form the chronic condition of the subsidiary, it may as well be recognized that the holding company must assume all of them. This, of course, applies only to those cases in which a subsidiary company is so largely owned by the holding company that the minority interest cannot be depended upon to advance its share of the funds necessary to take care of the loss.
"The holding company may carry these advances as an asset, but the auditor should place such a value upon these items as the facts warrant, and it is reasonably certain that the final result will be to include all of the loss in the consolidated income account, although something less than 100 per cent. of the stock of the subsidiary is owned."

[^0]This statement probably expresses the prevailing opinion of accountants and in accordance therewith it would appear that the $\$ 50,000$ loss of Company B should be taken up on Company A's books by a debit of $\$ 50,000$ to profit and loss and a corresponding credit to the investment account of stock in Company B. Perhaps a reserve would also be set up against the advances account.

The editor of this department is not entirely convinced, however, that it is obligatory for the holding company to take up the entire loss; in fact it seems more than probable that a secret reserve is created by doing so. While it is true that the subsidiary may be so essential a part of the organization that the holding company will consider it expedient to retain its ownership of the stock in spite of losses, and make advances to the subsidiary to supply the deficiency of its working capital and enable it to pay its current liabilities, it seems clear that subsidiary losses decrease the value of all of the subsidiary stock, that owned by the minority as well as that owned by the holding company. The situation is not unlike a partnership in which one of the partners owns a $90 \%$ interest and the other a $10 \%$ interest, profits and losses being shared in the capital ratio. The partnership may be engaged in some business providing materials to or furnishing services for some other business owned by the $90 \%$ man so that he must keep the partnership business in existence even though it continually loses money, and it is necessary for him to continually make advances to it. Until the original capital of the two men is exhausted the $10 \%$ man must bear his share of the loss. After the original capital is all wiped out, the $90 \%$ man may take over the business in settlement of his advances, and thereafter he will have to bear all of the loss. But it is difficult to see why he should assume $100 \%$ of the loss as long as he has a partner. The $10 \%$ man should bear his loss up to the extent of his capital, even though he may be unable to supply funds in addition to his capital.

Similarly with a holding company and a subsidiary. Assume that the subsidiary starts out with the following financial condition:

## Balance-sheet of Subsidiary

Net assets ............. $\$ 100,000 \quad$ Capital stock $\ldots . . . . .$. . $\$ 100,000$ The holding company owns $80 \%$ of the stock. The subsidiary continually loses money and the holding company continually makes advances, until all of the capital has been lost, and the condition is as follows:

## Balance-sheet of Subsidiary


The holding company may now take over the net assets of the subsidiary in settlement for its advances. It has lost the $\$ 80,000$ invested in the subsidiary stock and the minority stockholders have lost $\$ 20,000$. From now on the holding company will have to take up $100 \%$ of the losses of the subsidiary but it is hard to see why it should have taken up all of the past $\$ 100,000$ loss unless it intended to pay off the minority stockholders at par when the subsidiary reached the condition shown in the second balance-sheet.

It may be contended that some provision should be made for the loss of the advances since the subsidiary is continually losing money and the advances are pretty sure to go the way the original investment went. But before this contention can be granted it must be remembered that the holding company is making the advances to keep the subsidiary in existence since its operations, at an apparently unavoidable loss, are essential to the operation of the holding company at a profit. In other words, each year's operating loss of the subsidiary is virtually an operating expense of the holding company. In the years during which the subsidiary was piling up a deficit equal to its capital stock the holding company's expense was $80 \%$ of the subsidiary's losses. After the capital furnished by the minority interest has been exhausted, the holding company's expense for the subsidiary's services will be $100 \%$ of the loss.

If, at the time of preparing the second balance-sheet shown above, the subsidiary has taken up all of its losses, the net assets of $\$ 100,000$ are really worth that amount, and in taking them over in payment for its advances the holding company is fully paid for the advances. Up to date the advances have not been lost. It is true that they are pretty sure to be lost, and if the subsidiary losses were not incidental to the production of holding company profits there would be good reason for providing in advance for the possible future loss. But it seems a reasonable position to take that since the advances are still represented by good assets they can properly be carried at full value. At the worst they are in a sense deferred charges against future operations.

Returning to the question asked in C. D. Z's letter, this department would take up $80 \%$ of the subsidiary's loss for the year, and carry the advances of $\$ 50,000$ as an asset. The letter does not ask for the effect of the transactions on the consolidated balance-sheet, but it may be added that the advances account on the holding company's books would be offset against the reciprocal account on the subsidiary's books, and the minority's interest would be reduced by its $20 \%$ of the year's loss.

## Extinguishing Stock Discount <br> Common and Preferred Stock Interest in Surplus

## Editor, Students' Department:

Sir: I should like your answer to the following questions:
(1) What formal procedure is necessary to extinguish discount on stock, so as to avoid the legal liability? Is a mere accumulation of surplus deemed sufficient to make the stock fully paid?
(2) To whom does corporate surplus belong, common or preferred? Do the following considerations have any influence on the answer?
a. Cumulative or non-cumulative.
b. Participating or non-participating.
c. No par value or par.

Minneapolis, Minnesota.
E. A. H.
(1) If at a time when the corporation had a surplus equal to the stock discount the directors authorize the writing off of the stock discount against the surplus, the action would probably relieve the stockholders from liability. The surplus might have been used for a division of cash among the stockholders; instead, it was used as an offset against the
discount. This is virtually equivalent to a payment of a dividend and a return of the money by the stockholders to the corporation in payment of the discount.

As a practical matter such formal action would undoubtedly be necessary, and it would have to have been taken at a time when the directors could have paid a dividend without jeopardizing the rights of the creditors. If the question of liability for discount arises, it will be because the creditors cannot be paid in full. The inability to pay the creditors will be due to the fact that losses have occurred which have wiped out the capital. This means that the surplus (which existed at a former time and might have been used then to formally extinguish the discount, but was not so used) has disappeared and it is too late to make the offset.
(2) As a general rule it may be stated that all classes of stock have the same rights except as differentiation is made by the terms of the stock issues. That is to say, basically the common and preferred share pro-rata in the surplus. The provisions of the preferred stock issue may take away from the preferred stock some of these basic rights (for instance, the preferred stock may be made non-participating) or may give the preferred stock certain rights in addition to the basic rights which will be retained by the common stock (for instance, the preferred stock may be made cumulative).
(a) If the preferred stock is cumulative it may have more than a pro-rata share in the surplus because of the fact that there are dividends in arrears which must be paid to the preferred stockholders before the common stockholders can share in the surplus. If all dividends have been paid on the preferred stock, the cumulative or non-cumulative status of the preferred stock is immaterial.
(b) On the theory that all classes of stock have the same basic rights unless certain of them are specifically taken away, preferred stock is participating unless definitely stated to be non-participating. That is, it has the basic right to share pro-rata with the common stock in all dividends, and hence in the surplus, unless this right has been taken away by making the stock non-participating.

To summarize, it may be stated that the surplus belongs proportionately to the common and preferred stock, unless the preferred has special interests by reason of the stock being cumulative with dividends in arrears; or unless the preferred has less than a proportionate interest by reason of the stock being non-participating.
(c) I do not see how the fact that the stock has or has not a par value would have any effect on the division of the surplus between the classes of stock. The important consideration is the relative interests of the two classes of stock. Having determined the interest of each class in the surplus, the interest of each share would be stated as a per cent. of par if the stock has a par value, or as a certain number of dollars per share if the stock has no par value.

## Valuation of Treasury Stock

## Editor, Students' Department:

SIR: In a recent dispute between two accountants, the question arose whether treasury stock received either by purchase or donation to a
corporation should be treated as an asset or a deduction from the capital stock outstanding on the balance-sheet. Would you be good enough to send me your opinion in this matter?

At the same time I would appreciate it if you would render me an opinion as to how dividends on treasury stock should be treated in the balance-sheet.

New York.
Very truly yours,
Both parties to the dispute could probably quote good authority in support of their conflicting viewpoints.

It is the opinion of this department that treasury stock, no matter how acquired nor at what price, should be carried on the books at par and be deducted from the capital stock on the balance-sheet, thus showing the par of the stock outstanding. As long as the stock is in the treasury it is not outstanding, and this fact should be shown on the balance-sheet by the deduction of the treasury stock.

There should be no dividends on treasury stock. The purpose of a dividend is to make a division of assets among the stockholders. No one owns the treasury stock and hence there is no one to whom to pay the dividend. Dividends should be declared only on the stock outstanding.

## Leaseholds

## Editor, Students' Department:

Sir: A problem in valuation of a leasehold has been presented to me, upon which I seek advice.

An individual in 1910 purchased a leasehold for twenty years upon property situated in the state of Illinois, for a certain amount. He formed a corporation for the purpose of operating same and valued the leasehold at $\$ 100,000$, representing twenty years' net profits at an estimated average of $\$ 5,000$ per annum, and issued capital stock accordingly.

To my mind this valuation is not conservative. It is based upon anticipated profits which may or may not materialize. Inasmuch as the individual who purchased the leasehold owns practically all of the capital stock of the corporation, it is my contention that the corporation should have issued stock to the amount of the fair market value of the leasehold.

On the other hand, admitting that the leasehold is worth much more than it cost, would it not have been proper to set up this valuation at the present worth in 1910 of the estimated profits for twenty years?

Very truly,
Newark, New Jersey.
Sidney Klein.
There seems to be no question that the valuation of the leasehold at $\$ 100,000$, the product of twenty years' rentals at $\$ 5,000$ per annum, is excessive. With the leasehold on the books at $\$ 100,000$ and with twenty years in which to write it off, an equal annual write-off of $\$ 5,000$ would exhaust the entire $\$ 5,000$ credit for rent received and leave nothing for dividends. If the capital is not to be depleted by dividends the leasehold must be amortized. Of course if a sinking fund is created annual instalments of less than $\$ 5,000$ will suffice for the creation of a fund of $\$ 100,000$ in twenty years because of the compound interest accretions. But even so it would certainly have been more conservative to value the leasehold at the present value, on a reasonable interest basis, of the rents to be received.


[^0]:    * Auditing Theory and Practice, Volume I, Robert H. Montgomery, 1922, page 350.

