## Journal of Accountancy

# Students' Department 

H. A. Finney

H. P. Baumann

Follow this and additional works at: https://egrove.olemiss.edu/jofa
Part of the Accounting Commons

## Recommended Citation

Finney, H. A. and Baumann, H. P. (1926) "Students' Department," Journal of Accountancy. Vol. 41 : Iss. 3, Article 9.
Available at: https://egrove.olemiss.edu/jofa/vol41/iss3/9

This Article is brought to you for free and open access by the Archival Digital Accounting Collection at eGrove. It has been accepted for inclusion in Journal of Accountancy by an authorized editor of eGrove. For more information, please contact egrove@olemiss.edu.

# Students' Department 

Edited by H. A. Finney<br>Assisted by H. P. Baumann

## AMERICAN INSTITUTE EXAMINATIONS

(Note.-The fact that these solutions appear in The Journal of Accountancy should not cause the reader to assume that they are the official solutions of the board of examiners. They represent merely the unofficial opinions of the editors of the Students' Department.)

## Examination in Accounting Theory and Practice-Part II

November 13, 1925, 1 p. m. to 6 P. m.
The candidate must answer all the following questions.
No. 1 ( 35 points):
From the following data, prepare an application of funds statement for the calendar year 1924.

X Y Z Company

| Assets | December 31 |  | Increase or Decrease * |
| :---: | :---: | :---: | :---: |
| Current assets: |  |  |  |
| Cash in banks and on hand... | \$152,928.16 | \$221,314.90 | \$68,386.74 |
| Notes receivable. . . . . . . . . . | 41,368.00 | 85,618.20 | 44,250.20 |
| Accounts receivable, less reserve for bad debts. | 249,628.30 | 378,920.62 | 129,292.32 |
| Due from affiliated companies. | 116,283.25 | 146,962.18 | 30,678.93 |
| Inventories................. | 896,762.80 | 950,319.60 | 53,556.80 |
|  | \$1,456,970.51 | \$1,783,135.50 | \$326,164.99 |
| Deferred charges: |  |  |  |
| Unamortized bond discount. |  | \$36,000.00 | \$36,000.00 |
| Other deferred charges. | \$29,615.25 | 47,837.90 | 18,222.65 |
|  | \$29,615.25 | \$83,837.90 | \$54,222.65 |
| Investments: |  |  |  |
| Affiliated companies. | \$643,828.76 | \$668,828.76 | \$25,000.00 |
| Outside investments. | 227,396.40 | 208,316.80 | 19,079.60* |
|  | \$871,225.16 | \$877,145.56 | \$5,920.40 |
| Fixed assets: |  |  |  |
| Land, buildings, machinery, equipment, etc. | \$2,392,875.40 | \$3,380,317.90 | \$987,442.50 |
| Less, reserve for depreciation | 465,928.15 | 562,928.62 | 97,000.47 |
|  | \$1,926,947. 25 | \$2,817,389.28 | \$890,442.03 |
|  | \$4,284,758.17 | \$5,561,508.24 | \$1,276,750.07 |
|  | 215 |  |  |


| Liabilities and net worth | December 31 |  | Increase <br> or <br> Decrease * |
| :---: | :---: | :---: | :---: |
| Current liabilities: |  |  |  |
| Accounts payable. | \$215,962.10 | \$127,824.11 | \$88,137.99* |
| Notes payable. | 230,000.00 | 170,000.00 | 60,000.00* |
| Dividends payable | 68,048.50 | 79,138.75 | 11,090.25 |
| Accrued interest, taxes, etc... | 87,368.20 | 96,218.90 | 8,850.70 |
|  | \$601,378.80 | \$473,181.76 | \$128,197.04* |
| Assets <br> Ten year $\mathbf{6 \%}$ gold bonds dated January 1, 1924. |  | \$500,000.00 | \$500,000.00 |
| Reserves: |  |  |  |
| Employees' pension fund. | \$2,619.30 | \$3,500.80 | \$881.50 |
| Dredging reserve... | 6,927.60 | 7,317.19 | 389.59 |
| Contingencies... | 120,615.40 | 122,876.45 | 2,261.05 |
|  | \$130,162.30 | \$133,694.44 | \$3,532.14 |
| Net worth: |  |  |  |
| Capital stock, preferred.. | \$174,200.00 | \$236,500.00 | \$62,300.00 |
| Capital stock, common. | 2,600,000.00 | 3,000,000.00 | 400,000.00 |
| Capital surplus. |  | $479,326.19$ | $479,326.19$ |
| Earned surplus. | 779,017.07 | 738,805.85 | 40,211.22* |
|  | \$3,553,217.07 | \$4,454,632.04 | \$901,414.97 |
|  | \$4,284,758.17 | \$5,561,508.24 | \$1,276,750.07 |

On January 1, 1924, the company issued $\$ 500,000$ par value $6 \%$ gold bonds due January 1, 1934. The bonds were sold at 92, the discount deferred to be amortized over the life of the bonds.

Outside investments included stock in the B company which cost $\$ 55,000$. The B company failed during 1924 and the stock was sold for $\$ 5,000$. The loss was charged to the reserve for contingencies. Other worthless outside investments, carried on the books at $\$ 10,000$, were absorbed in the current profit and loss. Other charges in this account may be attributed to the sale of securities at their book value of $\$ 15,000$ and the purchase of other securities.

An appraisal of the plant as of January 1, 1924, taken up on the books as at that date, resulted in a considerable increase in the sound book value. The appreciation arising therefrom amounted to $\$ 496,452.69$ and was credited to capital surplus. Extensive additions and improvements were made from the proceeds of the bond issue. Depreciation was computed upon the appraised property values and amounted to $\$ 132,716.90$ for 1924. It was found that $\$ 17,126.50$ of this a mount represented depreciation on the appreciation element in the book value of the fixed assets and this depreciation on appreciation was carried to capital surplus. A brick storehouse was abandoned and torn down in order to make room for plant extensions. The original cost of this building, $\$ 30,000$, had been entirely written off to depreciation reserve and the salvage, after removal costs, amounted to $\$ 5,000$. Actual expenditures for renewals and replacements charged directly to the depreciation reserve amounted to \$10,716.43.

In addition to the worthless securities charged to contingencies reserve, a federal tax assessment for the year 1920, amounting to $\$ 47,738.95$, was charged thereto. As a result of these unusual charges, the directors voted to appropriate $\$ 100,000$ of surplus to increase this account. A charge of $\$ 1,200$ was made against the pension reserve and $\$ 4,560.90$ against dredging reserve.

On July 1, 1924, a common stock dividend was declared which increased the stock outstanding to $\$ 3,000,000$.

The cash dividend transactions of the company were as follows:

| Preferred | Common | Date declared | Date paid |
| :---: | ---: | :---: | :---: |
| $\$ 3,048.50$ | $\$ 65,000.00$ | Dec. 31, 1923 | Jan. 15, 1924 |
| $3,325.00$ | $65,000.00$ | Mar. 31, 1924 | Apr. 15, 1924 |
| $3,500.00$ | $65,000.00$ | June 30, 1924 | July 15, 1924 |
| $3,717.00$ | $75,000.00$ | Sept. 30, 1924 | Oct. 15, 1924 |
| $4,138.75$ | $75,000.00$ | Dec. 31, 1924 | Jan. 15, 1925 |

Net profit for the year, carried to surplus, was $\$ 754,469.53$.

## Solution:

This problem contains so many complications and serves so excellently to illustrate the intricacies in which the preparation of a statement of application of funds may be involved, that it is thought that possibly more than a mere solution of the problem should be presented, and that advantage should be taken of the opportunity which the problem affords to discuss the theory of the statement and the working papers which may be employed to assemble the figures for its preparation.

The broad theory upon which the statement of application of funds is based is that increases in assets and decreases in liabilities during a period require the expenditure or application of funds, while decreases in assets and increases in liabilities and capital produce funds. If a statement of application of funds were prepared solely on the basis of this theory, without consideration of qualifications to be later considered, the statement would appear somewhat as follows:

## X Y Z Company

Statement of application of funds for the year ended December 31, 1924 Funds provided:

By increase in capital:
Increase in:
Capital stock, preferred. . . . . . $\$ 62,300.00$
Capital stock, common. . . . . . . 400,000.00
Capital surplus. . . . . . . . . . . . 479,326. 19
\$941,626.19
Less decrease in earned surplus. . $40,211.22$
By increase in liabilities:
Ten year $6 \%$ gold bonds.
\$901,414.97

Current liabilities:
Dividends payable
\$11,090.25
Accrued interest, taxes, etc.... $\quad \mathbf{8 , 8 5 0 . 7 0}$
$500,000.00$

19,940.95
Reserves:
Employees' pension fund..... \$881.50
Dredging reserve............. 389.59
Contingencies................ $\quad 2,261.05$
By decrease in assets:
Outside investments. . . . . . . . . . 19,079.60
Total funds provided. . . . .
\$1,443,967. 66

Funds applied:

| To increase in assets: |  |  |
| :---: | :---: | :---: |
| Cash. | \$68,386.74 |  |
| Notes receivable. | 44,250.20 |  |
| Accounts receivable, less reserve.. | 129,292.32 |  |
| Due from affiliated companies. . . | 30,678.93 |  |
| Inventories. . | 53,556.80 |  |
| Deferred charges: |  |  |
| Unamortized bond discount.. . | 36,000.00 |  |
| Other deferred charges. . . . . . | 18,222.65 |  |
| Investments in affiliated companies. | 25,000.00 |  |
| Land, buildings, machinery and equipment, less reserve for depreciation. $\qquad$ | 890,442.03 |  |
|  |  | \$1,295,829.67 |
| To decrease in assets: |  |  |
| Accounts payable. . . . . . . . . . . | \$88,137.99 |  |
| Notes payable. . . . . . . . . . . . . . | 60,000.00 |  |
|  |  | 148,137.99 |
| Total funds applied....... |  | \$1,443,967. 66 |

But the preparation of a statement of application of funds on the foregoing basis ignores the fact that the changes in the balances of the accounts during the period do not represent the true amounts of funds provided and funds applied. The reasons why this is so may be grouped under three headings, and illustrated as follows:
(1) Some changes in account balances are the result of mere book entries which did not produce any funds nor require the application of any funds. Hence the effect of such book entries must be eliminated from the accounts, and the changes in the balances must be adjusted to show what they would have been if such non-fund-producing and non-fund-requiring entries had not been made.

For instance, the plant was appraised as of January 1, 1924, and the appreciation was credited to capital surplus. This entry affected both the plant accounts and the capital-surplus account, but since it was merely a book entry the increase in the plant account resulting therefrom does not represent the result of an expenditure of funds, and the increase in the capital surplus does not represent a provision of funds. The debit increase in the plant account and the credit increase in the capital surplus must hence be reduced by the elimination of this item.

As a further illustration, a stock dividend was paid during the year and recorded by charge to surplus and by credit to capital stock, common, in the amount of $\$ 400,000$. This dividend was merely a conversion of surplus into stock and no funds were involved. The decrease in surplus has no relation to funds, and the increase in the credit balance of the capital-stock account does not represent a provision of $\$ 400,000$ of funds. Hence, before a statement of application of funds can be prepared on a proper basis, the credit increase
in the stock account must be eliminated, and the debit to surplus must be eliminated.
(2) Some changes in account balances are the result of transactions which did involve a provision or an application of funds, but the amount of the change in the account balance does not represent the amount of the funds provided or applied.

As an illustration, attention is called to the $\$ 500,000$ increase in the bondspayable account resulting from the issue of bonds during the year. This transaction did provide funds, but it did not provide $\$ 500,000$ of funds because the bonds were issued at a discount of eight points, or $\$ 40,000$, and the issue of bonds consequently produced only $\$ 460,000$. The credit to bonds does not represent a provision of funds to the amount of $\$ 500,000$, and the charge to bond discount of $\$ 40,000$ (subsequently reduced by amortization) does not represent an application of funds; rather, the entries in the two accounts must be taken into consideration together to determine the net amount of funds provided by the transaction.
(3) Some changes in account balances are the result of several transactions; some of which may represent a provision of funds (in the exact amount of the entry therefor, or in a different amount if there was an element of profit or loss); some of which may represent an expenditure or application of funds, and some of which may be merely the result of non-fund entries.

To illustrate, the change in the balance of the outside-investments account is the result of several transactions, as follows:


It should be apparent from this illustration that the change in the balance of the securities account can not properly be shown in the statement of application of funds as a fund provided in the amount of $\$ 19,079.60$, for an analysis of the account shows that the net decrease is composed of the following elements:

Loss on sales and write-offs . . . . . . . . . . . . . . . . . . . . . . . . . $\quad \$ 60,000.00$
Funds provided by sales . . . . . . . . . . . . . . . . . .
$20,000.00$
Funds provided by sales. . . . . . . . . . . . . . . . . . . . . . . . . . . . 20,000.00
Total. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 80,000.00$
Funds applied to purchases. . . . . . . . . . . . . . . . . . . . . . $60,920.40$
Net decrease in balance. . . . . . . . . . . . . . . . . . . . . . . . . $\$ 19,079.60$

## The Journal of Accountancy

The preparation of a statement of application of funds is simplified, when there are many items to analyze and adjust, by preparing working papers in which adjustments can be made giving consideration to the three classes of facts which make the mere use of changes in account balances impossible.

By using working papers:
(1) Changes in account balances which are the result of mere book entries can be eliminated by a reversing adjustment entry. For instance, the changes in balances resulting from the charge to plant and the credit to capital surplus can be eliminated by an adjustment debiting capital surplus and crediting plant account.
(2) Changes which are the result of fund-involving transactions but which do not represent the true amount of the fund provided or applied, can be adjusted by a correction of the changed balance. For instance, the bond account shows a credit of $\$ 500,000$, while only $\$ 460,000$ of funds were provided. By an adjusting entry of $\$ 40,000$ charged to bond account and credited to bond discount, the credit balance of the bond account is reduced to the true amount of the funds provided, and the charge to bond-discount account, which did not represent an application of funds, is eliminated.
(3) Changes in account balances which are the net result of miscellaneous transactions and entries therefor, are analyzed into their component elements.
Special provision is made in the working papers for the analysis of surplus, because the change in the balance of this account usually represents the net amount of many entries, including the net profits for the year (fund provided), the declaration and payment of dividends (fund applied), losses or gains on sales of assets (corrections or adjustments of the change in the balance of the asset account to determine the true amount of the fund provided), and writeups or write-downs in property values (which have no relation to funds and hence must be completely eliminated).

Attention is now directed to the working papers on pages 222,223 and 224. The balance-sheets at the two dates are entered in the first two columns, and the increases and decreases in the balances are entered as debits or credits in the year's-excess debit and credit columns, the debits representing increases in assets and decreases in liabilities and capital, and the credits representing decreases in assets and increases in liabilities and capital. These two columns are footed to determine, by their equality, that the differences in balances have been correctly computed and entered. The adjustments are then entered in the adjustment columns. The lettered entries in the adjustment columns of the working papers prepared in solution of this problem are explained as follows:
(A) The net decrease in surplus is brought down to a lower line where plenty of space will be available for complete analysis to account in detail for the various items which have resulted in the net decrease.
(B) Bond account is debited and bond discount credited with the $\$ 40,000$ discount on the bond issue. The results of this entry are: First, the excess credit of $\$ 500,000$ in the bond account is reduced by the $\$ 40,000$ debit adjustment, thus leaving a $\$ 460,000$ credit excess, which is carried out
as a credit to the funds-provided column, and second, the $\$ 36,000$ debit in the bond-discount account is converted into a net credit of $\$ 4,000$, which is the amount of the discount amortized during the year, and which is given consideration in C.
(C) Bond discount is debited and surplus credited to reverse the entry writing off the amortized discount for the year. The entry made at the end of 1924 to write off $\$ 4,000$ discount did not represent a provision or an application of funds. The $\$ 40,000$ entry (B) and the $\$ 4,000$ entry (C) completely eliminate the bond-discount balance, and the $\$ 4,000$ credit to surplus reverses an entry in that account which reduced the balance in that account without affecting the funds. It is true that the discount was probably written off by charge to profit and loss instead of surplus, but since the profit-and-loss account has been closed to surplus the result of the the amortization was a reduction of surplus.
(D) Stock of B company having a book value of $\$ 55,000$ was sold for $\$ 5,000$, the loss having been absorbed in surplus. Entry (D) is equivalent to the following journal entry:


It accomplishes the following: Begins the analysis of the investment account to determine the various elements of the net decrease of $\$ 19,079.60$; sets out as a separate item the amount of funds provided by the sale of the stock (this amount being extended to the funds-provided column); and offsets a debit entry made in the surplus account for a $\$ 50,000$ loss which changed the balance of the surplus account without affecting the funds.
(E) Worthless securities were written off by charge to profit and loss, and eventually to surplus. This entry reverses the write-off, continuing the analysis of the investment account, and eliminating another nonfund entry from surplus.
(F) Other securities were sold at their book value of $\$ 15,000$. This adjusting entry continues the analysis of the investment account, and sets out the proceeds of the sale as a separate item, which is carried to the funds-provided column.
The problem states that other securities were purchased, but it does not state the cost thereof. However, our analysis shows (entries D, E, and $F$ ) that the account was credited during the year with $\$ 80,000$, the book value of securities sold; since the balance of the account has decreased only $\$ 19,079.60$, debit entries aggregating $\$ 60,920.40$ must have been made to record the purchase of securities, and this amount is carried to the funds-applied column.
(G) This entry reverses the one for $\$ 496,452.69$ which was made as of January 1,1924 , to write up the plant to the appraised value. It was a mere book entry not affecting funds, and is hence reversed.
(H) Depreciation was provided during the year in the amount of $\$ 132,716.90$. This decreased the profits and the surplus without reducing the funds
X Y Z Company
Application of funds-Working papers, year ended December 31, 1924 X Y Z Company
Application of funds-Working papers, year ended December 31, 1924
Applied $\begin{gathered}\text { Funds } \\ \text { Provided }\end{gathered}$ $\$ 18,222.65$
$25,000.00$
$60,920.40$
$520,989.81$ Working capital
Increase $\$ 68,386.74$
$44,250.20$ 129,292.32 $30,678.93$
$53,556.80$ $\$ 4,000.00 \mathrm{C} \$ 40,000.00 \mathrm{~B}$
987,442.50 • 30,000.00 J 496,452.69 G

$\$ 68,386.74$ 129,292. 32
$30,678.93$
$53,556.80$ 36,000 .00 18,222.65
25,000.00
$987,442.50 \cdot 30,000.00 \mathrm{~J} \quad 496,452.69 \mathrm{G}$



$\$ 4,000.00$ C $\$ 19,079.60 \quad\left\{\begin{array}{l}55,000.00 \mathrm{D} \\ 10,000.00 \mathrm{E} \\ 15,000.00 \mathrm{~F}\end{array}\right\}$ | $\frac{2,392,875.40}{\$ 4,750,686.32} \xlongequal{\$, 380,317.90}$ |
| :--- | Assets Cash. . . . . . . . . . Notes receivable.. Accounts receivAffiliated companies. . . . . . .... Unamortized bond

 Other deferred. charges........
Investments: Investments:
$\begin{array}{rr}643,828.76 & 668,828.76 \\ & 208,316.80\end{array}$
208,316.80 $2,392,875.40 \quad 3,380,317.90$
Land, buildings,
etc..............


The Journal of Accountancy
X Y Z Company


$\overline{\$ 474,302.98} \underline{\underline{454,362.03}} \frac{454,362.03}{\frac{\$ 474,302.98}{}} \overline{\underline{\$ 1,438,391.92}} \xlongequal{\$ 1,438,391.92}$
Application of funds-Working papers, year ended December 31, 1924 (Continued) Working capital Analysis of surplus Debit Credit Increase Decrease $\$ 57,337.72 \quad \$ 146,716.90 \$ 1,352,539.30 \quad \$ 884,723.59 \$ 474,302.98 \$ 19,940.95$
$100,000.00 \mathrm{~N}$ $2,081.50 \mathrm{P}$
$4,950.49 \mathrm{R}$
400000.00 S
$14,680.75 \mathrm{~T}$
$280,000.00 \mathrm{U}$
$\begin{array}{r}5,000.00 \mathrm{D} \\ 15,000.00 \mathrm{~F} \\ \hline\end{array}$



$\$ 1,711,436.33$ \$1,711,436.33
T


| $\$ 948,429.64$ |
| :---: |
| $948,429.64$ |


 Funds provided by profits.

## Sale of outside investments.

Sale of brick storehouse salvage .
Funds applied to:
Renewals and replacements. . . . . . . . . . . . . . .
Renewals and replacements. .
Payment of federal tax assessm
Payment of pensions. . . . . . . . . . . . . . . . . . . . . . . .
Payment for dredging . . . . . . . . .
Preferred dividends. .
Common dividends............................
Increase in working capital and deferred charges
provided by the profits; since it was an entry for a non-fund transaction it is reversed.
(I) But $\$ 17,126.50$ of the above amount of depreciation represented depreciation of appreciation, which appears to have been charged to capital surplus and credited to earned surplus. Such a transfer from one surplus account to another did not record a fund transaction, and hence the entry is reversed. The effect of entries $G$ and $I$ is to eliminate the net increase of $\$ 479,326.19$ in the capital-surplus account.
Entries H and I could be combined in a single entry as follows:

| Depreciation reserve. | \$132,716.90 |  |
| :---: | :---: | :---: |
| Capital surplus. |  | \$17,126.50 |
| Earned surplus. |  | 115,590.40 |

(J) A brick storehouse which cost $\$ 30,000$ was abandoned. The problem states that the entire cost "had been" written off to the reserve. This is interpreted as meaning that the building had been fully depreciated by credits to the reserve, and that when the building was abandoned the cost was written off against the reserve. Such an entry would have affected both the plant and the reserve account without involving any funds, and hence entry $J$ is made to reverse it.
(K) Salvage from the brick building netted $\$ 5,000$. Nothing is said in the problem as to the account credited therewith; but the analysis of the depreciation-reserve account, accomplished by entries $H$ and $J$ discussed above, and $L$ discussed hereafter, shows that the net increase of $\$ 97,000.47$ has been fully accounted for with the exception of $\$ 5,000$, and it is therefore assumed that the salvage recovery was credited to the reserve. But this recovery represented a provision of funds, and hence entry K is made to set the $\$ 5,000$ out as a separate item to be carried to the funds-provided column.
(L) Expenditures for renewals and replacements of plant in the amount of $\$ 10,716.43$ were recorded by charge to the depreciation reserve. These expenditures involved an application of funds; hence entry $L$ is made, completing the analysis of the reserve account and setting the $\$ 10,716.43$ item out separately to be carried to the funds-applied column.
(M) The payment of the 1920 federal tax assessment required an application of funds, and this is indicated by entry $M$ crediting the reserve for contingencies and setting the payment out as a separate item to be carried to the funds-applied column.
(N) The appropriation of $\$ 100,000$ from surplus to the reserve for contingencies was a non-fund entry, and hence is reversed. Entries $M$ and $N$ dispose of the change in the balance of the reserve for contingencies, by analyzing it into its elements, one of which constitutes an application of funds, and the other a factor in the analysis of surplus.
(O) The charge of $\$ 1,200$ made against the pension-fund reserve presumably records pension payments, which are set out separately by entry $O$ as a fund applied.
(P) But since the pension-fund-reserve account has increased $\$ 881.50$ during the year in spite of the $\$ 1,200$ charge, it appears that a credit of
$\$ 2,081.50$ was made in the account by charge to profits and eventually to surplus. But such credits to reserves do not involve funds, and hence the appropriation to the reserve is reversed by entry P .
(Q) The charge of $\$ 4,560.90$ to the dredging reserve presumably records an expenditure, which is set out by entry $Q$ as a fund applied, and
$(\mathrm{R})$ To account for the present balance in the dredging reserve it is necessary to assume an appropriation of $\$ 4,950.49$ out of profits, which, being a non-fund entry, is reversed.
(S) The common-stock dividend of $\$ 400,000$ changed the balances of the stock and surplus accounts without involving funds, and hence entry $S$ is made to reverse the one recording the stock dividend.
(T) Surplus has been charged during the year with $\$ 14,680.75$ in respect of cash dividends on preferred stock, this amount being the total of the four amounts shown in the problem as having been declared during 1924. As dividends involve an application of funds, entry $T$ is made to set them out separately as a fund applied, and to continue the analysis of surplus.
(U) This entry is similar to T except that it applies to common dividends.

Consideration has now been given to all the facts stated in the problem as indicating adjustments. The analysis of surplus, however, is not complete, as the items entered in the two surplus-analysis columns do not account completely for the change in the surplus balance. The two surplus-analysis columns are brought into balance by inserting $\$ 891,091.92$ as the amount of funds provided by profits, and this amount is carried to the funds-provided column.

The adjustment columns are then footed to determine their equality as evidencing the correctness of the entries made therein; the amounts shown in the year's-excess debit and credit columns plus or minus amounts in the adjustment columns, are then carried to the appropriate working-capital or funds columns. The increase in working capital is entered as a balancing figure in the working-capital-decrease column, and carried to the funds-applied column, and the working-capital and funds columns are footed. The working papers are now complete.
Funds are provided by the profits of the year, but the net profits, as shown by the profit-and-loss statement, and the funds provided by profits, as shown by the statement of application of funds, are usually different amounts because certain charges, such as depreciation and amortization of bond discount, have been made against profit and loss which reduced the profits without reducing the funds provided by the profits. It is customary to prepare the statement of application of funds in such a way as to tie up the net profits as shown in the profit-and-loss statement with the funds provided by profits as shown in the statement of application of funds. This is done by setting down the net profits and adding the non-fund-requiring charges to profit and loss, the total being the amount of funds provided by profits.

But this problem does not state the amount of net profit shown by the profit-and-loss statement, and hence it is necessary to determine it if the usual tie-up mentioned above is to be shown. The net profit can be determined by the following tabulation of the figures shown in the surplus analysis of the working papers:

## Students' Department

| Bond discount amortized. | Profit and loss Surplas |  |
| :---: | :---: | :---: |
|  | \$4,000.00 |  |
| Worthless investments written off | 10,000.00 |  |
| Depreciation: |  |  |
| Credit to reserve . . . . . . . \$132,716.90 |  |  |
| Less realized appreciation. 17,126.50 |  |  |
| Net charge to profit and loss. | 115,590.40 |  |
| Appropriations to reserves: |  |  |
| Contingencies. |  | \$100,000.00 |
| Pensions. | 2,081.50 |  |
| Dredging. | 4,950.49 |  |
| Capital-stock dividend. |  | 400,000.00 |
| Cash dividends declared: |  |  |
| On preferred stock. |  | 14,680.75 |
| On common stock. |  | 280,000.00 |
| Total debits to surplus. |  | \$794,680.75 |
| Net decrease in surplus. |  | 40,211.22 |
| Credit to surplus-net profit transferred from profit and loss. | 754,469.53 | \$754,469.53 |

Funds provided by profits. . . . . . . . . . . . . . $\$ 891,091.92$

From the foregoing data the following statements called for by the problem can be prepared. The problem does not specifically call for a schedule of working capital, but this is usually assumed to be required as supporting the statement of application of funds.

## X Y Z Company

Statement of application of funds, year ended December 31, 1924

## Funds provided:

By profits:
Net profit for the year-per profit-and-loss statement
$\$ 754,469.53$
Add charges to profit and loss which reduced the profits without reducing the funds provided by the profits:
Credits to reserves:
Depreciation
$\$ 115,590.40$

Pensions.
2,081.50
Dredging
4,950.49
Bond discount amortized
4,000.00
Worthless investments written off
$10,000.00$

| By issue of ten-year $6 \%$ gold bonds: |  |  |
| :---: | :---: | :---: |
| Par value. | \$500,000.00 |  |
| Less discount | 40,000.00 |  |
| By issue of preferred capital stock |  | 62,300.00 |
| By sales of investments in securities: |  |  |
| Book value. | \$70,000.00 |  |
| Less loss. | 50,000.00 |  |
|  |  | 20,000.00 |
| By sale of salvage from brick storehouse. . . . . . |  | 5,000.00 |
| Total funds provided. . . . . . . . . . . . . . |  | \$1,438,391.92 |
| Funds applied: |  |  |
| To expenditures for fixed assets: |  |  |
| Additions and improvements. | \$520,989.81 |  |
| Renewals and replacements. | 10,716.43 |  |
| To expenditures for investments in other companies: |  |  |
| Affiliated. | \$25,000.00 |  |
| Outside. | 60,920.40 |  |
| To cash dividends: |  |  |
| On preferred stock. | \$14,680.75 |  |
| On common stock. | 280,000.00 |  |
|  |  | 294,680.75 |
| To payment of federal tax assessment for 1920 |  | 47,738.95 |
| To increase in working capital, per schedule.... |  | 454,362.03 |
| To miscellaneous expenditures: |  |  |
| Pensions. | 1,200.00 |  |
| Dredging. | 4,560.90 |  |
| Deferred charges. . . . . . . . . . . . . . . . . . . . . . | 18,222.65 |  |
| . |  | 23,983.55 |
| Total funds applied................. . |  | \$1,438,391.92 |

## X Y Z Company

Schedule of working capital, December 31, 1923 and 1924, and comparison
Changes in working
December 31,
19231924 capital
Increase Decrease

## Current assets:

Cash
\$152,928.16 \$221,314.90 \$68,386.74
$\begin{array}{llrr}\text { Notes receivable.... } & 41,368.00 & 85,618.20 & 44,250.20\end{array}$
Accounts receivable
-net......... 249,628.30 378,920.62 129,292.32


