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The nature and use of a sinking fund, provided for the redemption of a bonded debt, is well understood, and it is not intended to enlarge upon the *fund* account here. On the other hand, there is a very considerable difference of opinion and misunderstanding regarding the nature and the final disposition which should be made of the sinking fund *reserve* account carried in order to comply with the stipulation contained in many deeds of trust, that the sinking fund shall be provided for in yearly installments *out of profits*. To comply with this provision, profit and loss is debited each year with the amount of the installment, which is credited to an account usually entitled " sinking fund reserve," and a like amount is taken from cash, invested in securities and debited to " sinking fund," the sinking fund and sinking fund reserve accounts thus balancing and offsetting each other.

As the sinking fund, in theory and sometimes in practice, can be provided for without setting aside its equivalent from earnings, many accountants are puzzled to know why this provision should be included in trust agreements, and there is a very general disagreement and misunderstanding as to what should be done with the sinking fund reserve account when the bonds have been paid and the bond account and sinking fund account have disappeared from the balance sheet, leaving the poor, orphaned sinking fund reserve account looking very lonesome on the liability side of the balance sheet without a home and apparently without any relations. Consternation! What to do! Certainly an asylum must be found for it. As a matter of fact, an asylum has been provided for it all the time, but few appear to know where it is. Endeavor will be made herein to show, as briefly as possible, the proper disposition to be made of this much misunderstood account, and without going into details concerning sinking funds generally, which subject has already been worn threadbare.

Reference is made to the following articles which have appeared in The Journal of Accountancy:

Sinking Funds and Reserve Accounts,
By Seymour Walton, C. P. A. (October, 1908),
Sinking Fund and Reserve Accounts,
By James T. Anyon, C. P. A. (January, 1909),

Reserves and Sinking Funds,
By C. V. Rowe, C. P. A. (August, 1910),

also to a paper read before the Congress of Accountants at St. Louis, September 27, 1904, by A. Lowes Dickinson, C. P. A.

Mr. Walton is very positive that there is no necessity for charging profit and loss with the sinking fund installments, and, although he does not say so directly, one might infer from a perusal of his article that he would favor disregarding any such stipulation in a deed of trust. If, however, the reserve account has been kept in accordance with the clause in the trust agreement, he states that "the only way it can be disposed of is by a credit to profit and loss but no explanation has ever been vouchsafed as to why it was ever charged to profit and loss at all."

Mr. Anyon believes in the policy of setting aside the reserve, but states that "while these sinking fund amounts are set on one side for the purpose named, they, nevertheless, form part of the general surplus of the company, and are available at the right time for disposition the same as the rest of the accumulated earnings." He evidently considers the reserve merely a section of the surplus, and advocates closing it into the latter when the bonded debt has been extinguished.

Mr. Rowe thinks that when the bonds have all been retired, it might be a good idea to set up a "surplus capital account" entitled "Income Capitalized by Bond Redemptions." Further on he states—"but if the disposition of surplus is to be ascertained in the usual manner by comparison of the two sides of a balance sheet, there does not appear to be any logical reason for providing a reserve account."

Mr. Dickinson in the course of his very able and valuable address says—"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." He suggests goodwill or patents or some asset of a wasting character.

The American Edition of Dicksee's "Auditing" contains the following paragraph upon the subject—"In view of the fact that whenever sinking fund charges to profit and loss are in addition to ample charges for depreciation, probable losses on bad debts, etc., they really represent undivided profits or surplus, which will revert to surplus or profit and loss account after the specific purpose for which they have been temporarily set aside (i. e., the redemption of the bonds at maturity) has been fulfilled, it appears that the correct way to state the sinking fund in the balance sheet is as a separate section of the surplus or undivided profits, and not to include it among the actual liabilities."

It is believed that none of those whose opinions have been quoted above have indicated the proper and logical disposition which should be made of the sinking fund reserve account when the bonds have been retired at maturity, except Mr. Dickinson whose plan for its disposition, however, would appear to hold good only under exceptional circumstances. He does not indicate what he would do with it in case adequate provision has been made for depreciation of every character, and there is no fixed asset on the books which is overvalued and ought to be written down.

The matter would appear to be an exceedingly simple one if looked at from the proper point of view. Bonds having a sinking fund provision are generally long term obligations. In connection with a newly organized company they are, as a rule, issued to pay for the construction of plant. Frequently they are issued by a going concern which mortgages its property to provide more working capital, or to pay for new construction. But no matter for what purpose they are issued, they all create a capital liability.

Now what is the reason for the inclusion in a deed of trust of a provision that the installments to the sinking fund shall be set aside out of profits? This is a very wise provision in that it makes it *mandatory* upon the board of directors to set aside each year out of earnings an amount which when placed at interest will be sufficient to pay the bonded debt at maturity. To accomplish this there must be taken from the current assets in the shape of cash, a like amount for investment in the sinking fund, and this depletion of the working capital is made good by the reservations from profits.

If the policy of charging the sinking fund installments to profit and loss is not followed, and the directors are not farsighted enough to accumulate sufficient surplus in its place, it would simply mean that in order to replenish the working capital for the amounts taken therefrom for investment in the sinking fund, the company would either have to resort to borrowing or sell additional capital stock. If it is the policy of one board of directors to be conservative it may not be the policy of another, and it must be remembered that the personnel of the board is sure to change many times during the term of the bonds.

In the case of bonds representing a lien on plant, the sinking fund reserve account indicates the gradually increasing equity of the stockholders in the property which they own free and clear when the bonds have been retired. The charging of sinking fund installments against earnings, means the utilization of income for the extinguishment of a capital liability, and amounts to nothing more nor less than a capitalization of earnings. It would seem, therefore, that when the bonds have been redeemed and the debt extinguished at maturity, the amount so capitalized should be distributed to the stockholders in the form of a *stock dividend*, and the sinking fund reserve closed into capital stock account. If transferred to surplus and eventually paid out in cash dividends, it would simply mean the distribution of that much working capital.

The following illustrations, although purposely very crude, should serve to make the matter clear.

Let it be assumed that a corporation is organized with $300,000 capital stock and $200,000 bonded debt. The proceeds of the bonds have been used in the construction of a plant and the stock has been sold at par to provide working capital. The bonds mature, in say twenty years, during which time the company has set aside out of earnings, in yearly installments, an amount which having been invested yields at the end of the twenty years the exact amount necessary to pay and cancel the bonds. To simplify matters it is assumed that all surplus earnings in excess of the sinking fund installments have been distributed as dividends and that no additions have been made to the plant.

EXHIBIT A

BALANCE SHEET AT COMMENCEMENT OF BUSINESS

ASSETS		LIABILITIES	
Working Capital	$300,000	Capital Stock	$300,000
Plant	200,000	Bonds	200,000

At this time the bondholders practically own the plant, there being no equity in it for the stockholders.

EXHIBIT B

BALANCE SHEET AS AT MATURITY OF BONDS

ASSETS		LIABILITIES	
Working Capital	$300,000	Capital Stock	$300,000
Plant	200,000	Bonds	200,000
Sinking Fund	200,000	Sinking Fund Reserve ..	200,000

The stockholders have now accumulated sufficient funds out of earnings to pay the bonds and discharge the lien on the plant. The sums for investment in the sinking fund have been taken from working capital, which has been replenished from the amount reserved from profits.

EXHIBIT C

BALANCE SHEET WHEN BONDS HAVE BEEN RETIRED

ASSETS		LIABILITIES	
Working Capital	$300,000	Capital Stock	$300,000
Plant	200,000	Sinking Fund Reserve ..	200,000

The stockholders now own the plant free and clear, their ownership being represented on the balance sheet by the sinking fund reserve account.

EXHIBIT D

BALANCE SHEET, ASSUMING THE SINKING FUND RESERVE TO HAVE BEEN CLOSED INTO SURPLUS AND EVENTUALLY DISBURSED IN CASH DIVIDENDS

ASSETS		LIABILITIES	
Working Capital	$100,000	Capital Stock	$300,000
Plant	200,000		

The working capital has been depleted by the amounts necessary to pay the cash dividends, and the company is in bad shape financially. It will either have to borrow money, or again mortgage the plant. It probably had to borrow to pay the dividends.

EXHIBIT E

BALANCE SHEET, ASSUMING A STOCK DIVIDEND TO HAVE BEEN PAID AND THE SINKING FUND RESERVE CLOSED INTO CAPITAL STOCK

ASSETS		LIABILITIES	
Working Capital	$300,000	Capital Stock	$500,000
Plant	200,000		

The above should indicate very clearly that, except under unusual circumstances, the proper disposition to make of the sinking fund reserve is to declare a stock dividend and close the account into capital stock. Of course, a general rule cannot be established which will meet all conditions and cover exceptional circumstances, and this is especially the case in connection with accounting matters for the reason that conditions vary so in the business world. For instance, it would be perfectly proper to follow Mr. Dickinson's suggestion, and apply the reserve to the reduction of some fixed asset of a wasting character, or to depreciation of an intangible asset, such as patents or goodwill, in case of overvaluation of such. Again, a company might have a large excess of working capital over requirements, in which event the sinking fund reserve may, with safety, be transferred to surplus, but a state of affairs in which a corporation has an excess of working capital equal to or exceeding its bonded debt is scarcely conceivable.

There are four methods by which such a debt can be paid—by the conversion of assets, by the creation of another liability, by the sale of additional capital stock, or out of profits. It would seem that the intention of the framers of a deed of trust, in which it is stipulated that installments to the sinking fund shall be provided out of profits, and of the stockholders who consent to it, is that the debt shall be *paid* out of profits, and as this amounts to a capitalization of earnings, the safest course to pursue when the bonds have been retired is to evidence such capitalization by a distribution of shares pro-rata among the stockholders.