Railroad Accounting in Relation to the 20th Section of the Act to Regulate Commerce

Arthur W. Teele
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By Arthur W. Teele, C. P. A.

I believe it is generally understood that under the authority of the 20th section of the Act to Regulate Commerce, full power is given the Interstate Commerce Commission to prescribe the system of accounts to be used by practically all of the railroad companies operating in the United States.

Those who are acquainted with railroad accounting know that for a number of years the railroads have been required to report annually to the Interstate Commission and the form of the report and the classification of the information contained therein has been in accordance with the requirements of the Commission, so that the new provisions of the act do not involve so radical a departure as might at first appear. The requirements of the Commission were practically in accord with the recommendations of the Association of American Railway Accounting Officers and many railroads were keeping their accounts strictly in accord with those recommendations as far as their scope extended. In the order promulgated by the Commission, making effective July 1, 1907, the "Classification of Operating Expenses, Third Revised Issue," the introductory letter says, "With one exception, the 'Classification of Operating Expenses,' herewith promulgated, conforms to the recommenda-

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tions of the association," namely the association of American Railway Accounting Officers.

The one exception referred to was that which attempted to separate into elements the amount paid by one carrier to another for the use of equipment and to distribute them partly to operating expenses and partly to income. In presenting the reasons for this distribution, the Commission introduced a new feature into the classification by providing for formal depreciation charges on equipment.

This feature is called new because for the first time it has been formally provided for in the classification by the Commission, but I question if there is a successful railroad company in the country which has not, in one way or another, provided to a considerable extent for depreciation not only of its equipment but of other parts of its property.

In any business venture the integrity of the capital must be assured before there can be any profit. When capital is invested in railroad property we know that parts of that property commence to deteriorate from the time it is acquired and that ultimately it is discarded for one reason or another. The difference between the amount originally invested and the amount recovered when the property is discarded constitutes a loss or depreciation which must be provided for before there can be any actual profit.

The action of the Commission in making provision for formal charges for depreciation of equipment has called forth many different expressions of opinion from men in the railroad service, and although the sentiment expressed has largely been opposed to the action of the Commission, the existence of the element of depreciation and the necessity of providing for it at one time or another are admitted.

I do not think there are any public accountants, with experience in many kinds of work, who have not had to give much consideration to this question of depreciation of plant. I think all of us will agree that it should be provided for annually on some carefully calculated basis. We may hold different views as to whether the amount provided annually shall be included as part of the operating expense or cost of production or transportation, as the case may be, or whether in railroad accounts
it shall be treated as a deduction from income or as an appropriation of the profits, and any of us may take different views for different undertakings but we must not lose sight of the fact of depreciation wherever it exists, or fail to make provision for it, and it must be dealt with in a way which will not allow those responsible for the operation of the property to lose sight of it or fail to take it into their calculations.

If it is within the province of the Commission to determine the cost of transportation, in order that they may judge concerning the margin between the tariffs charged for the service of transportation and its cost, then the accounts must be kept on a uniform basis by all railroad companies so that fair comparison may be facilitated, and it is quite evident that the wear and tear of capital invested in the transportation plant must be taken into account through some uniform method. If the wear were plainly visible each day of the plant's use there would be little question as to the propriety of the charge being included regularly in the accounts, but because the plant is maintained in a state of operating efficiency there are many who do not see the necessity of charging depreciation until some part of it fails, either through accident or because mechanical construction is not in harmony with other parts of the plant and it consequently no longer fulfills its purpose and has to be replaced. It is, however, manifestly unfair that the revenues of to-day should be charged with the whole loss which has been going on during past years, and as depreciation is inseparable from the operation of plant, good accounting demands that it be provided for as it occurs, as closely as this can be accomplished.

I do not think it necessary for me to present arguments to my fellow public accountants as to the necessity of promptly taking into account depreciation of capital, neither do I think it would be necessary to present any very extended argument to the accounting officers of the railroads, for I believe that any one who gives the matter careful thought will agree to the principle of providing for the loss out of the revenues earned in the period when the loss is occurring. An opinion expressed by one accounting officer, in an article published in the Journal of Accountancy, was to the effect that if the requirement of the Commission had been established in some year other than the
The Journal of Accountancy.

past one, which has been full of difficulties for the railroads, there would have been little opposition to it. It is a curious feature that the opposition to the inclusion of the charge comes from those who operate the railroads and represent their owners and are therefore interested in maintaining tariffs rather than from those who use the service of transportation and are interested in having tariffs reduced.

There are many methods of dealing with this question and some of our members have already expressed their views as to how the matter should be dealt with in the accounts. My own belief is that the instructions as at present issued, in respect to equipment, are sound, provided the railroads base their annual rates upon tables of experience rather than upon arbitrary decisions. If the life is determined by taking the average period between delivery and retirement of a large number of cars, then I think the basis will be as safe and sound as the calculations of the actuaries of the life insurance companies. The constant expenditure for up-keep and the extraordinary expenditure for overhauling will all have had their influence and effect in determining the average life so arrived at. It may be advantageous to separately determine the average life of particular classes of equipment or equipment solely engaged in a particular kind of traffic, and there is little doubt but that whatever rates are adopted in the beginning, experience will lead to revision of them from time to time.

The suggestion that extraordinary repairs or replacements should be charged against the reserve for depreciation appears to me as a tendency to mingle two separate elements. If it were practicable to determine the total amount required to be expended for repairs during the life of the equipment, then that amount might be equally distributed over its whole life and we would not have such a condition as confronts some railroads to-day when much of the equipment is crippled and the management does not undertake the repairs necessary to put it in first-class condition because of the effect upon their operating expenses while revenues are low. The plan has been adopted in other lines of business of raising a reserve for extraordinary repairs in addition to the reserve for depreciation, and setting the amount up against the time when it shall prove necessary or
expedient to incur such expenses, and I believe this plan could be successfully adopted in relation to railroad equipment. The matter of the equitable distribution of the cost of repairs should not in my judgment be entangled with the matter of depreciation charges.

The question of depreciation is a vital one and the Commission has at present made formal provision for it only in respect to equipment. I do not know what further plans may be under consideration. Already there has been a modification, by interpretation of the instructions now issued, so that those companies that wish to provide for depreciation in other parts of the property may do so by advising the Commission of the accounts to be kept and the plan to be followed. The element of depreciation exists in all or nearly all parts of the physical property and I look forward to the time when systematic and complete provision will be made for it.

As public accountants we are interested in seeing that the interests of bondholders and stockholders are protected in corporation accounts and it follows that so far as we are able, we must see that the capital invested is held intact before any profits are stated. There are, of course, other points of inquiry but I will refer to two which it seems to me have not had sufficient attention given to them. One is the provision for the various classes of claims, and the other is the proper inclusion of these and other items of expense in the accounts of the periods to which they belong.

You are aware, no doubt, of the vast number of claims for loss and damage and overcharge which arise when railroad traffic assumes any considerable volume. All these require investigation and many of them by more than one railroad company, so that considerable time is necessarily consumed before final adjudication is made. Methods adopted in late years have done much to simplify and hasten the final determination of these traffic claims, but little has been done with respect to charging them into the periods when they were incurred. The usual practice is to charge them in the period in which they are vouchedered or finally passed upon, the result being that the revenues of a given year bear the burden of expenses or deductions of the revenues of prior years. It is ordinarily assumed that the over-
Iaps of one year will about offset the overlaps of the next, but little if any effort is made to determine whether they offset each other and seldom is any provision found in the balance sheet for the unvouchered or unpresented claims at the close of the fiscal year.

An average relationship can be established between the amount of these claims and the volume of earnings, and an estimated liability set up for each year which would be charged with the claims when settled. The percentage of revenue thus set up as a liability would vary according to experience and a knowledge of traffic conditions. It is, however, more creditable to over-provide and have something to return to the accumulated profits than it is to under-provide and have to burden a succeeding year with the losses of a prior one. It is always more satisfactory to learn that profits are larger than calculated rather than smaller, and I believe a policy that leads to this result is more just to the security holders.

There is one class of claims which arises through the operations of a railroad which are far more difficult to deal with fairly, namely, the personal injury claims. The liability under many of them is quickly determined and settled, but in a vast number there are many elements which contribute to the determination of the final amount to be paid. Many claims are not filed until after the accounts have been closed for the year. I have however, much faith in the guidance of past experience, if the records of it are carefully analyzed, and if as soon as advice is received of probable claims, an estimate is made, based upon the records of similar cases, and the expense taken into account, the result will, I believe, not be far from accurate. These expenses are in the nature of a hazardous loss, the same as loss by fire, and it is possible that a plan for insurance against them, either wholly or partially, would prove to be very satisfactory.

It is not hard to understand the difficulties of providing in a railroad business for all expenses in the period during which they are incurred, particularly when accounts are stated monthly. On the other hand it is sometimes surprising to see how fully the expenses can be provided for if the expenditures are fully analyzed and estimates made for expenses known to exist but the exact amounts of which are not known at the time of closing the
Railroad Accounting.

records. If the result obtained is to be accurate, the accounts of each fiscal period must be rendered as complete as possible and one period must not benefit from or bear the burden of another beyond the unavoidable minimum of these conditions.

Railroad accounts are the means through which the Interstate Commerce Commission is to be informed as to the cost of transportation. In order that the information shall be sound, the accounts must be accurate and intelligibly stated. To obtain these results we must have a uniform classification, a clear understanding of the distinction between expenditure properly chargeable to capital and that chargeable to revenue; and we should have the assurance that all charges necessary to the full maintenance of the capital and the production of the revenue have been included before final results are stated.