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### Papers and Proceedings of the Third Annual Meeting, Richmond, VA., 1918

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# The American Association of University Instructors in Accounting

## PAPERS AND PROCEEDINGS OF THE THIRD ANNUAL MEETING

#### American Association of University Instructors in Accounting

## ORGANIZED AT COLUMBUS, OHIO DECEMBER 28, 1916

#### Executive Committee, Year 1919

H. R. Hatfield, University of California, President
J. T. Madden, New York University, Vice-President
C. F. Rittenhouse, Boston University, Vice-President
Donald English, Cornell University, Vice-President
H. T. Scovill, University of Illinois, Secretary-Treasurer

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#### **PROGRAM**

#### THIRD ANNUAL MEETING

## The American Association of University Instructors in Accounting

RICHMOND, VA., DECEMBER 27, 1918. HEADQUARTERS: HOTEL JEFFERSON

#### FRIDAY MORNING

9:30—10:55 Joint session with American Economic Association. Chairman F. H. Elwell, University of Wisconsin, President of American Association of University Instructors in Accounting.

Paper: "Interest on Investment as a Factor in Manufacturing Costs, Especially in Connection with War Contracts," Clinton H. Scovell, C. P. A., Boston.

Prepared Discussion:

Louis H. Haney, Federal Trade Commission.
Pierre Saxton, Auditor of Receipts, American
Telephone and Telegraph Co.

H. R. Hatfield, (Univ. of Calif.) War Industrial Board.

Informal Discussion.

11:00—12:30 Sectional Meetings on "Marketing Methods and Costs" and "Price Levels" under auspices of American Economic Association and American Statistical Association.

#### FRIDAY AFTERNOON

2:30— 4:30—Round Table Discussion of some of the problems arising in the teaching of accounting, arrangement of courses and curricula, and relation to other college courses, and to high school courses.

- Suggestions: (a) What are the principles of accounting?
  - (b) What should constitute a course in cost accounting, auditing, advanced problems, general accounting, or other specially designated course?
  - (c) What is meant by "unlearning" an accounting principle?
  - (d) What should be our policy toward high school work?
  - (e) What is done for other than commerce students who wish to take a course in accounting courses?
  - (f) The use of business papers in elementary college and university accounting courses.
- 4:30— 5:30 Business meeting. Reports of officers and committees. Election of officers.

#### Address of the President

FAYETTE H. ELWELL

#### University of Wisconsin

My remarks should not be considered as a Presidential Address, but rather as a brief summary of the status of our Association as it appears to one of your fellow instructors.

Last year at our annual meeting, President Wildman urged us to consider the advisability of holding informal meetings until the war was won. That advice was considered in arranging for this year's meeting, and the only fixed program of this annual convention is that arranged with the Economics Association. It was thought inadvisable to attempt to have a long program of prepared papers and discussions, and yet it was thought it would be equally inadvisable not to have the regular annual meeting. As you have seen from the program, this afternoon's session is to be given over to a round table discussion of some very interesting topics.

The majority of you will remember how we perfected a temporary organization in Washington in 1915, at the meeting of the American Economic Association. Three years is an extremely short time to judge an organization by the value of the service it has rendered, and when in addition it is realized that this term includes a war period, I believe our membership may well be pleased to know that our Association has not only been held together as an active force for the betterment of our work but that it has actually started on its way of accomplishing some of the things which it set out to do.

At this time I should like to call to your attention one or two points which came up during the past year.

Early in the year Prof. J. R. Wildman was asked to confer with Mr. A. P. Richardson, Secretary of the American Institute of Accountants, relative to the possible use of the Institute's library by accounting instructors not members of the

Institute. Prof. Wildman's letter relative to the action of the Institute is as follows:

"I took up with Mr. Richardson some time ago the matter of extending to university instructors in accounting the use of the library of the American Institute of Accountants.

Mr. Richardson, after taking the matter up with the committee on administration of endowment, replied as follows:

'University instructors in accounting who are not members of the Institute will be heartily welcome to make use of the facilities of the library whenever they desire to do so.

If such instructors wish to make inquiries or requests for advice I believe the committee would be glad to cooperate as far as possible by rendering such assistance as can be rendered. If a reasonable number of inquiries were received and could be answered without undue research, the committee would be glad to assist the instructors to that extent.

The committee agrees with you that the Institute should be regarded as the source of information in matters concerned with accountancy, and it is hoped that a spirit of cordial cooperation can be maintained between the American Association of University Instructors in Accounting and the American Institute of Accountants.''

I sincerely trust that our membership avails itself of the privileges so generously extended by the Institute, for undoubtedly the facilities may be used to great advantage by the teaching fraternity. Here and now I should like to express the appreciation of our Association to the American Institute of Accountants for the courtesies they have extended us in this matter.

The next point to which I would call your attention relates to possible co-operation between the American Institute of Accountants and our organization. Last year at our Philadelphia meeting I spoke of the efforts of the Committee on Standardization to work out a plan of co-operating with the Educational Committee of the Institute, but there was no definite report to be made. This past year correspondence has been continued with the Educational Committee of the Institute, and as evidence of the good will of the Institute I quote the following from a letter written by President Waldron H. Rand (formerly Chairman of the Educational Committee):

"We have never gone deeply into the subject of College courses, for we have found always a great difference in the minds of instructors regarding what should be considered best. If your Association could determine a College course which would meet the approval of our leading Schools in Accounting, it would be, I believe, a splendid accomplishment and receive the support of the Institute Membership without much hesitation."

The present chairman of the Committee on Education, Mr. Herbert F. French, C.P.A. (166 Essex Street, Boston, Massachusetts) has also evidenced his desire to co-operate with our Association, and I feel confident that during the coming year a plan will have developed for the active co-operation of the Institute in our efforts to standardize college courses in accounting.

In my remarks at this morning's joint session with the American Economic Association I made the statement that it was the first joint session of the two organizations. I cannot help but feel that the understanding of the value of accounting which was evidenced by such a joint session speaks well for the future of our subject and our organization.

But to continue to merit the belief in our work which those in allied academic fields are now holding of our subject and to increase such belief to the point where we believe it should be, we must continue to give serious thought and attention to the upbuilding of our courses with the idea of getting them upon a sound pedagogical basis. The idea of standardization which is now receiving so much attention may well receive our serious consideration and we must devise ways and means of bringing

the work of our organization to the attention of accounting instructors who are not members of our organization.

I am offering no apologies for such work as may have been done or may not have been done during the past year toward the accomplishment of the objects for which our association was organized.

You are all aware that many of our members have been, and are yet, in the service, and you also realize that their less fortunate brothers in this teaching fraternity have been extremely busy attending to their various duties at their respective universities. It should be a time for rejoicing here today that our members have been able to contribute their part to the allied victory, and we should all recognize the fact that in doing so they have increased the interest in accounting instruction many, many fold. I shall not attempt to enumerate the various kinds of war work in which our members were engaged but they cover a wide range, and in many cases our members brought a knowledge of the collection, analysis and interpretation of accounts which gave a new idea of accounting and its uses to those with whom they were associated.

Our association, together with all the others meeting here today may in the future point with pride to the part which its members have played in the winning of the war.

Before I leave this point I cannot refrain from mentioning the general interest created in accounting among business men as a whole by the way the graduates and even undergraduates of our courses handled the various problems which came before them in their sundry duties. Many business men have seen the vision of the true value of accounting by having one of these enthusiastic young men point out and utilize facts which heretofore had simply been entered in the company's books. The general interest aroused in cost accounting alone will react not only to the great benefit of the business world but also to the demand for competent men thoroughly trained in accounting. Here is an additional challenge to our organization—one demanding prompt and immediate attention so that the business world will not be disappointed in employing young men and women who are supposed to be qualified in accounting subjects, but whose services soon prove the fact that their instruction was not what it should have been.

Another great benefit which I believe will accrue to our association through its members having had the experiences of the last year will be the widening of our breadth of view and the realization that only by co-operation can the best results We have acquired a fuller and broader meaning of the significance of national co-operation which will be a very healthful factor right here in our own organization. I do not doubt that the great majority of accounting instructors will welcome the opportunity of serving our united interests-of getting our thoughts away from the routine of our own local affairs to the bigger, broader subject of advancing accounting education in the country as a whole. The organization through which such work may be carried on is already perfected—it is a live going concern—and I sincerely hope that everyone enters upon this new national duty with all the vim and vigor which characterized our war work. If we do the work ahead of us anywhere near as well as we did the sundry war jobs which we have just left, or will be leaving soon, we can be equally proud of the results accomplished by our combined efforts.

In an organization as young as ours, it seems to me that a portion of the few hours we are together each year, should be given over to a serious study of the best means of accomplishing the results for which our Association was founded. And what are some of the points to which we should give our immediate attention in working toward our goal?

First, I feel that a special effort should be made to prepare outlines of the usual courses which would be thoroughly discussed and criticized by your membership. When finally approved by our Association the outline should be sent to the accounting instructors in every college and university in the country. The preparation of such outlines is a task which warrants our best efforts, it is not something which can be done necessarily successfully by the mere blending of the outlines of courses given in a few schools. I hope that some of those present will express their ideas as to how this work may best be undertaken, and will also freely criticize the outlines presented at Philadelphia last year. The Committee on Standardization had hoped to be able to present at this meeting a report concerning the outlines for Cost Accounting, Auditing and Accounting Systems but it was impossible for it to do so. It would

seem proper to state that our membership should express its opinion as to whether other courses should be included in the work undertaken by the Committee during the coming year.

The second point to which we might well give our attention is that of the training of teachers in bookkeeping and accounting. Indeed, many institutions might well offer such a course, and if we could have a discussion of the scope and content of such a course, I am sure that we would all benefit.

I do not need to detail the condition of affairs which exists today in the bookkeeping and accounting instructional staffs of both secondary schools and institutions of higher learning. It is to be regretted that many of the instructors fail to prove themselves competent in teaching the subject of accounting. The demand for qualified accounting instructors has exceeded the supply. This condition has led to a most unsatisfactory state of affairs, which we may well consider for a moment.

Many administrative officials have been forced to ask instructors in allied subjects to instruct in accounting courses. I realize that in some cases the officials have felt that any instructor with a few hours free time in his schedule was competent to handle the accounting courses, but these cases are rapidly becoming fewer in number. Whatever the reason, certain it is that efforts should be made to interest the present instructor in adequately preparing himself for the task. And furthermore special efforts should be made to get young men and women to look forward to the teaching of accounting as a career and to prepare themselves accordingly.

Let us ever remember that we should urge all young people who seem to possess those qualities so highly desirable for an instructor to consider seriously whether they will not prepare themselves for a teaching career. We should encourage them to secure practical experience as well as to verse themselves in the theory of the subject for by following our advice, they will obtain that combination of the theory and of the practice which it is so advisable that instructors possess.

In connection with the great necessity for securing satisfactory recruits to our ranks, many other factors should be given attention, but I must be content with merely calling your attention to this matter.

A third point which well merits our continued attention

is the matter of correlating the work of the high school and the university. This subject of correlation has received the very careful consideration of the Committee on Correlation; and I feel that the report rendered by that Committee at our meeting last year warrants close study and thought by every member of our Association. Undoubtedly we may expect very beneficial results to accrue from the work of the Committee on Correlation with regard to the development of the strong teaching fraternity to which I have already referred. Let each member of our Association interest himself in this matter of correlation within his own state or community, and I am confident that a great amount of good will be accomplished not only in improvement in the quality of the accounting instruction but also in the improvement of the relation existing between the secondary schools and the colleges and universities.

There are many other points to which I might call your attention at this time but I feel that we should proceed with a round table discussion of the topics listed on the program. These and the many others that might be discussed should remind each one of us that there is a tremendous amount of work ahead of our Association, and that if we are to have the honor of advancing the teaching of accounting we must all make up our minds that it is only by the full and complete co-operation of all the members of our Association we may hope to attain satisfactory results. Certainly no association of men engaged in giving instruction in a subject but comparatively recently added to the University curriculum has ever had a greater opportunity to do more real constructive work than our own Association of University Instructors in Accounting. dently believe that every member of our organization is ready, now that the war is won, to give the work of the Association a generous amount of his thought and of his time so that very definite accomplishments may be reported at each succeeding meeting.

## Interest on Investment as a Factor in Manufacturing Costs

BY CLINTON H. SCOVELL, A.M., C.P.A.

Accounting and economics are necessarily closely associated. The essential factors in economic discussions—rents, wages and interest, are reckoned in accounting terms of debit and credit, and the reckonings are made according to working methods that the practice of accountancy has developed. It is the function of the economist to interpret the facts of industry and commerce, whereas the accountant provides the necessary methods and standards for measuring and recording the financial results of business operations.

It is important that both economist and accountant work according to sound principles, and any accounting device that makes the underlying principles of business stand out more clearly, is useful, not only to the business men immediately concerned, but also to the economists, who should thereby have better opportunities for analyzing and interpreting the business facts. Interest on investment as a manufacturing cost deserves consideration both for the principle involved and for its conspicuous usefulness in accounting practice.

#### The Principles Involved

Considering first the principles involved we note that economists recognize capital as a factor of production and say that the return to those who furnish capital is interest. Another factor of production is management (service of the entrepreneur), and the return to those who manage is profit.

The fundamental distinction between interest for capital and profit for management is maintained through a long series of references to standard economic writings, and the reasoning of the economists is not at all confused by any question of who owns the capital.

Management must make outlays for wages and rents, and whenever the manager's capital is insufficient he must borrow. The sums paid by management to the capitalist are in return for the service or use of capital, just as wages and rent are paid for the services of labor or the use of land. If a manager is so fortunate as to own all the capital he uses, it is no less useful or serviceable on that account.

It seems strange that any difference of opinion should arise in applying these fundamental concepts, but much of current accounting practice departs from the standards of the economists, confuses cost for capital with profit for management, and sometimes reasons incorrectly about the return on capital both borrowed and owned. These errors arise chiefly because accountants constantly think and speak of "money invested" or "capital invested" instead of fixing attention as do the economists, on physical assets as used in production.

#### Interest on Borrowed Money

The error has been frequently made in the past of reckoning the immediate outlay for borrowed capital as a cost; but if a proprietor has a physical plant and inventories to operate, the cost for using them is no greater because he is borrowing to provide some of these assets. Fortunately there has already been enough discussion of these matters among accountants so that mistakes are coming to be less frequent in the reasoning and accounting that relate to capital borrowed. Nearly every recent writer who has advocated the exclusion from cost of interest on investment admits that interest on borrowed money, whether secured by mortgage or otherwise, has no bearing on the issue, in either theory or practice.

The errors of reasoning chiefly arise with reference to capital owned, and the idea is frequently expressed in accounting practice and in accountants' writings that a proprietor gets the use of capital he owns without a cost to himself. The idea is not fully grasped, and seldom adequately expressed, that interest on investment is a charge to cost.

#### Confusion Between Cost and Profit

The confusion between cost and profit arises again and again, and frequently the argument that interest on investment is not a cost is based almost entirely on the assertion that it is a profit. Thus, A. Lowes Dickinson C. P. A., declares in the

Journal of Accountancy for August 1913, page 89: "The fundamental objection to treating interest and rent (which, except in so far as it includes compensation for services rendered, is only a form of interest) as an integral part of the cost of manufacture is that all interest is in fact profit." This fallacy is repeated by every writer who alleges that there is an "anticipation of profits" by reckoning interest on investment into costs.

The same logical fallacy (of substituting assertion for argument or evidence) is involved in the declaration that the total return from an enterprise is to be considered as a profit divisible among the partners or "contributors" (Mr. Dickinson's term) namely: 1. the owners of the capital (other than land and buildings), 2. the landlord who has provided the land and buildings, and 3. the manager or entrepreneur. Obviously if interest on investment is profit, it is not cost, but let us have first an exact argument and sound reasoning whether it is cost, or profit. If the conclusion is that interest on investment is a cost, then wherever it appears, it is a cost that appears and not a profit.

#### Interest a Charge for the Use of Capital

Interest on investment is a cost and not a profit because it is a charge for the use of capital, and there is a cost for the use or service of capital just as for the use or service of labor or land. When attention is fixed on the fact that physical assets (plant and inventories) are in constant use, it is not hard to secure an agreement that the use of such assets cannot be provided free, and that to provide them must mean a cost to the one who makes this provision. If the management provides its own capital, the economic cost is no less than if others provide it. (Although Mr. Dickinson argues that interest on investment is not a cost he correctly says "... the manner in which capital is provided cannot affect the cost of manufacture" (Bulletin of the American Economic Association, April 1911, page 120 of Papers and Discussions.)

#### Depreciation a Charge for Consuming Capital

Many writers say that depreciation is a charge for the use of capital. Thus, "an adequate adjustment in respect to the use of the machine is, or should be secured through the charge for depreciation, or speaking more accurately the expired outlay upon productive plants." (J. E. Sterrett, C.P.A. in Journal of Accountancy, April 1913, page 242); and "Modern cost accounting does provide an adequate charge—for the use of manufacturing facilities by arranging for a proper charge to output for the depreciation caused by the manufacturing process. By this assessment for depreciation—the entire capital investment is preserved without impairment." (Edward C. Gough, C.P.A. in Journal of Accountancy, June 1913, page 474). Both of these quotations refute the argument they seek to make, for they both reveal the essential character of depreciation as a cost of exhausting an asset—not a cost for its use unimpaired.

Consider the analogy of a charge for the rent of a farm. Whatever the amount of that rent, the assumption is that the tenant will not exhaust the land, but by a reasonable rotation of crops and good use, maintain its fertility. Even when he does this, and if he paid all taxes and insurance on the premises, he would still expect to pay something for the *use* of the assets placed at his disposal.

The analogy is perfect if one considers the rent of a city lot where there is no question of depreciation. If the tenant pays all the taxes, he would still expect to pay for, and there is a cost to someone to provide, the capital value that he uses.

The conclusion seems warranted, therefore, that, as a matter of correct principle, interest on investment is a cost for the use of capital, and that depreciation does not meet the requirements, since depreciation is a cost not for the use of capital but for the exhaustion or consumption of capital.

#### Practical Advantages

Every writer who has attempted anything like a thorough discussion of interest on investment admits that this element must in some way be included in the selling price. In other words, interest on the plant and inventories, which are the tangible expressions of the capital invested, must be taken into consideration at some point, for if the net profit resulting from trading does not exceed the amount which the capital might

earn invested in standard bonds yielding ordinary rates of interest, then from an investment point of view the business is not worth while. The only question is then at what point interest should be included in the accumulation of a total cost to sell.

This brings us to an argument of utility or convenience, and the reasoning in regard to this important matter has been considerably obscured by constantly dealing in generalities, especially by the opponents of interest inclusion, who have never so far as the record is available, indicated clearly how they would deal with the practical problems which the cost accountant has to meet.

#### Unit Costs for Continuous Process Industries

If the reasoning were confined to certain kinds of business such as mining, transportation, or manufacture by continuous processes, like the making of flour, cement, pig iron, or wood pulp, it makes but little practical difference whether the desired information is secured by reckoning interest on investment into cost, or by leaving it out, and determining an average profit for the industry including a return on the capital. It does make a vast deal of difference, however, when one has to deal with the practical problems of cost accounting in most industries.

As Professor Cole says, (Journal of Accountancy, April 1913, page 234), "No comparison is possible between different establishments, between different periods in the same establishment, or between different methods in the same establishment, if capital investment in labor-saving or material-saving machinery is neglected; for the very purpose of such investment is to save cost in other directions, and to neglect the capital sacrifice, made in saving other costs, is to neglect in part the very aim of cost accounting."

Space does not permit a *complete* exposition of the circumstances and the practical problems in management and cost accounting for which there is no satisfactory solution except by reckoning interest on investment.

Whenever it is desired (1) to compare the efficiency of alternative methods, (2) to measure the time element in costs, (3) to distinguish between the profits on two or more kinds of

business (such as jobbing and manufacturing) by the same management, (4) to measure the cost of carrying inventories larger or smaller, or of more or less valuable material, (5) to record accurately the costs, and therefore the profits, of complete or incomplete plants (a machine shop with or without a foundry, an automobile factory making or buying its engines), (6) to compare manufacturing costs in owned or rented plants, (7) to compare the cost of power generated on the premises with purchased current, (8) to reduce varieties of financing to common terms, (9) to make a uniform cost plan for associations, the work cannot be well done unless interest on investment is reckoned as a factor in cost.

#### Business Policy and Unearned Burden

The inclusion of interest on investment in cost is an important factor in the determination of manufacturing and selling policy particularly during periods of curtailed production when part of a plant is lying idle, or in other words, when part of the capital is not producing. The principle is well established among experienced cost accountants that, for each operation the normal burden should be determined, based on normal activity of operation, and if a plant is not operating on a full schedule, the burden applicable to the idle time is a direct loss, and not an additional cost for the manufacture of the limited volume of output.

Current charges showing all the expense (including interest on the investment) of carrying this unused capacity for manufacturing are much more likely to arouse an executive or board of directors to action than a mere memorandum of approximate fixed charges, prepared as an estimate of the burden on unused manufacturing capacity. Since the determination of accurate rates for overhead or burden, and particularly sound reasoning in regard to these rates when they are determined, is about the most important function of a cost department in a modern business, it seems clear that no pains should be spared to get the burden rates accurate, and particularly that they should be made to include all the recognizable costs of operation.

#### Bookkeeping for Interest on Investment

Since this paper is presented to a joint association of economists and instructors in accounting, it is pertinent to consider bookkeeping methods by which the interest charge may be calculated and applied to costs.

The method which is uniformly much to be preferred is that of determining the asset values of all kinds, wherever found, and calculating the interest thereon as a charge through the various channels of rent, equipment charges, inventory charges, etc., with a corresponding credit to an account known as Interest Charged to Cost, which is a credit each period to the Loss and Gain account, and as such is available for dividends, if not offset by losses of one kind or another. This method, in fact, is the only one that can be worked out in a practical way in an industrial establishment that requires careful analysis and subdivision of its overhead charges or burden.

#### The "Net Investment" Method

The other method is applicable to trading establishments (with only one kind of inventory, so that it is not necessary to reckon fixed charges on different classes of the business) or to the very simplest manufacturing conditions. According to this method, interest charged to cost or expense will be divided between interest on borrowed money and interest on capital owned. The interest on borrowed money is interest on bonds, notes and accounts payable. Interest on capital owned, as a charge complementary to interest on borrowed money, is reckoned on the "net investment" in the business, that is, on the difference between the sum of the assets-cash, notes and accounts receivable, raw materials, work-in-process and finished goods inventories, prepaid interest, insurance, etc., and the sum of all the liabilities—notes and accounts payable and all accrued (The reader will note the omission of plant and equipitems. ment assets).

When this second method is used, the charge to cost will come in two parts: First, as interest is reckoned and paid for borrowed money; and second, an amount by a journal entry, reckoning at the agreed-upon rate of interest on the next investment as above defined. The interest on the borrowed money will be a cash disbursement, when the interest is paid; the second part of the entry will be carried, as in the first method, as a credit to an income account known as Interest Charged to Cost.

A theoretical objection to reckoning the interest charged to cost in two parts in this way is that it involves the use of two rates, one of which is bound to fluctuate from time to time, as the current market rate for business paper goes up or down. This introduces a variable element into the calculation which is objectionable, particularly when uniformity is sought in accounting for an entire industry, as two business enterprises, otherwise substantially alike, may be financed so differently that one will have much of its interest charge derived from borrowed money, and the other will have none from that source, but all the interest cost reckoned as a rate on the investment. It is fundamentally correct to say that "the dollar owned does just as much work and should be compensated as is the dollar borrowed" but since that is true, they should be compensated alike when used in the same business. As that is impossible according to the "net investment" method (with one or more rates on borrowed money, and the agreed-upon and probably different rate on the net investment), it seems that that method should be abandoned in favor of one that does not involve such inconsistency.

Another very serious objection to this "net investment" method, even within the limited field in which it can possibly be applied, is that it can rarely be used unmodified. In the Harvard System of Accounts for Shoe Wholesalers, published in the summer of 1916, there is the most authoritative exposition of this method known to the author, and there the reader will find that interest on land and buildings is specifically excluded from the "net investment" calculation, for the good and sufficient reason that it is a charge to a Rent account, which must be set up completely, and independently of other expenses, if any comparison is to be made between businesses which operate in premises owned and businesses which operate in premises rented. This difficulty would be much more serious in a manufacturing establishment, where interest on the in-

vestment must be reckoned for the equipment, usually in several different subdivisions, and on three, or perhaps four, different kinds of inventories.

Even in a merchandising business such as wholesaling shoes, the plan as defined breaks down (to the extent that further exceptions must be made) if the proprietors are interested to get an accurate measure of the results between selling shoes, for example, and rubber footwear, which most of these establishments also handle. In a business like wholesale hardware it would be indispensable to reckon fixed charges on inventories by classes, in order to measure the results in a satisfactory way. Whenever fixed charges require any considerable division the "net investment" plan breaks down completely.

Whenever an attempt is made to use this method attention should be fixed on the sum of the two charges, namely, interest on borrowed money and interest on capital owned. If the business operates with extensive borrowing, the interest charge on that account will be large. If the owners have provided most of the capital, most of the amount charged into cost will be credited to the account, Interest Charged to Cost, and then to Loss and Gain.

#### SOME OBJECTIONS ANSWERED

The distinction of leadership in opposition to the inclusion of interest on investment as a charge to cost has generally been accorded to A. Lowes Dickinson C.P.A. who presented his views some years ago before the American Economic Association. This article with some supplementary material was reprinted in the Journal of Accountancy for August, 1913, and is one of the ablest statements of the view that interest on investment is not properly an element in manufacturing cost. Mr. Dickinson presents the same views in his well known book "Accounting Practice and Procedure."

#### Interest and Rent

By the same reasoning that supports this view, Mr. Dickinson reaches the conclusion that rent also should be excluded from manufacturing cost. This opinion will probably be condemned without discussion by any business man who has realized the stern necessity of paying rent in order to continue his manufacturing or other business operations.

Some emphasis on the landlord's functions, in fact, is pretty certain to convince a manufacturer that he has not reckoned on the whole cost of his operations with buildings and equipment owned until he has set up the accounting equivalent to what his landlord would have if the manufacturing operations were being carried on in rented buildings, or with leased machinery.

The landlord has to pay insurance, taxes and repairs, unless these charges are assumed by a tenant as part of the terms of the lease. He must incur the loss from depreciation. Even the most liberal repairs will not entirely check the deterioration and obsolescence of a structure. It may serve well for a generation or longer, but the time surely comes when because of structural weakness, or the superiority of modern design or a better location, it cannot be used economically. This lack of fitness is essentially a landlord's risk.

The landlord expects, if possible, to charge as rent enough to make his property pay a fair return on the investment. If the title passes in course of time to the man who has hitherto been the tenant, does it cost him any less (in any sense—either practically or as an economic theory) to make shoes or shirts, furniture or machinery in that building because he now owns it? It is true that he no longer pays in cash the landlord's charge, but can anyone contend that his product is manufactured cheaper than before? The answer is a self-evidenced negative.

It is certainly an excursion into the depths of economic theory thus to compare interest and rent. In the article referred to, Mr. Dickinson places a footnote which reads, "It may be well to mention here that rent may include something more than interest, in which case a part thereof may properly be included in cost, and further that in the case of office rent, convenience and the relative unimportance of the amounts, may sometimes justify their inclusion in the cost of production or selling, usually the latter."

The reader who will refer to Mr. Dickinson's article will see that although he speaks of rent, or rentals, as merely a kind of profit, and on that reasoning not chargeable into the cost of manufacturing, the footnote makes some recognition of the fact that certain expenses of doing business frequently comprised in the term rent, such as insurance and taxes on the buildings or rented equipment, and also depreciation and repairs, are inevitable items in a charge to cost, because of their actual and unavoidable character, which finds expression in the ultimate disbursement from the cash drawer.

The footnote refers to a paragraph in Mr. Dickinson's article in which he speaks of the landlord as a partner in the business. It seems to the present author unsound in theory and wholly impracticable to regard a landlord as a partner in a business in respect to the capital he has invested, but not in respect to the taxes and insurance that he pays, his outlay for repairs, or his loss through depreciation. Practical common sense seems to say that the landlord is a creditor rather than a partner or "contributor" (Mr. Dickinson's term) to the enterprise, so that what is paid to the landlord is clearly a cost.

#### Inflated Inventories

The objection is often made that to reckon interest into cost "inflates" the value of an inventory. This objection is a part of the same fallacy which alleges that interest is a profit, for if interest on investment is shown to be a cost, it logically and properly raises the value of manufactured goods as much as any other cost, and there is no "inflation" by including it in the inventory.

Now any inventory of manufactured goods has used capital, frequently in huge quantities, in the process of conversion from raw material to finished product. It has also used capital in the possession of the producer before coming to the manufacturer, and the purchase price to him is higher accordingly. If it has used capital it therefore has, indisputably, a greater cost. If the manufacturing business has been sensibly managed, the product is worth what it has cost in capital in its last stage (manufacturing), just as much as in any previous (producing) stage. To be specific, the capital cost of converting seasoned

lumber into furniture is just as inevitably an addition to its cost, and just as fair an addition to its inventory price, as the cost of seasoning it beforehand.

In short, it takes capital to manufacture, more or less capital according to the kind of product made, and according to the manufacturing policy pursued. Frequently a liberal use of capital diminishes other costs, and the too meager use of capital increases other costs. Interest on investment is the conventional and logical way of expressing capital cost.

Accepting an arbitrary charge for depreciation as a good asset in the cost of manufactured goods, the logic seems unavoidable that there is no greater objection to an arbitrary charge for interest. Why is not one kind of a cost as good an addition to value as another?

There is, therefore, no reason why an inventory should not be carried at all its cost, including so much thereof as may be due to interest on the investment employed.

While we are on the subject of inventory values, let us consider how trivial in compaarison with some real inventory weaknesses is any possibility of "inflated" costs because of a calculation of interest on the investment. Accountants of high standing who object to reckoning interest on investment are known to the writer to have passed with approval inventories in which goods were taken higher than in the preceding annual inventory, because, forsooth, with a curtailed volume they "cost more to make" during the later year than during the earlier. In this proceeding we have an expense which is not in any proper sense cost-to-manufacture unhesitatingly added to inventory values "at cost."

Situations like this reveal most conclusively the fallacy of the old-fashioned plans of charging all burden into cost, or if a normal burden is first calculated, the mistake of adding a "supplementary rate." If the product of a plant is sold as fast as it is manufactured, there is no difference in the *net profit*, according to one plan or the other, but if inventories are changing in volume, there will be a very real inflation of profits and assets with an increasing inventory, and a very poor and unreal showing of profits per volume of sales during a period of diminishing inventories.

All accountants will agree that it is highly desirable for a correct view of profits, that the inventories be priced correctly, especially so if there are fluctuations in the volume of inventory from one closing to another. If the custom is to overvalue inventories, profits are obviously overstated in periods when inventories accumulate, and understated in periods when stocks diminish. If it is the practice to undervalue the inventories, just the reverse effect is produced.

If it is desired to have the inventory conservatively stated in total, it is altogether better to make a suitable reserve to accomplish that result, rather than to leave out essential and calculable elements in the cost.

Auditors not skilled and experienced in industrial accounting certainly encounter difficulties in trying to decide on the significance and sufficiency of much that passes for cost accounting. The errors of this kind, committed in good faith but in blissful ignorance of realities, are likely to far outweigh any possible overvaluation resulting from debatable elements in a scientifically calculated cost.

Let no one infer from these remarks that the writer underestimates the importance of being conservative in valuing inventories. Accountants should strive zealously to see that items or values that do not belong in the inventory are excluded. There may be many considerations to influence the adoption of a price below cost on inventory items, or a liberal reserve against the total, or important sections, of the inventory. If there are good reasons for such action in a given case, by all means observe them consistently, but if cost is the basis, by all means get it all in.

#### Alleged Difficulty Regarding the Rate

An objection raised by those who oppose the inclusion of interest on investment is the difficulty of deciding as to the rate that should be used, but the argument on this point is really part of the confusion between interest and profit.

There will be no great difference of opinion among well informed people as to what is a fair investor's rate with proper security for principal and income and reasonable marketability. The Harvard Bureau of Business Research recommends

the use of "the ordinary interest rate on reasonably secured long term investment, in the locality in which business is situated. In measuring the result of his business, as has already been pointed out, the business man, if he thinks about the subject at all, computes the amount of interest which his capital would earn if he invested it in something else. The Bureau has determined from its inquiries that there seems to be in each locality a definite idea as to what constitutes a current rate of interest."

It might well be added that the rate of depreciation is as difficult to determine, and as a matter of practical experience a group of business men are better informed and can come nearer to agreeing on a suitable rate of interest to charge than they can on suitable rates of depreciation.

As to the validity of an interest rate to be used in cost accounting, nothing more is required than that it should be reasonable and agreed upon by the persons concerned. This is particularly true when a group of competitors are interested to establish a plan of uniform accounting.

#### Significance of the Rate Chosen

One of the most technical and scholarly articles that has ever appeared in opposition to the inclusion of interest on investment as a charge to cost is that by George O. May, C.P.A., in the Journal of Accountancy for June, 1916. Mr. May's article is given over chiefly to a discussion of the rate that shall be used.

The principal argument against the inclusion of interest in Mr. May's article is based on a confusion between the returns on capital and the returns to the proprietor for his skill or risk. It is a mistake to refer, as Mr. May does, to "compensation of the proprietor's capital." The returns for the proprietor's capital can be reckoned by other standards with considerable accuracy, and whatever else he gets is a return for something besides capital.

Another opponent of including interest, W. P. Hilton, C.P.A., writing in the Journal of Accountancy for October, 1916, speaks of adopting a plan whereby the "reasonable expectancy rate" is made a factor of expense.

We can also accept Mr. Dickinson's statement that "if any interest rate is to be assumed, it can only be a rate which represents a fair compensation for the use of the capital." It is true that proceeding from this point Mr. Dickinson argues that in the compensation for the capital there is involved a large and important element of risk, and any argument on this point must admit that there is no interest rate in practice which is entirely free from risk. The current rate, or reasonable expectancy, however, is generally understood among business men.

#### How Business Men Regard Interest on Investment

In the arguments of Mr. Dickinson, Mr. May, and others who oppose the inclusion of interest, reference is made repeatedly to the return on the investment in a given industry. Nearly every accountant would agree with Mr. May when he says "the rate which will attract capital into an industry would seem to be one of the things which accounts should help to determine," but the rate which will prove attractive in a given industry can be determined with even greater clearness by charging interest into cost than by leaving it out.

If the attention of prospective investors is fixed on the probable rate of return on capital embarked in a particular enterprise, it seems certain that they will make a comparison between the conventional investors' rate and the amount that they can expect to earn from the investment in question, or in other words, how much better they can do in the new industry than with their capital invested as it is.

Capital has a fairly well determined market value, but loss or gain is a function of management. Men may be more or less successful, have more or less good luck, but irrespective of these considerations, they have an inevitable fixed charge for capital, just as inevitable as they would have a fixed charge for rent if they were engaged in business using leased property.

When reference is made to "that rate which will attract capital into an industry," on a premise that interest on the investment is excluded, the reasoning is that the total net business return is a residue. This is the idea which the modern economists refute when they insist that the charge for capital shall be paid first, and that the residue shall be profit only.

#### The Government's Attitude Towards Interest

Prior to the war, the principal official statement on behalf of the United States Government in regard to the treatment of interest in costs was in a pamphlet published by the Federal Trade Commission under date of July 1, 1916, "Fundamentals of A Cost System for Manufacturers."

Under the subject of building expense, page 11, the pamphlet says: "Rent includes a return on the investment in addition to the items named (the items named were insurance, taxes, depreciation, repairs, heat, light, elevator and janitor service and water). So when it is desired to make comparisons between plants where the building is owned and where it is rented, the return on the investment must be taken into consideration." Since this comparison is one that must frequently be made, it was helpful to have the Federal Trade Commission express the correct view so concisely.

In a passage amounting to a page of fine type on the general subject of interest, the commission said, "The cases where it is desirable to include interest in cost may be grouped under two heads:

- Where materials have to be stored for long periods while a seasoning process is being completed.
- 2. Where it is desired to show the effect of variations in the amount of capital employed and the term of employment."

Regarding a seasoning process the pamphlet says "the interest on the capital locked up during the seasoning process forms in a sense a direct part of the cost of material. If the material were purchased in a seasoned condition, a higher price would have to be paid, and this price would at least include interest and other carrying charges."

Regarding expensive equipment and the length of time to complete various processes, the pamphlet says, "It is impossible to get true relative costs unless consideration is given to interest on the capital employed."

#### Interest in War Contracts

The definition of cost has been an important practical problem for various Government departments since the United States entered the war in the spring of 1917, and in respect to interest on investment the situation has not been well handled.

In the summer of 1917 a pamphlet was issued containing the recommendation by an Interdepartmental Conference on Uniform Contracts and Cost Accounting Definitions and Methods. Among the items included in a "general definition of cost" was "a fair proportion of overhead expenses."

As the general definition of cost was originally drafted, interest was excluded, but not rent, and in a letter of protest distributed by the writer under date of August 8, 1917, the comment was made that "the practical result of allowing rent and disallowing interest is that a manufacturer in a rented plant reckons in his bookkeeping cost, economic factors which the manufacturer who owns his plant is required, by the proposed regulations, to eliminate. There are enough manufacturers in the United States operating in rented plants to justify the statement that this proceeding is a grievous injustice to the men who are operating in plants that they own."

Regarding the exclusion of interest on investment, this same letter of protest included the following comments: "To exclude interest on the investment, furthermore, operates to the practical disadvantage of the manufacturer who is conducting a business including all the processes from the initial conversion of raw material to the finished product, in contrast with a manufacturer who buys a great many manufactured parts and whose product, similar to his competitor's in other respects, is largely made by assembling. The second manufacturer naturally treats his purchases of parts as material costs, and he necessarily acquires them at a price which has included profits equivalent to or greater than interest on the investment to the previous manufacturer who produced them. A manufacturer who. instead of buying and assembling, plans comprehensive detail manufacturing for every step that his finished product requires. should not be penalized on that account in stating costs and reckoning profits thereon."

When the pamphlet was finally printed it read "By the term 'overhead expenses' is meant the indirect labor and other manufacturing expenses, and the general and administrative expenses applicable to and necessary in connection with the production of the article contracted for hereunder. It does not include (among other items) the following: Interest, rent, advertising, collection expenses, credit losses and customers' discounts, and such taxes as income and excess profits taxes imposed by the United States Government (interest, rent, and selling expenses, will not be allowed as part of the overhead cost but may be the subject of special compensation when so stipulated in the contract.)"

We have no knowledge of reasonable rent charges being thrown out of Government contracts during the years 1917 and 1918, but numerous instances have been reported of interest on investment being excluded. This method of handling the contracts has given an important and unfair advantage to the manufacturer whose product is largely assembled or who is renting buildings or equipment.

#### Significance of Turnover

It should be clearly understood that the issue raised in respect to Government contracts is not one of more profits or less. When the manufacturing cost has been correctly determined, it may be fair to the manufacturer to give him a 10% profit, or it may be that he should have more than 10% on goods which take a long time to manufacture and accordingly have a slow turnover, or perhaps a great deal less than 10% on goods which have a rapid turnover.

The statement is familiar enough to accountants and students of business affairs that a rapid turnover increases profit, or makes possible a smaller margin of profit on individual sales. Analyzing this situation further, it is seen to be in substance merely that the business with the rapid turnover uses the capital in question a much shorter time between the purchase of the raw material and the sales.

#### The Relation Between Capital and Labor

In Mr. Dickinson's original article, which bore the title "The Fallacy of Including Interest and Rent as Part of Manu-

facturing Cost," Journal of Accountancy, December 1911, he touches on the relation between capital and labor in the following terms, "The only rate which could be justified in argument would seem to be that inasmuch as the capitalists have charged into costs and obtained for themselves the rate which they might think they ought to realize on the whole business, (italics are not in the original) the balance of it, which under such a procedure would be called profit, does not belong to them at all, but to those who purchased goods from them, to the general public, or to the government. This is an argument which would hardly be admitted by a manufacturer." This passage quoted from Mr. Dickinson's article requires a restatement to correspond with the facts in the business world. It is not intended (by those who advocate interest in costs) that capitalists should charge into costs, and obtain for themselves, the rates which they think they ought to realize in a particular business, but rather that they should charge into cost the rate which they ought to realize from any business use of capital, and that they are entitled to something in addition to that rate for the risk that they incur for running the particular business in question.

In an introduction accompanying the reprint of this original article, page 90, Journal of Accountancy, August 1913, Mr. Dickinson says: "If any interest rate is to be assumed it can only be a rate which represents a fair compensation for the use of the capital. If the selling price or rate yields a profit over and above the cost of material and labor, a fair return on the capital employed and fair compensation for management, it would seem that to the extent of this profit the price charged is excessive, at least where the manufacture is not conducted under some patent or other special process for which a further compensation may fairly be exacted. This is not a conclusion that a manufacturing or public service corporation whose prices or rates are attacked can afford to admit, more especially as those attacking the rates are not bound by the interest rate adopted, as the corporation might be."

There may be some doubt in the minds of the general public as to what is a fair compensation for management, but there can be no doubt that any article or service provided for the public must be paid for at a price which will include the cost

of material, labor, and burden, and a fair return on the capital employed. It seems almost certain that if these factors are set forth clearly, the argument will take shape much more rapidly in regard to the fair compensation for management. It is generally true that the more clearly a case is stated, the more quickly is it understood, and a conclusion reached equitable to all concerned.

This argument involving a calculated return on capital and a reward for management is taken up more in detail by Mr. George L. May in his article in the Journal of Accountancy in June 1916. Mr. May says: "Upon any great question the tendency must be to reduce the issue to the simplest terms. The fair disposition of the results of organized industry is one of the greatest of questions, and the issue here is reduced in the public mind to one between labor and capital—everything that does not go to labor is regarded as going to capital. The elements other than labor entitled to compensation may in the economic mind be subdivided, and the economist may attempt to differentiate between pure interest, compensation for risk, the reward of the entrepreneur, etc., but in the public mind and for practical purposes these elements are combined in capital. Moreover, in general, once an enterprise is launched these elements are vested in the same body of individuals, so that the fact that the isolation of the elements is not possible except in theory does not cause any difficulty in practice."

There may be difficulties, as Mr. May says, in interpreting to the public mind the "differences between pure interest, compensation for risk, and the reward for the entrepreneur." Mr. May realizes, of course, that whenever there are bondholders of a corporation, the capitalist element in that enterprise is not wholly "vested in the same body" as the management, and that distinction applies more or less when there are preferred stockholders. It is surprising to read that if no interest is charged on capital, it is thereby easier to establish the claim of capital as one that must first be satisfied from the residuum of conducting business.

In fact, a writer none too friendly to the idea of interest on investment, namely, Mr. George Mahon, see Journal of Accountancy, October 1916, page 255, makes a very different interpretation of the business man's interest from that made by Mr. Dickinson and Mr. May. Mr. Mahon's view is apparently that the inclusion of interest in cost tends to insure to the capitalist at least a part of the return to which he is entitled (provided of course that there is something to divide).

This discussion touches on the issue which is at present raised between the Labor party in England as represented by Mr. Arthur Henderson, and the Women's party as represented by Mrs. Pankhurst. The Labor party would apparently insist on labor having a large share of all that accrued in the way of earnings from a business after an established minimum of returns has been accorded to the capitalist. Mrs. Pankhurst on the other hand, says that the able managers of the business are entitled to a large return for their management, recognizing that at present only such large rewards will induce the skilled accomplishment which society needs from these experienced managers, in order to bring the total production of the community to its highest point.

Whichever view is taken as to how the division is made, it seems a fairly safe prediction that the reasoning and sentiment of the community will rather steadily advance towards that simplification of the terms, and better understanding of the argument which is accomplished by reckoning interest on the capital as an undisputed minimum of return, and therefore limiting the debate to the profits, if any accrue, after the capital return has been provided for.

#### Discussion

#### LEWIS H. HANEY

#### Argument based on assumed identity between economic and business costs.

Mr. Scovell's first argument may be stated to be (1) "the argument based upon an assumed identity of economic cost and business cost. The two concepts, however, are very different, and cannot be made the same. The accountant deals with a particular business concern. He takes what to the economist is a

short time point of view. He is concerned with the financial results of the particular concern. To the accountant price equals cost plus profit. The economist, on the other hand, deals with a whole society; he does not even confine his attention to business, let alone a single business concern. He is concerned with long periods of time. Financial results only interest him indirectly, as his ultimate interest is in wants and sacrifices. In economics price equals cost,—even profits is regarded as a share in distribution which the entrepreneur must have.

Mr. Scovell says that if the management provides its own capital, the "economic cost is no less than if others provided it." This statement is absolutely true; but it concerns economic cost only. The question at issue is accounting cost. The sacrifices of saving and waiting are present; but is there any interest on investment in the particular case with which the accountant happens to be dealing? As a matter of fact no interest at all may be earned. If there is any interest it is not an expense to anyone, but is income to the owner.

#### Arguments based on analogy between interest and other shares in distribution.

Mr. Scovell, in his paper, states that there is a "cost" for the "use or service" of capital, just the same as for labor or land. But the capitalist owner does not pay for the use of his own capital, while he does incur actual expense for hired labor and land; and I maintain that the fact that there is actual outgo in the latter case makes a difference, which, for the accountant is fundamental.

Another difference lies in the fact that if he did not pay his hired laborers their wages, they would stop the works; while no such result would follow if his accountant should not enter an interest charge on the books. My point is merely that these things constitute a difference, and controvert the argument from analogy between "interest on investment" and wages or rent paid.

Especial reference is made to the analogy between interest and rent. On this point I do not concede that interest and rent are the same. Land is different from capital; it is a non-fungible element which is not fused in the plant and equipment account as is capital, but remains separate and liable for specific delivery. This fact finds expression in the further fact that the rent contract calls for an actual outgo, which is entirely independent of the net earnings of the business, which is not true in the case of interest. The case of a tenant farmer is referred to; and it is inferred that, because he pays rent, which is to him a cost, therefore, interest is a cost. Now in the first it is to be noted that rent is not a cost in economics, and that the analogy between economic cost and accounting cost falls to the ground in this regard. But the point I would make is that the rent is actually paid out by the tenant, and must be paid before the net earnings of the business can be known. Furthermore, the difference between money rent and share rent illustrates my point. If money rent is referred to, the rent payment presumably represents outgo to a completely separate owner, who stands in a sense opposed to the farm business; and accordingly the rent is cost to the business. If, however, share rent is referred to, the amount of the rent depends in part, at least, upon the net earnings of the business. Therefore, the farm owner is not entirely separate from the business of the tenant, and rent and profit can not be separated.

Mr. Scovell states that if a tenant buys his farm and becomes the costs of production remain unchanged; but here I would point out that he is again shifting from accounting cost to economic cost. It is economic rent which remains the same,—and would remain the same even if the first owner had given the tenant the use of the farm rent free. Furthermore, please note that rent as an outgo from the business does cease when the owner and the farmer become the same person. It may be asked, "does it cost the owner any less than the tenant to produce the same crop?" Other things being equal, the owner does pay out less. He has a smaller outgo to account for on his books, and does this not mean a lower "accounting cost?" The economic cost, however, is actually greater by the amount of the sacrifices involved in saving the capital invested in the farm. In fact, under competition, the economic cost of the capital invested in the farm just balances the capitalized rent which the tenant formerly paid. The income of the owner is greater than that of the tenant. This may be explained in either of two ways: (1) The owner's great income is a reward to cover the costs involved in the investment; or (2) it may be said that his income is greater because as owner he does not have to pay the rent which was an outgo cost to him as tenant. The two ways of looking at the matter are reciprocal.

Let us examine the method which Mr. Scovell recommends for making "interest on investment" look plausible on the books as cost.

It is proposed to take the following steps:

- (1) Take the value of assets as the basis.
- (2) Calculate interest thereon at some rate not stated.
- (3) Devise charges for interest which will spread this estimated interest on investment over the various parts of the investment, making "charges" for rent, equipment, inventories, etc.
- (4) Offset these charges by setting up an account called "Interest Charged to Cost" (but which is really "Accrued Interest estimated to be earned in the Business"), to which account the charges are credited.
- (5) Close this interest account into Profit and Loss, the amount being available for dividends "if not offset by losses"!

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The accounts would be presumably set up as follows:

Investment Interest at 5%	= \$2,000,00 $=$ 100,00	
Sales Less Mfg. Cost		
$\left. egin{array}{ll}  ext{Interest in Cost:} &  ext{Rent} &  ext{Equipment} &  ext{Inventories} \end{array}  ight\}$	\$100,000	\$3,500,000

Earnings from Operations (excluding interest	
on investment)\$	0
"Other Income":	
Interest included in Cost\$100,00	0
Net Income, Including Profit and Interest on	
Investment \$100.00	0

To me this scheme looks like a subterfuge. The end is clearly to get some interest into the profit and loss account where it will be available for dividends. Are dividends, then interest? It would result in making some interest seem to be earned by merely crediting income with an estimated amount and justifying that amount by charging it to cost.

In reality, a part of the item called interest is profits.

But little is said in the paper under discussion of the analogy between interest and profits. Did time permit, I would point out that in economic analysis price must cover profits, while in accounting, profits depend upon price. I will merely state, however, that much of the argument advanced for including interest in cost would apply to profits. It may equally well be stated that profits is "cost" for the use or service of the business enterpriser; or that profits have to be received if the business is to be "worth while."

I conclude that interest on investment and profits are inseparable in accounting. In economic theory the two are separate. But as long as capitalist owner and entrepreneur function are so intertwined as they are in the business world, the returns to the two can not be divided as items of expense. In fact, bond interest is partly profits, and dividends are partly interest. The net earnings of the owner-entrepreneur are a mixture of interest on investment and profits on enterprise.

## 3. Argument based on "Opportunity Cost."

Mr. Scovell states that "if the net profit resulting from trading does not exceed the amount which the capital might earn invested in standard bonds, yielding ordinary rates of interest, then from an investment point of view, the business is not worth while." Note the "opportunity cost" idea which is here presented. The argument is that interest is cost, be-

cause the capitalist owner might have got interest if he had invested his capital in some other business. The poet says that the saddest words are: "It might have been." And accordingly I would dub this concept of cost the "sad words cost." It is only necessary to call attention to the fact that the accountant is concerned, not with what might have been, but what is. If the business, whose life history is recorded, is a failure, and does not even earn interest, no amount of modern cost accounting work can change the situation. Interest has not been earned; it has not been paid; and it cannot be paid. If every business man were to enter on his books as cost the sums which he might have made, we would have an impossible situation.

## 4. Argument based on general productivity of capital.

Mr. Scovell confuses capital in general with the particular capital invested in a particular business. It is true that the economic factor, capital, must and does receive interest. It does not follow, however, that the capital invested in every business must or does receive interest.

The fundamental error in Mr. Scovell's paper is his assumption of some rate of interest which all capital ought to have and which ought to be allowed for the "use" of any and all capital. The rate of interest is something which is not to be taken for granted; and interest is not earned by all capital goods. The interest rate has to be determined by demand and supply forces; and what rate will apply to any particular business can only be known after interest has been earned. The assumption that capital in a given business might have earned 3%, or any other percent in some other use, is gratuitous. Indeed, if all capital were to seek investment, even in Government Bonds, it would go a begging.

## 5. Arguments based on policy.

A chief point made in the paper is that it is desirable to include interest in cost as a matter of business policy. This point, of course, might be dismissed with the statement that we are not here concerned with policy; but with the fundamental principles and truth.

This matter of business policy raises the question in my mind as to what the motive is for the movement toward including interest in cost. Doubtless the motive is in part to educate irresponsible business men, the idea being to prevent unreasonable price cutting and to establish a wise selling policy. As Mr. Scovell says, the inclusion of interest on investment in cost is an important factor in determining the manufacturing and selling policy. This motive may be commendable and socially unobjectionable. It is to be noted, however, that this by no means constitutes an argument for putting interest into cost. To obtain the end desired, it is only necessary that some estimate of interest be made and that the business man make bargains with some regard to that estimate. At the end of the fiscal period, the net earnings will show what interest and profits have been earned.

Again it may be desired to figure in advance what prices will have to be secured in order to warrant the use of certain methods of production. No objection is to be made to such estimates for comparative purposes, and some good may come therefrom, although I am inclined to think that the results would tend to mislead, rather than give correct information, and certainly might do so.

Or the aspiration may be to square the circle and to harmonize economics and accounting. This, however, is impossible. There need be no conflict or inconsistency between the two any more than there is between the society and individuals. But the two are by nature different. And economic cost and accounting cost cannot be made identical.

Other motives exist, however, which may be more sinister. During the last few years, there has been a general tendency in the business world to eliminate competition in price. We have had an organized propaganda for the maintenance of resale prices on manufactured articles; we have had a movement to allow the *value* of raw materials secured from property owned by the producer to go into cost, by charging depletion and depreciation, not on a cost basis, but on a value basis. We find many accountants standing for the value of the investment, instead of the cost of the investment as a basis for price fixing, etc. And Mr. Scovell, I judge, from his paper, would

stand with such accountants. Also the portentous growth of associations in all the industries is a well known phenomenon; and these associations generally center in the idea of what is called "uniform systems of cost accounting," a phrase which may mean systems of uniform costs. Now comes an effort to put a fixed return on investment into cost. Where will it all end?

Are we to reach some advanced economic stage in which the "industrial engineer's" art will enable the tired business man to sell "at cost" and still receive a return on his investment?

#### 6. Government authority.

With regard to Mr. Scovell's reference to the Federal Trade Commission, I can only say that the quotations presented merely indicate that to a limited extent for comparative purposes, the Commission indicated that interest and rent might be "considered." The pamphlet quoted does not state that interest is cost.

I would further call attention to the fact that in all its numerous reports made to the Price Fixing Committee, the Commission has excluded interest from cost. I cannot but feel that Mr. Scovell has gone too far in citing the Federal Trade Commission as a sponsor for the idea which he is defending.

#### Summary.

The gist of my remarks may be summed up as follows: It is fundamental to recognize the impossibility of making the accounts for a particular business square with the distribution of the social dividend. In a word, social economics differs fundamentally from private business.

With this general background, my reasoning is as follows: Interest may in a sense be called cost by the business man; but in any case it is very different from outgo cost for wages, material, depreciation, and the like. The question is therefore one of wise definition, my conclusion being that it would be unwise so to define cost as to include interest.

(1) Interest is not cost in the economic sense.

- (2) Interest may be cost in the private acquisitive sense and might be treated as cost by an accountant. But if "interest on investment" is so treated it would be but a hypothetical book entry which would be liable to abuse. There is no general assumption to be made that interest will be earned in all cases. It may not be earned at all; it may be earned on a part of the investment; or a very low rate only may be earned on the entire investment. In any case it is practically impossible to separate interest and profits.
- (3) To be used in real accounting costs, therefore, interest must represent actual outgo.
- (4) The outgo must be real; that is, it must represent payment to parties not connected with the business and must be independent of the net earnings. If interest is actually paid, and is paid for the use of capital, the owner of which is absolutely dissociated from the business; that is, if he is a mere capitalist, then that interest payment may be regarded as true cost.

No objection is to be made to the estimation of interest for comparative purposes; but such estimates should be recognized as being hypothetical and not outgo costs, and as having no significance as determining competitive prices.

## Minutes of the Business Meeting

DECEMBER 27, 1918.

The business meeting as announced previously, convened in the library of the Hotel Jefferson, at 4:30 p.m. with President Elwell presiding.

The annual address of the president was given, including the reading of letters indicating the willingness of the American Institute of Accountants to co-operate with our association in educational matters and in the use of the Institute Library. (Extracts from the letters are included in the president's address.)

The Committee on Standardization, the Committee on Nomenclature and the Committee on Correlation each reported

through its chairman that little progress had been made during the year, because of the activities of the various members in war work. It was recommended that the committee chairmen appoint members to fill vacancies caused by the removal of some members from the teaching profession; and that the work of the several committees be continued during the coming year.

The reports of the Secretary and Treasurer were read and approved by vote.

The following officers were unanimously elected for the year 1919:

President, Henry R. Hatfield, University of California.

Vice-Pres., (3 years), John T. Madden, New York University.

Vice-Pres., (1 year), Donald English, Cornell University, succeeding to the unexpired term of H. R. Hatfield, president elect.

Secretary-Treasurer, Hiram T. Scovill, University of Illinois.

The following letter was read by H. T. Scovill, copies having previously been mailed to all members of the association:

### December 13, 1918

To the Members of the A. A. U. I. A.:

Not as an official but as a member interested in seeing some greater benefits accrue to each one of us as a result of our organization, I am enclosing a paper on Bookkeeping and Commercial Arithmetic, read before the Commercial Section of the Illinois High School Conference. This is enclosed merely to assist in illustrating a suggestion, and not because of any implied literary merit it may possess.

The suggestion is this: That we consider at our coming meeting at Richmond, Virginia, the feasibility of having arrangements made whereby each member can be supplied with copies of addresses made by various members on subjects in which we are interested, but which we could not ordinarily obtain in any other way. This would apply, then, largely to the educational side of accounting, and would not include such articles as are pub-

lished in any of the periodicals generally considered available for reading by the average instructor in a university.

It occurs to me that with our representative membership, there are probably a number of good suggestions made from time to time by various accounting instructors of which the rest of us would be glad to receive the benefit. If such suggestions could be placed in our hands, it would tend to unify our actions and ideals to a certain extent, and reduce duplication of effort to a minimum. Again, please don't consider any implication on my part that the enclosed paper supports any of these claims whatever. It is one of those which we are often called upon to prepare rather hurriedly because of the pressure of other affairs. It is used merely to indicate how we might be benefited if some of the good accountants and teachers in our organization were to pass their ideas on to us in this way.

Could we not have an editorial board or committee to whom such papers could be sent? Such committee might be given power to reject such articles as it thought best, having other papers duplicated for our common good. The one enclosed is duplicated on perforated paper to show how other articles might be put up for filing in note book form.

The cost of duplicating the article enclosed is about 4 1-2c per member; postage being 1 cent per member, none of which is charged to our Association. If such a policy is even considered further it would be necessary not to overlook the cost per member as compared with the dues.

Yours faithfully,

H. T. SCOVILL.

Mr. Scovill then moved the appointment by the president of an Editorial Board of three members to receive, edit and distribute articles prepared by members of the association in substantial accord with the suggestions made in the letter. Motion carried. Wm. M. Deviny of Duquesne University was appointed chairman of the Editorial Board, the other two members to be appointed later upon recommendation of Mr. Deviny.

Mr. Paton moved the time and place of the next meeting be left to the Executive Committee. Motion carried.

Meeting adjourned.

REPORT OF THE SECRETAR	Y	
Total active and associate members Dec. 31	, 1917	82
Added during the year		40
and the second of the second o		
Present membership, Dec. 27, 1918		122
REPORT OF THE TREASURE	3	
STATEMENT OF CASH RECEIPTS AND	Payments	
Balance, cash on hand Dec. 29, 1917, as per		
last published report		\$159.29
Dues receivable additional collected prior to		
Dec. 31 1917		15.00
•	•	117100
D'ITI D'III		\$174.29
Paid John R. Wildman amount due him as		•
shown in report of Treasurer, at meet-	ф199.49	
ing Dec. 28, 1917	\$122.48 .60	\$123.08
Paid for telegram	.00	φ123.00
Balance on hand Dec. 31, 1917, as received	*	ф <b>51 01</b>
from former Treasurer, F. H. Elwell		\$ 51.21
Received from membership dues during the		249.00
year		249.00
Available for use during the year		\$300.21
Paid for:—		,
Stationery and printing, including		
publication of Annual Proceedings*_	\$ 99.50	
Secretary's postage	13.31	
Postage on Annual Proceedings and for		
membership campaign	20.10	
Correlation Committee expense	5.86	
Stenographic and Clerical work	9.20	

<sup>\*</sup>The publication of the Annual Proceedings cost \$123.75, but J. R. Wildmanpaid \$48.75 of this amount, leaving \$75 as the net cost to the Association for the copies actually distributed by it, the remaining copies being distributed through Mr. Wildman.

Total Disbursements		147.97
Balance cash on hand Dec. 27, 1918		\$152.24
Analysis of Dues Receivan	BLE	
Dues assessed in 1918 (114 members)*		\$342.00
1918 dues prepaid in 1917	\$ 75.00	
Less 1917 Dues owing Dec. 31, 1917	33.00	42.00
		\$300.00
Less cash received from dues, 1918		249.00
Net amount dues receivable, Dec. 27, 1918 Consisting of :—		\$ 51.00
Dues Receivable		
15 members @ \$3		
7 members @ \$6	42.00	±
_	\$ 87.00	
Less 1919 dues prepaid		
12 members @ \$3	\$ 36.00	\$ 51.00
STATEMENT OF RESOURCES AND I DECEMBER 27, 1918 Resources	ABILITIES	
Cash in bank		\$152.24
Dues receivable		•
		\$239.24
Liabilities	=	
Accounts payable		
Dues paid in advance		
Reserve for dues receivable		. 18.00
Net worth		. 183.17
	,	\$239.24

## Respectfully submitted,

## H. T. SCOVILL,

Secretary-Treasurer

<sup>\*</sup>Eight members joined after Dec. 1, 1918, and their first dues assessed are for 1919, hence the difference between 114 reported here and 122 shown in the report of the Secretary.

# Membership A. A. U. I. A., as of December 31, 1918\*\*

Alther, Phillip F., New York University.

\*Ames, G. C., American Brake Shoe and Foundry Company, New York City.

Andersen, A. E., Northwestern University.

Barber, W. A., New York University.

Barlow, Albert J., Boston University.

Bauer, John, Princeton University.

Bayer, Walter A., New York University.

Bell, Spurgeon, University of Texas.

Bell, Wm. H., St. Louis University.

Bensen, Philip A., New York University.

Bexell, J. A., Oregon Agricultural College.

Blight, Reynold E., Southwestern College.

Bloor, W. F., Ohio State University.

Breitenstein, H. S., Duquesne University.

Brimacombe, Lewis, McGill University.

Byington, John R., Georgia School of Technology.

\*Castenholz, Wm. B., LaSalle Extension University.

Catell, S. S., Kansas University.

Clapp, Philip F., Northeastern College.

Clark, Herald R., Brigham Young University.

Cole, Wm. M., Harvard University.

Collins, Clem W., University of Denver.

Copeland, C. M., Ohio University.

Cox, Henry C., New York University.

Crowther, Ernest, Duquesne University.

\*Cunningham, Earle H., National School of Accountancy.

Cyprian, B., Notre Dame University.

Denfeld, George A., University of Montana.

Dent, William Sherman, University of Denver.

<sup>\*\*</sup>This list corresponds with the 122 members shown in the Secretary's report except that the names of W. F. Bloor and H. E. Sheppard have been added since the meeting, and those of Malcolm D. Simpson and Hugo Kuechenmeister of New York and Wisconsin, respectively, have been dropped. The latter two resignations were accepted by the Executive Committee as both men have gone into industrial activities.

<sup>\*</sup>Associate members.

Deviny, Wm. M., Duquesne University.

Dissosway, Edwin T., New York University.

Djorup, Christian, New York University.

Douglas, W. W., New York University.

Drucker, A. P. R., Colorado College.

Duncan, John C., University of Cincinnati.

Eckelberry, G. W., Ohio State University.

Elwell, Fayette H., University of Wisconsin.

English, Donald, Cornell University.

Eversfield, Chauncey DeV., New York University.

Flocken, Ira G., University of Pittsburgh.

Foye, Arthur B., New York University.

Friday, David, New York University.

Gause, Edmund C., University of Pittsburgh.

Gilby, J. H., Northwestern University.

Gilman, Stephen W., University of Wisconsin.

Glendinning, Wm. D., University of Manitoba.

Godridge, P. E., New York University.

Goggin, Walter J., Boston University.

Gray, Wm., University of Manitoba.

Gray, Wm. R., Dartmouth College.

\*Greeley, Harold Dudley, Walton School of Commerce.

Hall, Roy, Northwestern University.

Hamilton, Geo. F., New York University.

Hatfield, H. R., University of California.

Himmelblau, David, Northwestern University.

Hodge, A. C., University of Minnesota.

Huntington, C. C., Ohio State University. Jackson, J. Hugh, University of Minnesota.

Johnson, William B., New Yrok University.

Juchoff, Frederick, Toledo University.

Kester, P. B., Columbia University.

\*Kinney, John P., Buford-Reid Business College, Dallas, Texas.

Krebs, William S., University of Michigan.

Leidner, Walter E., Boston University.

Lemon, Erwin B., Oregon Agricultural College.

Lilly, Lewis W., University of Washington.

Littleton, A. C., University of Illinois.

Lynn, J. Fred, Northwestern University.

McCarty, W. J., Boston University.

McCollough, E. V., Penn. State.

MacDow, G. Wilson, Boston University.

McKinsey, James O., University of Chicago.

McMurray, Karl F., University of Wisconsin.

Madden, J. T., New York University

Magee, J. F., Ellsworth College.

Martin, O. R., University of Nebraska.

Mickle, William Y., John B. Stetson University.

Miller, Miss Nina, Columbia University.

Morton, Davis Walter, University of Oregon.

Neilson, J., University of Saskatchewan.

Newlove, George Hillis, University of Illinois.

Newman, Clarence A., DePaul University.

Paton, William A., University of Michigan.

\*Patterson, Robert James, Bureau of Municipal Research, Philadelphia.

Pelton, Guy M., Northwestern University.

Percy, Atlee L., Boston University.

Peterson, Elmore, Colorado University.

Peterson, Parley E., Utah Agricultural College.

Preston, Charles H., University of Minnesota.

Rand, W. H., Boston University.

Reass, Nathan, New York University.

Reeve, Frederic E., New York University.

Ringham, Fred E., University of Minnesota.

Rittenhouse, C. F., Boston University.

Rosenkampff, Arthur H., New York University.

Rotzel, C. J., University of Minnesota.

Roudebush, Wallace P., Miami University.

Saliers, Earl A., Yale University.

Sanders, T. H., University of Minnesota.

Schlatter, Chas. F., South Dakota State College.

Schmitt, Herbert N., University of Michigan.

Scovill, H. T., University of Illinois.

Sheppard, Charles C., University of Pittsburgh.

Sheppard Harry E., Ohio State University.

Shugrue, Martin J., Massachusetts Institute of Technology.

Silsbee, Nathaniel F., Simmons College.

Smith, Harry Edwin, University of Montana.

Snyder, Irwin C., Duquesne University.

Stevenson, Russell A., University of Iowa.
Sugars, Robert M., McGill University.
Swank, E. W., William Jewell College.
Taylor, Albion G., Union College, Nebraska.
Tiffany, Burton E., University of South Dakota.
Treleven, J. F., University of Texas.
Van Ness, W. C., Upper Iowa University.
\*Warner, P. J., Ronald Press, New York City.
Watkins, Myron W., University of Missouri.
Watters, J. M., Georgia School of Technology.
Wildman, John R., New York University.
Wiest, Edward H., University of Kentucky.
Winke, Chas. H., Marquette University.
Wright, H. Winfield, Temple University.