

How much of the earnings shall we leave in the business and how much shall we give to the stockholders in the form of dividends? Some earnings should be retained in the business to provide for expansion and some also to provide for the time when business is bad and we are losing money. Some industries make it a rule to try to keep at least 50 per cent in the business.

The accounts receivable turnover varies greatly with industries because of the length of time allowed for payments. I should imagine the installment plan houses have a very long turnover period. This turnover is calculated by dividing the average sales per day into the average accounts receivable, giving a result in days. If we expect our customers to pay in thirty days then we should expect a thirty-day turnover. If we are not getting it some customers must be stalling on their payments; perhaps we have some bad debts; perhaps a poor collector.

Two very important factors affecting production are the unfilled orders and the proper balance of these orders. If a decline in sales occurs it may effect all or only part of the factory, and the same is true of an increase. Good judgment has to be used in endeavoring to obtain a proper distribution of work throughout the factory. It may be possible that a great increase may occur in the sale of one kind of product, affecting one department, which will tax that department to or beyond the limit in production; yet the total orders may not be increased and possibly they may be decreased.

Delivery dates on prospective jobs have to be readjusted and salesmen instructed on which kind of product to concentrate. Shop forces may also have to be readjusted.

Our recent plans relative to plant expenditures have been to purchase, if necessary, not to exceed an amount equal to the amount which we charge off as depreciation. Of course in case of necessary expansion because of permanently increased business, a carefully laid out schedule should be used. We have recently established

a budget for development expenditures which we consider reasonable, and I think I may say that an amount not to exceed 2 per cent of the sale price of the product shipped per month is not excessive in lines like our own.

In conclusion, I should like to say that if possible it is very desirable to arrive at certain ratios which from your experience or the experiences of others have proved to be proper for each classification of assets and liabilities on the balance sheet. This is a complex problem and one which has not been treated very much in text books. One book, however, has been published very recently which may be of interest to us—Bliss, "Financial and Operating Ratios in Management," The Ronald Press.

I shall give you a few ratios taken from this book based upon eight years history of the electrical machinery manufacturers. These have been compared with our own history and we find the comparison very gratifying to us.

Ratio of Important Balance Sheet Accounts to the Total (Year 1921 only).

Current assets	60%	Current liabilities	14%
Property	21%	Long term borrowing	17%
	81%	Net worth	66%
			97%

Working capital ratio, 3.18.
 Percentage of earnings left in the business, 52.5.
 Inventory turnover (Sale price of shipping cost inventory), 2.67 times.
 Accounts receivable turnover, 85 days.
 Dollar of sales per dollar of total assets, \$.85.
 Dollar of sales per dollar of fixed property, \$4.55.
 Net profit on sales, 8.3%.
 Net profit on net worth, 12.5%.

I have endeavored merely to point out to you some of the accounting problems pertaining to production. These problems can not be discussed in great detail in a brief time. I may have brought out points of interest to some of you; if so let me hear how you handle these problems yourself.

NATIONAL AND SECTION MEETINGS

- January 11 Central New York Section, Syracuse. Subject: Continuity of Employment—a Case Presentation.
- January 24-26 The Society, New York City. Subject: The Development and Influence of Scientific Management during the Past Decade.
- January 28 Cleveland Section. Subject: Distribution—a Governing Influence on Production.

For details see pages 245-7.

THE NEXT MEETING

New York, January 24-26

THE next meeting of the Society will be held in the Engineering Societies Building, New York, January 24 to 26. Members should set aside these dates for participation in the meeting.

Arrangements have been made for an interesting and instructive program. The following papers will be presented and discussed:

Types of Management: Unsystematized, Systematized and Scientific, by H. P. Kendall, Boston. At the Tuck School Conference of 1911 Mr. Kendall presented a paper under this title which stands as a classic; the new paper will present the observations and conclusions of twelve years later.

The Positive Contributions of Scientific Management, by Henry H. Farquhar, of the Harvard Graduate School of Business Administration. A noteworthy paper under this title was published by Mr. Farquhar in the Quarterly Journal of Economics in May, 1919; the new paper will present observations and conclusions based on recent investigations.

Scientific Management and General Administrative Control, by John H. Williams, New York. The earlier applications of scientific management were to control of processing; later applications have included other phases of management, including the function of coordinating the major functions of selling, finance and production. Mr. Williams' paper will review the influence of scientific management principles on the practice of the general management.

Scientific Management in Selling and Advertising, by Wm. S. Groom and Stuart Cowan, of the J. Walter Thompson Company, Chicago and Cleveland offices. Under the conditions of a buyer's, or at least an uncertain market, general managers and sales managers feel a new and greater interest in the application of scientific management principles and methods to marketing problems. This paper will present to us examples of this trend in management with facts indicating the progress which is being made and the results which are being obtained.

Personnel Work in Scientific Management, by Mary Gilson, The Joseph & Peiss Company, Cleveland. Notwithstanding the fact that historically the first functionalized personnel work was established by Taylor at Midvale back in the early 1880s, many people have been led to believe that the human aspect of management has been neglected by scientific manage-

ment. This paper will show that the human relations aspect of management has always been a principal concern of scientific management—and that during the recent depression it was the scientific management plants which did not participate in the wholesale junking of personnel work, because it has been made by them an integral part of the general management work.

Scientific Management in Federal, State and Municipal Business, by Morris L. Cooke, Philadelphia. The management of the public business is the last stronghold of resistance of the traditional and inefficient in management. To what extent has it been influenced by the scientific management ideals? Perhaps to a greater extent than we are aware of. This paper will review the facts.

Scientific Management in Other Countries than the United States, by Frank B. and Lillian M. Gilbreth, Montclair, N. J. It is said that the interest in scientific management in the countries of western and central Europe and in Japan is more general than in the United States. To what extent have those countries been influenced by these ideals? To what extent has that influence manifested itself in practice? What is the tendency? What will be the influence on competition with the United States? Mr. Gilbreth's numerous trips to Europe have enabled him to observe conditions and tendencies and give a reasoned account of his observations and conclusions.

It will be observed that the program is built about a central theme—the development and influence of scientific management during the past decade. The recent publication of Copley's life of Taylor has put on record the details of the origin and early stages of development of scientific management; the Tuck School Conference of 1911 put on record its status in 1911, up to which time it had been concerned principally with production; the meeting of the Taylor Society here announced is planned to put on record its status in 1923—to show how it has developed to include influence on general management and on the management of practically all departments of a business.

MAKE YOUR PLANS TO ATTEND

Set aside the dates—January 24-26.

Secure your hotel reservation.

Secure your railway reservation.

MAKE YOUR PREPARATIONS