

collection of articles by Bertrand Thompson some fifteen years ago, although at the time of its publication it gave the best picture of the subject. All of these were published before the recent enlightening experience with scientific management in other fields of management than production. The Society believes, therefore, that the time is ripe for a new exposition.

The extent of the development of scientific management is such that it is realized that no one book can cover the subject completely in minute detail. Furthermore, while universal in its principles, its objective manifestations must vary from plant to plant even in the same industry. Its most basic principle of research into "the law of the particular situation" requires that objective manifestations must fit the particular situation. Therefore the purposes of this book are: first, to give a correct perspective of the fundamental principles of scientific management; second, a similar perspective of it with respect to the functions and departments of enterprise; third, the more important principles pertaining to each function or department; and fourth, illustrative cases of its application. Although a book of multiple authorship, careful planning and editing give it, we believe, a satisfactory unity of style and treatment.

### Workers' Response to Scientific Management

THE parallelism between the responses of workers to scientific management in a non-union and a union shop, brought out on other pages of this issue, is remarkable and interesting. The similarity of occurrences in two widely separated places, at different times and in dissimilar industries, may be taken as an indication of what will usually happen in developments of scientific management.

In both cases the concerns were established and profitable, of moderate size, and not by reason of current financial returns under the necessity of undertaking the development of new management methods. The businesses, however, were without satisfactory cost accounting systems, or indeed, any systems at all, making it obviously impossible to understand working performances in the detail necessary for their improvement.

<sup>1</sup>Cf. pp. 61-70.

In the beginning the foreman groups were strongly skeptical, unsympathetic or even antagonistic, a quite natural product of the fact that it had been their custom to "do it all," and it was the obvious intent of scientific management to remove those functions properly to be regarded as belonging in other places, and to free the foreman for his real duty of departmental supervision. The necessity of a slow and cautious beginning, acceptance of the probability of encountering in the early growth a difficult period attended by the addition of extra real expenses of considerable amount, and a reduction of this expense as the procedures are perfected, seem adequately demonstrated.

The importance of having in the early stages of development the co-operation of the leaders in the worker group and of having it shown in the very beginning that the intent of scientific management is to yield advantage to the worker, is very well emphasized. In the course of the developments there was a shortening in the hours of work per week and concessions in wages not properly related to performances. There was operator resistance to training for new jobs and to interruption between jobs as finished work is exchanged for new work.

The main points of dissimilarity in the two instances seem to be that the managements themselves were enthusiastic in one case and skeptical in the other, and that the development at New Haven was under the direction of an engineer as consultant, while at Rochester it was carried on entirely by the plant's own staff.

From the standpoint of managers generally it is important to make the observation that the acceptance of the principles of scientific management is complete at both plants, and the serviceability of scientific management procedures is well demonstrated over a period of many years.

### Southern Meeting Postponed

Because of extremely disturbed conditions in one of the most important of Southern industries—the textile industry—it is realized that the time is not opportune to ask Southern owners, managers and workers to leave their plants for purposes of attending any kind of a convention. The Taylor Society has therefore reluctantly decided to postpone the meeting planned for May 1 and 2 in Charlotte, N. C.—the more reluctantly because at this late date it will be impossible to arrange a convention at another place this spring.

## Specimen Chapters

From "Scientific Management in American Industry"<sup>1</sup>

### CHAPTER IV Research for General Administration<sup>2</sup>

IF MANAGEMENT is to be in any sense scientific, it is essential that administrative decisions be based on investigation and analysis of facts rather than on the arbitrary and hasty edict of officials. The type of investigation which deserves first attention from the logical point of view is concerned with those problems of general administration which are the province of the president and the board of directors. It must be admitted that these problems, while logically first, have been almost the last to receive systematic attention, and even now have received less careful treatment than the more limited but concrete problems of the shop. In fact, many even among business men do not distinguish clearly what general administration is, or realize the importance of careful analysis of its problems.

#### The Nature of General Administration

By general administration is meant the determination of the general policies of the business, the adaptation of general plans to changing conditions, the co-ordinating control of the various major functions of the business, and the appraisal of results secured by departments. The existence of such a thing as general administration may not be recognized by the chief executive of a small concern, whose mind is occupied by particular problems of buying, selling, designing, making, employment, or pay adjustment. But in any business which grows past the point where one man can personally make all decisions, it is necessary, first, to cease deciding every issue as a separate special case and to establish normal policies and procedures; and second, to separate the problems of general concern from those pertaining to only one function of the business.

<sup>1</sup>To be published by Harper & Brothers for the Taylor Society. See table of contents on the outside back cover of this issue.

<sup>2</sup>By Robert W. Burgess, Senior Statistician, Western Electric Company, New York.

Let us consider briefly what are the distinguishing features of general administration as contrasted with the administration of various functions.

The merchandising and sales functions, as distinguished in subsequent chapters, are concerned with most of the specific problems of distribution, such as market analysis, analysis of the value and uses of goods, the computation of sales-production schedules, the computation of detailed prices, the determination of quotas, the training and direction of the sales force, detailed records of orders, sales and stocks, and advertising. But the function of final decision with respect to such things as the desirable volume of sales, quantity of advertising and pricing policy—matters requiring a balanced point of view because involving general policy and a balancing of departments—is a general administrative function.

Likewise purchasing is a special function concerned with such activities as selection of sources of supply, analysis of price tendencies and the placing of orders. But such problems as determining whether purchases shall be on a "hand to mouth" basis, or whether forward buying may be advisable, are general administrative problems.

The administration of receipts and expenditures, the keeping of general accounts, and the analysis of the results of expenditures, are particular responsibilities of the treasurer and the comptroller, but such problems as whether a new bond or stock issue shall be made to finance an expansion, what method of depreciation shall be utilized in accounting, and how additional capital shall be invested, are problems of general administration.

The engineering department is concerned with invention and design, but the adoption of an invention or design is an administrative problem. The personnel department is responsible for such things as employment and training of workers, safety and health, and the administration of benefit, stock purchase and similar plans; but determina-