THE APPLICATION OF THE PRINCIPLES OF SCIENTIFIC MANAGEMENT TO THE OFFICE¹

AS EXEMPLIFIED IN A FACTORY OFFICE, A DEPARTMENT STORE AND A BANK

WILLIAM HENRY LEFFINGWELL²

I INTRODUCTION

I. THE OFFICE

The office is that part of an enterprise devoted to the direction and coordination of the various activities of the enterprise; and is chanacterized by the gathering, classification and preservation of data of all sorts; the making, using and preservation of all kinds of records; the analysis and utilization of these data in planning. executing and determining the results of operation; the preparation, issuing and preservation of instructions and orders; and the composition, copying and filing of written messages.

a more striking change during the last forty years than has manufacturing. Though many changes in manufacturing have taken place, the purpose and technique of manufacturing still remain much what they were at the beginning of the present economic system. The purpose of the office, however, has grown far beyond its original scope, so far indeed that the original purpose is almost forgotten.

Formerly the office kept only financial recordsrecords of amounts owed and owing. Today the office is the master planning department of an enterprise and in some lines is so intricately bound up with operations as to make it impossible to separate the office from the operating.

The growth of the importance of the office may be shown by the increase in the number of workers engaged in the manufacture of typewriters, adding machines and other office supplies and equipment. In 1880 there were but eight such workers to every mil-

tion inhabitants; in 1010 there were 240, a relative thirty-fold increase, and an absolute fifty-five-fold increase.

From records of amounts owed and owing, the scope of the office was first enlarged to cover records of agreements, correspondence, and analyses of profits and losses. Later, elements of direction and coordination were added. Today the office is really the master planning department of an enterprise.

It is significant that the engineers who developed planning in the factory should have turned to the devices of the offices for their tools, and that the office managers, all unconscious that the office is a planning and coordinating department, should have ignored the THE office and office management have undergone intensive application of these devices and methods to planning their own planning.

2. OFFICE TYPES MORE COMPLEX THAN MANUFACTURING

Management engineers have classified manufacturing operations as feither (1) contractual, (2) repetitive or (3) continuous. It seems impossible to apply any such classification to office operations as in almost every office these three kinds of production methods are found as major functions. The handling of correspondence, for example, may be likened to contractual or jobbing production; although as in jobbing many elements are like, each letter requires individual treatment. Many operations in the sales department are distinctly repetitive. The handling of orders or other similar routines may be likened to continuous production. In one respect, however, the office differs from the factory: while, for instance, an automobile manufacturing plant has almost totally different machinery from a paper mill, a bank uses tools almost identical with a mail-order house. The tools of all kinds of offices are similar even if the products are

3. PRINCIPLES AND MECHANISMS OF SCIENTIFIC MANAGEMENT

February, 1922

Scientific management may be briefly described as the application of the highest degree of coordination and control on the basis of scientifically determined standards of policies, materials, equipment, tools and

In the practice of their profession, management engineers have developed certain standard methods and to deal with, whether he be clerk or executive. Clerks mechanisms. These mechanisms are the outstanding concrete evidence that something has been changed. but the mechanisms themselves are not scientific management. Carl Barth has said: "It may be well to not by the hour or piece on wages. Wages in the mention here that Doctor Taylor himself, some fifteen ' factory are a matter of known rates applicable to years ago, in warning a group of men against mistaking his details and mechanisms for essentials as against the principles of which they were merely an expression, made the prediction that ten years from then, not a single one of these details was likely to be in existence; and while this has not fully come to pass, it is true, that, for instance, I myself, have hardly left any of them untouched . . . "

The writer, therefore, with ample precedent, feels it necessary to urge the reader to ignore the mechanisms here described except as they are illustrative of the application of scientific management principles. Imitated mechanisms are usually worthless. For instance, some two or three years ago we developed a more scientific method of regulating and controlling production in the stenographic department of one of our clients. The head of that department in a lecture before office managers described the method and to illustrate the manner in which we measured the output, displayed the transparent celluloid scale used by us. This concrete object attracted attention at once. The lecture was printed in a business magazine. As a result of this lecture we received orders for over a hundred of the scales; but strangely we have never heard of even one conspicuous example of high production as a result of its use. These devices alone could not produce the result, and it is quite likely that there are a large proportion of these companies who claim to have "tried" scientific management in the office and found it worthless

The application of the principles of scientific management to the office involves in most cases a radical departure from the shop mechanisms of the Taylor system, but we have found that some of the mechanisms

and all of the principles behind the standard shop mechanisms are essential to good office management.

4. THE APPROACH TO THE OFFICE PROBLEM

The analytical approach to almost any office problem is precisely the same as it would be in the factory. The management engineer practicing in the office, however, will find generally an entirely different type of personare more sensitive than factory workers. They more quickly resent any inquiry into the amount of work they do. They work by the week or month on a salary, groups; in most offices an attempt is made to keep salaries secret. Every effort has been made in the past to make a caste of office workers. The engineer in the office will come closely in contact with more temperamental, snap-judgment executives than usually will be found in factories where the executives have had contact with physical things and physical laws. The engineer finds more problems which seem to make analysis difficult, when dealing with documents, records, routines and the operations in connection with them than when dealing with more material things.

5. TYPES OF OFFICES REFERRED TO IN THE PAPER

To illustrate the various sorts of problems encountered in applying scientific management principles to the office we give examples in three distinct types of office—the office of a manufacturing plant, the office of a department store and the office of a bank.1

a. Manufacturing Plant Office. The office dealt with specifically is the office of a manufacturing company in Massachusetts. This firm may be classified as textile. In this factory scientific management has been developed throughout the shops by Taylor men and is considered an outstanding example of the application of Taylor methods. The office consists of two parts; the sales, order and correspondence division, and the planning department. Our work has been concerned mainly with the sales office, but the same methods of analysis are now being applied to the factory planning office with similar results.

b. Department Store. This is a store in the Thirty-

¹ A paper presented at a meeting of the Taylor Society, New York, Dec. 2, 1921.

² President. The Leffingwell-Ream Company, Management Engineers, New York and Chicago.

¹ Foreword to The Taylor System in Franklin Management, by George D. Babcock.

¹ We are pleased to say that all of our remarks have first been approved by these clients before being presented in this paper. In view of the fact, however, that our work is necessarily of a confidential nature, we have omitted names