Graphical Methods of Schools, Colleges, Statisticians, planning. It must use every tool, research, invention and investigation—but in addition must apply imagination and vision in generous measure if it would keep ahead of the march of time. (J. George Frederick in "Modern Salesmanagement," p. 364.)

A BSTRACT of remarks of W. L. Carter, Treasurer, Nashua Gummed and Coated Paper Company, Nashua, N. H., at the first meeting of the New England Section of the Taylor Society—Boston, May 6, 1921:

Of course, every one in this room is keenly interested in the development of scientific management, but I wonder how many of you recognize how widespread the interest in it is. I have made several trips to England in the past few years, returning from my last trip only a few weeks ago. There has been the biggest change in the attitude of the English manufacturers since the war. The old "stand-patters" have been left in the background. Today, they are keen for production. Their newspapers frequently have articles on production in American mills. They gave tables of wages, comparing the English wages and American wages—tables showing the number of employees per machine in an English factory and an American factory in the same line. All these tables show that the American gets greater production with fewer men. In many cases the unit wage cost on account of this increased production is no greater than the English and they are making a very close study of our methods here. I met several American industrial engineers in London who told me they have more work than they can do. The Englishman has always been rather hesitant to scrap his old machine so long as he "could manage with it." While they are not as yet ready to install new machines as the American is, they certainly have gotten over their hesitancy of changing their management methods. Temperamentally, the Englishman takes naturally to job analysis. He is not in as big a rush and hurry as the average American. He is very persistent. What he does he does for a permanent result. As an illustration: One rides in many automobiles eight or ten years old which are running as noiselessly and efficiently as when they were built. Today, few American machines of ten years ago are even operating.

A few years ago in England one heard, a great deal about the limits of production which the unions allowed;—so many bricks layed a day was the limit of the bricklayer, etc. Employers today are not submitting to these limits. They have, up to today's time submitted to the rate of pay, but they are insisting on a greater production for this pay. Of course, some factories have gone ahead very much faster than others. As an example, one city I was in has a shoe factory run with American machines and using American methods. It was paying the same scale of wages as in America, was running full and was some weeks behind on its orders. A number of other shoe factories in the same city operating on English standards were running short time for lack of business, and were absolutely unable to meet the cost of the first mentioned factory. Such successful illustrations as these are leading the English people to overcome their reluctance to change their methods. We may expect them to be strong supporters of scientific management and eventually to give us very strong competition.

NEXT MEETING Philadelphia, March 16 to 18

REVIEWS

Graphical Methods for Schools, Colleges, Statisticians, Engineers and Executives. By William C. Mar-'shall, New York, McGraw-Hill Book Co., 1921, Pp. vii, 253.

So little material is as yet available concerning methods of graphic presentation that any new book on the subject can bardly fail to be of considerable real service to the business world. Under these conditions "Graphical Methods," by William C. Marshall, cannot be viewed otherwise than as a valuable addition to the limited number of pioneer works in its leid. At the same time, from the standpoint of the business statistician, the book is somewhat of a disappointment in that ic overs so little new ground and contributes so few original ideas. As a matter of fact, the author has set himself an impossible task in endeavoring to cover the many phases of the subject, mathematical and non-mathematical, in 220 pages and in attempting in one volume to meet the different needs of "schools, colleges, statisticians, engineers and executives." The result is necessarily a fairly superficial treatment of numerous important topics.

Indeed, in so far as the book is intended for business executives of the class of corporation officers, it fails in its purpose. In any industrial organization of such size that the use of graphic methods is not only desirable but has become essential to effective administration, the executives are not likely to be able to afford the time, and frequently lack the technical knowledge, to study and to understand more or less complicated charts involving factors which, from their standpoint, are matters of comparative detail. Such matters are properly left largely to departmental managers. Briefly, what the executives primarily desire, as a basis for administrative action, are simple and accurate graphic pictures of the movements of the significant broad elements of the business. In order to meet this need, careful statistical analyses must first be undertaken to determine what trends, ratios and facts are really significant; then the problem becomes one of graphic presentation designed to "make the statistics talk" in a language which will be readily understood, and cannot be misunderstood, by the particular executive or group of executives for whom the graphics are intended.

There is, however, very little in "Graphical Methods" which will be helpful either to this class of business executives or

There is, however, very little in "Graphical Methods" which will be helpful either to this class of business executives or to those of their subordinates whose duty it is to satisfy executive wants. An engineer himself, Mr. Marshall has devoted more than one-half of his text to engineering problems and to other applications of graphic methods which are in the nature of technical tools rather than administrative aids. Moreover, the illustrations, a most important element in any book of this kind, are for the most part poor examples of effective graphic presentation, and are also generally of such special nature as to be of little value in suggesting new methods to the executive.

ods to the executive.

In short, while the author states (p. 6) that "business executives cannot afford to ignore the merits of graphic representation which have for so long been accepted by the engineer and man of science," the book offers little assistance to the business executive, as distinguished from the engineer or department manager, in explaining or suggesting how graphic methods may be applied to his own special problems.

S. L. Andrew,

Chief Statistician, Am, Tel. & Tel. Co.

Bibliography of Industrial Efficiency and Factory Management. By H. G. T. Cannons, Borough Librarian, Finsbury, London. New York, 1921, E. P. Dutton & Co.

The most valuable bibliography on management yet compiled. Contains approximately 3,500 references, covering U. S. literature adequately. Divided into two parts: 1—Classification under sixty-three subject headings; II—Alphabetical author index with reference to location of author in Part I.

OBJECTS OF THE SOCIETY

(Extract from the Constitution)

The objects of this Society are, through research discussion, publication and other appropriate means:

- 1. To secure an understanding and intelligent direction of the principles governing organized effort for the accomplishment of industrial and other social purposes for the mutual benefit of
 - A. The Community
 - B. Labor
 - C. The Manager
 - D. The Employer
- 2. To secure the gradual elimination of unnecessary effort and of unduly burdensome toil in the accomplishment of the work of the world.
- To promote the scientific study and teaching of the principles governing organized effort,
 and of the mechanisms of their adaptation and application under varying and changing conditions.
- 4. To promote general recognition of the fact that the evaluation and application of these principles and mechanisms are the mutual concern of the community, labor, the manager and the employer.
- 5. To inspire in labor, manager and employer a constant adherence to the highest ethical conception of their individual and collective social responsibility.

MEMBERSHIP

Members are elected by the Board of Directors. Application must be made on a form which may be secured of the Managing Director. There are five classes of members:

- 1. Honorary Member: Elected for distinguished service in the promotion of the science of management.
- Senior Member: Thirty years of age or over; connected with organization, management or management engineering, as one in responsible charge of installing methods, as executive, as social scientist, or as teacher. (Initiation fee, \$15; Annual dues, \$15.)
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