

and Non-Producers," which is a reply to a specific written inquiry.

#### Service to Members

During the past two years the Society has been endeavoring to develop a service of practical usefulness to its members—something more specific and definite than the educational work.

This has taken several minor forms, such as the specialized personnel service, but the major line of service of practical value is the consultation and information service. It had its start a year or more ago through casual inquiries on the part of several members, has increased gradually and promises to become a most valuable tangible product of society work.

By "consultation and information service" is not meant anything which has the nature of or competes with the professional service rendered by a research organization or an industrial engineer. The office of the Society makes no attempt to solve a member's problem, either through an analysis of and report on any situation, or through the formulation of a plan or the devising of a method. To attempt such a service would not be wise were there facilities available—which there are not. What is meant by "consultation and information" service may be indicated by three or four disguised actual cases.

1. Mr. A, the owner and manager of a plant, has conceived the idea of developing his management along certain specific lines, as a result of suggestions received from an article in the BULLETIN. He calls at the office of the Society and spends an hour—may be two or three—in general discussion of the idea with the Managing Director; he inquires what experience others have had along the same line, from what persons and firms he can get more detail information, who are dependable professional consultants if he should decide to engage one, and so on.

2. The general manager of a plant by letter asks for information relating to a specific problem, as is illustrated by the letter of thanks printed on p. 193 of this issue.

3. A minor executive has been instructed to investigate and report on the handling of stores in the plant with which he is connected. He calls at the office of the Society for advice how to start his investigation, what others have done, where he can see cases, what has been printed on the subject; and the conversation usually includes a general discussion of the basic principles of stores keeping.

4. An engineer from France (or Sweden or Japan or one of several other countries) calls with a letter of

introduction from a foreign member. He has been sent by his firm or his government to investigate methods of management in the United States. He is given an explanation of the lines of development of management in the United States and what of significance to look for; an itinerary is prepared for him and introductions to representative firms and engineers.

5. An investigator is making a study of a particular phase of the management problem. He calls for suggestions regarding sources of information, and in the course of the call asks for criticism of his method of investigation and tentative conclusions.

#### The Future

Members are urged to suggest lines of activity for the future, and in preparing to do so, to consider whether the two lines of activity to be most highly developed should or should not continue to be: (1) general educational work concerning the fundamentals of wise administration and progressive management; (2) consultation and information service to members

#### A SYLLABUS FOR THOUGHTFUL EXECUTIVES

WITH respect to manufacturing costs—

1. The downward movement in wages seems to have been checked by a shortage caused by immigration policy and a redistribution of workers, and, although there will undoubtedly be further wage adjustments, it seems probable that wages will settle at a point considerably higher than before the war. The United States Steel Corporation's wage advance has not been the only one; witness the following report of the National Industrial Conference Board concerning increases and reductions of wages during recent months:

Month	Reductions	Increases	Total Changes
April 15-May 15	54	9	63
May 15-June 15	23	26	49
June 15-July 15	25	21	46
July 15-Aug. 15	7	8	15
Aug. 15-Sept. 15	4	119	123

2. This higher level of wages will be reflected in costs of many materials.

3. The elements of prime cost seem certain to remain high, relative to conditions before the war; as also will many elements of indirect cost.

II. With respect to the consuming market—

1. National policy and European conditions seem to be such as to retard a development of foreign commerce, and industry in the United States will have to depend chiefly upon the domestic market.

2. Signs do not point to the development of any ex-

traordinary demand on the part of consumers; higher wages to fewer workers amounts to no more than lesser wages to a greater number of workers; good crops at low prices and high costs will not give the agricultural section an extraordinary purchasing power.

3. Industry is equipped for a large production.

4. The competition between enterprises is certain to be keen.

III. With respect to administrative policy it appears that the administrative policy of an enterprise will be forced to take one or both of two forms—

1. Consolidation with competitors;

2. Refinements in management to give power in competition, these refinements in management being:

a. Better general administrations; long-time policies, budgets, schedules and coordination of departments.

b. Better selling methods.

c. Better production methods, in order to offer lower prices than competitors and better service to customers.

#### REVIEWS

*Production Engineering and Cost Keeping for Machine Shops.* By William R. Basset and Johnson Heywood, McGraw-Hill Book Co., New York, 1922, pp. vii, 311.

The comprehensive scope of this book is indicated by the chapter headings: What Production Planning Does, Purchasing as a Tool of Production, Need for Systematic Stockkeeping, Engineering the Product, Tool Issue, Laying Out the Machines, The Central Control of Production, Controlling the Work in the Shop, Planning in the Jobbing Shop, The Fundamentals of Correct Time Study, Setting the Standard, Setting Piece Rates, Special Cases of Time Study and Rate Setting, Time Study on Automatic Machines, What a Cost System Can Do for You, The Fundamentals of Cost, Fixed Charges, Departmentalizing the Overhead Expense, Analyzing the Labor Costs, Accounting for Supplies, Getting the Overhead Into the Final Costs, The Statement of Condition and the Operating Statement, What Does It Cost to Sell?, Graphic Methods of Control.

While the text relates almost exclusively to machine-shop practice, and largely to specialty shops producing a limited variety of products in relatively large quantities, the methods and practices described might be equally applicable with more or less modification in other than metal-working industries.

As is inevitable in any treatise on industrial management, and especially so in one dealing with machine-shop operations, the authors have accepted and built upon much of the doctrine and practices of scientific management developed by Taylor. Therefore it is surprising that Taylor is not mentioned among those to whom they acknowledge indebtedness.

It should not be assumed, however, that the authors have described, or presented as their own, the system developed by Taylor. The plan of organization, the methods for planning and control of production, and the methods of accounting here described, may be said to be a compromise between those of scientific management and ordinary practice. In the main they represent what Mr. H. P. Kendall has described as "systematized management," although in certain respects they approach one on more steps nearer the scientific management level.

In fact, the authors seem to criticize scientific management as too rigid because they believe it to be more rigid than it is. Witness Ch. VIII:

"The common idea, founded on the teaching of the early industrial engineers, is that a schedule of production, once drawn up, must be lived up to whether school keeps or not. That idea offends the common sense of most managers. . . . Such planning is worse than useless. Better than that is the extreme opposite methods of handling production from hand to mouth by means of stock chasers, who with all their faults are at least in touch with the shop and in sympathy with its trials and troubles."

Taylor and his associates were unquestionably the earliest of early industrial engineer, and this may be taken as an implied criticism of Taylor methods. But the assumption concerning Taylor methods is contrary to fact; it shows a lack of familiarity with those methods and the literature concerning them; the authors have in this instance created but a straw man to shoot at.

Therefore while in general the book builds on the framework of scientific management, as is indicated by the chapter headings, the underlying treatment leans rather towards giving at least full value to "the extreme opposite methods" to those believed to be characteristic of scientific management.

Lack of thoroughness and precision is indicated by such circumstances as these: In the chapter on Analyzing Labor Costs the authors refer to keeping time in decimals of an hour rather than minutes, and show a home-made time clock dial so subdivided (twenty years ago found only in Taylor shops), but in the chapters treating time study the authors suggest the use only of stop watches reading in seconds. In the chapter on Tool Issue two illustrations are given of saving by tool-room control of high-speed steel at pre-war prices—a saving in one instance of \$4,200 and in the other of \$13,000. The prices of \$5 and \$6 per pound were used in the illustration. As a matter of fact before the war the best high-speed steel cost from \$60 (in quantity or specification) to \$1.25 (proprietary brands in small lots), and during the war the highest price paid by a shop with which the reviewer is connected was only \$2.64 (in 1917-18). Such savings as are indicated by the illustration are possible, but the argument is weakened by a price per pound which machine-shop executives will question.

The cost-keeping practice described is fundamentally sound in most respects. It would be rendered much more useful, however, if a suitable classification of activities, expense, etc., were included. While in most respects similar to the Taylor methods, it seems unnecessarily complicated in the matter of distribution of indirect expense, and involves considerable work which might be avoided with the same or greater accuracy in the final result. As may also be said of the system of planning and controlling production, and indeed of the methods of making time studies, that there appears to be a certain amount of duplication of work which to some readers may not seem consistent with the authors' warnings against oversystematizing.

The authors point out certain truths which it would be well for all managers to "read, mark, learn and inwardly digest," some of which if not new are better stated than heretofore.

Recently there has cropped up seemingly a desire to force uniformity in costs of products, whether made in busy times under favorable conditions or in dull times. With reference to this the authors say:

"Incorrect Methods of Pricing.—It is essential that the cost figures reflect the actual operations of the business. An estimate is a different thing and is ordinarily dictated by outside conditions over which the manufacturer has no control.

"Confusing estimates with costs has led to many entirely inaccurate methods of pricing materials. In order to keep the costs, and the stores inventory 100 per cent correct, some method of pricing must be adopted which will make the total of the physical inventory check dollars-and-cents-wise with the inventory record upon which the inventory records in the main books of accounting depend; providing, of course, that there have been no actual physical shrinkages."

They also wisely point out: "Unless the cost system ties in frequently with the general books of account we have no check