

scribed—as for instance the state railways, postal and telegraph service, shipping and air transport and tourist traffic. Finally the development, present conditions and future prospects of German economy are presented.

Perhaps two quotations will serve to indicate the improvements which are appearing in Germany's economic position. "The needs of a large part of business have apparently been met, the domestic money market is opening up more and more, German interest rates have changed materially so that there is not nearly as much inducement or necessity now to obtain long-term loans from abroad, as there was but a little while ago." (p. 45). "Since the fall of 1926, production and sales have considerably improved in nearly all branches of industry, so that in some of them pre-war conditions have been surpassed. This revival has, however, so far been only confined to domestic markets. German exportation has made only small progress, with the exception of coal, a strong temporary increase in the exportation of which occurred in consequence of the British miners' strike . . . . As against this, due to the improved economic situation, importation of raw materials and also importation of manufactured goods has grown during the last months, in consequence whereof the balance of trade is once more passive, the excess of imports over exports having reached about \$300,000,000." (p. 189).

The reader leaves such books with no belief, of course, that the great problems facing new Germany have all achieved settlement. The problems of paying reparations, the foreign loans, the possibility that much of recent economic improvements may have proceeded from the demands for equipment stimulated by rationalization, the still-present possibility of reaction and many other problems inherited from the war and its aftermath need grappling with.

Yet engrossing as are the stories told by these books, members of the Taylor Society will close them only to feel that another must be written presenting that part of the German experience in which they are most interested. The progress in scientific management achieved by Germany prior to 1914 was halted by the war and the immediate years following. But since the stabilization of the mark, it has been more than resumed. The rationalization of German industry as part of the national

effort toward recovery, with its accompanying movements for standardization, simplification, improved technique and equipment, industrial psychology, expansion of cartels and combinations is perhaps one of the most momentous forces shaping the future of the new Germany. Its details, including the part played by trade unions as well as industrialists, is the next chapter in the post-war history of Germany, for which we shall eagerly watch.

### Reviews

*Sales Management Fundamentals.* By Richard C. Hay, Harper & Brothers, New York, 1929, pages xi, 249.

This is a splendid book covering many of the fundamentals in sales management. It is written in a very easy style, and the use of technical terms and phrases is entirely absent. It is filled with many common sense suggestions on sales management. The author has treated the major fundamentals in sales clearly, and with a great deal of sound judgment. His comments and suggestions are based on actual experience covering a very wide and varied field of operation.

He emphasizes two or three very important subjects which are neglected by many managers of distribution, and they are the subjects of training and market analysis. The section on the training of salesmen is particularly good. It not only carries through the training of new salesmen, which of course is always important, but brings out suggestions about the training of senior salesmen. It also emphasizes the perpetual training of all salesmen which in many organizations is somewhat lost sight of.

The comments on compensation are quite inclusive of the varied methods of payment, and while no solution is given to this most important subject, there are many suggestions of value which can well be followed in the handling of this subject.

While no definite recommendations are made on specific things, the author has given many valuable suggestions covering many of the fundamentals in sales management and covers the questions from various angles. It is a book that can be read with considerable profit by sales managers and other executives as well.

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*Factory Management.* By Paul M. Atkins, Prentice-Hall, Inc., New York, 1926, pages xiii, 386.

The purpose of this book is to provide the student of management with enough data to introduce him to a comprehensive study of this field. "It is based on the idea that the control of production is one of the major functions of a business administration, a function which in

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many ways touches and even overlaps that of the technical engineer on one hand, while at the same time, it interlocks with other business functions on the other hand.

"It has been planned on the supposition that students using it will have already taken a course in business administration and have some conception of the more important business functions and their inter-relationships and that, in addition they know something about typical manufacturing processes and equipment."

In his discussion on the "Selection of Workers" the author briefly and effectively points out that the management "should realize that the human side is the bigger and more important when considering the worker as a means of production."

The opinion has very often been expressed and the idea practised in some plants today, that the worker, if given the proper incentive, will determine the best method for doing his work. "It is seldom that a worker can develop on his own responsibility the best method of doing his work. In the first place he seldom has had sufficient training in the fundamentals of the work which he is doing to be able to decide whether the method he is employing is the best one or not. He lacks the experience which is essential to the formation of a sound judgment in the matter."

On the subject of standards for employees, in his chapter on "Manufacturing Standards," the author gives the reader the impression that substandard or superstandard workmen are useless as subjects for setting standards of work. This is certainly true in the case of the former from the point of view of time only. The superstandard, on the other hand, is undesirable because "he will give good methods but his time will be too fast in most cases to be realized by other workers." In other words, the author seems to think that the superstandard worker is of no additional value to the management aside from the extra work he turns out.

We should be glad to have this type of worker in our industries. His performance should be carefully studied; improved if possible, and his method transferred to others, making the proper allowances for the beginner while he is acquiring the desired automaticity. By ignoring the superstandard worker the analyst is not only doing the worker an injustice but he is also wasting a good opportunity to get data which is valuable in setting the standard of performance.

Much can be learned from the worker who appears to have the best method, from the point of view of fatigue or unnecessary motions, for the complete cycle or any part of it. This worker may not necessarily produce as much as the superstandard but his method may have greater possibilities. The difference in production, however, is very often due to strenuously rather than efficiency.

The reviewer questions the value of the technique employed in making a "Time and Motion Study" as described in the volume. According to the author, the way to improve a method is to break down the job into its suboperations, then to make an "analytical" time study. The time data is analyzed and obvious changes in the method made; a new time study is made and the data again analyzed. If

further changes in the method result, more time studies are made and so on until the best method—"as far as can be seen" is reached. Finally, for the purpose of determining the standard, it becomes necessary to make what is termed "a constructive" time study in order that the time required with the new method may be recorded.

If the analyst seeks to improve the method as well as to make an accurate record of the time, why should he not use the technique which will enable him to record not only time but methods as well? The author concedes the fact that the limitations under which the analyst must work when studying an operation with the use of a stop watch are removed if the time and method are recorded accurately and simultaneously with a motion picture camera and Gilbreth clock. In his opinion, however, the latter method of recording "involves the use of specialized and expensive apparatus" as well as the "training of the observer in the methods of manipulating a camera and in the art of making good motion pictures."

If a business organization can afford to employ an analyst, it can well afford to give him a small motion picture camera and a projector, which are unfortunately more popular in the outdoors and about the home than in industry. As to the amount of training necessary, the reviewer dares say that, as far as the recording of method and time is concerned, less training and skill are required to use the motion picture camera than to record the time and method with the aid only of a stop watch and the naked eye.

Few men, especially those in the analytical work, most of them technical men by training, have escaped the study of physics which gives them the necessary fundamentals of photography. The simplicity of the manipulation of the camera of today is such that a layman can, in a few hours, learn to take satisfactory pictures.

By citing concrete examples the author presents the uses and need of the various steps required to "carry on" manufacturing on an efficient basis and succeeds in showing that production control is one of the major functions of a business organization.

One of the most interesting and instructive chapters in the book is that on making standards permanent. It shows clearly the amount of educational work which must be done to make standards permanent and to maintain improved conditions.

The relation of the work of one department to that of the others in a scientifically managed plant is logically presented. The activities of each function are well defined and the book should serve as an excellent text for the student in manufacturing administration, whether in the factory or in school. The reviewer appreciates the author's treatment of the functions of each department. It shows the modifications necessary to adapt the fundamentals of good management to the continuous process and to the jobbing business.

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