

COMMUNICATIONS

At the Fall meeting of the Society a year ago I called attention¹ to the fact that the principal development of scientific management took place during a period of continuously rising prices—from the late eighties until the peak in 1920—and that the methods and even the principles which were found so satisfactory under easy business conditions must be thoroughly scrutinized if the future of scientific management is to be as significant as its past.

I was therefore particularly pleased to listen to Mr. Person's paper on "Shaping Your Management to Meet Developing Industrial Conditions,"² at the recent New York meeting. In that paper he dealt in a capable and foresighted manner with the managerial problems ahead of us. He showed that to meet those problems the significance of scientific management must be realized fully—in selling and finance as well as in production, and from the point of view of a business as a whole as well as from the departmental point of view. If the proponents of scientific management appreciate the real nature, so ably pointed out in Dr. Person's paper, of the management problem during the next ten years, and if they appreciate the applicability of their principles to every phase of the management problem as presented in that paper, then the future achievements of scientific management will be even greater than those of the past.

HENRY H. FARQUHAR.

THE paper by Dr. Person, at the recent meeting of the Society,² has raised a number of important questions about managerial policy which will bear a considerable amount of discussion. One question in particular warrants attention, namely, the question of sales policy.

It is the ambition of every enterprise to grow and to expand into a large business, which means concretely, to enlarge its sales. But it is just in the manner in which that enlargement of sales is carried out that the difficulty lies. For obviously in times of expansion when everything is booming and prices are rising, the expansion of sales occurs. And after a period of growing sales there inevitably comes a period of declining sales.

Now the reason for that change apparently is this: when prices are rising buyers are increasing their pur-

chases, egged on in no small measure by salesmen who predict even higher prices. Purchasers therefore "buy for the rise" and continue to buy more, the more prices rise. Inventories or stores grow and then suddenly prices begin to fall. Then it is discovered that everyone has overbought and the sales of a company, which have soared, drop practically to nothing. Manifestly, a buyer who has stacked up beyond his needs will, when depression comes, be out of the market until his overstocks have been reduced.

Thus it so frequently happens that a company or an industry which has had extraordinary increases in sales during prosperity must practically close down for months afterwards because its sales have practically disappeared.

From the point of view of management the conception of sales needs further scrutiny. When one producer sells to another, or to a distributor, from the point of view of management the goods "sold" have merely passed from one stage to another stage in the process of production and distribution. They haven't been sold until they have passed into the hands of the final consumer or user. They are still goods in process. And if through sales acceleration and rising prices, one stage overbuys and builds up its stores, it is just as detrimental as if the machine shop, let us say, loaded up on castings; when the shop stops its loading up, the foundry must shut down until the large store of castings has been used up.

If the aim of management is to stabilize and regularize production, then overselling is just as bad as the underselling which it produces, as cause and effect. A few organizations have realized this and have formulated a sales policy accordingly. The long term view of sales means that the sales of one organization cannot exceed the sales of the organizations to which it sells. When for short periods the sale of, say cloth, exceeds the sale of the garments made from that cloth, then it is obvious that, sooner or later, the sales of cloth must fall off until the excess purchases of cloth are used up.

There are good grounds for believing that the feverish activity in production and sales of 1919 and the early months of 1920 was due to such overselling or overbuying, from the consequences of which we are just escaping.

We may face a period of falling prices or rising prices considered from the long term view. But in either case we shall undoubtedly have short periods of expansion and contraction, of prosperity and depression.

In general a period of depression and curtailed industrial activity will last as long as it is necessary to use up the accumulated stocks due to overbuying in the period of prosperity. A sales policy which fosters overbuying must pay the penalty of reduced sales later, for in the long run the sales of one organization cannot exceed the sales of the organizations to which it sells its product.

The raw materials and equipment of one enterprise are but finished products of other enterprises, just as the materials-in-process of one department of a single enterprise are the finished products of other departments of that enterprise. The series of processes between the first step of securing crude material from nature and the final step of delivering a commodity to consumers is one great enterprise of which specialized manufacturing and distributing are departments. The principle of balanced inventories applies to the whole as well as to the parts, and should be basic in sales policy.

L. K. FRANK.

REVIEWS

Factory Storekeeping: the Control and Storage of Materials. By Henry H. Farquhar. McGraw-Hill Book Co., New York, 1922, pp. xi, 182.

The special importance that has attached to inventories during the past two years makes Mr. Farquhar's book of special timeliness. In a good many cases the amount of the loss that had to be taken in writing down the inventories of industrial plants was only partly due to the shrinkage in market values that was beyond individual control; many industrial plants paid an additional penalty for not having kept the quantity of inventory under strict control, and for allowing speculative purchasing to take the place of purchasing for reasonable manufacturing requirements. Perhaps the lesson that the recent depression has taught us will cause Mr. Farquhar's book to be more widely read and carefully studied than might be the case in more heedless times.

It is a small book, but it contains a succinct analysis of the problem of stores control, and outlines principles and methods well worth observing. It is in no sense dogmatic as to method, but the sound principles discussed in it are good dogma, as sound principles must ever be.

The materials of production are the food of industry. Without an adequate and steady supply of them, it is ill nourished; with them it can live sanely on a well-balanced diet or gorge itself to repletion, using them wastefully or well, according to its housekeeping ability.

Materials are valuable and should be well cared for; an excessive supply ties up capital unnecessarily and increases the risk of loss due to depreciation of both market value and quality; an inadequate supply disorganizes the work of production and increases its cost; waste of material is just plain waste, like war, and plague, and graft; failure to guard and account for valuable material means inefficiency, temptation, to thievery and carelessness, and, perhaps worst of all, ignorance of costs, which is a cardinal sin against customer, competitor, and self. These are major phases of the problem of factory storekeeping, and consideration of them should guide the reader of Mr. Farquhar's book in his study of the methods, both general and specific, suggested for dealing with them.

Precision in the control of processes and of funds, for instance, is generally admitted to be desirable. Why not precision in the control of material? Knowledge as nearly exact as possible for what we need in the way of material, when we need it, where and how it should be stored, how long it takes to get it, what it is going to cost or has cost, how much in units and value we already have, whether we are getting the quality we pay for, whether we have too much or too little capital tied up in inventory, whether our stocks are being handled expeditiously or at minimum cost—real knowledge concerning these and similar points is essential to effective factory management.

The methods of obtaining and using this knowledge, as pointed out by Mr. Farquhar, are sensible and well founded in practice. A great many plants have enclosed stores departments and some sort of stock record or stock balance sheets, but there is still a surprisingly large number in which a physical inventory must be relied upon to tell what is the count and value of material on hand. Surprisingly few also are the cases in which the stock records form an integral part of a cost and accounting scheme which provides current and even reasonably accurate information about inventories and material costs in production. Even when such a fortunate co-ordination of records exists, adequate connection with the production planning and purchasing is frequently missing. Good storekeeping is a function with many points of contact in an industrial organization, and Mr. Farquhar has very ably shown its comprehensive nature. It is worthy of more than casual attention, and it is to be hoped that Mr. Farquhar's exposition of the subject will be widely read and carefully studied.

It is to be regretted that what is perhaps the most important illustration in the book (Fig. 5, p. 61, Four-column balance of stores sheet) had to be so reduced in scale for printing as to be difficult to read. In the main, however, the book is well got up and readable, with logical and useful chapter divisions. It is indeed gratifying to find a book on factory storekeeping that recognizes the importance of classification and symbolization of materials and continuous material accounting as integral parts of the general accounting scheme for business. Mr. Farquhar might very well have given them even more extended treatment.

Only with respect to details or certain specific suggested methods can one find reason to differ with the author. He refers somewhere to the operating importance of occasional "tremendous trifles," and this serves to bring to mind one which is not mentioned in the book. That is the importance of having specific price information on the purchase order, so that there shall be no delay in entering values on balance of stores sheets and notices of receipt or issue of material. Primary dependence on the invoice for this information always leaves in suspense an appreciable number of transactions, and hampers the work of the material planning, cost, and accounting departments. Negligence or laziness in the purchasing department is often the only obstacle to be overcome in this matter. Insistence on having prices and terms detailed on the purchase order will speed up the material accounting and make it more useful because then more nearly current. Perhaps other "trifles" will be found worthy of discussion and debate among those interested in factory storekeeping. No better fate could await Mr. Farquhar's book, which we trust will attain wide circulation.

J. D. WALSH, JR.¹

Trade Association Activities and the Law. By Franklin D. Jones. McGraw-Hill Book Company, New York, 1922, pp. xii, 360.

This book, according to the author, "has a twofold purpose": first, an endeavor is made to explain . . . the meaning and purpose of the laws regulating competition; second, a summary is presented of that great group of lawful activities in which our trade associations are steadily achieving results of vast benefit to industry and to the nation."

¹Sanderson & Porter, New York.¹ Bulletin of the Taylor Society, Vol. VI, No. 6.² "Shaping Your Management to Meet Developing Industrial Conditions"; Vol. VII, p. 211.