

to as little as one-twentieth of one per cent of the total quantity of the branches of the line to which they belonged,—far too few to warrant the cost of setting up the necessary machines. Again, the nature of the product is such that, in order to come out whole the concern must produce a certain percentage of each grade, which was exactly what did not happen. Result: large accumulations of some of the grades, violent shortages of others, and a scramble every so often to dispose of excess stock by inducing the trade to permit substitutions and by reducing prices. The final straw was the institution of a rush list and the sending of men into the factory to force through items urgently needed. I need not go into details as to the confusion, high costs, low production and general unrest which such a procedure was bound to bring about.

Planning, as we understand it, contemplates that an estimate be prepared for three months, four months, six months, a year, as the case may be. Such estimates in concerns under traditional management are made in many cases. But they are usually guesses rather than estimates. It is required that this estimate be the result of carefully compiled data, that each component element be studied and scientifically assimilated. To take the records for past years and add a round percentage for normal increase is not enough. Each productive department must be analyzed. Available workers, equipment, materials, space, transportation, conditions, housing facilities, actual working time, tasks, bonuses, wages,—all these and other factors enter into production and cost and must be studied in advance if we are to plan scientifically; they must not be left to future development. Where a factory planning department is functioning properly, this data is quickly available.

A preliminary statement of factory capacity in as much detail as the circumstances may demand is prepared for the use of the administration, indicating what it can depend upon—barring adverse events beyond human control—from the standpoint of production and cost. This is the basis upon which all subsequent planning rests. It is evident, therefore, that it should be prepared with precision.

"But this is impossible in our plant," one may say. Would you permit your architect to build your house with an estimate less precise? Yet almost as many varied elements enter into the building of a house as enter into the manufacture of the average product. What of the contracts for building bridges, tunnels and the like under some of which the contractor is penalized up to as much as \$1,000 a day for every day's

delay beyond the allotted time and, of course, is held to the contract price?

It is true that under the present uncertain business conditions this planning and estimating is more difficult than it is in normal times. Yet it is being done to my knowledge successfully. The more uncertain the outlook, the greater the need for careful planning.

THE SALES FACTOR

Not until it knows what there is to sell can the administration of any sales department determine what effort will be necessary to sell it.

On the other hand, there can be no intelligent sales program without a scientific study of markets, sales people, advertising facilities, distribution agencies and the countless other factors which enter into the sales problem. The scientific method employed in the factory has equal force in the sales field. It is true that the problems are different in character and that engineering precision, in many cases, is out of the question. But the process can be carried profitably to a far more advanced stage than is the common custom.

Much has been said of the wastes of production in the plant. Would it surprise many of us if it were found that the wastes in selling were several times greater? I think not.

Appropriations for periodical advertising,—upon what actually known facts are they based? The millions of circulars distributed annually,—how carefully are they planned to reach the actual potential purchaser? The storerooms full of printed matter, display fixtures, dealers' helps and the like which were never even sent out to do their work,—what planning is done here to prevent waste or, what is even more important, to secure productive results from the money and effort spent?

Take the problem of selecting the channel of distribution. How many concerns can justify their policy of selling through the jobber or direct to the retailer, as the case may be, by actual facts and statistics taken from scientific study? Is it not true that most businesses follow the trade custom, fearing, rather than knowing, the consequences of a departure from it? Yet I have seen, as the result of common sense tests which could hardly even be dignified by the term "scientific," a sales policy successfully switched from the jobbing to the retail basis almost overnight—after over twenty years of debate on the basis of precedent and judgment.

On the other hand, I recall where a concern had both jobbers and retailers on its books. It became necessary to decide which should be dropped. A meeting

of the important executives was called and the matter was settled at that meeting purely on the basis of majority opinion. Not a single set of facts or statistics was produced beyond a comparison of the amount of business that had been received from each class of customers and a comparison of the number of customers in each group.

Then there is the problem of managing the salesman in the field. No experienced business man will deny the waste there is here. Mr. John M. Bruce, who has done so much valuable work in connection with this problem, has cited illustrations before this Society and elsewhere which are evidence enough of wasted effort in the selling field, if, indeed, any evidence were needed. It is clear that a considerable amount of time is wasted, to say nothing of the direct expense, because there is no planning in relation to market consumption, location of customers, condition of stocks on their shelves, transportation routes, available products for sale, coordination with advertising campaigns, etc. I have in mind several concerns which send their salesmen into the field two or three times a year with no other equipment than a line of samples, some specimens of advertising copy and display fixtures and a pad of order blanks. It is up to the salesman! As a matter of fact, in these cases the salesman controls the business. He decides what items to push, and naturally they are those which yield the largest commissions or make his records look big. He determines what new items shall go into the line and when they shall be dropped. He decides whether he shall see all the prospective customers in town or go to a baseball game.

The Associated Advertising Clubs of the World and other national and local bodies of advertising and sales managers are approaching these problems in painstaking and constructive fashion and have done noteworthy work in the field of research. At least one large publishing house, several progressive advertising agencies and a few professional sales consultants also have made valuable contributions to this work. The individual concerns which are likewise scientific are exceptions, however, rather than the rule.

Planning applied to the sales activity contemplates the preparation of estimates of sales in detail, estimates of expenses in detail, based upon scientific study of the component elements of the sales problem from the factory to the consumer. It comprehends the reconciliation between sales requirements, on the one hand, and factory productive capacity on the other, to the end that the sales departments may sell what the factories produce and the factories produce what the sales departments are able to sell.

It goes further and demands the application of the planning principle to the activities *within* the sales function. It is useless to prepare estimates and budgets unless the sales administration sets up internal planning machinery designed to distribute the task of making its plans come true. The advertising department should correlate its program and its appropriations to the plans of related departments. The assignment of sales tasks in detail to the branches and to the individual salesmen to fit the program, and the periodical supervision of their efforts to keep the ship pointed along the charted course, form part of the intelligently planned sales procedure. Even the sales correspondence, now left in many cases to the discretion of clerks with indifferent training and little vision, should be planned carefully to fulfil its real purpose in the general scheme.

THE STOCK DISTRIBUTION FACTOR

In a business with branches established at various market centres throughout the world, the problem of maintaining stocks sufficient to fill the orders which flow in, and yet not so large as to cause a drain on finances, or to run the risk of depreciation in value as a result of deterioration or change in style, is of great importance.

The common procedure is to establish maximum and minimum stocks on the basis of previous sales records. The result is an inflexibility which sometimes is extremely costly. A sales drive brings in a larger volume than usual and the stock is not there to meet it. If the branch is located many miles from the source of supply it is obvious that the delay in replenishing stock is a matter of considerable annoyance, causing cancellations and the consequent waste of sales effort.

Another method in common practice is to place the responsibility for distributing the finished product directly upon a central merchandise manager or warehouse manager at the home office. He in turn carefully watches the current sales sheet and the urgent requests by cable, telegram and otherwise which come from the branch managers, and sits in judgment upon the evidence before him. Conflicts and injustices are almost certain to occur, no matter how carefully he does his work. A rapidly selling article will be demanded by several of the branches, the total requirements being in excess of the supply. The branch managers cannot be convinced that they have had their share, particularly if their remuneration is dependent on their sales.

I have found that under this arrangement it also happens almost invariably that when the busy season