

wire fabrics for plastering and reinforced concrete. A study of the products showed that they could be divided into two sales divisions, one distributing through hardware channels and the other through the construction trade. There were other minor departments that could not be classified under either heading. In all there were about seven hundred producing machines that had to be kept continually employed. As scientific management was gradually installed the potential output was much increased. To fill the factory with orders it became imperative to build up an adequate sales department.

The selection of a salesman requires time and care and he should not be employed unless he has been under observation for a considerable period. In order to succeed he must be industrious, intelligent, loyal and in good health. Unless he is industrious he will fail to appreciate the need of conserving his time, thereby increasing the number of his calls and resulting customers. Unless he is intelligent he will fail to modify general instructions to fit individual cases. Unless he is loyal a salesman soon joins the "stove league" of knockers. Unless he has good health he cannot sleep in a different bed or a sleeping car each night, digest a variety of foods and greet the next day and the next customer with a smile.

Having selected the men, we were ready to open our school. A sales manual had been carefully prepared, describing the manufacturing processes, the products and the limitations of each group of machines. One day a week was devoted to a discussion of selling, four days were spent at the factory and the sixth day in quizzes. At the end of five weeks the men had acquired a fair knowledge of the products and were ready for the field. It is my belief that a knowledge of the company's products—how made and used—is of more importance than a superficial training in selling methods, because the latter can be acquired by means of the case system of being turned down and trying again. A salesman can, however, be warned against such crudities as putting his feet on the buyer's desk, handing him cheap cigars or indulging in familiarities. His personal appearance, or even his education, may be improved by suggestion. I once saw a piece of constructive selling while waiting my turn to see the buyer of a jobbing house. Ahead of me was a salesman who handled a hammer with the skill of a virtuoso. With a deft stroke he drove a common pin into the top of a desk and then, reversing the hammer, extracted the pin as

if it were a tenpenny nail. The salesman was Fayette Plumb, and his skill in handling the tools he was selling was a graphic way of showing the buyer what thousands of workmen could accomplish with such a high grade hammer.

We were next ready to set the individual tasks, or quotas. These were based on the possible consumption in a given territory. When a concern makes more than one product, the individual quotas for each article will keep the salesman selling his proper proportion. For an untried article, or one that does not have a repetitive sale, the quota is, at best, an approximation, but it does put the combined tasks of all on a very definite basis. For instance, one company's quota of \$2,000,000 of orders for five months actually reached \$2,010,000, a variation of one-half of one per cent.

The establishment of quotas produces keener competition among salesmen if the comparative standing is frequently distributed in graphic form. Orders are more vital to some salesmen if they think of them in terms of the number of machines or workmen they are keeping busy. The reverse point of view is sometimes seen. A salesman, who was home for a day or so, visited his factory only to be asked by the foreman why the hell he didn't get back on the road and book more orders so that the department could keep up its rate of production and earn a bonus.

Without a chance to make more than a mere living a salesman will not develop maximum efficiency; for most men want to know, "What is there in it for me?" The turnover will increase as the more ambitious men go elsewhere. Give a salesman a salary that will cover his average living expenses, and a bonus which depends upon the profits which he makes for his firm, and you will have an aggressive salesman and a contented sales organization. The successful salesman often becomes an investor in his company's stock.

Time studies cannot be made of a salesman in the same sense that time studies can be made of factory operatives; but a salesman's daily report of calls, orders and prospects furnishes a basis for valuable suggestions which will improve his efficiency. Two separate investigations mentioned in "Field Tactics for Salesmen" show that practically three-quarters of a salesman's working day is non-productive and only one-quarter of his time, which is spent in selling, making out orders and adjustments, is productive. Some of my own men, checked with their experience

²Dartnell Corporation, Chicago.

and found that even less time was spent in the presence of the customer. As a result of these findings the men planned their day more carefully. Further analysis of daily reports will show that a man is not out enough, due to too much detail work, ill health or sheer laziness. Or we may find that the ratio between actual orders and prospects opened is so small as to indicate poor closing ability, poor selection of prospects or keen competition. Lost order reports keep tab on competition and furnish a measure of the potential business in a territory.

It is important for salesmen who may be many miles away from headquarters to start out with a list of prospects, a definite route to follow and exact knowledge of what the factory can deliver. And while they are away the home office must keep constantly in touch with them. Scientific methods of distribution should also include a consideration of the potential market, of competition and of price. For example, in the case under consideration, a study was made of the market for screen cloth in terms of dwellings and of native white owners. Unfortunately, price was established by the low cost, or intramarginal, producer and had no relation to our costs which were sometimes higher than the prices. The market for poultry netting had moved westward, which made it necessary to take orders at the price set by the low cost, or intramarginal, producer until a quality article with a longer margin of profit could be developed. Wire lath was gradually being displaced by expanded metal, except for the highest class work, so here the price was based on a fair cost. Another article sold in competition with metal lath was priced a few cents under that product and afforded a handsome profit. In the perforated metals department improved methods of control showed that competitors were operating on average costs. Advantage of this situation was taken by making a scale of prices which decreased in proportion as the identical operation was performed over increasing periods of time.

From the foregoing I have tried to show you that sales planning which includes training, task and bonus, time studies and routing is just as necessary as planning for a factory. Careful sales planning helped one organization to increase its annual orders from one thousand to four thousand units per salesman.

In addition to sales planning there must be proper execution of the plans in order that the daily or seasonal orders be commensurate with the production schedule. It is as important for a sales manager to

know where he stands each day as it is for an investment banker or a department store manager.

Granting that the sales manager has put his distributing machinery in proper alignment, the factory must produce goods of unquestioned quality at competitive prices or no plan of distribution, however spectacular, will permanently succeed. However, in some cases the two functions—distribution and production—fail to coordinate, even when both are properly organized, for there are external factors which may affect the success of a business.

Many manufacturers who built war-time plants have not scrapped them, but have branched into lines which compete with those of established concerns. This new competition has reduced profits and demoralized some industries for the time being.

In 1910 we exported 45 per cent of all manufactures, 33 per cent of all crude materials and 12 per cent of our foodstuff. The dislocation of export trade produced by falling exchange, financial prostration of European nations and artificial trade barriers has increased our domestic competition.

The deflation of 1920-21 reduced prices, but wage scales and transportation costs have not been reduced proportionately. The travelling expenses and salaries of salesmen, and the cost of advertising of various forms have remained at high levels. As a result serious consideration has been given to possible readjustments of marketing methods. Shall I sell from house to house as the Fuller Brush and Real Silk Hosiery Companies are doing? Shall I do business by mail? Shall I eliminate the jobber? These are questions which manufacturers are asking—serious problems for manufacturers who are making articles which do not have a repetitive sale, and whose cost at the factory door is frequently but 25 per cent of their price to the consumer.

Despite diatribes against retailer and jobber, they will continue to exist as long as they perform a legitimate function in distribution. Many manufacturers who have cut corners have done so to launch a new article or overcome the opposition of existing channels. Beacon Blankets were sold direct to department stores because of jobber opposition. It is probable that the selling cost of such manufacturers is as high as the cost of distribution through the middleman. Such manufacturers do control their own destiny more completely and, once established, there is no reason for changing. But for one manufacturer who is distributing direct to the consumer there are thousands