

the business to find out whether we were buying a business which could make money or not, since it had been losing money up to that time. A careful budget of sales expectancy month by month, twelve months in advance from last November, and of expenses, departmentalized and divided with ample provisions for everything, showed that we could make perhaps a few thousand on the present basis of operation.

The manager of this establishment had never had any experience of that kind at all, and he and his accounting crew began to watch that budget. It became a non-financial incentive, and if they beat the budget they could not wait to get me the news of it.

That budget swung one side or another each month, but on the twelfth month it came out within \$14.00 of its expectancy. That is just a coincidence, but so was Howard Coonley's twelve months budget which came out almost exactly. But it shows how the budget tells the story. We have the budgetary control in each enterprise that I am mixed up in—each budget for each plant made by its separate crew—and the accuracy with which they come out is almost uncanny.

E. Joint Research

In selling as in purchasing problems there are many opportunities for joint research. Those of you who adopt the policy that I have always adopted, of not hiring salesmen from competitors but training your own, know that you cannot always pick the right man, and you have to make an investment—and quite an investment—in many before you discover that they cannot be fitted for your work. The insurance companies have done much along this line, and since we are all poor prospects as insurance customers, insurance salesmen have certainly been well trained. But the insurance companies got together a cooperative fund which they placed at the disposal of the Carnegie Institute in Pittsburg for making studies covering the testing, selection and training of salesmen. I have understood that the insurance companies have gained a good deal from that, and that the Equitable, under their vice-president who was brought in from a teaching position in psychology, has had exceedingly good results. In the retail field, the Comptrollers' Congress, associated with the National Drygoods Association, has been one of the chief agencies in help-

ing the retail drygoods stores develop sound selling methods.

E. Scientific Advertising

Statistical and research work is tremendously important in advertising, for advertising as a tool for selling has become ever more important. Advertising poorly done is tremendously expensive. The two great developments in advertising in the past few years, it seems to me, have been the tendency to truth, and the development of skill in making tests of advertising effectiveness.

One friend, a psychologist, who has given a good deal of thought and study to the effectiveness of advertising copy developed a series of tests of the efficacy of advertising matter. He applied his tests to the advertising copy of twenty large concerns, and then compared his conclusions with the actual performance of this copy, and he found his tests were 80 per cent accurate as to the effectiveness of the different kinds of copy. He is now making a study, with the aid of these tests, for a concern which during the first quarter of this year spent \$35,000 in advertising a product which they had been selling for some time, but secured only \$1,000 increase in sales. Now they have turned to see what applied psychology can tell them about that advertising material, so that they will get, if possible, 80 per cent of success instead of a fraction of nothing. If the validity of this method of testing copy can be established, it is going to increase sales efficiency.

I think we are going to see a gradual evolution in advertising. The way advertising is done now on a commission basis makes the advertising firms who have the greatest talent practically unwilling to give advertising advice or service to the man who does not have a large enough appropriation to give the agency a very real return. So the man who has from five to ten thousand dollars to spend on advertising—which he might spend very readily and fruitfully if properly advised—has no place to go to buy skill. I wonder if eventually advertising agencies and advertising advisors are not going to be on tap much as doctors and lawyers are, so that the moderate sized concern with a relatively small appropriation can get good advice in making that tool of selling more effective.

This sales and advertising drive, with advertising playing a larger and larger part in the cost of sell-

ing, together with the tendency of manufacturing to get low costs through quantity production seems to my mind to be pointing inevitably toward the larger consolidation of industry in this country. That tendency has already started in the textile industry. It is going on at a rapid pace in the automobile industry. Today 95 per cent of all the automobiles in the country are manufactured by thirteen concerns, and it is my guess that two or three years from now there will be fewer automobile concerns that there are today. I have seen the same tendency in rubber goods, in shoes and leather, in metal working, in woolen manufacture, and so on; and I think that with over-production, the keen competition for volume with the lowering cost is putting a premium on the best managed concerns. All this puts upon those who represent this school of management more and more of a burden to prepare for the problems which come with consolidation.

III. Control

There is just one other phase of management which I want to speak of, and that is the development in the clerical, statistical, accounting and control end of business. In the old days and today the unsystematized form of management gets off its balance sheet of assets and liabilities once a year. The systematized form of management gets off its profit and loss and balance sheets four times a year or monthly. But about all they know about it is a simple analysis of sales and production and costs. Today an accurate, current and dependable cost system in the hands of the sales manager is absolutely essential to help him in his strategy. There are times when he has got to have the courage to take work at cost when the other fellow does not dare to, but he must know it is cost and not below cost. The executives in business today want not only internal statistics for their internal management; budget control of sales, manufacturing and purchasing require that they have external statistics such as the tendencies of raw materials in the market, the variable demands of markets for commodities, the avail-

ability of financial and technical resources and changes in these; the availability of workers; restrictions or regulations imposed by government, and so on. The growth of the big statistical organizations is an evidence of the importance that people are attaching to this need of business.

As I foresee the tendency of business, competition for a great many industries is and will be very keen in the next two or three years—a life and death struggle for volume. There is going to be a tendency to consolidation through the failure of the poorer managed concerns. The one-man type of establishment with its low overhead will always continue, and in many cases will be a thorn in the flesh of the larger concerns. But one is not safe without taking a long look to the future; and in the long run, there is a premium put on scientific management. The larger concern of the future will need superior production methods to produce a dependable product and a dependable service at costs lower than its competitors; it will need superior selling methods to gauge the market, select proper channels of distribution and to search out and sell the consumer; it must have superior control methods—master plans, budgets, schedules of operation for a considerable period ahead, and detail independent schedules for selling, production and finance. The concern of the future needs to continue the development of the art and science of management. And if we are not going to have labor troubles and the economic waste of bad industrial relations, we must take a broad point of view in the handling of the human equation. With the broadening authority that comes from the growth of industrial enterprises there comes also a greater opportunity and a greater responsibility for making those enterprises agencies not only in producing and distributing their physical product better and more cheaply, but also in giving a wider opportunity for health, happiness, education, and progress for the many people employed and the communities which they support. In our organizations we try to feel that responsibility and are trying day by day to put more "happiness in every shop."