a. Display fixtures; b. Interior displays; c. Window displays; d. Consumer literature; e. Local newspaper advertising; f. Slides, etc.; g. Other selling helps.

> Advertising department, 9; Sales promotion department, 3; Sales department, 3; Advertising department (a—d—e-f)—Advertising department (a—e-c-d—e-f) and sales department (g)—Merchandise comittee (a—b-c), advertising department (d—e-f). mittee (a-b-c), advertising department (d-e-f), and selling committee (g)—Sales department (d-e)
>
> —Dealer service department—Advertising department (a-b-c-e-f), advertising department and sales educational division (d), sales educational division (g)-Sales engineering and advertising—sales and advertising—Advertising department and dealer service department—Advertising service—Sales adpartment (d—e-f—g)—Sales, advertising and production man-

C 10. What unit plans new products to be added to vour lines?

> Sales department, 3; Sales engineering, 2; Conference sales, production and finance, 2; Sales research studies market, factory development department perfects product—Department managers, approval of irim New goods department—Sales and publicity—Engineering—Merchandising committee—Sales department plans, management department approves—All department ments—Managers branch factories in conjunction with executive committee—Engineering Department, ap-proval sales manager—Conference sales, production and proval sates manager—conference sates, production are engineering—General offices of company—Sales manager or mill sales committee (executives)—Sales and sales promotion—Head of firm—Sales and engineering —Style committee—Sales and research—Sales and production—Sales committee, laboratory or manufacturing committee may initiate-Engineering department, concommittee may intrate—Engineering department, con-ferring with general manager, sales manager, manu-facturing executive, chief engineer and service engi-neer—Research department and sales development sec-

C11. What unit reports upon activities of legislative bodies and trade organization?

> Legal department and sales manager-Staff assistants Legal department and sales manager—Staff assistants in President's office and Vice-President in charge of sales—Sales promotion department—General Manager—Sales department, 6; All departments—Legal department—ment—Merchandising committee and sales committee—Unit of executive department—Relations department (legal division of sales department)-Sales engineer ing—Vice-President in charge of welfare, employment and organization work—Executive board—Research nd financial departments—Outside organizations-Mill sales committee.

C 12. Do you have a separate unit to compile and report sales statistics?

> Fourteen replies stated "Yes" without details-Comptroller's department, 2; Sales engineering—Sta-tistical department under comptroller—Statistical di-vision, sales department—Regular clerical force— Vision, sairs department—regular deficient force—Statistical division, sales promotion department—Statistical section, finance division—Trade record section, sales department.

C 13. What unit handles dealer and consumer complaints?

Sales department, 13; Service department, 2; Branch sales managers, 2; Service division—Salesmen or special representative of vice-president in charge of sales —Service department under production manager— Adjustment bureau, sales department—Each branch factory—Claim department—Quality committee—Sales and production—Assistant sales manager—Sales and and production—Assistant sales manager—Sales and service—Department managers—Sales operating— Order department—Credit, sales and factory depart-ments—Correspondence division, merchandising de-partment—Adjustment department.

14. What unit analyzes and reports on seasonal, territorial or economic factors affecting the sale of your products?

> Sales department, 13; Sales engineering, 2; Sales Sales department, 13; Sales engineering, 2; Sales research—Department manager—Stock control committee—Merchandise managers—Manager of sales information—Salesmen—Sales department and general management—Sales promotion department—Planning and statistical section—Sales committee and branch manager—Executive Board.

C 15. Do you have a definite method of ascertaining competitive activities and prices?

> Nine reports state "Yes" without details-Branch managers—Sales engineering.

C 16. What unit plans the methods of salesmen's compensation?

> It is evident that this question was not carefully read by many whose replies indicate that they refer to com-pensation and not to *methods* of compensation. Sales department, 20; Administrative, 2; Sales op-

> erating initiate, management committee approves Sales engineering—Sales personnel department—Par denartment managers-General Board of Directors—Sales operating—Sales and general management—Executive committee—Sales promotion—Executive assistant to vice-president in charge -Sales committee and board of directors-Sales and executive board—Executive department—Sales committee on recommendation of sales manager.

III. GENERAL OBSERVATIONS

The purpose of the questionnaire was to obtain information about the form of organization of sales departments, the extent to which the engineering phases were recognized and scientific planning and scheduling attempted, and the methods of control of important portions of the work of the distribution organization. As the original membership of the Society was composed largely of men engaged in the industries, it naturally follows that the questionnaires were sent mostly to industrial executives. The replies are of value, accordingly, because this sales section of the Taylor Society came into existence as a result of the question raised by a few earnest men whether there are not in the scientific methods of production control lessons that can be applied in sales organizations.

The first group of questions under the heading "Organization" were framed merely to throw some light on the control thought to be necessary when an organi-

zation became so big or its distribution plan is such as and their work coordinated by the general manager? to force decentralization. In a centralized sales organization, executive ability of its head and his staff may largely counterbalance lack of organized control. but as authority is given in increasing measure to field or branch managers the necessity for a controlling system develops.

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Instances are known where decentralization has been carried too far and it has become necessary to call a halt and retrace some of the steps. The danger of losing control through decentralization is always present and affords an opportunity to utilize in sales organization the skill and training of the industrial or management engineer. Thus, in the very foundation of sales work, there exists the need for an application of science to the solution of the problem of proper organ-

If the industrial engineer had had a part in the general planning of sales organizations, there would have been in existence by now some recognized standardof organization, operation and nomenclature. You have only to turn to the answers to the questions in group "C" to recognize that the progress of production organizations toward such standards has not been duplicated in distribution organizations. Many of the latter have just grown like "Topsy," and an attempt to scientifically attack their problems has been in some degree rendered difficult by the lack of science in organization and operation.

Functions within the marketing organization are not organized on clean cut lines, and duties and responsibilities overlap. With duties ill-defined, it rarely happens that real authority can be delegated to division heads, and thus matters of minor moment drift up to the sales executive's desk for decision. Thus many a sales manager, due to lack of proper organization, is so submerged under a mass of detail that he lacks time to do the real thinking and study that will broaden his horizon and increase his usefulness and influence. When you find decisions on matters involving only the distribution function passing up the line to a company executive, you can expect to find the narrow-visioned, overburdened sales executive and the unscientific sales organization. There is a place for the engineer in sales organization-invite him in!

Now let us consider the "B" group of questions. The answers give some insight into the extent and character of the planning that is done in some sales drganizations. Do you ever stop to wonder why so many manufacturing organizations are divided into engineering and production groups, each reporting to Is there any real value in the written plans and schedules by which production programs are guided? Is there any truth in the assertion that some men are thinkers and others doers: that each has his place in industry and that it is difficult for most men to cross the invisible line that separates their respective spheres of activity? The truth is that the scheme of such organization for production works, and so the answer to the last two questions must be affirmative.

Is there any real difference between the tasks of producing goods and producing orders? Is there a place for both the thinker and the doer in distribution? You will agree that there is a place for both. Then it follows that you must recognize the engineeering phases in sales work. Planning, preparation and scheduling must precede production and these are the engineering phases. I do not argue that these must necessarily be set aside as an engineering group, but the manufacturing division has found it advisable to so segregate the thinkers; and distribution, especially when engaged in large scale operations, can well afford to look into the reasons for separating engineering from production in the factory.

One reason why so many decisions must be made by the sales executive is the lack of a well-defined policy, and policies are best established by written plans and schedules. And so we find justification for at least a planning division in sales. In a highly organized distribution machine where different groups are engaged in selling, merchandising, advertising, sales promotion and service work, the absence of plans means endless conferences out of which each man goes, all too often. to apply his own narrow conception of the policy to be pursued.

It is the ordinary practice, and perhaps necessarily so, to let each division make its own detailed plans. Thus there appears the necessity for master plans and schedules. And this necessity for master plans and schedules renews our interest in the engineer.

Somewhere within the organization must be a master plan to co-ordinate the work of all divisions of the business. These master plans must either form the basis for master budgets, or must be the basis for working programs that will operate within budgets otherwise established. Such master plans must be based upon adequate information produced by research or statistics. And so we find planning, research and statistics falling into a natural group. Last year we termed this group "Sales Engineers." The name is not important-the work is.