department has charge of each): (a) selection of salesmen; (b) training of salesmen; (c) direction of salesmen; (d) "educating" of customers; (a) advertising; (f) warehousing; (g) shipping; (h) traffic?

The replies to this question are most interesting. Nineteen state that the selection of salesmen, the training of salesmen, the direction of salesmen and the "educating" of salesmen are in charge of the Sales Operating Department, with the exception that one places the training under the Sales Engineering Department and another states that they have practically no training of salesmen and "education" of dealers. Eleven place advertising under Sales Operating; one under a Merchandise Department; one under Sales Engineering; two in a distinct Advertising Department. With respect to warehousing, four place it under Sales Operating; one under Sales Engineering; one under the Treasurer; and four under the factory management. Shipping is placed by only two under Sales Operating; by two under the Treasurer; and by seven under the factory management. Traffic is placed by three under Sales Operating; by two under the Treasurer; by one under the Acounting Department; and by five under the factory management. One reply states that all of these duties are under the General Manager.

4. Does your organization provide for a unit in the sales operating department which takes the master sales plans and schedules and works out detail plans or schedules for carrying out the master plans; i. e., a planning of the actual work of performance?

Ten firms state that they have no such unit in the Sales Department for detail planning. Two state that they have such unit; two state that they have such unit is in contemplation. Four state that the Sales Manager makes detail plans for his department.

5. Does this planning of actual performance involve: (a) analysis of master plans as first step in making detail working plans; (b) laying out of detail working plans in the form of written schedules; (c) checking of reports of performance against written detail working plans?

Six firms state that all the phases of planning above indicated are carried out in the Sales Department; one that all three are in contemplation; one that (a) and (b) but not (c) are carried out; and one that (c) but not (a) and (b) is carried out.

6. Does your sales operating department provide for the study of the art of personal selling for the purpose of improving the salesmen's methods?

Twelve firms state that study is made of the art of personal salesmanship; four that it is not; two that it is done superficially; one that it is a responsibility of the Sales Manager.

7. Have you ever made a time-study of a salesman's work, or any kind of job analysis of his work?

Eleven firms reply that no job analysis of the salesman's job is made; five that there is such analysis without time study; three that there is such analysis including time study.

IV. GENERAL

1. What are the functions of your sales manager; does he have supervision of sales engineering or plan-

ning, as well as of the selection and direction of sales-

Vol. VI. No. 5

Thirteen replies state that the Sales Manager supervises both sales planning and sales execution, even when the routine of planning is performed by a distinct unit. Three state that he is responsible for execution only. One states that he is primarily responsible for execution, but participates in planning by his presence on a planning committee. One states that a Distribution Manager is responsible for both planning and execution and that under him are sales managers who are responsible for execution only.

2. Do you believe the function of sales engineering or planning requires a type of personnel different from that required by the function of actual selling? If so, what are the differences?

Eighteen replies express the opinion that sales engineering or planning requires a personnel different in temperament from that required in sales operating; one that the difference is not great; one that "it does not in our business but probably doce in most." There seems to be general agreement that actual sales operations require the vigorous, motor type of man and sales engineering or planning the engineering, studious, analytic type, and that the latter must also possess imagination.

3. Do you make provision for effective close cooperation between the sales department and the production department in order to keep the output of both departments in balanced relation?

Sixteen firms make serious effort to coordinate selling and production; one is just beginning to attempt coordination; one states that the production manager does the coordinating; one that production and sales seem "practically unrelated."

4. Is the advertising department subordinate to the sales department, or coordinated?

In eleven replying firms advertising is subordinate to the sales department; in six it is coördinate, the inference being that they are coördinated by the General Manager. In one they are practically unrelated, "the sales manager knowing nothing of advertising until he sees copy in publications."

A close analysis of these replies will disclose many discrepancies in details. To make such an analysis and to draw conclusions is not attempted. The tabulated raw material of the questionnaire is presented for what it is worth. In itself it is believed to be worth something; as a guide for the committee and others in preparing future questions, especially as a lesson in the necessity of precise terminoligy and the clear framing of questions, it is of great value.

Also there would be much of greater value were it possible to disclose the replies of individual firms. Of those firms which recognize and in their organizations provide for the difference between sales engineering or planning and sales operating, the replies to detail questions are illuminating.

Willard E, Freeland, Chairman, Winchester Repeating Arms Co., New Haven, Conn; Charles J. Crockett, Printz-Biederman Co., Cleve-land; Charles P, Staubach, Burtouglis Adding Machine Co., Newark, N. J.; E. St. Elmo Lewis; Campbell-Ewarld Co., New York; Henry Wood Shelton, Consulting Engineer in Management, Philadelphia; II. S. Pearson, Managing Director, Taylor Society, New York.

ABSTRACT OF A PRELIMINARY REPORT of the

COMMITTEE ON THE ORGANIZATION AND FUNCTIONS OF THE SALES ENGINEERING DEPARTMENT

PRESENTED AT THE ANNUAL MEETING OF THE TAYLOR SOCIETY NEW YORK, DECEMBER 3, 1920

FOREWORD

POR convenience in this report the term Sales Engineering is used as descriptive of the major function discussed. Work of this character, in whole or in part, is now being carried on in organizations under such titles as Sales Technical Division, Sales Promotion, Merchandising, Merchandising Control, Sales Research, Sales Planning, Development Department, etc. It is not important at this time to discuss the name, as the choice of a name will depend upon the organization, personnel and character of the individual enterprise.

This report is designed to stimulate and guide discussion of a comparatively new phase of the work of a distributing or marketing organization. The committee presents a preliminary report only; it cannot hope at this time to present other than a basis for discussion of a subject on which only meagre pioneer work has been attempted.

Every modern sales manager has of necessity been compelled to carry on some or all of the phases of distribution outlined herein. The subject matter is new only in the attempt to segregate into a distinct major function that part of his work which has to do with research, master planning and master scheduling. It is a definite effort to bring recognition of a major function which shall have to some degree the same relation to distribution as that of manufacturing engineering to factory operation.

A point of similarity is the necessity for selecting for the performance of these functions, personnel which possesses the student, planning, creative aptitude and ability. It must be noted, however, that the manufacturing engineering function is concerned almost wholly with tangible things, whereas sales engineering is concerned with both tangible and intangible things.

The first is concerned largely with materials and controllable processes; the second with fallible records and uncontrollable human impulses and activities. The first can frequently test its plans on a laboratory scale with minimum expenditure of money and loss of time, employing pure science; the second must incorporate in its plans psychological and economic laws, which are none too well defined and understood and of which the verity and applicability can only be ascertained after considerable loss of time and expenditure of money.

This frank statement of the differences in the certainty of results and the possibility of scientific checks on operation does not destroy the similarity of the relations of the two engineering functions to the operating functions to which they are respectively related, and it does not limit the field or the possibilities of sales engineering. It should serve to emphasize the necessity for the recognition of the engineering phase of sales work as a distinct function and of the Intensive use of all the sciences now available, thereby making possible the application of scientific analysis and synthesis to the problems of distribution.

In our present development of manufacturing and merchandising, the cost of distribution or marketing usually far exceeds the cost of production, and the success of the application of scientific management to production points a plain path for management to pursue in its efforts to cut the costs of distribution.

TENTATIVE CONCLUSIONS

- I. The conditions or causes which have led to the establishment of engineering and operating as separate major functions in the production of products exist also with respect to distribution and indicate the necessity for the recognition of engineering and operation as major functions in the production of sales.
- 2. Master planning and scheduling can properly be