

THE HOLT MANUFACTURING COMPANY, Exhibit on elimination of waste in industry (29 charts)

CLOTHING MANUFACTURERS ASSOCIATION OF NEW YORK, Exhibit of processes of coat making.

THE LEFFINGWELL-REAM COMPANY, Graphic Exhibits: Executive Control; Functional Organization; Investigation and Research (2 charts); Layout; Planning and Control (2 charts); Posture Studies (2 charts); Reducing Overhead; Scientific Office Arrangement (2 charts); Standardization (2 charts).

HARVARD GRADUATE SCHOOL OF BUSINESS ADMINISTRATION, WHARTON SCHOOL OF FINANCE AND COMMERCE, INDUSTRIAL ENGINEERING DEPARTMENT, PENNSYLVANIA STATE COLLEGE, AMOS TUCK SCHOOL, LASALLE EXTENSION UNIVERSITY, Exhibits illustrating teaching of scientific management in the United States. (In three books.)

DWIGHT V. MERRICK, Nine volumes of Time Study Data. (Blue Prints).

Report in French of Visit of Charles deFremenville to United States in 1913. (Mimeographed).

### News of the Sections

THE Central New York Section held its annual outing with the Central New York Purchasing Agents at Three Rivers, New York, on the afternoon and evening of Saturday, July 26. Owing to vacations the attendance was relatively small (twenty-five) but those that did attend thoroughly enjoyed indoor baseball, cards, and a typical Central New York fish, frogs legs and chicken dinner.

The next meeting is scheduled for August 25 at Syracuse, New York, probably at the Yates Hotel, beginning as usual with an informal dinner at 6:30. The subject for the evening will be a case presentation of the Bedaux Plan. Mr. George V. Lennon, Treasurer of the Stromberg-Carlson Telephone Manufacturing Company at Rochester, New York, will be the speaker of the evening. This case presentation follows up the June meeting when Mr. Keogh of the Bedaux Company explained the Bedaux Plan, it being the intention of the Central New York Section to present cases wherever possible in matters of this kind. A large attendance is expected at the August meeting because of the interest aroused at the June meeting.

The Cleveland Section has elected as Chairman, John Younger, Automotive Abstracts; Vice-Chairman, F. J. Kunze, American Multigraph Company; Treasurer, H. F. Mueller, The Printz-Biederman Company; Secretary, Harry Kaiser, Cleveland

Metal Products Company; Directors, Elmer R. Krueger, The P. A. Geier Company and Mildred S. Cooke, The Landesman Hirschheimer Company. Keppele Hall, retiring Chairman, will serve as a Director for the next year.

Colonel B. A. Franklin, Vice-President of the Strathmore Paper Company, Mittineague, Mass., and of the Associated Industries of Mass., has been chosen as President of the New England Section. H. H. Farquhar continues as Secretary and Raymond Tweedy of the Manufacturers Research Association will serve as Chairman of the Committee on Meetings.

### Reviews

*Psychology for Students of Education.* By Arthur I. Gates. The Macmillan Company, New York, 1924, pp. 482.

Had despairing old Ecclesiastes lived in our day when he sighed, "Of making many books there is no end," he would undoubtedly have referred to books on psychology in particular, for the last few years have witnessed a veritable flood of literature on all phases of this subject, from the "day by day" stuff so popular in its appeal as to rival the "best sellers" in other lines to the Freudian creations so ethereal in conception as to compare favorably with the airy fantasies of Edgar Allan Poe. Out of it all the hard-headed business executive has been able to draw very little practical help for the day's work.

To those of us who have been steeped in this sort of literature for a long time, Professor Gates's new book, "Psychology for Students of Education," comes as a welcome relief. It is the old-fashioned psychology brought up to date. One need not read far to be satisfied that here is an author talking with both feet on the ground. Although the book is written chiefly for students in colleges and normal schools, it is the kind of book which will appeal to foremen generally, but especially to those who are engaged in teaching in industry. It is meant to be studied, rather than merely read, but even those who are not inclined to be bookish should find the material easy to grasp, especially in study groups, where there is opportunity for discussion. Stimulating questions at the end of each chapter, referring mainly to the learning problems of the schoolroom, can be paralleled by similar questions bearing on experiences in the shop.

Books relating to factory instruction which have come under the reviewer's observation in the last five years, while they no doubt filled a great need in shops of the old type, have been of questionable value to the instructor working under scientific management. Job analysis, instructional

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order, progress charts and the like, about which these books said so much, are well-established fundamentals in a scientifically managed shop, hence things about the creating of which he needs to concern himself but little. What such an instructor needs primarily is a working knowledge of psychological principles to change his uncertain, impoverished method of getting his ideas across into something more sure and varied. In this important element these books on shop instruction are lamentably weak. A book like Dr. Gates's *Psychology* will serve admirably to fill this big gap.

The first part of Gates's "Psychology for Students of Education" is devoted to the necessary physiological background of nervous activity, not omitting the functions of the various glands. An abundance of illustrations in this and other portions of the book helps to popularize the scientific text for the beginner.

The succeeding chapters cover the whole range of subjects connected with the mechanics of normal human behavior, such as habits, instincts, emotions, the laws of learning, intelligence and its measurement. An illuminating chapter on the effects of various factors, such as environment, drinks, drugs and the like, should be of special interest to factory executives.

The last few chapters are given up to an exposition of intelligence factors and some of the tests which have been devised to measure them. Intelligence testing has passed beyond the stage of experiment and become a science. Those of us who have had our instruction problems lightened by the application of such tests upon new workers at the time of employment know their great value as an agent in eliminating the unfit at the beginning and saving the worker useless effort, the instructor useless agony, and the organization useless expense.

There is very little material in the whole book applicable to schools and academic subjects alone. The typography of the volume, the illustrations, the suggestive questions at the end of each chapter all help to remove it from the class of "dry-looking stuff." The clear, readable style of the author should make the book appeal to that increasingly important group of teachers outside of school walls—the instructors in industry.

EDWARD G. HEINMILLER.<sup>2</sup>

*Psychological Tests in Business.* By Arthur W. Kornhauser and Forrest A. Kingsbury, The University of Chicago Press, Chicago, 1924, pp. 180.

As a science matures it necessarily grows continually more complicated until ultimately no one man grasps the whole but each worker specializes on some small, previously insignificant part. When this stage arrives it becomes practically impossible for anyone to write a simple statement of the underlying principles, the particular field which the writer happens to have selected for his own endeavors colors so highly his view. This adds special value to the occasional stopping and summing up in a simple concrete form of the progress which has been made, and renders a

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book, such as "Psychological Tests in Business" by Kornhauser and Kingsbury, of more than passing value, making it something of a milestone to which to refer when the more complicated stage has been reached. For psychological testing is rapidly approaching a science, and it will not be long before it reaches that ramified level where each worker is a specialist.

One evening not long ago at an informal gathering Mr. Eugene Smith told me that the modern child must be taught to read at a rate of five hundred words a minute, if one expects him, when he grows older, to keep up with modern thought. When I found that only by continually driving myself could I, at that time, reach one hundred words a minute, I realized why so many interesting things take place in the world, of which I am wholly ignorant. Here is an opportunity for a business man to post himself in the fundamentals of psychological testing in two or three evenings at the most, or if he reads at the rate of a modern well brought up child in a little over two hours, for the book consists of only one hundred eighty pages.

"Psychological Tests in Business" contains no revolutionizing theories, no brilliant discoveries, but is a sane, sensible statement, not overemphasized, not underestimated, of the present progress in psychological testing.

The saneness of the book first appears under the heading, "What Is a Psychological Test?" (page 3): "The principle of the psychological test is, then, to use a sample of one's behavior to indicate his abilities or other tendencies, and hence to predict his probable future behavior."

If this definition of a test as a sample of one's thinking, or of one's work, could be constantly kept in mind, much useless criticism would be wholly eliminated and much worthless experimenting made needless. When a foreman gets a new man he does not put him immediately on his most difficult job, even if he may have been hired to do this particular piece of work, but he tries him out first on an easy, simple task to get some idea whether the new man is capable or not. In other words he samples the man's capacity; he gives the man in the strictest sense of the term a psychological test. This is all that psychologists are attempting to do, on perhaps a little more scientific basis than the foreman has done, but in the last analysis the same thing. Every concern whose foremen are today trying a man out on a first simple job is using psychological tests.

The second fundamental of Messrs. Kornhauser and Kingsbury's book is the insistence upon checking and rechecking results. First, a test must be tried and proved on workers who have already made good. If excellent clerks who have proved themselves on clerical work fail to pass a clerical test, it does not prove, as so many psychologists have felt it should, that the clerks were really no good after all. But it does show on the other hand the absolute worthlessness of that particular test. The first essential of a successful clerical test is that good clerical workers pass well.

Still this is not sufficient to prove the test worth giving, for the test must in addition predict what new employees will do, who have not had previous experience and who have not yet made good. A test must, therefore, be