COMMUNICATIONS AND DISCUSSIONS

REPORT OF THE TWENTY-FOURTH ANNUAL MEETING OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION, CHICAGO, DECEMBER 28-30, 1915.

The program of the Twenty-fourth Annual Meeting of the American Psychological Association comprised some seventy addresses, ranging all the way from psychology in its relation to philosophy to psychology in its applied aspects. Parallel sessions were held throughout most of the program and the notes here given are drawn from those only which the writer attended and are further limited to those considered of special interest to educational psychologists. The address of the President, John B. Watson, upon "The Place of the Conditioned Reflex in Psychology," and many other addresses equally profound and inspiring to the general worker in psychology are not included.

Several papers emphasized the growing interest in tests for determining vocational fitness. F. Lyman Wells and Walter Dill Scott brought out the importance of comparing the experimental status of a group or of individuals with their later careers. Scott proposed, in his paper upon "Experiments on Vocational Selection," two means of checking up test results: (1) by testing employees whose ability is known to the employers, and, (2) as mentioned above, by examining applicants and correlating their standing in tests with success after employment. Correlations as high as .90 were obtained by use of the former method.

Mental age tests and problems concerning the feeble-minded occupied a large part of the program. Augusta F. Bronner made very clear a point too little recognized, that attitude materially affects performance on tests. Much may be revealed by a child who wilfully fails in a test, but obviously the revelation is not that of feeble-mindedness. Criteria of dissimulation are much needed in practical mental diagnoses.

J. B. Miner proposed a "Percentile Definition of Intellectual Deficiency." To call the least intellectual $\frac{1}{2}$ (or some other) per cent. of the population "feeble-minded" has the decided advantage of giving an objectivity to the term "feeble-minded" that the usual definitions

in terms of economic and social self sufficiency, or in terms of years of retardation, do not give. The number of years retardation before an individual may be proclaimed feeble-minded varies with age, as does also the value of the intelligence quotient proposed by Stern. It is reasonable to believe that the percentage definition would not be subject to this objection. It is also a definition that would be readily comprehended by the layman.

The percentile method of locating the standing of children was used to very excellent advantage by Helen Thompson Woolley and Charlotte Rust Fischer in their study of the "Comparative Rank in Mental and Physical Tests of 14 and 15 year-old Working Children with 14 and 15 year-old School Children." The most striking of the results shown was that the school group stood above the working group in all tests, physical as well as intellectual.

J. E. Wallace Wallin, in his paper upon "Who is Feeble-Minded," criticized the acceptance of failure to pass Binet age 12 as evidence of feeble-mindedness, showing that many successful housewives and farmers do not rank up to that age. Wallin suggested Binet age 9 as a reasonable limit. The discussion showed the existence of quite general opposition to accepting Binet age 12 as the lower limit of normality.

Joseph W. Hayes' study comparing the "Binet-Simon Method of Measuring Intelligence with the Yerkes-Bridges Point Scale Method," showed that in the earlier years the Binet results fitted more closely to the chronological ages of normal children than the Yerkes-Bridges results and that from eight or nine on, the Yerkes-Bridges method gave the better results, the disagreement being quite plainly due to the difference in methods of scoring and not to differences in test questions.

Samuel G. Kohs considered "The Distribution of the Feeble-Minded Arranged by Mental Age (Binet)," and gave as the result of his calculations the estimate that about 54% of the feeble-minded are at large, about 30% in institutions for the feeble-minded and about 15% in penal institutions.

Karl T. Waugh gave some results of "Mental Tests of College Students as Freshmen and as Seniors." The improvement in attention (cancellation test) of the college seniors over their standing as freshmen was 4.6%; in speed of learning 4.2%; in association 2%; in range of information 44.7%; in class standing 19%. These results are highly suggestive of the kind of traits influenced by a college education.

Rudolf Pintner reported progress in standardizing some 15 performance tests, which are independent of language. A scale of such tests will be very serviceable in examining non-English-speaking individuals, or those of poor language endowment. The tests thus far standardized are: Feature Profile, Manikin, Five Figure Board, Two Figure Board, Casuist Form Board, Seguin Form Board, Adaptation Board, and Healy's Five Block Frame Test.

Daniel Starch presented "A Scale for Measuring Ability in Arithmetic." This consists of twelve problems, scaled for difficulty upon the basis of percentage of pupils who passed them. The distributions for grades four to eight are very much like the distributions in other traits which have been measured. Decided overlapping from grade to grade was shown. Approximately 33% of any grade reach or exceed the median of the grade above. An unusually strong sex difference was revealed—approximately 60% of the boys reaching or exceeding the median of the girls.

The exhibit and description of laboratory material held several features of educational significance. Truman Lee Kelley presented a test of initiative (described in the January number of this JOURNAL). W. V. Bingham presented a learning test and two spatial relations tests. The latter are tests demanding the kind of talent a mechanic must have in reading working drawings, or in interpreting two-dimensional data into three-dimensional facts. Such a test should prove of value in determining vocational fitness. C. L. Hull presented an exposure apparatus used in "A Quantitative Method of Investigating the Evolution of Concepts." The experiment described gives a means of noting the mental stages in the dropping out of irrelevant material as a concept of an element common to many situations is gradually built up from repeated experience with the various situations in which it is found.

Joseph Jastrow contributed to "The Study of Judgments" in showing that reliable aesthetic, moral and other judgments may be obtained from the consensus of opinion of a jury of a certain size. For example, the offensiveness of grammatical errors, slang expressions, etc., may be measured, for it was shown that judgments of these things are by no means random.

Herbert Woodrow and Frances Lowell have extended the use of the Kent-Rosanoff association list and methods, by drawing up "A Childrens' Association-Frequency Table." Unfortunately the method was not that of oral reaction, but the results strongly suggest, if

indeed they do not prove, very material differences between children and adults in types of association.

In a rather taxing learning experiment, involving motor co-ordination, which largely eliminated the factors of experience and environment, W. H. Pyle showed that 92% of white children exceed the negro average. It appears that negro children have from $\frac{2}{3}$ to $\frac{4}{5}$ the learning capacity of white children.

An analysis of typewriting habits shows that certain letter combinations are much more frequent in ordinary usage than others. Working with a group along this line M. E. Haggerty reported that typewriting practice of these most needed combinations of letters resulted in much more rapid improvement than that resulting from the usual procedure.

Frank M. Freeman and C. T. Gray reported intensive studies of handwriting and reading respectively. The use of moving pictures and of a hand-tracer in making possible the study at leisure of the rapid motions and the fine adjustments in writing and the use of a two-lensed camera, operated synchronously with a phonograph, to record the eye movements, vocal adjustments and time elements in reading, give promise of enabling an analysis that will show the motor correlates of good and poor reading as well as suggesting the psychological concomitants.

The following resolution, introduced by G. M. Whipple and of interest to all engaged in mental testing, was passed at the business session:

"Whereas psychological diagnosis requires thorough technical training in all phases of mental testing, thorough acquaintance with the facts of mental development and with the various degrees of mental retardation, and, whereas there is evident a tendency to appoint for this kind of work persons whose training in clinical psychology and acquaintance with genetic and educational psychology are inadequate, be it resolved: That this association discourage the use of mental tests for practical psychological diagnosis by individuals unqualified for this work."

The very excellent report of the committee on the Academic Status of Psychology, covering "The Academic Status of Psychology in the Normal Schools," was submitted in printed form. This report supplements that of the same committee last year upon the status of psychology in colleges and universities. It gives information con-

cerning the training of instructors in psychology and the methods of teaching this subject in normal schools.

The addresses upon "The Relation of Psychology and Pedagogy" raised issues confronting every growing department of education. M. E. Haggerty presented a course of study offered by the University of Indiana and particularly recommended it as a preparation for advanced research work in education. It included elementary, experimental, educational and other courses in psychology. C. H. Judd dealt particularly with courses in education for the prospective teacher. One fundamental thesis laid down was that general psychology has failed to give a scientific background for scientific activities in school practice. The reasons for this are: (1) Psychology does not deal with those problems that must be faced by the teacher. General psychology is too broad—unless application of psychological principles to educational situations is made by the teacher, it is not made. There is a great difference between courses that are applied to education and courses in which it is hoped students will make the application. Students do not and can not make the applications. (2) The beginning education student needs, in the first course, to be made aware of the problems of education and to be given specific facts which will contribute to the solving of those problems. (3) The disputes within psychology itself draw the attention of prospective teachers away from its educationally valuable and discovered facts. Judd apparently agrees with Haggerty in the value of general psychology for the leaders in educational science, but proposes "educational psychology," or perhaps better "experimental education" for the rank and file of teachers.

TRUMAN LEE KELLEY.

University of Texas.