additional allowance of \$150 for uniforms in time of war.

- 4. Eighty-five nominations of electrical engineers meeting the above requirements to be made by each of the following agencies:
- (a) Naval Consulting Board.
- (b) National Research Council.
- (c) American Institute of Electrical Engineers
- 5. Upon receipt of the 255 nominations thus made certain forms will be sent each nominee to execute, and upon receipt of the executed forms a Board of Naval Officers will select 100 for appointment.
- 6. After appointments have been made the officers so nominated and selected will be given a month's training and instructions on shore in naval methods, customs and regulations and instructions. Pay will begin on date of appointment.
- 7. Upon completion of the month's training on shore they will be ordered to the active fleet as electrical officers of ships for a period of at least six months. After this period they will be assigned to duty as the exigencies of the service may demand, excepting such as may be unfitted for the naval service.
- 8. The utmost care will be exercised in the nomination of these candidates as regards professional ability, physical condition, temperament and bearing, to the end that each one may qualify and not be subjected to inconvenience and disappointment and that the Navy may be benefited accordingly.
- 9. The Provost Marshal General of the U. S. Army has stated that any one subject to the Selective Draft Law may be released from compliance in order to accept an appointment as officer in the U. S. Naval Reserve Force.
- 10. Any one who now is in the Army, either volunteer or drafted, may make application but must obtain his discharge before he can be appointed. This includes any one who has been directed to appear before an exemption board. Those now in the Naval Reserve are eligible.
- 11. Individual nominations will be received, but any one making such should first assure himself that his nominee will agree to serve if

selected and give as much information as possible to assist the committees in making nominations to the Department.

- 12. Any member of the electrical profession who can meet the technical requirements and who can submit proper credentials may make direct application to the undersigned.
- 13. To facilitate the work of selection, applicants should submit, in time to reach the committees not later than *October 15*, the following detailed information on the attached blank.
- 14. Letters from at least three responsible personal acquaintances should accompany each application.
- 15. From the nominations received the undersigned will each select 85 names to be forwarded to the Bureau of Navigation, Navy Department, Washington, D. C., from which total 100 names will be finally selected for commissions.

Applications may be sent to any one of the undersigned:

NAVAL CONSULTING BOARD OF THE U. S., 13 Park Row, New York,

NATIONAL RESEARCH COUNCIL,

33 West 39th Street, New York, American Institute of Electrical

Engineers.

33 West 39th Street, New York. New York, October 3, 1917

## THE PSYCHOLOGICAL EXAMINATION OF RECRUITS

As was announced in SCIENCE at the time, a committee on psychology has been organized, with the approval of the council of the American Psychological Association, by the National Research Council. This committee consists of J. McKeen Cattell, G. Stanley Hall and E. L. Thorndike, from the National Academy of Sciences; Raymond Dodge, S. I. Franz and G. M. Whipple, from the American Psychological Association, and C. E. Seashore, J. B. Watson and R. M. Yerkes, from the American Association for the Advancement of Science. Dr. Yerkes, this year president of the American Psychological Association, lately professor of comparative psychology at

Harvard University and recently elected head of the department of psychology at the University of Minnesota, is chairman of the committee, and has been made a major in the Sanitary Corps of the Army in charge of the Section of Psychology, which has been established in the office of the Surgeon General.

A number of committees were organized and are now at work on different problems connected with the conduct of the war and national efficiency, partly under the auspices of the office of the Surgeon General and partly in the office of the Adjutant General. Information concerning the work of the committee on the psychological examination of recruits has been communicated to the press.

The members of that committee are R. M. Yerkes, W. V. Bingham, professor of psychology, Carnegie Institute of Technology, Pittsburgh; H. H. Goddard, director of research, the Training School, Vineland, N. J.; T. H. Haines, professor of medicine, Ohio State University; L. M. Terman, professor of educational psychology, Stanford University; F. L. Wells, psychopathologist, McLean Hospital, Waverley, Mass.; and G. M. Whipple, professor of educational psychology, University of Illinois. This committee met continuously for two weeks planning methods and tests. The seven men then separated, went to various parts of the country and applied the methods in actual practise. After making about 500 examinations they gathered again for two weeks and worked over the methods.

Six weeks after the first gathering of these psychologists, their test sheets, report blanks, etc., were ready for the printer. Arrangements were made for a trial of the method under working conditions with large numbers of men. About 4,000 men in regular organization camps, officers' training camps and naval stations, were examined, and special attention was given to correlating the ratings from the psychological examinations with the ratings prepared by the usual army methods.

The results of these thousands of examinations were sent to Columbia University, where, under the direction of Professor Thorndike and with the cooperation of Professor Cattell, Professor Woodworth and other members of the department of psychology, ten assistants and computers worked a month assembling and analyzing the statistical results. Again the seven psychologists went over their methods in the light of these 4,000 examinations to make further improvements.

The psychological examinations are now in progress in four of the national army cantonments: Camp Devens, at Ayer, Mass.; Camp Dix, at Wrightstown, N. J.; Camp Lee, at Petersburg, Va.; and Camp Taylor, at Louisville, Ky. There are about 160,000 men to be examined in these cantonments, and each will receive an intelligence rating as a result of the psychological examination.

The work is undertaken, first, to supplement the medical examination and second, to give line officers estimates of the mental ability and special aptitudes of their men. Reports of the psychological examinations will be made to the chief surgeon of the camp or the psychiatric officer in order that those mentally incompetent may be considered for discharge, and to the regimental and company officers in order that they may use this additional information concerning their men for the improvement of the service.

## SCIENTIFIC NOTES AND NEWS

Dr. Otto Klotz has been appointed chief astronomer and director of the Dominion Astronomical Observatory at Ottawa.

Dr. Salvador Debenedetti has been appointed to the directorship of the Museo Etnografico at Buenos Aires, in place of the recently deceased Dr. Juan B. Ambrosetti.

CLARENCE EBAUGH, professor of chemistry in Denison University, is on leave of absence for the year 1917-18, to serve as chairman of the Council of National Defense for the state of Utah.

Dr. John Preston, superintendent of the State Insane Hospital, Austin, has been appointed by the Medico-Psychological Society to organize neuropsychiatric hospital units to be attached to the base hospitals and other