

mittees, relating to the observations and experiences of the members of this committee, in connection with which recommendations for cooperative investigations in this country are made.

The special committees of the council on the subjects of optical glass and noxious gases have submitted reports, which in turn have been transmitted by the executive committee of the council to the General Munitions Board and the Council of National Defense. As a result, arrangements have been made for providing the government with optical glass through cooperation between the Bureau of Standards, the geophysical laboratory of the Carnegie Institution of Washington, the Bausch & Lomb Optical Company, and the Pittsburgh Plate Glass Company. Researches on noxious gases have been placed under the charge of the director of the Bureau of Mines, acting in cooperation with the army and navy and the committee on noxious gases of the National Research Council.

It is expected that announcement may be made at a later date relative to problems initiated by the various committees of the council and means for their solution.

A number of friends have generously contributed to provide funds for the expenses of the council. It is also a pleasure to announce that at a recent meeting of the Carnegie Corporation of New York, the following resolution was passed:

Resolved, That the sum of fifty thousand dollars (\$50,000) or so much thereof as may be necessary, be and it hereby is appropriated to the Carnegie Institution of Washington, to be expended in the discretion of the president of said institution to meet expenses incurred by the National Research Council during the war; and that the treasurer be and he hereby is authorized to make payments as needed on the certificate of the Carnegie Institution of Washington.

PSYCHOLOGY AND NATIONAL SERVICE

AMONG the many scientific problems which the war has forced upon the attention of our military authorities there are several which are either psychological or present a psychological aspect. In the opinion of experts many of these problems are immediately soluble and it therefore becomes the duty of professional psychologists to render national service by working on such problems. For this reason 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, chairman and member of the National Research Council, from the American Association for the Advancement of Science.

At the first meeting of the committee, it was voted "that whereas psychologists in common with other men of science may be able to do invaluable work for national service and in the conduct of the war, it is recommended by this committee that psychologists volunteer for and be assigned to the work in which their service will be of the greatest use to the nation. In the case of students of psychology, this may involve the completion of the studies on which they are engaged."

It is the function of this general committee to organize and, in a general way, supervise psychological research and service in the present emergency. Problems suggested by military officers or by psychological experts are referred by the committee to appropriate individuals or institutions for immediate attention. Already at the suggestion of the council of the American Psychological Association the chief psychological laboratories of the country have been offered to the committee for such use as the military situation dictates. Moreover, the membership of the American Psychological Association, in response to a

letter addressed to it by the council, has responded most promptly and heartily with offers of personal service.

At a meeting held in Philadelphia, April 21, the council of the American Psychological Association, in addition to approving and urging the appointment of a committee on psychology for the National Research Council, authorized the organization of twelve committees to deal with various important aspects of the relations of psychology to the war.

The list of committees with their personnel, so far as at present announced, follows, together with brief comment on the status of their work:

COMMITTEES

Committee on psychological literature relating to military affairs. It is the function of this committee to prepare bibliographies and abstracts of important psychological military contributions for the immediate use of committees, individual investigators and for publication. Chairman, Madison Bentley, University of Illinois.

Dr. Bentley already has rendered valuable service to several of the committees.

Committee on the psychological examining of recruits. The first task of this committee is the preparation and standardization of methods and the demonstration of their serviceableness. Chairman, Robert M. Yerkes, Harvard University, W. V. Bingham, Henry H. Goddard, Thomas H. Haines, Lewis M. Terman, F. L. Wells, G. M. Whipple.

This committee has prepared a method of group examining, and also varied methods of individual examining. The work, covering a period of four weeks, was generously financed by the Committee on Provision for the Feeble-minded. The methods are now (July 25) being tested in three army camps and one naval station. The expense of this initial trial, which is made primarily for the further development and perfecting of the methods, is met by an appropriation of twenty-five hundred dollars made by the Committee on Furnishing Hospital Units for Nervous and Mental Disorders to the United States government. At the present writing, the surgeon general of the Army awaits lists of psychol-

ogists who are both adequately prepared and willing to serve as psychological examiners.

It is the conviction of the committee that the psychological examiner, by applying specially prepared and adapted methods to recruits in the camps, should obtain measurements valuable alike to line officers, to general medical officers, and to the special officers in charge of the psychiatric hospital units.

It is assumed that the work of psychologists, although not strictly medical in character, but instead vocational, educational and social, will supplement that of the medical examiner by supplying him with information otherwise not available. Further, the psychologist may aid the psychiatrist by detecting and referring to him those individuals for whom careful psychiatric examination is obviously desirable.

Committee on the selection of men for tasks requiring special skill. This includes the selection and promotion of officers, as well as choice of men for varied kinds of skilled service. Chairman, Edward L. Thorndike, Columbia University, J. C. Chapman, T. L. Kelley, W. D. Scott.

A method of selecting officers devised by Dr. Scott is now in use in many of the Officers Training Camps.

Committee on psychological problems of aviation, including examination of aviation recruits. Chairman, H. E. Burtt, Harvard University, W. R. Miles, L. T. Troland.

Work looking toward the development and thorough testing of methods for the selection of aviation recruits has been authorized by the Government and already is in progress in at least one of the institutions where the recruits are being trained.

Committee on the psychological problems of incapacity, especially those of shock, re-education and vocational training. Chairman, S. I. Franz, Government Hospital for the Insane, K. S. Lashley, J. B. Watson.

The task proposed for this committee is a large and difficult one and the chairman plans to organize, in intimate relations with various military activities and agencies, a committee which shall be competent to deal with the varied scientific problems of incapacity.

Dr. Franz has himself developed methods for

the reeducation of certain paralytics, and according to our information his methods are now used by the Military Hospitals Commission of Canada. It is greatly to be hoped that his own country may be equally ready to avail itself of these methods, and that it may adequately prepare in advance for the extremely important as well as difficult task of rehabilitating maimed and paralyzed soldiers and sailors.

Committee on psychological problems of recreation in the Army and Navy. Chairman, George A. Coe, Union Theological Seminary, W. C. Bagley, H. L. Hollingworth, G. T. W. Patrick, J. H. Tufts.

This committee will serve the national cause by cooperating in every profitable way with the committee on military recreation of the Y. M. C. A. and with such other agencies as are immediately concerned with this kind of military aid. Psychologists will find abundant opportunity for the study of psychological aspects of recreational problems.

Committee on pedagogical and psychological problems of military training and discipline. Chairman, Charles H. Judd, University of Chicago.

Committee on problems of motivation in connection with military service. Chairman, Walter D. Scott, Northwestern University, H. S. Langfeld, J. H. Tufts.

Committee on problems of emotional stability, fear and self-control. Chairman, Robert S. Woodworth, Columbia University, W. B. Cannon, G. Stanley Hall, J. B. Morgan, J. F. Shepard.

It is probable that in addition to dealing with the special problems of emotional stability this committee will find it desirable to undertake a careful study of incorrigibility.

Committee on acoustic problems of military importance. Chairman, Carl E. Seashore, University of Iowa, R. M. Ogden, C. A. Ruckmich.

Already the chairman of this committee has interested himself in the relations of the principles of acoustics to various naval situations. Methods of localizing sounds and their utilization for the detection of submarines, the

identification of guns, and the locating of batteries are clearly important. These questions are under investigation by the physics committee of the National Research Council, with which Dr. Seashore's committee will cooperate.

Committee on visual problems of military significance. Chairman, Raymond Dodge, Wesleyan University, R. P. Angier, H. A. Carr, L. R. Geissler, S. P. Hayes, G. M. Stratton, L. T. Troland.

Chairman Dodge has devised and perfected an apparatus for the measurement of various important aspects of the naval gunners reaction. This is now installed for trial on a number of battleships. The committee has also been requested to prepare and recommend to the Navy methods for the selective examining of men for various kinds of service. This work is in progress and its results will shortly be reported to the officials directly concerned.

If the war continues for as much as a year American psychologists will have opportunity to serve importantly, not only in the examining and classifying of recruits but also in the selection of men for positions of responsibility, and in the choice and training of aviation recruits, naval gunners and others in skilled service. It is no longer a matter, as at first appeared to be the case, of inducing military authorities to accept methods of psychological measurement, but instead primarily one of meeting their expressed needs and requests for assistance.

As psychological research along such lines as have been indicated above progresses and as the applicability and serviceability of methods are demonstrated, it is probable that effective use can be made by the government of all scientists who are skilled in the study and control of human behavior. For after all, the human factors in the war are as important as are the mechanical and it can not be doubted that brains and not brawn will decide the great conflict.

R. M. YERKES,
Chairman