

perienced teachers have been recruited from institutions needing them.

As a matter of fact, the demand for physicists to engage in war research and various war activities other than teaching continues and as many research physicists as possible should be released from teaching obligations, thus making it all the more important that as many new teachers of physics as possible should be recruited. Even with the recognition by Selective Service of the importance of continuing physics students in training, advanced undergraduate and graduate work will make lighter demands than normal upon staff time except in the small number of institutions where the Army and Navy training programs call for advanced work. Therefore, in many institutions there will be physicists who can serve the war effort better by going into war research than by teaching beginning physics. Such men should be released and are urged to register with the Office of Scientific Personnel.

Several institutions have anticipated this teacher shortage and have canvassed their own faculties and other sources for potential teachers of physics, mathematics and other subjects in which shortages will occur. Some departments of physics have already inaugurated intensive refresher courses in which prospective teachers thoroughly review beginning physics, solve all the problems of the course, and perform the demonstration and laboratory experiments. Even though the new teachers may not be called upon to give demonstration lectures or to teach in the laboratory, this work with equipment furnishes a most effective form of review. It vitalizes and clarifies the "book learning" that might otherwise appear to be sufficient. It also serves to make each teacher familiar with what goes on in the entire course.

Many departments of physics have available some graduate and senior students who can immediately be called upon to serve as teachers. This has been taken into account in the estimates. Most departments, however, will have to meet most or all of the demands for staff expansion by recruitment from the staffs of other departments and outside sources. The sooner this is realized the better, for it is essential that such persons enjoy a period of thorough training.

It is unfortunate indeed that the selection of institutions for Army and Navy training programs is piecemeal. Some of the less well-equipped institutions, from the standpoint of both personnel and facilities, have been announced as on the approved list, while excellent institutions are still quite uncertain where they stand. This situation throws a heavy burden of responsibility upon the administrative officers and staff members of those colleges which are held in suspense. Apparently the Army and the Navy can not be expected to guarantee the use of an institution until a final decision is reached. In the meantime the col-

lege will have to depend on any indications that may be given by "approvals for inspection" and the attitude of inspection officers. This means that an institution must be its own judge as to whether or not it should hold its staff together until a "letter of intent" is issued. Unless a nucleus of experienced teachers is maintained, it will be difficult and perhaps impossible to revive a department. In some instances, it may be feasible to release staff members "on loan," subject to recall.

The best information that can be obtained indicates that, except for institutions that can not furnish the necessary housing and messing facilities, all normally good physics departments will be used and there are practically no departments from which teachers should be taken. It is to be hoped that departments fortunate enough to secure early contracts will not yield to the temptation to pirate staff members from other institutions. There is no good department of physics so small that the professor of physics should not attempt to remain at the post to hold things together, with the hope that some sort of training program may be secured or that he can maintain a civilian program of value to the war effort. All the better qualified departments are practically certain to receive contracts of one kind or another.

It is true that there will be a small, legitimate movement of physicists from one teaching position to another and it is to be hoped that readjustments within departments may release a considerable number for war research.

The Office of Scientific Personnel is ready to assist in any changes that will further the war effort and will welcome the registration of available persons, especially those who may be released for war research.

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### THE PRODUCTION OF THE MEAT, MILK AND EGGS TO WIN THE WAR AND THE PEACE

MEAT, milk and eggs are among those protective foods which are considered so essential for maintaining the health, stamina and morale of the armed forces and civilian populations of the United Nations. The United States has been called upon to serve as the food arsenal for democracy. While this country is one of the best in the world for livestock production, maximum use is not made of the knowledge developed by the research workers so that production is still somewhat inefficient and much loss occurs. Many of the losses from which the farmer suffers are insidious in nature and resemble more the work of sabotage than the direct annihilative result of warfare.

From the biological point of view it is not sufficient to merely ask for an expansion of production without providing suitable recommendations for handling those problems resulting from increasing the density of the animal population and to make provision for substituting adequate feeds and other products required for the animal population as a result of the changes brought about by the war. Production programs based upon the best existing available knowledge are currently being prepared for the guidance of farmers and breeders under the auspices of the Inter-Association Council on Animal Disease and Production.

This council is composed of the following representatives from the respective national associations: Dr. H. W. Jakeman, *chairman*, American Veterinary Medical Association; Dr. L. E. Card, Poultry Science Association; Dr. W. V. Lambert, American Society of Animal Production; Dr. G. E. Taylor, American Dairy Science Association; Dr. Mark Welsh, United States Live Stock Sanitary Association.

This council was formed as an outgrowth of an informal discussion held by a group of men whose interests were concerned with the activities of the associations mentioned above. The informal discussion was held on April 1, 1942, during the meetings of the Federation of American Societies for Experimental Biology. The scientists attending these meetings were pointing out the great need for improving the diet of the American public, and consequently those at the

informal discussions recommended that official representatives be appointed from the associations for the development of coordinated programs, which would advise the farmer on the most practical methods of attaining the food production goals which he had been asked to reach.

Officially appointed representatives held their first meeting on May 11, 1942, in Chicago. They recommended that the Inter-Association Council prepare suitable production programs, utilizing the facts already well established, and that the National Research Council be requested to appoint a Committee on Animal Health for consideration of those critical problems which require further research before they can be suitably handled. Such a committee has been appointed by the National Research Council.

The report of the Inter-Association Council was duly accepted by the various organizations, and the council has proceeded in accordance with its instructions for the preparation of production programs. Outstanding consultants on the various classes of live stock have been appointed, and special programs are expected to be available in the near future. They will consist primarily of a series of recommendations which are designed to enable the farmer and breeder to most effectively produce the livestock and livestock products required of him.

H. W. JAKEMAN,  
*Chairman*

## SCIENTIFIC BOOKS

### "FAMILY TREASURES"

*Family Treasures.* By DAVID D. WHITNEY. 299 pp. Illustrated. Jaques Cattell Press. 1942. \$3.50.

A BIOLOGICAL teacher and investigator of long-established and high reputation has prepared a popular guide to heredity based upon observation of his own family and that of many of his students. Unlike most books on human genetics, stress is laid on normal, somatic and physiological traits rather than on pathological ones. As is very wise, the book deals prevailingly with facial features, since these are more accessible through photographs in successive generations of the same family.

An outstanding feature of this book in which it differs from all other books on human heredity is the abundance of photographic material secured and published in the 234 illustrations. Particularly striking is the large scale of many of the facial photographs that are reproduced, in many cases somewhat enlarged. This enlargement concentrates attention upon details which would otherwise be overlooked.

The book is also characterized by a comparative

absence of quantitative materials such as are provided by careful measurements with various kinds of measuring apparatus. This will be regarded by many as a defect. On the other hand, the work is rendered the more readable by being qualitative rather than quantitative in its descriptions.

From the standpoint of the investigator in human genetics it may be stated that the author stresses too little the complicated inheritance of many human traits. Multiple factors are so widespread that some students have felt that a new approach to inheritance of human traits is best secured through a new quantitative method of approach. But here again the quantitative studies of this nature are decidedly esoteric and far beyond the scope of a book which is "written for amateurs in the study of human heredity and for those who are interested in personal inheritance of family traits." The book is well adapted to dispelling many of the myths surrounding some of the popular oppositions to heredity and it is also well adapted to the stimulation of other students of heredity to make further extensive studies.

For the purpose for which it is designed the book