

creasing this production until the war has been won by the United States and its Allies.

The managers report that the amount of floor space already engaged is greater than last year, that the exhibits will be much more attractive, and that a movement is under way to show all exhibits of machinery in operation under actual working conditions as they would be found in the plants.

Some sections of the south are again sending exhibits, and Canada is taking the opportunity of presenting the materials it has available for development by the chemist and financier. A section for the Glass and Ceramic Industry has been added with which the American Ceramic Society is cooperating.

The program for the Exposition is in active preparation. Opening addresses will be made by Dr. Charles H. Herty, chairman of the advisory committee, and Dr. G. W. Thompson, president of the American Institute of Chemical Engineers. There will be a series of symposiums on "The Development of Chemical Industries in the United States, notably since July, 1914." This will embrace the period since the beginning of the European War, which, by removing the source of supply for our domestic industries, inspired the development of our own chemical industries which, now that we ourselves have entered the war, are proving so effective. The subjects to be discussed are Potash Development, Chemical Engineering, Acids, Industrial Organic Chemistry, the Ceramic Industries and the Metal Industries. Among the speakers will be:

- C. A. Higgins, "Recovery of potash from kelp."
- Linn Bradley, "Recovery of potash from cement dust and other sources by electrical precipitation."
- A. Hough, "Chemical engineering in explosives; T. N. T., T. N. A., picric acid and nitrobenzol."
- E. J. Pranke, "Development of nitric acid manufacture."
- S. P. Sadtler, "Development of industrial organic chemistry."
- George H. Tomlinson, "Wood as a source of ethyl alcohol."
- C. A. Higgins, "Kelp as a source of organic solvents."
- Alcan Hirsch, "Pyrophoric alloys."

Joseph W. Richards, "The ferro-alloys of silicon, tungsten, uranium, vanadium, molybdenum, titanium."

Theodore Swann, "Ferromanganese."

Leonard Waldo, "The development of the magnesium industry."

The American Ceramic Society, which will hold its meeting at the Exposition on Thursday afternoon, September 26, has already upon its program:

A. V. Bleininger, "Recent developments in the ceramic industries."

L. E. Barringer, "Manufacture of electrical porcelain" (illustrated).

H. Ries, "American clays."

F. A. Whitaker, "Manufacture of stoneware" (illustrated).

Following this meeting a series of motion pictures of the ceramic industries will be shown.

The motion picture program, in the arrangement of which the Bureau of Commercial Economics is again cooperating, carries forward the idea of the symposiums, the pictures appropriate to a subject being shown on the same day as the symposium on that subject is held.

NUTRITION OFFICERS STATIONED IN THE CAMPS¹

NUTRITION officers are to be stationed in every National Army cantonment and every National Guard camp, as well as in every camp where 10,000 or more soldiers are in training. These officers are food specialists who before they joined the army as members of the division of food and nutrition of the Medical Department were connected with colleges and public bodies as physiologists, chemists, economists, food inspectors and experts in other specialized work relating to food.

Since October of last year the division of food and nutrition has been making surveys of food conditions in the camps. Groups of officers have gone from camp to camp, studied the food served, how it was inspected, stored, and prepared, and have made recommenda-

¹ Statement from the office of the Surgeon General authorized by the War Department.

tions which, upon being carried out, resulted in many advantageous changes.

Although the principal work of these groups was inspection of the manner of handling and preparing food, the visiting officers were able to give considerable instruction in the principles of nutrition, the proper selection of foods, and the construction of dietaries to mess officers, medical officers and others who were interested. Detailed personal instruction was given to the mess personnel on some of these topics, as well as on the various methods of avoiding waste, the importance of keeping kitchens and mess halls clean and orderly, and the methods of judging and storing food.

Survey parties were instructed to seek in every possible way to reduce waste. It was found that men and officers were very willing to cooperate in making surveys and to reduce as much as possible the waste of food. One of the most effective means adopted for this purpose was introduced at one camp and followed later at other camps.

At this camp seven companies were selected from various organizations, totaling 1,135 men. A two-day survey was run on each mess, and the average edible waste was found to be 1.12 pounds per man per day. Instructions were then given to the mess sergeants and cooks in matters of food and mess economy, and when the officer in charge was satisfied that they had a reasonable understanding of the subject a second two-day survey was made. This showed an average edible waste of 0.43 pound per man per day—a saving of 0.69 pound. This saving amounted to \$61.75 per day for the seven messes, or at the same rate would amount to \$22,542 per year. If the same rate of saving were brought about for the entire camp, in this case approximately 15,000 men, it would amount to \$338,000 a year.

Work of this character showed the necessity of keeping a nutrition officer in each camp at all times so that he might advise about the composition and nutritive value of dietaries, make inspections for adulterations, spoilage, and deterioration, and to cooperate with the mess officials.

Sixty new officers are to be commissioned in

the division of food and nutrition to handle the additional work. All will be food specialists similar to those already in the service.

GREETINGS TO FRANCE FROM BRITISH SOCIETIES

MESSAGES to France on the occasion of France's day have been dispatched by all the leading societies and institutions in Great Britain, including the following scientific societies:

British Association.—Nineteen years ago the Dover meeting of the British Association was "so arranged that the two great nations which had been, a century earlier, grappling in a fierce struggle should in the persons of their men of science draw as near together as they could." Another joint meeting with France was on the point of taking place when our high hopes of lasting general peace were so cruelly destroyed. But out of the destruction has arisen a far closer union of our two peoples, and an even brighter prospect of our future cooperation for the good of humanity and science.

Royal Society.—The Royal Society of London sends greetings to the French nation and more especially to its scientific men. It recalls the intimate friendship which since their foundation has bound together the Académie des Sciences with its own body. Always united in their endeavor to promote the advance of science, they are now joined in their efforts to defend the cause of civilization and freedom.

British Academy.—To France, who has so often inspired and led civilization in Europe; to France, who upholds the banner of intellectual freedom and unfettered thought; to France, who for nearly four years has endured brutal outrage and the violation of all decencies of humanity and civilization, the British Academy, in the name of British scholarship, sends on this great anniversary a renewed assurance of loyal fraternity and of unshaken determination to continue the conflict until liberty is secured and French soil delivered from the desecration of the invader.

Royal College of Surgeons of England.—Brothers-in-Arms, we greet you. Bound by ancient ties of blood and by the memories of many a gallant contest in the past, to-day we stand as one nation united in a sacred cause. We have before us a happy presage from the past. As the united efforts of Pasteur and Lister have laid low the tyranny of disease, so shall France and Britain