house, in charge of plant introduction for the U. S. Department of Agriculture, and Dr. W. W. Aldrich, also of the Federal Department, will outline the government's fruit-breeding program with particular reference to new introductions that offer possibilities in fruit-breeding work.

IT is reported in the *Journal* of the American Dental Association that C. Willard Camalier, chairman of the War Service Committee, has announced that the War Manpower Commission has approved of a new committee on dental education to act as adviser to the directing board of the Procurement and Assignment Service. The appointment of two additional members to represent dental examiners to the Committee on Dentistry of the Procurement and Assignment Service for Physicians, Dentists and Veterinarians was also announced. The committee will concern itself with developments arising out of the Army and Navy Specialized Training Program, as well as with the training of students for civilian practice. Members of the committee are J. Ben Robinson, dean, Baltimore College of Dental Surgery, University of Maryland; Dr. Harlan H. Horner, executive secretary, Council of Dental Education of the American Dental Association; Carl O. Flagstad, secretary, American Association of Dental Schools; Wendell D. Postle, dean, College of Dentistry, the Ohio State University; Bert L. Hooper, dean, College of Dentistry, University of Nebraska.

IT is stated in *Nature* that the British Ministry of Food has, by arrangement with the Department of Scientific and Industrial Research and the flour milling industry, taken over for the period of the war the extensive laboratories at St. Albans which were previously occupied by the Research Association of British Flour Millers. The Ministry will have the advantage of the use of these laboratories and the existing staff for the consideration of all food research problems, but they will continue to be used in the main for specialized work connected with cereals and cereal products. The laboratories will, in future, be known as the Cereals Research Station of the Ministry of Food. Dr. P. Moran, who was previously director of research to the Research Association of British Flour Millers, has been acting as deputy scientific adviser to the Ministry since June, 1940. In March last he was appointed, in addition, director of research in the Ministry of Food. In this latter capacity he will direct the work at St. Albans. From June 1, the date on which the transfer took place, the entire control and direction of the laboratories passed to the Ministry of Food.

DISCUSSION

SCIENTIFIC RESEARCH BY THE DEPARTMENT OF AGRICULTURE

UNDER date of July 26 I called the attention of Dr. Karl T. Compton to the fact that the material in his Pilgrim Trust Lecture, "Organization of American Scientists for the War," appearing on page 73 of SCIENCE, for July 23, 1943, contained certain errors relative to work carried on by the Department of Agriculture. He very kindly replied, in a letter of July 31, 1943, in which he expressed regret that, despite his efforts to clear and attain full accuracy, misstatements were made. He also wrote:

> I wonder if you would feel like submitting to the editor of SCIENCE a brief comment on the subject, in which you would call attention to such errors of statement or implication as may have concerned the Department of Agriculture in my lecture. I should welcome it if you should wish to do so, and it would certainly be worth while to get the record straight promptly.

In the part of his lecture to which I made reference Dr. Compton stated that the scientific research carried on by the Department of Agriculture was quite largely spread through a great number of agricultural experiment stations distributed in the various states, with which it operated cooperatively. He also said: "Most of the bureaus in Washington are primarily of an administrative character, but there are several which also conduct centralized research, as, for example, the Bureau of Chemistry and Soils and the Food and Drug Administration."

The facts are that the department's initial work was in the field of scientific research, the introduction of valuable plant species, entomology, botany, chemistry, meteorology, and so on. Its first bureau, the Bureau of Animal Industry, was created by act of Congress of May 29, 1884, and has carried on and still performs very distinguished research in the field of animal diseases, of the breeding, feeding and management of domestic animals and related subjects.

On March 2, 1887, an act was passed which authorized the establishment, under the direction of the land-grant colleges, of stations in each state to conduct agricultural experimentation. The Office of Experiment Stations was established in the Department of Agriculture, in 1888, to act as a staff agency to administer Federal grants involved in this and subsequent supplementary legislation. This work includes the evaluation and approval of research projects, proposals for new projects, project revisions, annual research programs and budget allotments of the state experiment stations, as well as the coordination of their researches with similar or related investigations

carried on by the department itself. This is the department's sole agency with the administrative functions mentioned.

On December 13, 1941, a major reorganization of the Department of Agriculture was announced to streamline it for the war effort. An Executive Order dated February 23, 1942, validated this reorganization. At that time seven of the old-line scientific bureaus and agencies, concerned largely with research work, were combined to form the Agricultural Research Administration. Included also were the four large Regional Research Laboratories, authorized in 1938, and established at Peoria, Ill., Albany, Calif., Philadelphia, Pa., and New Orleans, La.; the nine Bankhead-Jones laboratories for research on special agricultural projects; and the Beltsville (Md.) Research Center.

In February, 1943, due to an internal reorganization within the Agricultural Research Administration, some of the bureaus were re-named. Their names will provide a sufficient indication of the fields of research they cover for present purposes and are now as follows: Bureau of Animal Industry, Office of Experiment Stations, Bureau of Entomology and Plant Quarantine, Bureau of Human Nutrition and Home Economics, Bureau of Dairy Industry, Bureau of Plant Industry, Soils, and Agricultural Engineering, and the Bureau of Agricultural and Industrial Chemistry. The work of the Regional Research Laboratories is now closely integrated with the last.

As a result of Presidential reorganization plans announced in 1939 and 1940, the Weather Bureau was transferred to the Department of Commerce, the Food and Drug Administration to the Federal Security Agency, the Bureau of Public Roads to the Federal Works Agency, and the Bureau of Biological Survey to the Department of the Interior, where it became part of the Fish and Wildlife Service.

In addition to the above-mentioned agencies in the Agricultural Research Administration, the department carries on considerable scientific research in the Forest Service and in the Soil Conservation Service. The former does research in twelve forest and range experiment stations, and in the well-known Forest Products Laboratory at Madison, Wis. The latter conducts investigations into the character, cause and effect of soil erosion and water depletion, and develops methods of soil and water conservation in cooperation with state agricultural experiment stations. Finally, the Bureau of Agricultural Economics is the central statistical and economic research agency of the department, and has done outstanding work in the fields of social and economic science.

T. SWANN HARDING,
Sr. Information Specialist
U. S. DEPARTMENT OF AGRICULTURE

A TEA PREPARED FROM NEEDLES OF PINE TREES AGAINST SCURVY

IN the issue of SCIENCE for August 6, 1943, Maurice Donnelly calls attention to the work of B. Shishkin concerning the use of needles of ordinary pine trees against scurvy. Francis Parkman is quoted as having published the beneficial effect of a decoction of evergreen on scurvy.

The beneficial effect of this substance was discussed in an article of Dr. Walter Tobler, now in Bern, Switzerland, who studied scurvy in the children's clinic of the University of Vienna after the first World War. His paper is published in the *Zeitschrift fuer Kinderheilkunde* (Vol. 18, pp. 63–158, 1918). He found the publication of Lind, "Treatise about Scurvy," (Riga and Leipzig, 1775, translated from the second edition (English) by Petzold).

In the war between Sweden and Russia (most likely the march of Charles XII into the Ukraina in the winter of 1708/09) almost all soldiers of the Swedish army became incapacitated through scurvy. But the further progress of the disease was stopped, as according to the advice of Erhenius, the royal physician, a tea prepared from pine needles was used. Even the most severe cases were cured and soldiers up to that moment free from scurvy were protected. This remedy became therefore very famous and the pine tree was called afterwards *Pinus Antiscorbuticus*.

Lind quotes further proofs for the beneficial effect of pine needles and needles of other conifers. Later the cones and even the green bark of these trees were used against scurvy and not only in form of tea but also in form of pine-beer. Lind states with enthusiasm: "If one takes a few bags filled with Pine branches on an ocean trip, one may prepare this 'marvellous drink' at any time. The drink may be prepared by letting the pine needles ferment in wine or beer."

One of the first antiscorbutic remedies in Europe was wine in which Vermouth was put in and boiled. But Lind states that experience teaches that "real" pine-needle beer better than anything else not only prevents scurvy but it is also a very effective curative remedy.

Tobler points out that the richness of woods in pine trees in Europe gives the people the consolation that they possess an excellent remedy against scurvy. Wine and beer are not necessary.

Tobler prepared the drink by pouring boiling water over the crushed needles, letting the extracting proceed until the tea obtained an exquisite aroma of pine needles. The taste of the tea is very pleasant so that even a sensitive palate will not refuse it. Tobler used the tea and was enthusiastic about it. I took it myself and found the drink very nice.

Children went with knapsacks into the pine woods