

## TECHNOLOGY

# Allies Reach Agreement

► **THREE** great nations, the United States, Canada and Britain, allies in two world wars and ready to stand together if another emergency arises, will have taken an important strategic and commercial step when their agreement to standardize threads of screws, nuts and bolts is signed this month.

The agreement has already been made. Representatives of the three nations met in Washington this month at the National Bureau of Standards to formalize it. When signed by them, it goes into immediate effect. One of the largest automobile manufacturers is reported ready to make the necessary changes the day of the signatures.

To many the standardization of screw threads may seem a minor matter. Without it, however, a British nut will not fit on an American bolt. With it an American driver of a British Austin car who loses a nut will not have to wait for a replacement from England. The same holds true for all types of machines built in one country and used in another. Standardization of screws, nuts and bolts is particularly important in aviation.

Important as the standardization is in peacetime, it is more important in war, particularly among nations who are fighting side by side. During the recent war millions of tons of precious steel went into bolts, nuts and screws, and great quantities were sent abroad to wherever American equipment was in use so that these war essentials could be kept in usable condition.

In America, the standard screw thread of today is made at an angle of 60 degrees, with a cross-section looking like the sharp teeth of a saw. In Britain, the thread has flat sides at an angle of 55 degrees to each other and with rounded tops and bottoms. The new agreement will establish several classes of screw threads with compromise

dimensions which will enable the essential surfaces of corresponding classes to fit exactly.

This standardization step, which marks a definite turning point of the machine age, is the result of negotiations over the past 30 years or so which came to a real head during the war because of the wide use of American equipment by all the allies. The United States government took a very active part, but much of the success in reaching a conclusion is due to technical societies, particularly the Society of Automotive Engineers, the Society of Mechanical Engineers, and the American Standards Association.

Science News Letter, November 20, 1948

## ENTOMOLOGY

## Ship Insects From China's Redwoods to California

► **FIRST SHIPMENTS** of a collection of 60,000 insects from the Dawn Redwoods forest of China have been received at the California Academy of Sciences in San Francisco, Director Robert C. Miller announced. An entomological expedition headed by Dr. J. Linsley Gressitt and sponsored jointly by the Academy and Lingnan University, of Canton, is now at work among the Chinese redwoods, recently discovered alive after having been known only as a fossil species.

The collection will be studied with special care to find what relationships, if any, can be found between the insects that live among the Chinese redwoods and those of the redwood forest of the California coast. Any such possible kinships or resemblances among the insects will be significant in working out the lines of descent of the existing redwoods from the redwoods of

50,000,000 years ago, whose vast forests circled the whole Northern Hemisphere.

It has already been learned that Meta-sequoia, the Chinese redwood, is limited to one valley, named Shui-Hsa-pa, in Hupeh province. About a thousand trees have thus far been counted. Along with them grow oaks, beeches, birch, linden and rhododendron, giving the forest a strong resemblance to woodland areas in the eastern United States.

Part of the insect collections will be retained by the Academy; the rest will be returned to Lingnan University.

Science News Letter, November 20, 1948

## SCIENCE NEWS LETTER

Vol. 54 NOVEMBER 20, 1948 No. 21

57,800 copies of this issue printed

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N. W., Washington 6, D. C., North 2255. Edited by WATSON DAVIS.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

Change of address: Three weeks notice is required. When ordering a change, please state exactly how magazine is now addressed. Your new address should include postal zone number if you have one.

Copyright, 1948, by Science Service, Inc. Reproduction of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicate services issued by Science Service. Science Service also publishes CHEMISTRY (monthly) and THINGS of Science (monthly).

Printed in U. S. A. Entered as second class matter at the post office at Washington, D. C. under the act of March 3, 1879. Established in mimeographed form March 18, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Readers' Guide to periodical literature, Abridged Guide, and the Engineering Index.

Member Audit Bureau of Circulation. Advertising Representatives: Howland and Howland, Inc., 393 7th Ave., N.Y.C., Pennsylvania 6-5566 and 360 N. Michigan Ave., Chicago, STate 4439.

## SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: Edwin G. Conklin, Princeton University; Karl Lark-Horovitz, Purdue University; Kirtley F. Mather, Harvard University. Nominated by the National Academy of Sciences: Harlow Shapley, Harvard College Observatory; Warren H. Lewis, Wistar Institute; R. A. Millikan, California Institute of Technology. Nominated by the National Research Council: Hugh S. Taylor, Princeton University; Ross G. Harrison, Yale University; Alexander Wetmore, Secretary, Smithsonian Institution. Nominated by the Journalistic Profession: A. H. Kirchhofer, Buffalo Evening News; Neil H. Swanson, Baltimore Sun Papers; O. W. Riegel, Washington and Lee School of Journalism. Nominated by the E. W. Scripps Estate; H. L. Smithton, E. W. Scripps Trust; Frank R. Ford, Evansville Press; Charles E. Scripps, Scripps Howard Newspapers.

Officers—President: Harlow Shapley, Vice President and chairman of Executive Committee: Alexander Wetmore, Treasurer: O. W. Riegel, Secretary: Watson Davis.

Staff—Director: Watson Davis. Writers: Frank Thone, Jane Stafford, A. C. Monahan, Marjorie Van de Water, Martha G. Morrow, Ron Ross, Lydia Schweiger. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Sales and Advertising: Hallie Jenkins. Production: Priscilla Howe.

# Question Box

## ARCHAEOLOGY

Where has a pagan temple been discovered? p. 331

## CHEMISTRY

For what contribution was the Nobel prize in chemistry awarded? p. 325

## CONSERVATION

How has the U.S. exceeded Russia's 15-year plan? p. 327

## ENGINEERING

Where is there a large supply of oil in the United States? p. 326

Photographs: Cover, Acme Telephoto; p. 323, Sage-Allen Store; p. 325, Westinghouse Electric Corp.; p. 327, General Electric Co.; p. 330, Fremont Davis; p. 331, Food and Agriculture Organization of the United Nations.

## MEDICINE

What role does the newly discovered vitamin play in the body? p. 323

## METEOROLOGY

What proposal was made for eliminating lightning? p. 328

## PHYSICS

What was the Nobel prize in physics awarded for? p. 325

## TECHNOLOGY

Signing of what agreement will prove an important aid in international trade? p. 324