Within 2 weeks the signature of 2000 American scientists had been obtained, and on 4 June 1957 the statement was submitted to President Eisenhower [*Science* **125**, 1190 (14 June 1957)].

In July Pauling received a statement of adherence to the petition signed by all of the professors of science in the Free University of Brussels, as well as similar statements from scientists of other countries. He then wrote to a few scientists in each country, asking that they obtain signatures. In some countries no effort was made to obtain signatures except from a few leading scientists.

Pauling has stated that he does not believe that the problem of bomb tests and disarmament is one that should be settled by scientists; it is instead one of importance to every person in the world. Scientists, however, have some measure of understanding of the complex factors involved, such as the magnitude of the damage done by radioactive fallout, and he believes that scientists have an obligation to express their opinions in order to help their fellow citizens. He also has said that he advocates an agreement to stop bomb tests and that such an agreement would benefit all nations and all people equally and not one nation or group of nations preferentially.

Sun Spot Theory

A new theory about sun spots has been advanced by Donald H. Menzel, director of the Harvard College Observatory, in the annual report of the Smithsonian Institution. Heretofore, the spots were assumed to indicate the existence of solar storms, or the vertices of cyclones. However, in the report, Menzel says the small, dark regions are "islands of intense calm floating in the otherwise turbulent sea of the sun's atmosphere."

The report on the new theory states: "We are now in a position to understand the darkness of the sunspot relative to the surrounding photosphere. In a region where magnetism has not inhibited convection, the outer layers are hotter than they would be otherwise. They are, consequently, more luminous than the spots, where convection does not occur. In the region immediately surrounding the spots, the convective layer must rise higher."

Tariff-Free Instruments

A bill to permit certain educational organizations to import free of duty scientific and laboratory apparatus for educational or scientific purposes was introduced last August in the House of Representatives by Congressman Anton N. Sadlak of Connecticut. It was referred to the Committee on Ways and Means. The bill, H.R. 9349, proposes that the Tariff Act of 1930 be amended to permit the free import of "scientific or laboratory instruments, apparatus, utensils, or appliances (including surveying and mathematical instruments), or parts thereof, imported by a tax-exempt educational organization for its own use in scientific research or in the instruction of students, and not for sale (including sale to students) or for any commercial use."

Standard Inch

Standardization of the inch among friendly nations in an age of increasing weapon precision was urged recently by A. V. Astin, director of the National Bureau of Standards. He asserted that the fractional differences between the inches used in the United States, the United Kingdom, and Canada have created critical problems in technological cooperation.

Astin said there were 129 calibration centers throughout the Soviet Union for passing on the accuracy of instruments in weapons and missiles plants and in military installations. The United States probably has superior tools of standardization, but the Russians appear to have superior means of distribution in that field.

Astin proposed that the appropriate agencies of the United States, the United Kingdom, and Canada negotiate an international yard of 0.9144 of an exact international meter. This would yield an international inch equal to 2.54 centimeters. This is exactly the Canadian standard and about midway between the United States and British standards.

Tenth Anniversary of the American Heart Association

Marking its first decade as a national voluntary health agency, the American Heart Association has announced that, by the end of the current fiscal year, the association and its affiliates and chapters will have channeled a total of $29 million into research studies. Research allocations for the current fiscal year total nearly $7 million, the highest annual amount since the awards were first made in 1948. More than 60 percent of the awards are for basic research.

In noting the 10-year gains in cardiovascular research, the anniversary issue of the association's *Heart Research Newsletter* states:

"Outstanding have been the dramatic achievements of surgeons in repairing previously hopeless heart defects. New drugs have appeared to help those with high blood pressure. Improved drugs and diet therapy have helped heart failure patients. Rheumatic fever seems to be yielding to prevention. Anti-clotting drugs have been shown to reduce the death rate after the first heart attack and long-term anticoagulant therapy has been extensively studied.

"The application of electronics and the use of radioactive tracers have given investigators important new tools and provided physicians with improved methods of diagnosis. The catheter, a long thin tube pushed up through the veins into the heart chambers, has become widely used as a method for diagnosing heart and circulatory malfunctions. The value of regular exercise, the need to keep down weight, and sensible diet precautions have been affirmed."

News Briefs

An information exchange program linking Fordham University and the Catholic University of Lublin, Poland, has been announced. Heading the program at Fordham is the Rev. Walter C. Jaskievicz, director of the Institute of Russian Studies. He will direct the exchange of photographs, books, special editions of student newspapers, art exhibits, tape recordings, and newsletters. The program was arranged with the cooperation of the Department of State.

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The first issue of *Ergonomics: Human Factors in Work, Machine Control and Equipment Design,* has been announced by Academic Press Inc., distributors of the journal in the United States and Canada. The term *Ergonomics* was coined to denote an approach to the problems of human work and control operations which came into prominence during the second world war in relation to equipment for the armed services. The general editor of the journal, the official publication of the Ergonomics Research Society, is A. T. Welford, Psychological Laboratory, Cambridge University, Cambridge, England. Subscription orders originating in the United States and Canada should be addressed to Academic Press Inc., 111 Fifth Ave., New York 3, N.Y.

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The University of Michigan will build an 85-foot steerable radio telescope next June at Peach Mountain, 16 miles from Ann Arbor.

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The National Bureau of Standards has developed a simple, fast-acting, precision instrument to measure the speed of sound in nondispersive liquids—liquids in which the speed of sound is essentially independent of frequency. M. Greenspan and C. E. Tschiegg of the