the theoretical possibility that vaccines might revert to virulence, it held this was not practically admissible in this case. In the Luebeck Hospital laboratory Calmette cultures were prepared side by side with human tuberculosis bacilli, he said, and these two must have been accidentally confounded.

Such a mistake, the court held, was indicated by expert opinions, especially those regarding conditions in the hospital laboratory. The laboratory, while good enough for ordinary purposes, was unfit for the preparation of vaccine, and the court was convinced that the catastrophe had been caused by defects in the institution. The responsibility, therefore, rested primarily on Dr. Deycke, who as an expert bacteriologist knew the danger of a possible mistake or contamination. The precautionary instructions he had given were inadequate for certainly preventing them, the court held, the more so since, being overworked, he could not always supervise the laboratory personally.

The court held further that it had been established with a probability bordering on certainty that the catastrophe would have been averted had the vaccine been tested on animals before it was administered and that the tuberculosis outbreak would not have reached such dimensions had control through inoculation of animals been established. The responsibility for the omission was therefore held to rest also on Dr. Altstaedt, whose duty it was as chief health officer to make sure of the safety of the laboratory procedure.

Professor Albert Calmette, of Paris, the originator of the Calmette anti-tuberculosis serum, did not appear at the trial, but pleaded for the German physicians, saying that the hospital equipment was inadequate and that his colleagues should not be blamed. The serum was provided from the Pasteur Institute in Paris in July, 1929.

THE INTERNATIONAL SCIENTIFIC EXPEDITION

THE Department of the Navy has issued a statement to the effect that the *U. S. S. S-48* and the *U. S. S. Chewink,* naval ships on board which scientists of the International Scientific Expedition will cruise for two months while measuring ocean depths and the pull of gravity in the vicinity of the West Indies and the Bahamas, sailed on Sunday, February 7, from Guantanamo Bay on the first loop of their cruise.

The part of this first loop to be covered by the two ships lies southward of the Island of Jamaica and around the west end of Cuba, including 18 gravity stations, cruising about 1,125 miles and ending at Key West on February 11. There, computation of recorded data and a check-up with shore gravity stations were undertaken, after which the two ships left on the second portion of this loop, extending up the Florida Straits and the Old Bahama Channel.

Investigators embarked in the *S-48* and the *Chewink* are Dr. F. Vening Meinesz, member of the Geodetic Commission of the Netherlands; Mr. Harry Hess, proctor fellow in geology at Princeton University, and Mr. Townsend Brown, of the United States Naval Research Laboratory. Lieutenant Commander Allen H. Gosnell, U. S. Naval Reserve, is accompanying this unit of the International Scientific Expedition in the capacity of historian.

Professor Richard M. Field, director of the expedition, has sailed from Miami for study of the structural geology of the outer Bahamas, this study to be supplemental to the gravimetric survey being made beneath the sea by Dr. Meinesz.

In commenting in his dispatch on preparations made since the Meinesz unit of the expedition sailed on January 27 from Norfolk on board the *U. S. S. Tarbell,* destroyer, Lieutenant Commander Gosnell reports as follows:

> Set up gravity apparatus on deck of *Tarbell* in lee of Crooked Island January 29. Dr. Meinesz, Hess and Brown in Santiago during earthquake of February 3. Escaped safely from hotel and spent remainder of night on bench in Plaza. *S-48* and *Chewink* arrived at Guantanamo February 4. Commenced work on iron framework for apparatus.
>
> On February 5, ships successively at sea testing all depth-finding installations. February 6, charging batteries and completing preparations for test of all gravity apparatus. This test in progress February 7 alongside dock. Prior to arrival of ships, party was engaged in working up results of tests made at Naval Research Laboratory.

SCIENTIFIC PROBLEMS OF THE ARCTIC

THE United States has been slow about joining the other nations in plans for studying scientific problems in the colder regions of the earth during August, 1932, to August, 1933, but Science Service reports that it will probably take part and establish a station at Fairbanks, Alaska. All that is needed is the money —$30,000—and the Senate Foreign Relations Committee has reported out the bill authorizing this expenditure. It is expected to pass, despite the depression, and the economy program of the administration. Recommendations in its favor were made to the committee both by President Hoover and Secretary of State Stimson.

Twenty-six nations have arranged to take part in this "Second Polar Year Program." The United States will make the number twenty-seven. Subjects to be studied are the magnetism of the earth; the

aurora or polar lights; the natural electric currents which flow in the earth's crust; the electric condition of the atmosphere; the relation of radio transmission and reception to all these phenomena and to the condition of the surface of the sun, also meteorological conditions to great heights in the atmosphere.

The Senate committee in making its favorable report for authorizing the $30,000 expenditure said:

> It must not be forgotten that this polar year program has by now become irrevocable, except in the event of direct calamity. Too many nations have already made extensive preparations for the work to permit its being dropped except under very special circumstances. There is at present not the slightest prospect that it will be dropped. The present plan is that the United States of America shall provide funds for a polar-year station at Fairbanks, Alaska. The request for $30,000 has been made with full realization that adverse economic conditions demand that the amount shall represent the irreducible minimum for carrying on the work at that station.
>
> Fairbanks, Alaska, occupies a key position in the distribution of polar-year stations. There are no other stations near-by—in fact, unless Fairbanks is occupied as a station, about one fourth of the Arctic region will be totally neglected. . . . Economically we are probably not worse off than are other nations that are participating.

COMMITTEE ON NOISE MEASUREMENT OF THE AMERICAN STANDARDS ASSOCIATION

THE organization of a sectional committee on noise measurement under the procedure of the American Standards Association was recommended by a general conference of 32 representatives of 18 national bodies held in New York on January 29. It was also recommended that the committee function under the technical leadership of the Acoustical Society of America.

The scope of the project as recommended by a steering committee consisting of Professor Vern O. Knudsen, Acoustical Society of America; E. E. Free, American Society of Mechanical Engineers; P. L. Alger, American Institute of Electrical Engineers; H. R. Summerhayes, National Electrical Manufacturers Association; R. G. McCurdy, ASA Telephone Group; and Dr. Harvey Fletcher, Acoustical Society of America, is the "Preparation of general standards of nomenclature, units, scales and measurement in the field of acoustics, with special reference to noise measurements."

The conference followed a request made by the Acoustical Society of America to the American Standards Association to set up a national committee to correlate the activities of various technical and trade organizations which have been attempting individually to set up standards for noise measurement. Eight such organizations now have committees on this subject. It was pointed out that the diverse nomenclature and methods of measurement growing out of these uncorrelated activities were interfering with the progress of scientific work on the subject and that without real national standardization this condition would become worse as different individuals became accustomed to different concepts and terms.

For the present the committee's work will be concentrated chiefly on the standardization of nomenclature, units and scales. It is believed that further progress in the science of noise measurement is necessary before effective standardization of this phase of the subject can be completed. There is some confusion in the measurement of noise at the present time because of the complex nature of noises and their effect upon the ear, and the fact that none of the noise meters yet designed can translate the approximate physiological and psychological effects of noise into definite units of measurement. Dr. Harvey Fletcher, of the Bell Telephone Laboratories, pointed out at the conference that to the average individual a noise composed of widely separated frequencies is less disturbing than a noise of equal intensity, but having components close together in the frequency range.

SUPPORT FOR BIOLOGICAL ABSTRACTS

DURING the year 1931 the following sums have been contributed to *Biological Abstracts* and to the Union of American Biological Societies in support of this publication:

To the Union of American Biological Societies	
American Association for the Advancement of Science	$ 400.00
American Association of Anatomists	100.00
American Physiological Society	125.00
American Society of Biological Chemists	100.00
American Society for Experimental Pathology	50.00
American Society of Naturalists	50.00
American Society for Pharmacology and Experimental Therapeutics	50.00
American Society of Zoologists	200.00
Botanical Society of America	150.00
National Research Council	1,500.00
Society of American Foresters	50.00
Contributions by individuals	55.00
Total	**$2,830.00**
To *Biological Abstracts* directly	
American Society of Naturalists	$ 50.00
American Society of Zoologists	500.00
Total	**$550.00**

An accounting for expenditures under these sums, as received to December 15, 1931, was made by the