WHEREAS, More accurate and complete meteorological data are essential to many branches of human endeavor including navigation, agriculture, aviation and engineering; and WHEREAS, The Special Committee on Meteorological

WHEREAS, The Special Committee on Meteorological Data of the American Society of Civil Engineers, the Water Resources Committee of the National Resources Committee and the Advisory Committee to the Secretary of Agriculture on the Weather Bureau, have all urged expansion and improvement of the service furnished by that bureau, which will call for an increase for appropriations for the bureau, now deemed inadequate even for the present service; therefore, be it

Resolved by the Board of Direction of the American Society of Civil Engineers that it endorses improvements in the service of the Weather Bureau, and the provision of an adequate increase in appropriation therefor, especially along the following lines:

- (a) Stimulation of the service by adding qualified new men, by additional training of selected men now in the present organization, by further personal contact between field and office officials, and by regular inspections of both first-order and voluntary stations.
- (b) Research.
- (c) Extension of upper-air observations to attain, if possible, more exact and longer range forecasting.
 (d) Increased number of observation stations, espe-
- (d) Increased number of observation stations, especially in the higher mountain areas, and reports from more ships at sea.
- (e) Snow surveys and evaporation observations from water, snow and soils.
- (f) The complete adoption and use of the International Figure Code.

Dr. Daniel W. Mead, professor emeritus of hydraulic and sanitary engineering, University of Wisconsin, is president of the society and chairman of the board. George T. Seabury, New York, is secretary.

THE TWELFTH NATIONAL EXPOSITION OF POWER AND MECHANICAL ENGINEERING

THE twelfth National Exposition of Power and Mechanical Engineering will be held at the Grand Central Palace, New York City, during the week of November 30. Three floors will be occupied and admission will be by invitation or by registration only. Operating exhibits will be emphasized and the equipment on display will range from power-producing equipment, factory machinery and industrial equipment to materials of construction and plant accessories.

The exhibits of equipment and products have been designed to meet current needs. Machinery will be in operation. All the effective principles of modern display will be utilized to show products so that they may be easily inspected and so that attention will be drawn to their new and important features. Competent men from technical staffs will answer questions, demonstrate products and explain how principles may be applied to the specific problems of the inquirer. The comprehensive presentation, including the latest output of competitive manufacturers, will provide visiting executives and engineers with a sound basis for their comparison of relative advantages.

Exhibits will range from large, heavy equipment used in the generation of power to mechanical equipment for handling materials and tools. Classifications of equipment on display will include: fuels, combustion equipment; refractories, steam-generating equipment; steam distribution equipment; piping and fittings; prime movers, pumps and hydraulic equipment; electric generators and motors; electrical transmission, distribution, control; power transmission; control apparatus and precision instruments; powerdriven machinery; tools and machine tools; material handling equipment; heating, ventilating, refrigeration, air conditioning; lubricants; operation and maintenance materials.

Machinery and operating plant equipment will constitute a major section of the exposition. Steamgenerating equipment and accessories will as usual play a prominent part. Valves and controls of every type and the latest in pipe fittings in terms of their industrial applications will be displayed. Many exhibits will feature plant accessories. A complete line of pumping equipment will offer unusual features from the standpoint of operating efficiency. Innumerable exhibits will be devoted to the latest indicating, recording and controlling devices applicable to temperature, flow, pressure, level and time.

The American Society of Mechanical Engineers and the American Society of Refrigerating Engineers will hold meetings in New York during the week of the exposition.

THE PONTIFICAL ACADEMY OF SCIENCES

A NEW Pontifical Academy of Sciences was initiated by Pope Pius on October 30. It was announced that members had been selected solely for scientific achievement. It consists of seventy members as follows: Italy, 33; United States, 6; France, Germany and Belgium, 5 each; Holland, 4; Great Britain, 3; Austria, 2, and Czechoslovakia, Portugal, Argentina, Denmark, Norway, Poland and China, one each.

From the United States the following have been elected to membership: Alexis Carrel, professor of biology at the Rockefeller Institute, New York; George Birkhoff, professor of mathematics at Harvard University; Robert Andrews Millikan, director of the Norman Bridge Laboratory of Physics at the California Institute of Technology; Thomas Hunt Morgan, director of the Wm. G. Kerckhoff Laboratories of the Biological Sciences of the California Institute of Technology; George S. Sperti, biophysicist, formerly research professor at the University of Cincinnati; Dr. Hugh S. Taylor, professor of chemistry, Princeton University.

Among the Italians elected are: Guglielmo Marconi; Umberto Nobile, aviator, and Aldo Castellani, known for his work in tropical medicine, and Senator Vito Volterra, formerly professor of physics and mechanics at the University of Rome.

The Pope has issued the following statement in regard to the organization of the academy:

Among the many blessings with which the divine goodness has rejoiced the years of our pontificate, we should like to enumerate those afforded by the spectacle of so many men who have dedicated themselves to study of experimental sciences and who have changed their attitude and intellectual cause as regard to religion.

Unfortunately it is true that in times not so long gone some learned men, for reasons other than love of truth, have abandoned as prodigal sons the paternal roof or the religion of their forefathers. Especially during the last century there were those who taught the false, rash argument that the findings of human science were in open contradiction to the teachings of divine revelation.

It is, however, a source of profound joy to our heart that in our day these prejudices are so evidently outmoded that there are few who really have studied the positive sciences and yet continue to sustain this error.

On the contrary, during our pontificate many scientists, among whom were men of the highest worth and standing, have come to Rome from distant lands in order to participate in scientific congresses and have come to our presence to express their devotion to us, or rather to that authority which lives forever in the apostolic see, even though exercised by an unworthy successor of St. Peter.

There were those who acted in their own names and the names of their colleagues who did not hesitate to say that true science leads and prepares the soul to faith a confession which gave our heart profound happiness.

SCIENTIFIC NOTES AND NEWS

THE Nobel Prize for physiology and medicine has been awarded to Sir Henry Dale, director of the British National Institute of Medical Research, and to Professor Otto Loewi, professor of pharmacology at Graz, for their work on the part played by acetylcholine in innervation.

THE Hoover gold medal, "awarded by engineers to a fellow engineer for distinguished service," will be presented to Dr. Ambrose Swasey, chairman of the Board of Directors of the Warner and Swasey Company, Cleveland, Ohio, at the annual dinner of the American Society of Mechanical Engineers to be given in New York City on December 2.

THE William H. Nichols Medal of the New York Section of the American Chemical Society, founded in 1902 to "stimulate original research in chemistry," has been awarded for 1937 to Dean Frank C. Whitmore, of the School of Chemistry and Physics of the Pennsylvania State College, "for his studies in metalloorganic compounds, especially those of mercury, and in the field of aliphatic chemistry, particularly in molecular rearrangements."

At the recent Cleveland meeting, the Samuel Wylie Miller Medal of the American Welding Society was presented to Metcalf Hobart, consulting engineer of the General Electric Company, Schenectady, N. Y., in recognition of his work as "a pioneer in the art of welding who has done outstanding service toward the development of welding into the most important and widely used tool of industry."

Nature reports that the Riberi Prize, founded by an Italian surgeon, for the best contribution to the prog-

ress of medicine within the last five years, has been awarded to Dr. Francesco Pentimalli, professor of general pathology at Florence, for his work on experimental tumors and cancer.

THE honorary degree of doctor of civil law was conferred on October 27 by the convocation of the University of Oxford on Dr. James Bryant Conant, president of Harvard University.

THE doctorate of laws of McGill University was conferred on October 23 on Nevil Norton Evans, who recently retired from the professorship of chemistry, and on Dr. Maude Abbott, formerly professor in the faculty of medicine.

FRANK MALCOLM FARMER, vice-president and chief engineer of the Electrical Testing Laboratories, New York City, has been elected chairman of the Engineering Foundation. Mr. Farmer succeeds H. P. Charlesworth, assistant chief engineer of the American Telephone and Telegraph Company.

A BANQUET in honor of Dr. Daniel Webster Mead, professor of hydraulies and sanitary engineering at the University of Illinois and president of the American Society of Civil Engineers, was given at New Orleans on October 24 by the Louisiana section of the society on the occasion of the meeting there of the American Public Health Association.

AT the Philadelphia meeting of the American College of Surgeons Dr. Frederic A. Besley, of Waukegan, Ill., was elected president. He will take office next year, succeeding Dr. Donald C. Balfour, of Rochester, Minn. Dr. Frank W. Lynch, San Franeisco, was elected first vice-president, and Dr. Austin