Agriculture, is fitted into the Department of Commerce among bureaus that serve commerce and industry. The National Advisory Committee for Aeronautics, which has been an active research independent establishment since world war days, is merged with the Bureau of Standards.

## REDUCTIONS IN THE FEDERAL BUDGET FOR SCIENTIFIC WORK

In the budget estimates submitted to Congress on December 5, by President Hoover, many of the scientific bureaus are given reduced appropriations. The following figures, selected by Science Service, show the individual appropriations affected. These cuts are in addition to those covered by the economy legislation passed at the last session.

The Department of Agriculture shows the following decrease: Office of Experiment Stations, \$44,797, which will affect the the work in stations in Hawaii and Puerto Rico; Office of Extension Service, \$12,-846, involving cutting down agricultural exhibits at fairs: Weather Bureau, \$92,568 for weather service and research, \$4,200 for horticultural protection, and \$107.835 for supplying information regarding weather conditions to aviation; Bureau of Dairy Industry, \$19,803, which represents the amount appropriated in 1932-33 for completing a nutrition laboratory at the Beltsville, Maryland, experiment station; Bureau of Plant Industry, \$29,185 for cereal crop investigations, \$11,905 for forage crops and diseases, \$10,462 for sugar plant investigations and \$7,950 for western irrigation agriculture; Bureau of Chemistry and Soils, no changes affecting research; Bureau of Entomology, \$4,775 for investigations relating to fruit and shade tree insects, \$4,400 for forest insects, \$10,390 for cereal and forage insects and \$5,820 for household and stored-products insects; Bureau of Biological Survey, \$4,810 for studies of food habits of birds and animals, and the remainder of the \$156,270 decrease for this bureau is planned to be accomplished by delaying purchase of lands and sites for wild bird and wild life refuges.

Bureau of Agricultural Engineering, \$28,603 for engineering investigations; Bureau of Agricultural Economics, \$11,430 for research concerning marketing and distribution of farm products; Bureau of Home Economics, \$4,724 from investigations.

The Bureau of Plant Quarantine, however, is given \$39,501 increase so that additional work may be done in preventing the spread of the pink bollworm of cotton, the gipsy and brown tail moths, and the Japanese beetle. Less money is allowed for preventing the spread of the date scale, the thurberia weevil and the European corn borer—the total sum of these last items amounting to \$85,015, in decreases. The Bureau of Standards is untouched this year excepting for an increase of \$188,720 to do away with the 1933 administrative furloughs.

The Coast and Geodetic Survey was given an apparent decrease of \$1,239,813, but this sum represents the emergency relief appropriations of 1933.

The Bureau of Mines has \$26,025 less for investigating mine accidents, and \$7,090 less for helium investigations.

The Geological Survey's planned appropriations. have been increased by \$399,000, made up as follows:

Salaries, \$15,000; topographic surveys, \$184,000; geological surveys, \$40,000; fundamental research, \$10,000; volcanologic surveys, \$5,000; Alaskan mineral resources, \$5,000; gaging streams, \$70,000; classification of lands, \$10,000; printing and binding, \$20,-000; geologic and topographic maps, \$15,000, and mineral leasing, \$25,000.

Increases for international agency expenses recommended for the State Department would include, \$10,-000 for the Gorgas Memorial Laboratory; International Institute of Agriculture at Rome, \$5,400, and International Council of Scientific Unions, \$5,042. The last two were not appropriated for in 1933.

It is recommended that the Public Health Service should receive a net increase of \$173,266, but the principal increases are \$220,000 for pay of personnel and maintenance of hospitals and to provide additional facilities in new hospital buildings constructed as a part of the Federal building program and \$55,-000 for purchase of equipment for new quarantine stations. Reductions in the force which have been made during the year, however, mean \$34,984 decrease for pay of acting assistant surgeons and \$25,000 has been cut from the estimate for field investigations and \$50,000 from studies of rural sanitation.

The Smithsonian Institution is given certain slight increases in the estimates, mostly for supplies, materials, printing and binding.

## UNEMPLOYED CHEMISTS IN NEW YORK CITY

THE New York Committee on Unemployment and Relief for Chemists and Chemical Engineers announces that nineteen colleges and universities will cooperate in research projects to be carried on by unemployed chemists. Columbia, Princeton, New York and Rutgers Universities have pledged laboratory space and materials. Similar cooperation will be extended by a number of hospitals in the metropolitan area. Research workers have been placed in the laboratories of Columbia University and the Medical Center with funds provided by the committee. Other researches will be started as soon as they can be financed.

It is estimated that about 2,000 of the 10,000 chem-

ists and chemical engineers who live or work within fifty miles of City Hall have been laid off. About 900 have registered with the committee and registration continues at the rate of from five to twenty per week. A considerable number—between 25 and 50 per cent. —have obtained some form of temporary work. Others are occupying their time in researches, either in laboratories in their homes or in the libraries. Since last January the committee has helped to get permanent or temporary jobs for 184 men and women. Ten to twenty people per week have received relief in the form of work or direct contributions.

It is estimated that for the eight months from November 1 to July 1 between \$50,000 and \$60,000 is needed to help about 100 men and women and their families. This is at the rate of about \$15 a week. It is hoped that of this amount \$32,000 can be raised directly from the profession and that the balance of from \$18,000 to \$28,000 may be contributed by the chemical industry.

The committee's object is to furnish work for idle chemists that will not bring them into competition with regularly employed members of the profession, and at the same time to advance research in pure science.

It will not send out unemployed chemists to compete in industry for jobs at reduced salaries. Men who have been placed in competitive positions have been urged by the committee to ask for their regular salaries, and in no case has an appeal been made to any employer to employ a man at a reduced salary because he is in need.

## AWARD OF THE EDISON MEDAL TO BANCROFT GHERARDI

THE Edison Medal for 1932 has been awarded by the American Institute of Electrical Engineers to Bancroft Gherardi, "for his contributions to the art of telephone engineering and the development of electrical communication."

The Edison Medal was founded by associates and friends of Thomas A. Edison, and is awarded annually for "meritorious achievement in electrical science, electrical engineering or the electrical arts" by a committee consisting of twenty-four members of the American Institute of Electrical Engineers. The following eminent engineers and scientific men have been recipients of the medal: Elihu Thomson, Frank J. Sprague, George Westinghouse, William Stanley, Charles F. Brush, Alexander Graham Bell, Nikola Tesla, John J. Carty, Benjamin G. Lamme, W. L. R. Emmet, Michael I. Pupin, Cummings C. Chesney, Robert A. Millikan, John W. Lieb, John White Howell, Harris J. Ryan, William D. Coolidge, Frank B. Jewett, Charles F. Scott, Frank Conrad and Edwin W. Rice, Jr.

Bancroft Gherardi was born in San Francisco on April 6, 1873. Upon the completion of his studies at Cornell University, he entered the employ of the New York Telephone Company under Dr. John J. Carty, who was then chief engineer. From 1900–06 he was chief engineer of the New York and New Jersey Telephone Company; from 1906–07 assistant chief engineer of the New York Telephone Company, and from 1907–18 engineer of plant, American Telephone & Telegraph Company. In 1918 he became acting chief engineer and shortly afterward chief engineer of the company. Since 1920 he has been vice-president and chief engineer of the American Telephone & Telegraph Company.

H. H. Henline, acting national secretary of the American Institute of Electrical Engineers, writes:

Mr. Gherardi's entire professional and business career has been devoted to the art of communication. Coming into this field when the telephone art was very young (300,000 telephones in 1895) he has played a most important part in the development and perfection of operating practices and in the development of methods, equipment and apparatus, which have brought telephone communication to the high state of perfection in which we find it to-day.

Mr. Gherardi has directed the development and introduction of many new and improved arrangements which are in use to-day on a large scale, and which have added greatly to the speed and accuracy of local and long distance telephone service.

His broad vision as to the place of communication not only in the affairs of the people of the United States but also in world affairs and his initiative and skill in the development of engineering and operating organizations and in the development of the art generally have contributed enormously to the growth and success of present-day communication.

## SCIENTIFIC NOTES AND NEWS

DR. WILLIAM SYDNEY THAVER, professor of medicine emeritus at the Johns Hopkins University, died on December 11, at the age of sixty-eight years.

DR. WILLIAM JACOB HOLLAND, director emeritus of the Carnegie Museum, Pittsburgh, died on December 13, at the age of eighty-four years. THE Paris Academy of Sciences awarded on December 5 the Grand Prix founded by the late Prince Albert of Monaco to Prince Louis de Broglie, a former winner of the Nobel Prize for physics. The prize is valued at about \$3,900.

THE Gold Medals "for distinction in science" of the