the construction of small community hospitals in various states and continued to render services of various kinds to ten older institutions built since 1927. As a contribution to medical education, the fund gave fellowships for advanced study to seventeen teachers in medical schools or to junior staff physicians in teaching hospitals selected for appointment to medical faculties.

THE INDUSTRIAL RESEARCH INSTITUTE AT THE UNIVERSITY OF OKLAHOMA

THE Board of Regents of the University of Oklahoma has approved the incorporation of an industrial research institute. Dr. Homer L. Dodge, dean of the Graduate School, who with President W. B. Bizzell, formulated the plans, recently visited and made a study of several research foundations. The institute will differ from others in that it will include not only the natural sciences and engineering, but also social sciences and commerce.

It plans to make available to industry the investigators and research facilities of the university. Smaller industrial concerns, unable to afford research laboratories and technicians, will be aided.

The institute will be a non-profit corporation and will be conducted without cost to the state. Arrangements for securing funds will be entered into with industrial companies and private individuals. The Board of Regents, therefore, acting through administrative officials of the university, will establish an agency to arrange with industrial concerns for fellowships and research projects and the use of equipment. Three fellowships, financed by individual corporations, are now in existence at the university, and more are expected to be added as the program expands. Patents taken out will be held by the institute, and all royalties received will be used for research.

Since plans have been in process of formation for several years, the institute will go into operation as soon as it is incorporated.

THE SCHOOL OF CHEMICAL ENGINEERING OF CORNELL UNIVERSITY

CORNELL UNIVERSITY has received a gift of a new building for the School of Chemical Engineering, to be erected at a cost of $700,000. The donor is Franklin W. Olin, of Alton, Ill., a civil engineer graduate in 1886 and trustee of the university, who for many years has been president of the Western Cartridge Company and affiliated concerns. Mr. Olin presented the building as a memorial to his son, Franklin D. Olin, Jr., who received his M.E. degree from Cornell in 1912 and died in 1921. Construction will begin immediately, on a schedule calling for completion in October of this year. The plan contemplates similar buildings for the other three schools of civil, mechanical and electrical engineering, with a materials and metallurgy laboratory equipped to serve the entire college. These buildings will form a new quadrangle on the southern portion of the main university campus.

According to Dean S. C. Hollister,

> Olin Hall of Chemical Engineering will have unsurpassed facilities for training in this field. With more than 100,000 feet of floor space, the building will provide numerous laboratories of varying sizes, adapted both to undergraduate instruction and to graduate research. Occupying most of one wing will be an extensive three-story laboratory, enabling students to build and operate large-scale model plants, embracing all the equipment necessary for following through an entire chemical manufacturing process.
>
> These facilities will give our students the means of studying chemical processes not only on a test-tube scale, but also on a basis so closely approximating commercial manufacture that they can readily determine economic as well as engineering factors in designing and operating full-scale plants.

Olin Hall will be an L-shaped structure with three stories above a basement. Both portions of the building will be 60 feet in depth. It will be of fireproof construction throughout, faced in part with native stone to harmonize with Myron Taylor and Willard Straight Halls, which are adjacent. Architects for the new building are Shreeve, Lamb and Harmon of New York City.

An unusual feature of the building is that the majority of the lecture rooms, class rooms and offices will be placed on the ground floor to avoid congestion on stairways. Three lecture rooms, accommodating respectively 300, 110 and 70 students, will be on this floor. There will be a single lecture room, seating 200, on the second floor. Throughout the building there will be numerous small laboratories for specialized instruction and research.

The new building is designed to accommodate approximately 450 undergraduates and a large number of graduate students. The School of Chemical Engineering, under a selective system of limited enrolment, now has 277 students, an increase of 119 in this field since the school was established in 1938.

MEETING OF THE BOARD OF REGENTS OF THE SMITHSONIAN INSTITUTION

PROGRESS of scientific investigations carried out during the past year at the Smithsonian Institution was reported in January by Charles G. Abbot, secretary of the Board of Regents.

The Astrophysical Observatory has nearly completed the revision of results of measurements of the solar constant—a factor from which can be computed the amount of energy from the sun falling on the earth—for the past eighteen years.

By eliminating a season effect in the cycles of solar variation Dr. Abbot himself has found a closer corre-

spondence with variations in weather on earth, and is carrying out a series of five-year predictions of temperature and rainfall.

In the Division of Radiation and Organisms, which studies the complex interrelations between living things and solar energy, a standardized technique has been worked out for the extraction of growth substances from oat seedlings and evidence obtained of the existence of precursors to these substances and also of possible growth inhibitors.

Other studies have dealt with the lethal and stimulating effects of various wave-lengths of ultraviolet light on one-celled plants, the algae, which afford some measure of their effect on life in general.

There were 212,474 additions to the collections, including a cast of a Neanderthal child skull from Uzbekistan, Siberia; many Eskimo and other artifacts from Siberia and northern Alaska; several varieties of seals from the Antarctic; collections of birds from Vera Cruz and Indo-China; several thousand reptiles and amphibians from Mexico, and 14,000 fishes from the Phoenix and Samoan Islands.

Among the geological collections were a 347-gram flawless aquamarine crystal, a 128-carat emerald crystal from Brazil, 495 Mexican minerals and a large number of Paleozoic fossils obtained in the Rocky Mountains.

It is expected that the formal opening of the National Gallery of Arts will take place sometime in March. It is estimated that the total cost of the building and landscaping, now nearing completion, will exceed $15,000,000. There have been 59 noteworthy additions to the Freer Gallery, a Smithsonian unit, during the year. These have included East Indian and Arabic manuscripts, Chinese, Indian and Persian paintings and Oriental metal work and sculpture.

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA

THE Royal Astronomical Society of Canada has elected Dr. Frank S. Hogg, assistant professor of astronomy in the University of Toronto and a member of the staff of the David Dunlap Observatory, as president for 1941. He succeeds Dr. J. A. Pearce, acting head astronomer of the Dominion Astrophysical Observatory, Victoria, B. C., who has been president for two years.

Dr. A. Vibert Douglas, dean of women, Queen's University, Kingston, Ont., and Dr. D. S. Ainslie, associate professor of physics, University of Toronto, were elected vice-presidents.

Other officers are: E. J. A. Kennedy, *general secretary;* J. H. Horning, *general treasurer;* R. H. Combs, *recorder;* Dr. P. M. Millman, *librarian,* and R. S. Duncan, *curator,* all of Toronto.

Members of Council are: S. C. Brown, Toronto; H. Boyd Brydon, Victoria; Dr. J. W. Campbell, Edmonton; Rev. W. G. Colgrove, London, Ont.; Dean Henry F. Hall, Montreal; Dr. Ernest A. Hodgson, Dominion Observatory, Ottawa; Dr. A. E. Johns, McMaster University, Hamilton, Ont.; A. R. McCauley, Vancouver; Andrew Thomson, Canadian Meteorological Service, Toronto, and Dr. L. A. H. Warren, Winnipeg.

The address of the retiring president was presented at the annual "at-home" of the society at the University of Toronto on January 21. The subject was "The Advance of Astronomy, 1890 to 1940." The first award of the Chant Medal, established by the society in recognition of the work of Dr. C. A. Chant, now director emeritus of the Dunlap Observatory, was made to Bertram J. Topham, of Toronto, amateur astronomer.

SCIENTIFIC NOTES AND NEWS

THE Bruce Gold Medal of the Astronomical Society of the Pacific, has been awarded to Dr. Joel Stebbins, director of the Washburn Observatory, Madison, Wis. At the annual meeting of the society, held in San Francisco on January 25, Professor C. D. Shane, of the department of astronomy of the University of California at Berkeley, in his address as retiring president, gave an account of Dr. Stebbins's distinguished services to astronomy. At the same meeting Dr. A. S. King, of the Mount Wilson Observatory, was elected president of the society for the year 1941.

THE Oersted Medal of the American Association of Physics Teachers for "notable contributions to the teaching of physics" was awarded at the Philadelphia meeting to Dr. Robert A. Millikan, of the California Institute of Technology. Dr. Millikan, who was unable to be present, sent a message to the association entitled "Opportunities for Teachers of Physics."

IN recognition of contributions to aeronautical meteorology, which includes the development of an artificial means of dispelling fog, Henry G. Houghton, Jr., assistant professor of meteorology at the Massachusetts Institute of Technology, has been awarded the Robert M. Losey prize. The presentation was made on January 28 at the annual honors night dinner of the Institute of the Aeronautical Sciences by Commander F. W. Reichelderfer, chief of the U. S. Weather Bureau. Members of the committee of award were Commander Reichelderfer; Dr. Robert A. Millikan, chairman of the executive council of the California Institute of Technology; Dr. Karl T. Compton, president of the Massachusetts Institute of Technol-