direction of Professor A. H. Roffo, its founder. The original hospital consisted of one building. Now there are thirteen buildings, inclusive of the new pavilion, which occupy an area of 12½ acres. Its annual budget is 260,000 (Argentine) pesos (about \$78,550), with additional donations and endowments.

The work of the institute is done in three divisions: medical research, diagnosis and treatment and social welfare. The research activities are devoted to the experimental study of cancer, biochemistry, physical chemistry, experimental pathology, pathologic anatomy, tissue culture, radiobiology and experimental surgery. The diagnostic division has a dispensary for the early diagnosis and treatment of outpatients. Up to the beginning of 1939, 82,000 patients had been examined in the dispensary; clinical treatment is in the hands of specialists. The annual number of patients has risen from 1,772 in 1923 to 8,554 in 1938, the number of consultations from 6,767 to 91,752, the number of treatments from 3,900 to 50,279. The total number of treatments (end of 1938) was 354,000. In 1923, 422 persons were admitted; in 1938, 3,174; altogether 27,599. The division of social welfare does not confine itself to handling patients of the institute. It seeks to educate the public by means of pamphlets and lectures. A "cancer hour" is held every Saturday, in which the schools may participate. There is a visiting nurse service which accords special attention to carcinomatous housewives and mothers. There is also a school of nurses.

Dr. Roffo recently was made an Officer of the Legion of Honor at a ceremony at which the French Ambassador presented him with a check for a hundred thousand francs for the foundation of a fund for the study of cancer.

COOPER UNION ENGINEERING CAMP

Plans to establish an engineering camp for Cooper Union, New York City, on the Hewitt estate in the Ramapo Mountains near Ringwood, N. J., were adopted at a recent meeting of the Cooper Union Board of Trustees. Norvin Hewitt Green has offered to convey by gift a tract of 150 acres to the union as a memorial to his mother, the late Amy Hewitt Green, daughter of Abram S. Hewitt, former mayor of New York, and granddaughter of Peter Cooper. Title to the property, which will be known as the Green Engineering Camp and which includes twenty farm buildings and tenant houses, will pass to Cooper Union early in January. Development work will be started at once, and the camp will be opened in 1940 as a summer center of engineering education.

In describing Mr. Green's benefaction Dr. Gano Dunn, president of the union, pointed out that

the Cooper and Hewitt families have been intimately associated with the institution since its founding by Peter

Cooper in 1859 as a free school for the education of the working classes, and have made vital contributions to its progress.

For years, in the absence of an engineering camp of the kind enjoyed by many universities and other institutions of learning, the engineering students of Cooper Union have been obliged to learn the art of surveying by setting up their instruments and running their lines in Central Park, which a friendly city administration permitted them to do.

The camp site is especially adaptable to engineering work. Comprising large areas of meadow land and wooded slopes, the property is adjacent to a variety of geological formations and mines.

The trustees have decided to carry out at the camp not only the engineering activities related to surveying, but other activities associated with summer camps in connection with the development of the fine arts, and with the general objective of the social betterment of the students of Cooper Union.

All field work in engineering will be carried on at the Green Engineering Camp, thus making it possible to devote more of the regular school curriculum to languages, history and other liberal arts subjects under the department of humanities, created this year with a view of developing a rounded culture in Cooper Union students.

The limitations on education resulting from a strictly urban location are recognized. It is indeed fortunate that Cooper Union will now be enabled to offer its students, six sevenths of whom come from New York and Brooklyn, country advantages in education and recreation.

Administration of the camp will be in charge of Dr. Edwin Sharp Burdell, director of the union. While at the outset educational activities will be provided for the schools of engineering, it is planned eventually also to make provision for the art schools. Week-end expeditions of student and faculty groups will be a winter feature. Buildings will be remodeled to provide instrument rooms, blue printing and dark rooms, recreation and reading rooms, a social hall, a mess hall, a kitchen, store rooms, a general workshop for repairs and handicraft work, drafting rooms, a lecture hall and an infirmary. Facilities will ultimately be provided for outdoor sports, including tennis, baseball, volleyball and swimming.

THE OBSERVATORY OF THE CASE SCHOOL OF APPLIED SCIENCE

GIFTS amounting to the sum of \$123,000 have been made to the Case School of Applied Science in Cleveland for the purpose of enlarging the present Warner and Swasey Observatory, of providing it with an auditorium for public lectures and of installing a new and powerful telescope. These gifts have come mainly from those associated with the founders of the Warner and Swasey Company, Worcester R. Warner and Ambrose Swasey. The auditorium, a memorial to Mr. Warner, is the gift of his widow, Mrs. Worcester R.

Warner, and his daughter, Miss Helen Blakemore Warner. The telescope, the gift of Mrs. Edward Parker Burrell, is to be a memorial to her husband, who was for many years director of engineering for the Warner and Swasey Company. Others have provided additional gifts.

Construction of the addition will begin as soon as working plans are completed. The present observatory, situated at Taylor and Brunswick Roads, East Cleveland, was a gift to Case School in 1920 from Mr. Warner and Mr. Swasey, who were both trustees of the college. The present observatory contains the 10-inch equatorial telescope which was originally in the private observatory maintained by the donors.

The new telescope will be an instrument of such power that it will be possible to photograph objects many million light years away. It will be mounted in a 28-foot dome and will have a 36-inch mirror and a 24-inch lens. The optics of the instrument are of recent design, which utilizes the best properties of the reflecting and of the refracting type of telescope.

Below the dome in which the telescope will be mounted will be an exhibition hall for the display of models, globes, transparencies and other visual exhibits. Adjoining the hall will be the auditorium, which will be of the amphitheater type and which will seat 120 persons. On the same level will be two faculty offices. On a lower level, naturally lighted because of the contour of the land, will be a computation and recitation room, two research laboratories, a shop and living quarters for an observer. The addition, constructed of steel and concrete, will be faced with pressed brick with a stone trim to conform to the present building. Plans are being prepared by Walker and Weeks, of Cleveland. These have been developed from earlier drawings and models by O. M. Stone, assistant professor of engineering drawing at Case School.

EXPEDITIONS OF THE FIELD MUSEUM, CHICAGO

DR. CLIFFORD C. GREGG, director of the Field Museum, has issued a statement reviewing the activities of the museum during 1939. Among the expeditions of the year were the Magellanic Expedition of the Field Museum (which continues work in 1940), collecting zoological specimens in Peru, Bolivia, Chile, the shore of the Straits of Magellan and the island of Tierra del Fuego at South America's extreme tip. This expedition is sponsored by Stanley Field, president of the museum, and led by Dr. Wilfred H. Osgood, chief curator of zoology. Other members are Colin C. Sanborn, curator of mammals; Karl P. Schmidt, curator of amphibians and reptiles, and John Schmidt. A prime objective is the assembling of data to supple-

ment the work of Charles Darwin, who explored the more remote parts of this area.

The Field Museum Archeological Expedition to the Southwest, also sponsored by President Field, was led by Dr. Paul S. Martin, chief curator of anthropology, who was assisted by several other archeologists, and a party of excavators. Ruins of early Mogollon culture were investigated, and a large collection of artifacts obtained. Dr. Martin discovered traces of cultural developments that took place during a 1,500-year period which had previously been a blind gap to archeologists.

Comprehensive collections of the flora of Guatemala were made by two botanical expeditions, one sponsored by Sewell Avery and led by Paul C. Standley, curator of the herbarium; the other sponsored by President Field and led by Dr. Julian A. Stevermark, assistant curator of the herbarium. An important collection of fossil mammals, including a genus hitherto unknown to science, was made by an expedition in western Colorado, led by Bryan Patterson, assistant curator of paleontology. Dr. Fritz Haas, curator of lower invertebrates, and Staff Taxidermist Leon L. Walters, conducted an expedition in Florida which collected marine animals and made studies of invertebrate life. An expedition to South Dakota and Nebraska, led by Paul O. McGraw, of the division of paleontology, collected skeletal material representing various species of extinct mammals. Dr. Francis Drouet, curator of cryptogamic botany, is leader of an expedition collecting plants in Mexico and the southwestern United States. The Sewell Avery Zoological Expedition to British Guiana, which had begun operations in 1938. completed its work and returned to Chicago early in 1939. Emmet R. Blake, assistant curator of birds, was the leader.

THE NEW YORK MEETING OF THE AMER-ICAN PHYSICAL SOCIETY

THE two hundred and thirty-third regular meeting of the American Physical Society will be held in New York City on Friday and Saturday, February 23 and 24, as a joint meeting with the Optical Society of America and the Inter-Society Color Council. Simultaneous sessions for the reading of contributed papers of the American Physical Society and the Optical Society of America will be held on Friday and Saturday, February 22 and 23, at Columbia University. A special symposium of invited papers on "Optical Methods for the Study of Molecular Structure" will be presented at a joint session on the morning of February 23, in the Pupin Physics Laboratories. The following papers will be presented: "The X-Ray Diffraction Method," by Dr. E. B. Warren, of the Massachusetts Institute of Technol-