

of specimens identified every year as a service to the public, this work included special studies of many families of plants.

Other speakers were: Dr. H. A. Gleason, assistant director and head curator, on "Important Publications from the Garden Herbarium"; Dr. H. N. Moldenke, associate curator, on "Important Collections in the Herbarium"; E. J. Alexander, assistant curator, on the "Relation of the Herbarium to Horticultural Progress"; Dr. W. H. Camp, assistant curator, on "The Herbarium in Scientific Research," and Dr. J. H. Barnhart, on "The History of the Garden Herbarium." In his address Dr. Barnhart called attention to the circumstance that several parts of the herbarium had received special names in commemoration of former members of the staff. The first to be so honored was Professor L. N. Underwood, who died in January, 1907. A year later the entire fern collection was officially designated the "Underwood Fern Herbarium," and a bronze tablet was installed recording the fact. In 1934, Mrs. Britton's work was commemorated in the naming of the moss collection the "Elizabeth Gertrude Britton Moss Herbarium," and in the following year the general herbarium was designated the "Britton Herbarium," in memory of the first director of the garden.

While slightly exceeded by the United States National Herbarium in Washington in its specimens of flowering plants, the herbarium of the New York Botanical Garden ranks first in the country in plants of certain regions; for example, the southeastern states, the West Indies and Bolivia, and in the flora of Asia. It also stands first in mosses and in myxomycetes (a low order of plants somewhat akin to the fungi), and ranks among the first in its collections of algae and fungi.

Altogether, the herbarium contains 1,388,833 specimens of flowering plants and ferns; 177,000 mosses; 61,400 liverworts; 87,500 algae, and nearly 305,000 fungi, including lichens, making a total to date of 2,019,000 specimens. The two millionth to be accessioned was a specimen of a rare *elamatis* collected in Kentucky last summer by Dr. Gleason, who with John Dwyer, a graduate student from Fordham, was making an extensive collecting trip through the eastern and central states.

Special studies being carried out at the garden by members of the staff are:

Dr. H. A. Gleason, head curator, is working in the Melastomes, an American group of nearly 4,000 species, a number of which are in greenhouse cultivation.

Dr. H. N. Moldenke, associate curator, is studying the Verbena and Black Mangrove families throughout the world, and is also doing research on the plants of the Bible, the flora of the Watchung Mountains of New

Jersey, and on certain arrow poisons used in South America.

Dr. W. H. Camp, assistant curator, is working on the Blueberries and their relatives from the viewpoint of a botanist, and is also at present investigating the beeches, making special studies of the flowers and of the remnants of these trees from past geological ages.

E. J. Alexander, assistant curator, works on the flora of the Southern States, on the Cacti and other types of succulent plants—especially those which the Garden has on display in the conservatories. He is responsible for the correct naming of all the plants cultivated at the New York Botanical Garden.

B. A. Krukoff, honorary curator of economic plants, devotes his energies to plants of medicinal importance.

A number of graduate and fellowship students are also working on special plant problems at the Botanical Garden.

FIFTIETH ANNIVERSARY OF THE INSTITUTE OF EXPERIMENTAL MEDICINE IN LENINGRAD

DR. W. N. BOLDYREFF, now of Tucson, Arizona, writes to SCIENCE calling attention to the fiftieth anniversary of the Institute of Experimental Medicine which was founded at St. Petersburg by Prince A. P. Oldenburg in December, 1890, with the cooperation and advice of Louis Pasteur.

Dr. Boldyreff worked at the institute for many years. From the first young scientific men of promise were made directors of the separate laboratories. The chiefs of departments included I. P. Pavlov, physiology; M. V. Nezki (a Pole), biochemistry; S. N. Vinogradski (now vice-director of Pasteur Institute at Paris), microbiology; N. V. Uskov, pathological anatomy; S. M. Loukianov, pathology; H. J. Gelman, veterinary medicine; V. A. Kraiushkin (of the Pasteur vaccination against hydrophobia), and N. C. Shulz, practical bacteriology. Dr. M. V. Nezki had been a professor in the University of Bern, Switzerland, and Dr. S. N. Vinogradski was an associate of Louis Pasteur and had discovered the microbe acidifying ammoniac in the ground.

The institution worked not only for purely scientific purposes, but also for the application of new discoveries to the needs of every-day life such as the fight against different infectious diseases, the invention of better methods of disinfection, the elaboration of new drugs and methods of treatment of disease, etc. It was fully equipped. Much money was given for experimental work and for the salaries of investigators and other employees. The director of the institute (the first director was Dr. E. F. Sperk, the specialist in syphilology) and all assistants had furnished quarters in the building, situated in a beautiful park on the edge of the city. There was established also a cheap but excellent restaurant for employees.

The institute was attended by many young doctors and other scientific workers. Papers were published in its own journal, *Archives des Sciences Biologiques* both in Russian and French, and in the best foreign journals.

Here Pavlov did all his scientific work and completed classical experiments on digestion and conditioned reflexes. Many well-known scientific men graduated from the institution and many papers were published, some of them devoted to the discoveries made in the institute. A few of those who participated in its foundation are still living. Among these are Dr. S. N. Vinogradski (Paris) and Dr. V. G. Ushakov (Leningrad), who was at that time and later secretary of the council of the institute.

CONFERENCE IN HONOR OF LETA S. HOLLINGWORTH

A CONFERENCE on Education for the Gifted in honor of the late Professor Leta S. Hollingworth was held at Teachers College, Columbia University, on December 13 and 14. Dr. William F. Russell, dean of Teachers College, was honorary chairman of the conference and Dr. Herbert B. Bruner, professor of education, was chairman. The introduction to the printed program says: "This Conference on Education for the Gifted is held in honor of Leta S. Hollingworth, professor of education in Teachers College, whose untimely death last year brought to a close a brilliant career. Our discussions here are designed to promote increased activity in the discovery and education of the gifted—the task to which she so earnestly devoted herself and which she considered of paramount importance in our national life."

Speakers and their subjects at the opening meeting, over which Professor Lyman Bryson presided, included Dr. Nicholas Murray Butler, president of Columbia University, whose address was entitled "The Basic Problem," and Dean William F. Russell, who spoke on "The Importance of Social Capillarity." They were followed by a presentation of "Major Problems Regarding the Gifted"—The Place of the Gifted in Modern Life. In this discussion Lamont du Pont spoke from the viewpoint of industry; Spencer Miller, Jr., from the viewpoint of labor, and Bishop Francis J. McConnell, from the viewpoint of the ministry. Other speakers were Robert L. Thorndike, associate professor of education; Herbert B. Bruner, professor of education, and David E. Weglein, superintendent of schools, Baltimore, Md.

Friday afternoon was devoted to seminars, of which there were thirteen as follows: Who is the Gifted Child?; What Special Problems Are Encountered by the School Administrator in Providing for the Education of the Gifted and How May These Problems Be Solved?; What Is the Place of the Gifted in Modern

Life?; Gifted Children; their Educational Needs; Education of Gifted Pupils in Secondary Schools; How Can We Best Educate Teachers for Work with Gifted Children?; What Are the Physical and Mental Health Problems of the Gifted and How Can They Best Be Met?; Home Guidance of the Gifted Child; How Can We Release the Creative Energies and Develop the Creative Capacities of the Talented Gifted Child?; Research Problems in the Study of Gifted Children; How Do the Intellectually Gifted Evaluate Their Own Educational Experiences?; What Provision Should Be Made for the Education of Gifted Persons at the College Level?; How Should a School Be Organized to Provide for the Most Effective Education of the Gifted?

At the evening session on Friday, presided over by Dr. Arthur I. Gates, professor of education, Professor Rudolph Pintner gave an address on "Superior Ability," and Dr. Edward L. Thorndike, professor emeritus, spoke on "Gifted Children in Cities and Towns."

There was a display of books and miscellaneous work of gifted children from various schools and of testing materials and cumulative records, and demonstrations of tests on children of superior intelligence and a presentation of motion pictures taken by Dr. Hollingworth, showing the work in the Speyer School.

THE JOSIAH WILLARD GIBBS LECTURES OF THE AMERICAN MATHEMATICAL SOCIETY

At the meeting of the American Mathematical Society held at Vassar College in September, 1923, a resolution was adopted sanctioning the establishment of an honorary lectureship to be known as the Josiah Willard Gibbs Lectureship. The first lecture given under these auspices was on February 29, 1924, by Professor M. I. Pupin, of Columbia University, on the subject, "Coordination." Professor Veblen was then president of the society, and the purpose of the lectureship can perhaps best be summed up by quoting from his remarks in introducing the speaker.

In instituting the Willard Gibbs Lectures, the American Mathematical Society has recognized the dual character of mathematics. On the one hand, mathematics is one of the essential emanations of the human spirit,—a thing to be valued in and for itself, like art or poetry. Gibbs made notable contributions to this side of mathematics in his work on vector analysis and multiple algebras.

On the other hand, mathematics is the handmaiden and helper of the other sciences, both in their most abstract generalizations and in their most concrete applications to industry. In this field Gibbs may be justly described as transcendental,—even if we think only of his work in thermodynamics. His paper "On the Equilibrium of Heterogeneous Substances" is one of the foundation stones of physical chemistry.

It is hoped that the Willard Gibbs Lectures will remind