who, amid the blinding passions of war, with failing health and eyesight, never lost his mental vision of two main principles of his practical idealism, the necessity of friendship between the British Empire and the United States, and the necessity of some collective security for future peace, which from the first he strove to see embodied in a League of Nations.

He is remembered also as the lover of nature. In writings that combine the poetry and the science of bird observation, he has taught many to find the purest and most lasting joys of mind and heart.

Yet the two aspects of his life are not to be dissociated. If the strength, integrity and simplicity of his character made him for eleven years the notable representative of his country before the world as foreign secretary, and helped to give to the British Empire and her allies confidence and unity at the supreme crisis of fate, these qualities were drawn from the same well-springs of old English rural life which inspired him as a countryman, a naturalist and an author.

We therefore propose to erect to his memory a threefold memorial:

1. To set up a statue or bust in a central spot in London.

2. To acquire and make over to the National Trust "Ross Castle," the small hill-top crowned by an ancient earthwork which adjoins Chillingham Park in Northumberland, a favourite view-point of Lord Grey's, which he often visited from Fallodon.

3. To develop (by further endowment and otherwise) the existing scheme of research maintained by the British Trust for Ornithology at Oxford, of which university he was an undergraduate and in later years the chancellor, to form a permanent Institute of Bird Studies, to which his name would be attached.

STANLEY BALDWIN
COSMO CANTUAR
CREWE
G. M. TREVELYAN
HALIFAX
(*Chancellor of Oxford University*)
A. D. LINDSAY
(*Vice-Chancellor of Oxford University*)

Subscriptions from the United States may be made payable to J. P. Morgan and Company and sent to that firm at 23 Wall Street, New York City.

IN HONOR OF WILLIAM HALLOCK PARK

DR. WILLIAM HALLOCK PARK, Biggs professor of preventive medicine, professor of bacteriology and director of the bacteriological laboratories of the New York University College of Medicine, and for forty-one years until his retirement last December director of the bacteriological laboratories of the New York City Board of Health, has been granted leave of absence for a year, after which he will become professor emeritus. The council of New York University has adopted the following minute:

William Hallock Park, born in the City of New York, December 30, 1863, was graduated from the College of the City of New York in 1883 and obtained the degree of Doctor of Medicine at Columbia University in 1886. After serving three years at Roosevelt Hospital he went to Vienna for a year of post-graduate training, returning to New York in 1890 to assume practice as a specialist in diseases of the ear, nose and throat. At the same time he carried on research at the College of Physicians and Surgeons, and made a special investigation of diphtheria through the technique of bacteriological diagnosis at the Willard Parker Hospital which commanded the interested attention of Dr. Hermann M. Biggs, who at the time was a professor in the Medical College of New York University and also in charge of an important division of the New York City Health Department. As a result Dr. Park was appointed bacteriological diagnostician of diphtheria in the department, and director of its research laboratory in 1894. There, under his direction, the first municipal bacteriological laboratory was inaugurated, and methods of diagnosis, investigation, control and prevention of disease were originated which have since been adopted the world over. This venture into the field of public health marked a turning point in his career. For forty-two years he has continued his labors as active head of the public health laboratory, tending its growth from infancy to its present maturity as a great research institution. He has served as consulting bacteriologist to the New York State Department of Health since 1914, medical examiner in bacteriology since 1917, and consulting bacteriologist to the United States Quarantine Service since 1921.

Dr. Park's connection with New York University dates from 1898, when he was appointed adjunct professor of bacteriology and hygiene. A year later he was promoted to associate professor and in 1900 professor, a chair which he held until 1933, when he was designated the first incumbent of the Biggs chair of preventive medicine. He served for a year, ad interim, as dean of the Medical College. From 1895 to 1932, he served the Willard Parker Hospital as visiting bacteriologist, and since then in a consulting capacity. In the two institutions, the college and the hospital, he carried forward year after year intricate and intensive studies in the prevention of human ills and the alleviation of distress. The history of the science of bacteriology parallels in time the years of his career, and it is a history wherein his own name will ever be gratefully commemorated.

From his early studies of diphtheria came the development of the wonderfully efficacious antitoxin. And from such representative studies of Dr. Park as those of the tubercle bacilli, the dysenteries, the typhoid bacilli and typhus carriers, the curative value of spinal administration of tetanus antitoxin, the bacteriology of respiratory infections, the bacteriology of the pneumococcus, methods of producing immunization against diphtheria, and the treatment of pneumonia, have come incalculable benefits to mankind everywhere. But the worthiest citation of all is undoubtedly his gift to little children of immunity against the dread ravages of diphtheria. There are un-

told thousands of people living to-day who but for his work would undoubtedly have succumbed to that malady in childhood. Productivity has been the keyword of his career. Notwithstanding long hours of classroom and laboratory work with medical students, and still longer hours of meditative vigil, painstaking experimentation and patient analyses of research, he has a large bibliography to his credit representing significant contributions to leading scientific journals throughout the years. In addition he has published certain text-books that have proved to be perennially authoritative. Many of the leading bacteriologists of the country owe their training to him; indeed few there are of eminence in that field who have not at some time come under his tutelage.

Dr. Park has long been an active member of leading societies in the fields of his scientific interests in this country and abroad, and has served as president of the Society of Experimental Pathology, and the American Public Health Association. Various medals of distinction have been bestowed upon him, as well as foreign decorations and honorary degrees by four universities.

For his service as a teacher, scientist and public benefactor and for the personal qualities that have endeared him to all, the Council of New York University is enduringly grateful; and in granting him leave of absence for a year, to be followed by retirement with the designation of professor emeritus, they would express their great admiration, appreciation and affection and wish for him throughout the remainder of his years continued usefulness, and the comfort and happiness he so richly deserves.

INVESTIGATIONS OF TROPICAL STORMS BY THE U. S. WEATHER BUREAU

ACCORDING to a statement made by Dr. W. R. Gregg, chief of the U. S. Weather Bureau, an attempt will be made during the next hurricane to obtain accurate information in regard to the details of the various processes of a tropical storm. About 100 small very light instruments that automatically record conditions in the air through which they are borne have been prepared. Balloons will carry them up into one of the tropical storms that usually pass over part of the southern United States between the first of July and the middle of November.

If the "eye" of the storm—the calm area, sometimes 10 miles in diameter, in the center of winds that blow at velocities up to 200 miles an hour—passes over one of the special observation stations, the instruments will go up at about 15-minute intervals. Ordinarily they will be released every 1½ to every 3 hours, the interval depending on the path and the speed of the storm. These factors will determine also whether one, two or all three stations will take part in the program.

The instrument to be used for the observations—devised several years ago by a Belgian meteorologist—weighs only about 1¼ ounces and keeps an accurate record of conditions aloft. It fits into a little box either of thin aluminum sheet or of fabric doped with aluminum paint to make it waterproof and give a highly reflecting surface as a protection against the sun. A trap at one end lets any water from clouds or rain that may enter the box escape without touching the recording elements.

The instruments will be released at three special stations—Maxwell Field, near Montgomery, Ala., and Jackson, Miss., by the Weather Bureau, and Augusta, Ga., by the Massachusetts Institute of Technology, which is cooperating with the government in this study. The forecaster for the Eastern District of the Weather Bureau, at Washington, D. C., will give the signals for the release of the instruments and will set their schedules.

The instrument is tied at the intersection of three bamboo sticks placed at right angles to each other and attached to a small spherical balloon inflated with enough hydrogen gas to make it rise at the rate of 650 to 800 feet a minute. The light bamboo framework acts as a parachute in retarding the fall of the instrument when the balloon bursts—about 10 to 20 miles above the earth. When the balloon bursts contact is broken and no records are made during the descent. Breaking the contact at the time of the release, as well as jarring that might confuse the records on the plate, is prevented by attaching the instrument to the balloon with a rubber cord, which takes up the vibration as the balloon is launched.

Five pieces of red cloth attached to the bamboo framework are designed to attract the attention of passers-by to the fallen instrument. A tag offering payment for the return of the recording device to the Weather Bureau Station at Boston, Mass., is also attached. At Boston the glass plates will be removed and read under a microscope.

COURSES IN APPLIED PHYSICS AT THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

A NEW group of courses in applied physics designed to meet the growing demand for workers with special training for the application of physics in the solution of industrial problems has been announced at the Massachusetts Institute of Technology by Professor John C. Slater, head of the department of physics. The new course begins this autumn and is in charge of Professor George R. Harrison, director of the research laboratories of experimental physics, who has been appointed director of applied physics.

President Karl T. Compton, who as chairman of the National Science Advisory Board studied the possibilities of applying the knowledge and discoveries of science in industry, is also chairman of the American Institute of Physics, which after a study of several years has suggested the type of training that will be