extent that so many thousands of acres could feel the personal touch of any man, every section of every national park felt the personal touch of this great conservationist and lover of humanity. And they responded generously to that touch.

FIELD CONFERENCE OF THE NEW YORK STATE GEOLOGICAL ASSOCIATION

THE New York State Geological Association convened for the ninth annual field conference on May 12, at Newburgh, New York. In the morning thrust contacts of the Precambrian crystallines of the Highlands on the Paleozoic sediments were examined at Snake Hill, near Newburgh, and at Cornwall-on-Hudson, and the Precambrian intrusives were studied at the east end of Bear Mountain Bridge. After stopping for lunch at Mohansic Country Club, the cars were driven along the parkways to northern Manhattan and The Bronx, New York City; exposures of the Fordham gneiss, Inwood marble and Manhattan schist were visited. In the evening, a dinner was held at Columbia University in conjunction with the Geology Journal Club.

On Saturday, May 13, the first stop was at the diabase with included olivine zone along the state road above Edgewater, New Jersey. After crossing the Palisades, the remainder of the morning was spent in the Belmont-Gurnee quarry at Granton, where a contact of Newark sediments and intrusive basalt is well exposed; many specimens of the branchiopod *Estheria ovata* Lea and of ganoid fishes were obtained. After lunch in Jersey City, the party visited the exposures of the Staten Island serpentine and the moraines on Staten Island, New York.

About eighty members, many of them undergraduates in the universities and colleges in the state, attended the excursion. Professor R. J. Colony, of Columbia University, was president.

G. MARSHALL KAY,
Secretary

GROUP CONFERENCES AT THE COLD SPRING HARBOR BIOLOGICAL LABORATORY

As a part of its policy of fostering a closer relationship between biology and the basic sciences, the Biological Laboratory at Cold Spring Harbor is inaugurating a plan, according to which it invites each year a group of mathematicians, physicists, chemists and biologists, actively interested in some one phase of quantitative biology, to carry on their work, and to engage in a group conference at the laboratory during the summer. The aim is that every important aspect of a given subject should be adequately represented from the physical and chemical, as well as from the biological, point of view.

"The Potential Difference at Interfaces and its Bearing upon Biological Phenomena" is the subject this year, and the following men will be in residence.

Harold Abramson, biochemistry, College of Physicians and Surgeons, Columbia University.
David R. Briggs, chemistry, The Otho S. A. Sprague Memorial Institute, University of Chicago.
Barnett Cohen, physiological chemistry, the Johns Hopkins School of Medicine.
Kenneth S. Cole, physiology, College of Physicians and Surgeons, Columbia University.
Stuart Mudd, bacteriology, the School of Medicine, University of Pennsylvania.
Hans Müller, physics, Massachusetts Institute of Technology.
Eric Ponder, biology, Washington Square College, New York University.

In conjunction with this meeting, a series of lectures and symposia will be given by members of the group in residence and by other invited speakers. The latter include:

Robert Chambers, biology, Washington Square College, New York University.
Hugo Fricke, biophysics, the Biological Laboratory.
Herbert S. Gasser, physiology, Cornell University Medical College.
Duncan A. MacInnes, physical chemistry, Rockefeller Institute for Medical Research.
L. Michaelis, physical chemistry, Rockefeller Institute for Medical Research.
W. J. V. Osterhout, botany, Rockefeller Institute for Medical Research.
Donald D. Van Slyke, chemistry, Rockefeller Institute for Medical Research.

The symposia will take place on each Wednesday in July, and on Monday, July 24, and Friday, July 28, beginning at 10 A. M., and continuing, with ample time for discussion, throughout the day. Individual lectures will be given on other days, according to a schedule which may be obtained from the laboratory.

PROFESSOR HARRISON AS CROONIAN LECTURER

DR. ROSS G. HARRISON, Sterling professor of biology at Yale University, has been invited by the Royal Society to give the Croonian Lecture in London, and will speak on a lectureship which began with Alexander Stuart in 1738, the roster of which includes the distinguished anatomists and physiologists of Great Britain during two centuries, with very few from other countries. A correspondent writes:

Professor Harrison, who last year received the honorary degree of doctor of science from Trinity College, University of Dublin, in recognition of the fact that "in his own science he is one of the most famous discoverers and teachers of the New World," was the first to show that

it is possible to remove groups of individual cells from the living body, and grow them in the body juices in such a way that their behavior can be watched under the microscope. This growing of groups of living cells is known as "tissue culture," and has constituted a great step forward in the study of living cells and consequently in the investigation of diseases. He has employed this method to trace the development of embryonic cells into differentiated cells, and his transplantations of pieces taken from an embryo into another place, or even into a different embryo, have elucidated much that was previously obscure.

Managing editor of the *Journal of Experimental Zoology* since its foundation in 1904, Dr. Harrison was the first to observe directly the outgrowth of the nerve fiber, showing that it is a mode of protoplasmic movement. His links with zoologists in this and other countries are many. He is a member of the National Academy of Sciences and the American Philosophical Society, a fellow of the American Academy of Arts and Sciences, and has been honored by scientific societies of Germany, France, Italy, Norway and Austria.

Professor Harrison's most intimate connections, however, are through the students trained in the Osborn Zoological Laboratories at Yale. During his directorship a total of 58 Ph.D. degrees have been conferred upon students from the department of zoology, of whom some forty are now professors in twenty-five institutions. In addition, post-doctoral research students come each year to Yale University to study his technique. In recent years they have included investigators from China, Russia, Belgium, France, Germany, etc.

The lectureship to which Professor Harrison has been invited was founded by William Croone, a successful practising physician and lecturer to the Company of Surgeons in London, who contributed information far in advance of his time on muscular physiology and the embryology of the chick. He was one of the founders of the Royal Society and in the remarkable group of its early members, which included Sir Isaac Newton, Sir Christopher Wren, Halley, the astronomer, and the two great diarists, Evelyn and Samuel Pepys, his contributions to the discussion of the society are noted in the records.

SCIENTIFIC NOTES AND NEWS

THE University of Wisconsin will confer, at the annual commencement exercises on June 19, the doctorate of laws on Dr. Arnold Sommerfeld, professor of mathematics at the University of Munich, and the doctorate of science on Dr. James Aston, professor of mining and metallurgical engineering at the Carnegie Institute of Technology, Pittsburgh.

THE degree of Sc.D., *honoris causa,* will be conferred by the University of Cambridge on the Marchese G. Marconi and on Sir Frederick Gowland Hopkins, Sir William Dunn professor of biochemistry.

THE University of Liverpool has conferred the degree of doctor of science on Dr. Geoffrey Ingram Taylor, Yarrow research professor of the Royal Society.

FOR the development and promotion of agricultural exploration and the introduction of new and valuable plants into the United States, the committee on the Marcellus Hartley Fund of the National Academy of Sciences has awarded its Public Welfare Medal to Dr. David Fairchild, of the Division of Foreign Plant Introduction, Bureau of Plant Industry of the U. S. Department of Agriculture. The medal is given for "eminence in the application of science to the public welfare."

FOR chemical research work of high significance as pure science and of equally high value in its practical application, two research workers, Dr. F. B. La Forge and Dr. H. L. J. Haller, of the U. S. Department of Agriculture, have been awarded the Hillebrand Prize of the Chemical Society of Washington, for the determination of the chemical structure of rotenone, a new substance used in insect poisons.

DR. DAVID EUGENE SMITH, professor emeritus of mathematics at Teachers College, Columbia University, has been decorated by Persia for his study of the mathematical works and philosophy of Omar Khayyam.

DR. E. D. MERRILL, director of the New York Botanical Garden, was elected a foreign member of the Linnean Society of London at the meeting on May 11.

DR. C. TATE REGAN, director of the British Museum (Natural History), has been elected a foreign member of the Royal Danish Academy.

A WIRELESS dispatch to *The New York Times* states that Professor Albert Einstein, who has received a professorship in the Collège de France, has been proposed for membership in the French Academy of Sciences. After favorable discussion, the proposal was postponed for inquiry as to whether Professor Einstein's election was possible under the academy's rules, which state that before a foreigner can be named as an associate member he must first have served as a corresponding member.

AT a special dinner on May 5 at which the faculty of Harvard University and the governing boards of the university and of the Peter Bent Brigham Hos-