

vidual old trees that from time to time die off being constantly replaced, any timber so reserved would always be available in a serious national emergency such as a prolonged war. If it is sold and cut for lumber there will be nothing there for a long period to come except a growth of young saplings.

This is not a matter admitting of much more postponement if anything worth while is to be done. Every year of delay makes it more difficult and leaves in the national forests smaller and poorer areas available for reservations. The first-class timber on the public lands is rapidly disappearing. We must not be deceived by statements of vast areas of "primeval forest," or land that has never been logged, in the public domain. They exist, but they consist for the most part only of small and scrubby trees due to poor or rocky soil, high altitude, insufficient rainfall or other unfavorable factors; timber that the lumbermen will not buy until they can no longer get any that is better.

WILLARD G. VAN NAME

#### THE AWARD OF THE FIRST CHARLES REID BARNES LIFE MEMBERSHIP OF THE AMERICAN SOCIETY OF PLANT PHYSIOLOGISTS

At the Kansas City meeting of the American Society of Plant Physiologists, in December, 1925, official action was taken by the society to honor and perpetuate the memory of Charles Reid Barnes, first professor of plant physiology at the University of Chicago, by establishing at each succeeding annual meeting an honorary life membership in the society. To this honor is to be elected each year some member distinguished as an investigator in the field of plant physiology. Those so honored are to be known as the Charles Reid Barnes life members of the American Society of Plant Physiologists. It was felt that such a living memorial to Dr. Barnes is one that he himself would have approved, and that it is a fitting tribute to the man who had perhaps greater spiritual and inspirational influence upon students of plant physiology than any other American worker in that science. A large number of those now engaged in physiological botany trace their spiritual lineage directly to Dr. Barnes or indirectly to him through those who came within his personal influence.

The first Charles Reid Barnes life member was elected at the recent Philadelphia meeting of the society and it is fitting at this time to devote a brief space to the great teacher in whose honor the society has established this life membership, and whose tragic death seventeen years ago was mourned by all who knew him. Barnes was fortunate in having Dr. John

M. Coulter as his first instructor in botany, at Hanover College, where he took his first degree in 1877. He worked for a time at Harvard with Asa Gray and began his professorial career at Purdue University in 1882. For 28 years he led an exceptionally energetic life in the field of botany. From 1887 to 1898 he was in charge of the botanical work at the University of Wisconsin, where he built up a very active and vigorous department. In 1898 he joined Professor Coulter at the newly organized University of Chicago, and for twelve years guided the development of plant physiology in that institution.

Dr. Barnes was a teacher with rare gifts; the clearness and precision of his presentation of the subjects he taught has seldom been equalled. He captivated the imagination of his students for the field in which he labored. His cordial friendliness, his frank honesty of opinion, his searching analysis of problems, his keen critical estimation of the work of others, all endeared him to every one who studied under his guidance. The reviews that appeared in the *Botanical Gazette* during the 27 years of his co-editorship of that journal with Professor Coulter, show him to have been the keenest American critic plant physiology ever held. His conception of the science was well in advance of his period.

Those who came under his personal guidance in research found in Barnes a wonderful leader, whose clear and versatile vision enabled him always to suggest productive modes of attack upon all manner of problems. He was a wise counsellor, a splendid administrator, an incisive but ever helpful critic, and always a real friend to his students and colleagues.

His death in 1910 was caused by falling on an icy side-walk near his home, shortly after he had started to go to the university for his usual busy day. He became unconscious, and died a day or two later, on February 24, 1910. Those who knew him are proud to honor his memory. His name should be written high in the annals of the rapidly developing science, to which he gave his best.

After careful consideration of the many names that were proposed, the committee on the award of the first Charles Reid Barnes life membership in the American Society of Plant Physiologists has made the award to Dr. Burton Edward Livingston, professor of plant physiology and director of the Laboratory of Plant Physiology of the Johns Hopkins University and permanent secretary of the American Association for the Advancement of Science.

Dr. Livingston began his work in plant physiology at the University of Michigan in 1895 and the following year became an assistant in that subject, under Professor Frederick C. Newcombe, who had recently

returned from Pfeffer's laboratories in Leipzig. He received the B.S. degree in 1898, taught five different sciences in the high school of Freeport, Ill., for one year, and then went to Chicago, where he became a graduate student and assistant in plant physiology under Dr. Barnes. He was in charge of Barnes's laboratory course at Chicago, from 1899 to 1905, and gave several lecture courses. He received the Ph.D. degree in December, 1901, being the first doctor in plant physiology with Dr. Barnes. His dissertation, published as a book in 1903, is on "The Rôle of Diffusion and Osmotic Pressure in Plants." After leaving Chicago in 1905 he was in charge of soil fertility investigations in the U. S. Bureau of Soils at Washington for a year and prepared, with several assistants, the first analytical studies of toxicity in unproductive soils in the humid regions. In 1906 he became a staff member of the Desert Laboratory of the Carnegie Institution of Washington, at Tucson. He spent the year 1908 in research with Professor von Goebel at Munich and spent some time in Pfeffer's laboratory at Leipzig. He was called to the Johns Hopkins University in 1909, to be professor of plant physiology and became also director of the laboratory of plant physiology there in 1913. Dr. Livingston has exerted a large influence upon the development of ecological physiology through his researches and those of his students and associates, upon transpiration, soil moisture, soil oxygen, the mineral nutrient relations between plants and their environment and the influence of climatic conditions on plants. He has originated several devices which have been very useful in measuring quantitatively the dynamic influence of edaphic and climatic conditions. Chief among these are improved types of atmometers, auto-irrigators for the control of soil moisture conditions, and porous porcelain "soil points" for measuring the water-supplying power of soils in a quantitative manner.

In addition to these activities, Dr. Livingston has been engaged in several editorial enterprises: *Physiological Researches*, *Botanical Abstracts*, *Plant Physiology* and *Palladin's Plant Physiology*, which has reached three editions in the English translation. He was the first editor-in-chief of *Botanical Abstracts* and contributed much toward getting that journal started. He has been permanent secretary of the American Association for the Advancement of Science since 1920.

Appreciating his long and varied services, the undersigned committee is happy to announce the award to Dr. Livingston, *honoris causa*, of the first Charles Reid Barnes Life Membership of the American Society of Plant Physiologists. This award is the first in the chain of a living memorial to Dr. Barnes,

whose memory is revered by all who knew him and should be perpetuated as long as plant physiology remains in the service of mankind.

The Committee on the Award of the first Charles Reid Barnes Life Membership of the American Society of Plant Physiologists:

R. P. HIBBARD  
A. E. MURNEEK  
F. E. LLOYD  
G. W. SCARTH  
C. A. SHULL, *chairman*.

## SCIENTIFIC EVENTS

### EXPERIMENTAL CYTOLOGY AT THE TENTH INTERNATIONAL CONGRESS OF ZOOLOGISTS AT BUDAPEST

THE ninth International Congress of Zoologists, which was held in March, 1913, at Monaco, decided to have its tenth session in 1916 at Budapest, under the chairmanship of the undersigned. War conditions made it unfortunately impossible to adhere to the date determined upon for 1916 and the session of the tenth congress had to be postponed. The present international situation, however, now permits of this congress being held next year.

I have the honor, therefore, with the approval of the permanent committee of the International Congress of Zoologists, to announce that its tenth congress will be held at Budapest from the 4th to 9th of September, 1927, inclusive, and that all zoologists and friends of zoology are most cordially invited to attend.

In addition to the sections already represented at past congresses, a section for experimental cytology will be inaugurated at this time.

The complete program of the congress will be issued during the course of the year and sent to all those interested.

DR. G. HORVÁTH,  
*President Tenth International Congress of  
Zoologists.*  
Hungarian National Museum,  
Budapest, September 4, 1926.

A few additional remarks concerning the next to last paragraph of the above announcement are necessary:

The new section for experimental cytology came into existence in the following way: Professor G. Levi, of Turin, and Professor Rhoda Erdmann, of Berlin-Wilmersdorf, were desirous of meeting with other cytologists, from Europe and elsewhere, so that this newly-created special branch might correlate its discoveries with those of the older branches.