

SCIENCE

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No. 2111

<i>Botany and Human Affairs</i> : DR. A. F. WOODS	573	<i>State Academies:</i>	
<i>The Absorption of Sound in Gases</i> : PROFESSOR VERN O. KNUDSEN	578	<i>The Ohio Academy of Science</i> : WILLIAM H. ALEXANDER. <i>The Iowa Academy of Science</i> : DR. JOSEPH C. GILMAN	594
<i>Obituary:</i>		<i>Scientific Apparatus and Laboratory Methods:</i>	
<i>Hugo de Vries</i> : DR. ALBERT F. BLAKESLEE. <i>William Parker Cutter</i> : PROFESSOR EDWIN G. CONKLIN. <i>Memorials. Recent Deaths</i>	581	<i>An Illuminator for the Binocular Dissecting Microscope</i> : DR. J. ALLEN SCOTT. <i>A Modified Bulb Pipette</i> : DR. JOHN C. LOTZE. <i>New Tower Filling Material</i> : PROFESSOR A. McLAREN WHITE	595
<i>Scientific Events:</i>		<i>Special Articles:</i>	
<i>The Medical Curriculum in Great Britain; The President's Statement to the Council of the American Chemical Society; Institutions Selected for Work by Fellows of the National Research Council; Engineering in the Summer Session of Columbia University</i>	584	<i>Potential Rhythms of the Cerebral Cortex during Sleep</i> : DR. ALFRED L. LOOMIS, PROFESSOR E. NEWTON HARVEY and GARRET HOBART. <i>The Centriole and Its Rôle in Mitosis as Seen in Living Cells</i> : DR. L. R. CLEVELAND	597
<i>Scientific Notes and News</i>	586	<i>Science News</i>	6
<i>Discussion:</i>		SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. McKEEN CATTELL and published every Friday by	
<i>Juvenile Characters of Royal Palms</i> : DR. O. F. COOK. <i>Synchronous Firefly Flashing</i> : GERRIT S. MILLER, JR. <i>Scientific Men and the Newspapers</i> : HOWARD W. BLAKESLEE. <i>Biological Abstracts</i> : PROFESSOR PHILIP P. CALVERT	590	THE SCIENCE PRESS New York City: Grand Central Terminal Lancaster, Pa. Garrison, N. Y. Annual Subscription, \$6.00 Single Copies, 15 Cts.	
<i>Reports:</i>		SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the Association may be secured from the office of the permanent secretary, in the Smithsonian Institution Building, Washington, D. C.	
<i>Appropriations for Grants-in-Aid by the National Research Council</i> : DR. ISAIAH BOWMAN	592		

BOTANY AND HUMAN AFFAIRS¹

By Dr. A. F. WOODS

UNITED STATES DEPARTMENT OF AGRICULTURE

"BOTANY and Human Affairs" is a rather broad subject to present in twenty-five minutes. But I am advised by Director Gager that various special phases will be discussed in detail by other speakers, so that I may confine my remarks to a more general treatment of the larger aspects of the subject, creating, if you please, a background for the real pictures to come later in this program.

All animals, including man, are dependent for food directly or indirectly on some form of green or chlorophyll-bearing plant life. The study of these organisms, that make man's life possible, is of as great fundamental importance as the study of man himself.

Botany in its broad sense is the systematized knowl-

edge we possess of the vegetable kingdom as a whole. It includes all that is known about plants, their history through the ages, as we get it in geology and paleontology, the description and classification of all known forms of living plants; the study of their origin, life relationships and development (embryology, genetics); their structure; (histology and cytology and morphology) their physiology, their composition, modification, mutation and evolution; their cultivation, propagation and breeding; their diseases, their relation to each other and to other organisms and to the factors of their environment. From the economic aspect it is evident that this includes much of agriculture, forestry, horticulture, pharmacognosy, floriculture and cognate subjects.

At the lower end of this great kingdom of plant life we find the beginning of what we know as living

¹ Address delivered at the opening program of the twenty-fifth anniversary exercises of the Brooklyn Botanic Garden, May 13, 1935.

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Contents for July 1935

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- MARION AMMERMAN and ROBERT E. WATERMAN. Studies of crystalline vitamin B. IV. Injection method of assay. One figure.
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