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AGRICULTURE AND MODERN SCIENCE¹

CONTENTS

<i>Agriculture and Modern Science: THE HONORABLE W. M. JARDINE</i>	333
<i>Research in Colleges and Professional Schools:</i>	
<i>A Report of Suggestions from Three Conferences: PROFESSOR MAYNARD M. METCALF</i>	338
<i>Research Experiences and Problems in a Small College: DR. H. B. GOODRICH</i>	342
<i>William Healey Dall: DR. C. HART MERRIAM</i>	345
<i>Scientific Events:</i>	
<i>Professor Einstein on Newton; The Freeman Fund Traveling Scholarship; Awards from the Milton Fund at Harvard University; Reno Meeting of the Pacific Division of the American Association</i>	347
<i>Scientific Notes and News</i>	350
<i>University and Educational Notes</i>	353
<i>Discussion and Correspondence:</i>	
<i>The Fish Neostethus in Siam: DR. HUGH M. SMITH. Critical Potential Measurements: DR. JOHN G. FRAYNE. "Data is" or "Data are": A. P. MORSE. The Indication of Quotations: JOHN W. ARNOLD</i>	353
<i>Scientific Books:</i>	
<i>Cheney on Coffee: PROFESSOR JOHN M. COULTER</i> ...	355
<i>Special Articles:</i>	
<i>Conifers and the Coal Question: PROFESSOR E. C. JEFFREY</i>	356
<i>The Pacific Science Association: PROFESSOR HERBERT E. GREGORY</i>	357
<i>Science News</i>	x

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I FEEL a special sense of appropriateness in speaking on such a subject as "Agriculture and Modern Science" at Yale University. Much work in agricultural science has been carried on in Connecticut from pioneer days down to the present, largely under the leadership of Yale professors and investigators.

The earliest scientific paper on agriculture by a resident of the English colonies was that of John Winthrop, Jr., first governor of Connecticut, on the "Description, Culture and Use of Maize," read before the Royal Society in 1663. The Rev. Jared Eliot, of Killingworth, Connecticut, in the next century, is believed to have been the first American to publish a book on agriculture. Eliot, by the way, was a chemist. In 1764 the London Society for the Encouragement of Arts awarded him a gold medal for his process of making iron and steel from black magnetic sand.

Modern scientific study of agriculture in America may be said to have begun with John P. Norton, who undertook his duties as first professor of agricultural chemistry at Yale in 1847. Professor Norton, after making a promising beginning, died at the early age of thirty. His plans were carried to fruition by his pupil, Samuel W. Johnson, who held the professorship of agricultural chemistry at Yale for forty years, from 1856 to 1896. Professor Johnson is recognized as the father of agricultural research in the United States. The work which he did in the fifties as chemist of the State Agricultural Society in the analysis of fertilizers "for the information and protection of farmers" and the exposure of frauds attracted wide attention. As early as 1854 he advocated the establishment in this country of agricultural experiment stations and wrote: "What agriculture most needs is the establishment of its doctrines. . . . If agriculturists would know, they must inquire. The knowledge they need belongs not to revelation but to science, and it must be sought as the philosopher seeks other scientific truth."

Due largely to Professor Johnson's efforts the agricultural experiment station idea first took shape in the Connecticut station, which began its career at

¹ Address of the secretary of agriculture, at Yale University, New Haven, Conn., March 28, 1927, at 8:15 P. M., under the auspices of the American Institute of Chemists.

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