

# SCIENCE

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## CONTENTS.

<i>Some Problems for Agricultural Chemists:</i> PROFESSOR E. B. VOORHEES.....	385
<i>The Teaching of Science in College:</i> PRO- FESSOR GEORGE H. MEAD .....	390
<i>Scientific Books:—</i>	
<i>Moulton's Introduction to Astronomy:</i> PROFESSOR W. J. HUSSEY. <i>Smith's Intro-</i> <i>duction to General Inorganic Chemistry:</i> PROFESSOR H. L. WELLS.....	397
<i>Scientific Journals and Articles.....</i>	399
<i>Discussion and Correspondence:—</i>	
<i>Discontinuous Variation:</i> PRESIDENT DAVID STARR JORDAN. <i>Vulcanism:</i> PROFESSOR CARL BARUS. <i>The Rigidity of the Earth:</i> PROFESSOR L. M. HOSKINS. <i>The Interior of</i> <i>the Earth:</i> DR. ALFRED C. LANE. <i>The</i> <i>Geographical Distribution of Students:</i> PROFESSOR RUDOLF TOMBO, JR.....	399
<i>Special Articles:—</i>	
<i>The Preservation of Surface Condenser</i> <i>Tubes in Plants using Salt or Contami-</i> <i>nated Water Circulation:</i> W. W. CHURCH- ILL .....	405
<i>Quotations:—</i>	
<i>The Next International Tuberculosis Con-</i> <i>ference .....</i>	409
<i>Current Notes on Meteorology:—</i>	
<i>Climate and Altitude in Africa; Monthly</i> <i>Weather Review; Central Low Pressure in</i> <i>a Tornado; Notes:</i> PROFESSOR R. DEC. WARD .....	410
<i>Botanical Notes:—</i>	
<i>A New Flora of Colorado; The North Amer-</i> <i>ican Chareae; A Moss Book:</i> PROFESSOR CHARLES E. BESSEY.....	411
<i>Central Building of Iowa State College of</i> <i>Agriculture and Mechanic Arts:</i> PROFESSOR L. H. PAMMEL.....	413
<i>Sir William Perkin and the American Jubilee</i> <i>of the Coal Tar Industry.....</i>	413
<i>Scientific Notes and News.....</i>	414
<i>University and Educational News.....</i>	416

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## SOME PROBLEMS FOR AGRICULTURAL CHEMISTS.<sup>1</sup>

THE topic of my paper is not intended to convey the idea that I have anything new or startling to suggest, or that I intend to point out the shortcomings of the American agricultural chemist. My purpose is mainly to state what an experience of twenty-five years has suggested in the way of chemical investigations that seem now to be essential, if we are to maintain, or increase, the fertility of our soils, and thus retain the position that we have acquired as an agricultural people. We have in this country quite as capable chemists, I am sure, as there are in any country, yet the conditions existing here in the past, and that do exist now, in a way, have been such as to demand that our agricultural chemists should follow lines of a semi-technical, rather than of an investigational, character, in the sense that they have necessarily applied themselves to the problems of crop utilization, rather than to those having to do with the principles involved in their production. The principles of agricultural chemistry, which the early investigators established, and which were collated and formed into a science by the aid of the immortal Liebig, have served as the foundation for our work, and this basis has been sufficient to enable us to make great progress from the economic standpoint, so long as there were, in a sense, new worlds to conquer and new

<sup>1</sup>An address delivered before the American Chemical Society at the Ithaca meeting.

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