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<i>New Methods in Spectroscopy</i> : PROFESSOR GEORGE R. HARRISON .....	225
<i>Forces Driving the Respiratory Act</i> : DR. ROBERT GESELL .....	229
<i>Scientific Events</i> : <i>The Best Memorial Fellowships; Nominations to the Council of the American Association of Museums: Symposium on the Thermodynamics of Hydrocarbons; Pioneers on the American Frontiers of Industry. Recent Deaths</i> .....	233
<i>Scientific Notes and News</i> .....	236
<i>Discussion</i> : <i>Science in China</i> : PROFESSOR WILLIAM S. COOPER. <i>Injury to Trees from Sulfur Dioxide Fumes of Electric Refrigerators</i> : DRS. MALCOLM A. MCKENZIE and LINUS H. JONES. <i>Anthelmintic Inactivity of Fresh Pineapple Juice in Vivo</i> : DR. E. KUITUNEN-EKBAUM .....	238
<i>Societies and Meetings</i> : <i>The American Association of Scientific Workers at Columbus</i> : PROFESSOR ENOS E. WITMER .....	241
<i>Reports</i> : <i>Grants for Research of the Virginia Academy of Science</i> : DR. E. C. L. MILLER. <i>Grants for Research of the American Geological Society</i> .....	242
<i>Special Articles</i> : <i>The Possible Identity of Vitamin H with Biotin and Co-enzyme R</i> : PROFESSOR VINCENT DU VIGNEAUD .....	
and OTHERS. <i>Isolation of a Crystalline Derivative of Pantothenic Acid</i> : D. W. WOOLLEY. <i>The Structure of Pantothenic Acid</i> : PROFESSOR ROGER J. WILLIAMS and DR. RANDOLPH T. MAJOR. <i>Preliminary Studies on Mating Reactions of Enuclate Fragments of Paramecium bursaria</i> : DRS. VANCE TARTAR and TZE-TUAN CHEN .....	243
<i>Scientific Apparatus and Laboratory Methods</i> : <i>A Method of Substituting Fine Sapwood for Malt Agar in Culturing Test Fungi</i> : DR. ERNEST E. HUBERT. <i>Filing Photographic Copies of Articles</i> : ELMA T. EVANS and R. MAX GOEPP, JR. ....	247
<i>Science News</i> .....	8

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## NEW METHODS IN SPECTROSCOPY<sup>1</sup>

By Professor GEORGE R. HARRISON

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IN expressing my appreciation of, and gratitude for, the high honor which is bestowed in the award of the Rumford Medals, I am mindful of the obligation which is laid upon a medallist to hold in mind the true significance of such an award. In all human affairs there are values which are of so intangible a nature as to require frequent concrete symbolization if we are to keep their import before us; this is an occasion of such symbolization. I accept these medals, not as a reward for accomplishment, but as symbolic of a vast array of aspirations which we are gathered here to celebrate: the determination of our society that the search for truth shall be prosecuted diligently; the desire that men shall be encouraged in that prosecution; the hope that opportunity for such search may

<sup>1</sup> Address on the occasion of the Award of the Rumford Medals, of the Academy of Arts and Sciences, Boston, October 11, 1939.

continue in constantly increasing measure; the conviction that every addition to our knowledge of the world in which we live, no matter how slight, brings one step closer the day when men shall be freed from the terrors which have beset them all through the ages—terrors which, though at times they may seem overwhelming, do in fact gradually become less.

Not the least of our duties of realization this evening is the appreciation of the progress which has taken place since 1839 in one of those branches of physical science which Count Rumford desired to further when he arranged for the provision of medals in recognition of researches on heat and light. Later it will be my pleasant duty to recount some of the recent developments in the study of light with which I have had the good fortune to be associated, but before I come to the specific portion of my address which deals with

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