

SCIENCE

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INDUSTRIAL RESEARCH IN SMALL ESTABLISHMENTS

CONTENTS

<i>Industrial Research in Small Establishments:</i>	
MORRIS E. LEEDS	445
<i>The Naturalist's Place in his Community:</i>	
W. E. ALLEN	448
<i>Charles Conrad Abbott and Ernest Volk: PRO-</i>	
<i>FESSOR G. FREDERICK WRIGHT</i>	<i>451</i>
<i>Scientific Events:—</i>	
<i>International Science and the War; The</i>	
<i>League of Red Cross Societies; The Tariff</i>	
<i>on Scientific Apparatus; The New York</i>	
<i>Botanical Garden; Gift to the Rockefeller</i>	
<i>Institute for Medical Research</i>	<i>453</i>
<i>Scientific Notes and News</i>	<i>456</i>
<i>University and Educational News</i>	<i>458</i>
<i>Discussion and Correspondence:—</i>	
<i>Substitutes for the Words Homozygous and</i>	
<i>Heterozygous: DR. FRANK J. KELLEY. Some</i>	
<i>Port Hudson Outcrops in Louisiana: THE</i>	
<i>LATE F. V. EMERSON</i>	<i>458</i>
<i>Quotations:—</i>	
<i>The Recompense of Scientific Workers</i>	<i>460</i>
<i>Special Articles:—</i>	
<i>A Method of Assigning Weights to Original</i>	
<i>Observations: DR. LEROY D. WELD</i>	<i>461</i>
<i>The American Chemical Society: DR. CHARLES</i>	
<i>L. PARSONS</i>	<i>464</i>

IN the past few years, and particularly during the war, research in connection with industry has had much consideration. Most of our large technical societies have devoted sessions to its discussion and have listened to admirable papers on the subject. I hope not to retrace the ground thus covered. In this audience the vital importance of research to our technical industries would not need arguing even if it had not been amply argued. In these discussions research has been considered as something to be carried on in large well-organized laboratories, and for that reason possible only for large companies, for associated companies managing a cooperative laboratory or for government laboratories and the like. I believe that this way of thinking of research unnecessarily restricts it, and that differently conceived its usefulness to small as well as large establishments would become evident and might result in its large extension.

The various activities covered by such titles as "Research, Development and Technical Control" are those which should be assumed by a research department in a small business. In order to avoid a cumbersome name for such a department, I want to make a plea for a definition of technical research which some of you may think degrading. Doubtless you are accustomed to thinking of research as an adventure into the realms of the absolutely unknown. A department capable of research in this sense will only be possible in a small business when that business happens to have in it a real scientist. But every technical business (and what manufacturing business is not technical?) is continually confronted with the need of more information than is possessed by its regular staff in regard to processes, characteristics of materials, etc., and if it is to develop realizes that it must find new fields for