

SCIENCE

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THE CALCULUS IN TECHNICAL LITERATURE

CONTENTS

<i>The Calculus in Technical Literature:</i> PROFESSOR ERNEST W. PONZER	225
<i>Richard Klebs:</i> DR. GEORGE F. KUNZ	234
<i>The Association of Official Agricultural Chemists</i>	235
<i>Scientific Notes and News</i>	236
<i>University and Educational News</i>	238
<i>Discussion and Correspondence:—</i>	
<i>Air in the Depths of the Ocean:</i> CARL HERING. <i>The Lighting of a Jet of Hydrogen:</i> B. F. LOVELACE	239
<i>Quotations:—</i>	
<i>The Administration of the Department of Agriculture</i>	240
<i>Scientific Books:</i>	
<i>Punnett's Mendelism:</i> PROFESSOR W. E. CASTLE. <i>Duggar's Plant Physiology:</i> PROFESSOR BURTON E. LIVINGSTON	240
<i>Notes on Meteorology and Climatology:</i> ANDREW H. PALMER	246
<i>Special Articles:—</i>	
<i>The Nitrogen and Humus Problem in Dry-farming:</i> PROFESSOR ROBERT STEWART	248
<i>The American Chemical Society</i>	250

It would be difficult to get a majority report on either the quantity or quality of the calculus used by practising engineers in any country even if their individual opinions on the matter could be obtained. Evidences of the many conflicting views likely to be held are presented in the testimony along this line contributed by former students of ours who, after a brief experience in the technical world, give us their impressions of how much they have been called upon in actual practise to use the various mathematical principles with which they wrestled so laboriously in freshman and sophomore college days.

Instructors of mathematics in universities where sections of engineering majors are formed have, no doubt, heard recited, as I have, the many and varied experiences of these young engineers with the problems involving mathematics which arose at various times in their brief experience. Perhaps some cub engineer, who already had done a piece or two of engineering work worth while, has told you of how he has never yet had to use his calculus and that he wonders why we keep on teaching it. Perhaps you have been told, as I have, that if the prospective engineers are thoroughly grounded in the differentiation and integration of u^n , and know what they mean and how to use them, they will then have as much calculus as they are likely to use in the problems which may arise. Again, you may have heard another say, as I have, that he is already using all the mathematics he ever learned—and then some—and that he wished he had taken various