

# SCIENCE

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## CONTENTS

<i>The Basis of Individuality in Organisms:</i> PROFESSOR O. C. GLASER .....	219
<i>The Necessity for Biological Bases for Legislation and Practise in the Fisheries Industries:</i> G. W. FIELD .....	224
<i>Grants for Scientific Research:</i> PROFESSOR CHARLES R. CROSS .....	229
<i>Karl Schwarzschild:</i> DR. J. A. PARKHURST.	234
<i>Report on Infantile Paralysis</i> .....	234
<i>Scientific Notes and News</i> .....	235
<i>University and Educational News</i> .....	237
<i>Discussion and Correspondence:—</i>	
<i>Culture Media for Paramecia and Euglena:</i> PROFESSOR R. M. STRONG. <i>Severe Restrictions to Normal Geographic Cycle:</i> DR. CHARLES KEYES. <i>Ugo Schiff:</i> PROFESSOR J. BISHOP TINGLE .....	238
<i>Scientific Books:—</i>	
<i>Chamberlin on the Origin of the Earth:</i> PROFESSOR JOSEPH BARRELL .....	239
<i>Proceedings of the National Academy of Sciences:</i> PROFESSOR EDWIN BIDWELL WILSON.	244
<i>Special Articles:—</i>	
<i>Soil Bacteria and Phosphates:</i> PROFESSOR CYRIL G. HOPKINS AND ALBERT L. WHITING.	246
<i>The American Chemical Society:</i> CHARLES L. PARSONS .....	249

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## THE BASIS OF INDIVIDUALITY IN ORGANISMS<sup>1</sup>

### INTRODUCTORY

To enter upon the "higher criticism" of the concept individuality, is far beyond my powers. Even the humble attempt to think of it, in the organic realm, in what I conceive to be the simplest terms, offers difficulties most of which must be bequeathed in their entirety to future generations. Yet to point these out and to take a few soundings, unsatisfactory though they be, may not prove entirely futile even at this time.

For me, the basis of individuality in organisms is the mechanism by which living things, despite profound and constant change, keep themselves capable of identification. Some of the changes through which organisms pass are so radical that by common consent we treat them separately under the head of development, but since there is no evidence that living things become individuals at a particular point in their history, we may expect to find anywhere in the life-cycle the mechanism upon whose workings the possibility of identification rests. For obvious reasons the arrangements that make for constancy must occur in their least complicated form in the simplest of all the stages of development.

Fortunately, since it forces us at once to engage with fundamentals, the beginnings of development offer no refuge from our most insistent problem. We habitually identify a given organism at two more or

<sup>1</sup> Read at a joint symposium of the American Society of Zoologists and Section F of the American Association for the Advancement of Science, Columbus, Ohio, December 30, 1915.