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CONTENTS

<i>Early Terrestrial Conditions that may have favored Organic Synthesis:</i> PROFESSOR T. C. CHAMBERLIN, DR. R. T. CHAMBERLIN	897
<i>University Registration Statistics:</i> PROFESSOR RUDOLF TOMBO, JR.	911
<i>James Fletcher</i>	916
<i>The Smithsonian Institution</i>	917
<i>The Baltimore Meeting</i>	918
<i>Scientific Notes and News</i>	920
<i>The Resignation of President Eliot</i>	921
<i>University and Educational News</i>	922
<i>Discussion and Correspondence:—</i>	
<i>Aftonian Sands and Gravels in Western Iowa:</i> DR. B. SHIMEK	923
<i>Scientific Books:—</i>	
<i>The National Antarctic Expedition:</i> DR. W. H. DALL. <i>Parkes's Hygiene and Public Health:</i> PROFESSOR GEORGE M. KOBER. <i>Snyder's Soils and Fertilizers:</i> PROFESSOR E. W. HILGARD. <i>Lucien Poincaré's The New Physics and its Evolution:</i> PROFESSOR W. S. FRANKLIN	923
<i>Scientific Journals and Articles</i>	929
<i>Special Articles:—</i>	
<i>The Determination of the Clay Content of Soils:</i> C. C. FLETCHER. <i>Notes on the Atrophy of the Eye of Raja erinacea:</i> W. M. SMALLWOOD	930
<i>The Convocation Week Meetings of Scientific Societies</i>	931
<i>Societies and Academies:—</i>	
<i>The Geological Society of Washington:</i> PHILIP S. SMITH. <i>The Torrey Botanical Club:</i> TRACY E. HAZEN, W. E. MURRILL, MARSHALL A. HOWE. <i>Section of Geology and Mineralogy of the New York Academy of Sciences:</i> DR. CHARLES P. BERKEY. <i>Washington Section of the American Chemical Society:</i> J. A. LECLERC	933

EARLY TERRESTRIAL CONDITIONS THAT MAY HAVE FAVORED ORGANIC SYNTHESIS

THERE is a wide gap between the inorganic carbon compounds, as we now know them in nature, and the much more highly complex carbon compounds which are the material basis of living beings. It is a prevalent view that this gap can not be bridged by natural processes under existing conditions. On the face of things this view seems to be supported by the testimony of experience. This experience, however, when critically examined, is not altogether conclusive. Even if it could be shown beyond question that the chain of carbon compounds necessary to bind the inorganic to the organic never is built up under present conditions, there would still remain a legitimate ground of doubt in the possibility that this may be due to predaceous plants and animals, especially bacteria, which attack the carbon compounds at the first stages at which they become available for food and thus cut off the evolving series before it is complete. In this it is assumed that the formation of the more complex carbon compounds can come about only as the result of a long series of synthetic steps, and that at some of these stages, probably at many of them, the products would be suitable food for existing beings, especially for the almost omnivorous and ubiquitous bacteria. This prolonged evolution may thus be regarded as an extremely precarious process in the presence of predatory organisms; may indeed be regarded as practically prohibitive

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