

SCIENCE

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISHING THE
OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN ASSOCIATION
FOR THE ADVANCEMENT OF SCIENCE.

FRIDAY, FEBRUARY 16, 1906.

CONTENTS.

<i>The American Association for the Advancement of Science:—</i>	
<i>Is Mutation a Factor in the Evolution of the Higher Vertebrates? Section F—Zoology: DR. C. HART MERRIAM.....</i>	241
<i>Section F—Zoology: PROFESSOR C. JUDSON HERRICK</i>	257
<i>Scientific Books:—</i>	
<i>Thorndike's The Elements of Psychology: PROFESSOR E. B. DELABARRE. Rutherford on Radio-activity: PROFESSOR C. BARUS.....</i>	260
<i>Scientific Journals and Articles.....</i>	262
<i>Societies and Academies:—</i>	
<i>The Philosophical Society of Washington: CHARLES K. WEAD. The Biological Society of Washington: E. L. MORRIS. The Geological Society of Washington: ARTHUR C. SPENCER. The Society of Geohydrologists: M. L. FULLER.....</i>	263
<i>Discussion and Correspondence:—</i>	
<i>A New World for the Blind: DR. GEORGE M. GOULD. Color-associations with Numerals: DR. EDWARD S. HOLDEN. The Yellow Fever Mosquito: FREDERICK KNAB.....</i>	268
<i>Special Articles:—</i>	
<i>The Primeval Atmosphere: PROFESSOR RALPH H. MCKEE.....</i>	271
<i>Current Notes on Meteorology:—</i>	
<i>Temperature in Cyclones and Anti-cyclones; A Laboratory Manual; Notes: PROFESSOR R. DEC. WARD.....</i>	274
<i>A Colorado School of Forestry.....</i>	276
<i>The Geological Survey of Illinois.....</i>	276
<i>The Memorial of Major Walter Reed.....</i>	277
<i>Scientific Notes and News.....</i>	277
<i>University and Educational News.....</i>	280

MSS. intended for publication and books, etc., intended for review should be sent to the Editor of SCIENCE, Garrison-on-Hudson, N. Y.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

IS MUTATION A FACTOR IN THE EVOLUTION OF THE HIGHER VERTEBRATES?¹

THE stir created among botanists and horticulturists by the recent work of de Vries, particularly by his Berkeley lectures (1904) on 'The Origin of Species and Varieties by Mutation,' has led certain zoologists to believe that species of animals as well as plants may arise by the sudden assumption of new characters. Thus Davenport, in a recent review, expresses the conviction that 'as good an argument might be made from the zoological side as de Vries has made from the botanical.' The promulgation of these views by so eminent a student of evolution as Davenport, in connection with the circumstance that more or less similar views are held by others, has led me to reexamine certain groups of birds and mammals, of which I had previously made systematic studies, for the purpose of discovering evidence, if such exists, of the formation of species by mutation.²

But first let us be sure of de Vries's meaning. He states that individual plants of a certain species of evening primrose

¹ Address of the vice-president and chairman of Section F—zoology—at the New Orleans meeting of the American Association for the Advancement of Science.

² It is important that the terms used by de Vries should be understood. What we systematists have been in the habit of calling spontaneous variations or 'sports' he calls 'mutations'; what we call 'individual variations' he calls 'fluctuations'; and what we call the 'characters' of species he calls 'qualities.'