

SCIENCE

VOL. LXIII FEBRUARY 26, 1926 No. 1626

CONTENTS

<i>Isolation or Cooperation in Research:</i> DR. VERNON KELLOGG	215
<i>The Scope of Bibliographies:</i> DR. J. STROHL	218
<i>Carlos Werckle:</i> DR. PAUL C. STANDLEY	221
<i>Scientific Events:</i>	
<i>The Rumford Fund; The New Metallurgical Laboratories at the Pittsburgh Experiment Station; The Britten Bill to Extend the Use of the Metric System in the United States; Resolutions on the Freedom of Teaching; Geological Sciences at Pasadena</i>	223
<i>Scientific Notes and News</i>	225
<i>University and Educational Notes</i>	229
<i>Discussion and Correspondence:</i>	
<i>Morbidity of the American Indian:</i> DR. HAVEN EMERSON. <i>The Brown's Park Formation:</i> O. A. PETERSON. <i>The Quotations of Scientific References:</i> DR. HENRY LEFFMANN. <i>Simplified Literature Citations:</i> PAUL HANLY FURFEY	229
<i>Scientific Books:</i>	
<i>Annals of Eugenics:</i> PROFESSOR S. J. HOLMES	232
<i>Scientific Apparatus and Laboratory Methods:</i>	
<i>New Methods to Measure the Rate of Flow Produced by the Gills of Oyster and other Molluscs:</i> DR. PAUL S. GALTSOFF	233
<i>Special Articles:</i>	
<i>Displaced Series in the Spectrum of Chromium:</i> DR. C. C. KIESS and O. LAPORTE. <i>The Perfect Stage of Cylindrosporium Pomi:</i> PROFESSOR R. C. WALTON and C. R. ORTON	234
<i>Science News</i>	x

ISOLATION OR COOPERATION IN RESEARCH¹

THE phrase cooperation and coordination has become a familiar slogan in a number of fields of human activity. It is the slogan of an organization of scientific men with which I am connected. But not all scientific men accept it as a desirable slogan. Some scientific men think cooperation and coordination in science not only not desirable things to promote, but positively undesirable things to attempt to bring about. Part of this difference of opinion exists because there is no unanimity of understanding of what is meant by cooperation and coordination. But part of it exists because there is an honest disagreement as to the relative value of scientific men working as isolated individuals or as groups of individuals with a more or less well-defined program of work to be achieved.

Cooperation and coordination imply a certain degree of organization, and this word also brings its uncomfortable reactions. While scientific men will agree that organization is a good thing in business and industry, in factory production and in marketing, in carrying on war and managing a fleet, some of them do not at all like the word organization used in connection with science. They say that organization is out of place in science. They say that science, like music and art, ought not to be, and can not successfully be, organized. They ask if Copernicus, Galileo, Faraday, Darwin and Einstein could have been "organized." I am sure the answer is that they could not. Which is not at all to say, however, that much scientific work can not be advantageously organized, nor many scientific workers much aided by cooperating and coordinating measures. Even the Darwins can be helped by organized measures to remove material obstacles from their path; measures to relieve them of all distracting and wasteful exertions so that all their time and energy can be concentrated on their great adventures.

There are about six thousand professional working biologists in this country. But how many are Darwins? There are about seven hundred fellows and members of this society, but how many Hagens, Harrises, Walshs and Fitchs are there among us? That is to ask, how many of us scientific men are

¹ Annual public address before the Entomological Society of America, December 30, 1925, Kansas City, Missouri.

SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. McKeen Cattell and published every Friday by

THE SCIENCE PRESS

Lancaster, Pa. Garrison, N. Y.
New York City: Grand Central Terminal.
Annual Subscription, \$6.00. Single Copies, 15 Cts.

SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the association may be secured from the office of the permanent secretary, in the Smithsonian Institution Building, Washington, D. C.

Entered as second-class matter July 18, 1923, at the Post Office at Lancaster, Pa., under the Act of March 3, 1879.

Science

63 (1626)

Science **63** (1626), x-236.

ARTICLE TOOLS

<http://science.sciencemag.org/content/63/1626.citation>

PERMISSIONS

<http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

Science (print ISSN 0036-8075; online ISSN 1095-9203) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. 2017 © The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim to original U.S. Government Works. The title *Science* is a registered trademark of AAAS.