

One corollary may be drawn from this main proposition. From the point of view of its function, neither the hand as a whole nor any of its parts which become of any real significance can be regarded as a unit character. In the inception of the character there must have been some changes in the nutrition of the tissues—some change in the chemical mechanism of coordination—rendering such a departure possible, and such a change in a chemical system seldom arises without some associated change in conditions, near or remote. And when the character has developed to a stage at which it becomes significant, it acquires this significance only because it may enter into correlated or coordinated activity with other parts of the organism through the medium of chemical or nervous mechanisms, or both. It is difficult for a physiologist to regard any one portion of the body as an isolated mechanism acting without reference to any other mechanism. The tendency to regard a mechanism as an isolated mechanism has often led into error. And the attempts by experimental methods completely to isolate any mechanism so that it acts independently of every other has proved to be a difficult and for the most part impossible process under present laboratory conditions. In the living animal under its various conditions of existence, coordination is an indispensable process. And since the processes of evolution are concerned with living animals rather than dead ones, the mechanisms of coordination become the important factors in evolution. For it is these internal factors which modify in greater degree than any others the growth and development of the organism in any environment in which life is possible.

That Gaskell clearly recognized the importance of coordination and insisted upon it is clear from the extract quoted above. To recognize clearly amid the multiplicity of confusing detail the fundamental factors in organic evolution regarded from its functional side, is a noteworthy achievement. And to state the problem in terms of biological phenomena rather than in metaphysical terms is to give to other biologists a fruitful working hypoth-

esis. It is with a poignant sense of a personal as well as a scientific loss that many of us have read the recent announcement of his death. A kindly, sturdy, clear-eyed Briton, England need have little fear for the future of its science if she can produce more of his like.

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THE PHILADELPHIA MEETING OF THE
AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE
AND AFFILIATED SOCIETIES

THE preliminary announcement for the meetings of the American Association and those of the Affiliated Societies which will meet with it at Philadelphia during the coming convocation week has now been sent to members. The arrangements for the meeting are well under way and a strong local committee has been appointed, of which Provost Edgar F. Smith is chairman, Dr. J. H. Pennimann is vice-chairman, Dr. Philip P. Calvert is secretary, and Dr. George D. Rosengarten is chairman of the finance committee.

The first meeting of the council will be held on Monday, December 28, at 9 A.M. in the council room at Houston Hall. Registration will be held from 9 A.M. to 5 P.M. each day at headquarters in the Houston Club. The sections will meet for organization at 10 A.M. on Monday and will continue their sessions during the week.

The first general session will be held in Weightman Hall, university gymnasium, at 8 P.M. on Monday, December 28. The meeting will be called to order by retiring president Edmund B. Wilson, of Columbia University, who will introduce the president of the meeting, Dr. Charles W. Eliot, of Harvard. Addresses of welcome by the provost and the governor-elect will be replied to by President Eliot, after which retiring President Wilson will deliver his address on "Some Aspects of Progress in Modern Zoology."

There will be two public lectures, complimentary to the citizens of Philadelphia and

vicinity, the one on Tuesday night, at 8 o'clock, being by Dr. Dayton C. Miller on "The Science of Musical Sounds." On Wednesday night, at 8 o'clock, Dr. William H. Nichols will lecture on "The War and the Chemical Industry." The titles of the addresses by the retiring vice-presidents of the sections, to be delivered during the week before the respective sections of the association are as follows:

Vice-president Alfred D. Cole, before the Section of Physics: "Recent Evidence for the Existence of the Nucleus Atom."

Vice-president Henry C. Cowles, before the Section of Botany: "The Economic Trend of Botany."

Vice-president Walter B. Pillsbury, before the Section of Anthropology and Psychology: "The Function and Test of Definition and Method in Psychology."

Vice-president Frank Schlesinger, before the Section of Mathematics and Astronomy: "The Object of Astronomical and Mathematical Research."

Vice-president L. H. Bailey, before the Section of Agriculture: "The Place of Research and of Publicity in the Forthcoming Country Life Development."

Vice-president P. P. Claxton, before the Section of Education: "The American Rural School."

Vice-president O. P. Hood, before the Section of Engineering: "Safety Engineering."

Vice-president Joseph S. Diller, before the Section of Geology and Geography: "The Relief of our Pacific Coast."

Vice-president Theodore Hough, before the Section of Physiology and Experimental Medicine: "The Classification of Nervous Reactions."

Vice-president Judson G. Wall, before the Section of Social and Economic Science: "Social and Economic Value of Industrial Museums."

Vice-president Alfred G. Mayer, before the Section of Zoology: "The Research Work of the Tortugas Laboratory of the Carnegie Institution of Washington."

Vice-president Carl S. Alsberg, before the Section of Chemistry: "Fermentation."

A notable event of the meeting will be the organization of the new Section of Agriculture. Vice-president L. H. Bailey will deliver his address this year, and the new section will

hold its symposium at 3 p.m. on Wednesday, December 30, on the subject of "The Field of Rural Economics."

Other symposia will be held as follows: Section B and the American Physical Society at 3 p.m., Tuesday, December 29, on The Use of Dimensional Equations; Section K, at 2.45 p.m., Thursday, December 31, on the subject of Ventilation; at the same time, one will be held by Section F, the American Society of Naturalists, the Botanical Society of America and the Society of American Bacteriologists, on The Value of Zoology to Humanity; and at 11 a.m., Friday, January 1, by Sections C and K on the subject of The Rôle of Nitro-Organisms.

An unusual number of affiliated societies will meet with the association this year and will hold their sessions as indicated in another article in this issue concerning the Philadelphia meeting. The hotel headquarters will be at the Hotel Adelphia, Philadelphia's newest hotel. General headquarters will be at the Houston Club, University of Pennsylvania.

L. O. HOWARD

THE CONVOCATION WEEK MEETING OF SCIENTIFIC SOCIETIES

THE American Association for the Advancement of Science and the national scientific societies named below will meet at Philadelphia, during convocation week, beginning on December 28, 1914:

American Association for the Advancement of Science.—President, Dr. Charles W. Eliot, Harvard University; retiring president, Professor Edmund B. Wilson, Columbia University; permanent secretary, Dr. L. O. Howard, Smithsonian Institution, Washington, D. C.; general secretary, Professor William A. Worsham, Jr., State College of Agriculture, Athens, Ga.; secretary of the council, Mr. Henry Skinner, Academy of Natural Sciences, Logan Square, Philadelphia, Pa.

Section A—Mathematics and Astronomy.—Vice-president, Professor Henry S. White, Vassar College; secretary, Professor Forest R. Moulton, University of Chicago, Chicago, Ill.

Section B—Physics.—Vice-president, Professor Anthony Zeleny, University of Minnesota; see-