

in no way prevents my cordial appreciation of his work as a whole. Indeed, with the exception of those differences from Mr. Darwin, which it has been my object on the present occasion to consider, it appears to me that Mr. Wallace's latest work is one of the most interesting and suggestive in the whole range of Darwinian literature. And even these points of difference, it will be remembered, all arise out of the single difference before stated, namely, whether natural selection is to be regarded as the main, or as the exclusive, means of modification. Therefore, notwithstanding all that I have said on the Darwinian side of this momentous question, the fact that it still remains an open question compels us to recognize that Mr. Wallace's views with regard to it may eventually prove to be right; while, in any case, he is certainly to be congratulated on having lived to see the great movement which has recently taken place in the direction of those views. But to many of us it still appears that Mr. Darwin's judgment on this matter is the sounder one to follow. When a great generalization has been fairly established, there is always a tendency to exaggerate its scope; and, perhaps, in no respect was the wonderful balance of Mr. Darwin's mind so well displayed as it was in the caution with which he abstained from assigning to his vast principle of natural selection a sole prerogative. Moreover, as previously stated, the longer that he pondered the question, the more he became persuaded that the problem of organic evolution as a whole was too complex and many-sided to admit of being resolved by the application of a single principle. This conclusion, I believe, will eventually be justified by the advance of biological science; and, therefore, until some better reason is shown than has yet been shown for departing from it, I cannot help feeling that naturalists will do well to suspend their judgments, even if they are not so sure as they used to be touching the doctrines of "Darwinism," as these were left by Darwin.

GEORGE J. ROMANES.

BOOK-REVIEWS.

Stellar Evolution and its Relation to Geological Time. By JAMES CROLL. New York, Appleton. 12°. \$1.

THE basis of the theory advanced by Mr. Croll is that it is just as possible for the universe to have been created with a given amount of energy due to the motion of the created masses of matter, as with a given amount of matter; i.e., Mr. Croll would have the initial state that of a great number of cold bodies moving with high velocities. No one can deny the possibility of the truth of such a hypothesis, and many will find in Mr. Croll's deductions much that is suggestive. As it is not so probable that such initially moving bodies would collide as it is that bodies would if possessed only of motion of translation due to gravity, Mr. Croll thinks he sees in this universe created in motion a universe the better provided against the dissipation of its energy.

If we are to criticise the book, we would call attention to the unsatisfactory nature of all discussions of problems in mechanics, — and many of those in stellar physics are such, — by one who makes no pretence of being a mathematician. Yet as the mathematicians have not given the geologists all the time they call for that the solar system may have reached its present state with at least one planet built up of well ordered crystalline and fossiliferous rocks, it is to be expected that some flaw may be found in the calculations of the one or the theories of development of the other; and such suggestions as Mr. Croll has to offer will help in bringing the two parties to an agreement.

AMONG THE PUBLISHERS.

A. S. BARNES & CO. announce that the long-promised "The Three Germanys," by Theodore S. Fay, has now been issued.

— Callaghan & Co. will publish, on Oct. 1, Vvol. 6 of Von Holst's "Constitutional History of the United States."

— "King's Annotated Vest-Pocket Map of Massachusetts" is the most perfect small map of the State that has ever appeared.

— John C. Yorston & Co., Cincinnati, have just ready Henry A. Shepherd's "The Antiquities of Ohio," reprinted from the "Popular History of the State of Ohio."

— The Pacific Press Publishing Company have just issued "The Federal Government of Switzerland," by Bernard Moses, professor of history and political economy, University of California.

— John Ireland, 1197 Broadway, has the market for a new cook-book, "What One Can Do with a Chafing-Dish," just published by the author, H. L. Sawtelle. Experimenters in "light-house-keeping" will find the book just the one they have been in search of for so many years.

— Fords, Howard, & Hulbert have ready a new contribution, by a new writer, to the present all-absorbing discussion of the future of the negro in America, entitled "An Appeal to Pharaoh." The author confidently indorses it as "a radical solution of the negro problem."

— "Recollections of the Court of the Tuilleries," by Madame Carotte, is a recent book of reminiscences of the court of the last Napoleon, which is being widely read in France. It contains many memoirs of the Empress Eugénie. A translation is in hand, and will be published immediately by D. Appleton & Co.

— P. Blakiston, Son & Co., Philadelphia, have just ready a revised and enlarged edition of "Obstetric Nursing," by Theophilus Parvin, M.D., Professor of Obstetrics and Diseases of Women and Children in the Jefferson Medical College, and Obstetrician to the Philadelphia Hospital.

— The *Journal of Pedagogy* enters upon its third volume with the September issue. Dr. A. D. Mayo of Boston, the well known educational lecturer, stated in the annual address at the Ohio University, June 20, 1889, that "the *Journal of Pedagogy* is one of the two or three real educational papers in this country." It is published at Athens, Ohio.

— The author of the "Rise and Fall of the Confederate Government," Mr. Jefferson Davis, is not satisfied with the limited sale his work has had. He has complained so loudly of its failure as compared with the works of Grant and Sherman, that D. Appleton & Co., his publishers, have gained his consent to the appointment of arbitrators to decide the points at issue between them. The Messrs. Appletons attribute the slow demand made in the North for the book to the intense sectional spirit in which it is written.

— The Lounger writes in *The Critic*: "I heard the other day from an authority which I cannot dispute that 'The Century Dictionary' has cost the Century Co. over \$500,000, and my informant added parenthetically that when the undertaking was begun, the company had no idea that it would swallow up a sum approximating this. But like Topsey it 'grow'd.' It has taken nearly seven years of the time of some of the best experts and specialists in the country, at an annual expense of not very much less than \$100,000. This, I believe, is the first time the cost of making this great dictionary has been stated with any degree of accuracy."

— Mr. Paul Leicester Ford, whose address is No. 97 Clark Street, Brooklyn, N.Y., will have ready in September "American Bibliography: A Check-List of Bibliographies, Catalogues, Reference Lists, and Lists of Authorities of American Books and Subjects," a quarto volume printed on alternate pages, and containing 1,070 titles, arranged by subject under 19 divisions and 150 subdivisions, with a classification of contents and an author's index. At the same time Mr. Ford will bring out his "Franklin Bibliography: a List of Books written by or relating to Benjamin Franklin," an edition of 500 copies uniform in size with Bigelow's octavo edition of Franklin's Works. No fewer than 1,500 titles and references are promised, the list of works wholly or in part written by Franklin numbering 600, and his pseudonyms amounting to 60. There will be chronological, classical, and general indices, and mention of the libraries where the works may be consulted.

— "The Dominion of Canada is a device to keep the peace between those to whom Nature has allotted an irrepressible conflict." So says the writer of an article called "La Nouvelle France" in the September *Atlantic*, which will be the subject of discussion in the United States, and of something more than discussion in Canada. It shows how the French Canadian party is steadily gaining Canada to itself, and how by its consummate organization,