

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 cookbook, "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,

it is reconquering it from its nominal English rulers. The paper is an interesting pendant to that on French-Canadian literature in the August number; and it will, as has been said, no doubt call out some rejoinders. "The Isthmus Canal and American Control," by Stuart F. Weld, is a consideration of the policy promulgated by the United States government in its desire to control the inter-oceanic canal, with (as eighteenth century writers would put it) "some animadversions thereon." In fact, the magazine runs toward political questions, since Mr. Frank Gaylord Cook has an article on "James Wilson," a Scotchman who settled in Pennsylvania, and whose services in behalf of the Constitution of the United States are too little known. Still another sketch, of the "Americans at the First Bastille Celebration" (by J. G. Alger), completes the more important articles.

— Ginn & Company have just published "The Irregular Verbs of Attic Prose; their Forms, Prominent Meanings, and Important Compounds, together with Lists of Related Words and English Derivatives," by Addison Hogue, Professor of Greek in the University of Mississippi. The material treated in this book is much fuller than in the lists of irregular verbs in the grammars, and more accessible than in the lexicons. The book contains after the regular verbs, — pure, mute, and liquid, — the irregular verbs of Attic prose in alphabetical order. Prominent meanings and special uses of frequent occurrence are given, often illustrated by translated examples. The most important compounds are added, and also many related words, — forming a very practical sort of introduction to word-formation. The first declension alone is represented by about four hundred substantives, and this indicates the range of vocabulary. The English derivatives, of which there are over 450, should prove an attractive feature to teachers and students alike. To the latter they will be an additional support in learning some five or six hundred Greek words, and will broaden their knowledge of their own tongue.

— In the September *Magazine of American History* Mr. Robert Stiles, of Richmond, tells of "Lincoln's Restoration Policy for Virginia," which Admiral Porter, with whom Lincoln went to Richmond on its evacuation, represented differently in his "Incidents of the Civil War." The evidence here given for the first time to the public corrects even Grant's account of the matter in his "Memoirs," which is believed to have been written from hearsay. The illustrated feature of the magazine this month is the third chapter in Mrs. Lamb's "Historic Homes and Landmarks," the scene being the site of the Damen farm, between Wall Street and Maiden Lane, which for nearly half a century was outside the walled city of New York. Many new facts and figures have been exhumed by the accom-

plished historian, the most consequential landmarks are described, events are vividly portrayed which made the ground historic, and never before were the wonderful contrasts between the past and the present so sharply defined. A second illustrated paper, by T. H. Lewis, of St. Paul, is "The Old French Post at Trempeleau, Wis.," a recent discovery. Gen. J. W. De Peyster pays a tribute to the late "John W. Hammersley," whose portrait in steel forms the frontispiece to the issue. Milton T. Adkins writes the "Growth of a Great National Library," giving the history in brief of the library of Congress. William Seton contributes an article of interest on "St. John de Crèvecoeur, the First French Consul in New York after the Revolution." There is a sketch of "New York's Great Landholder, George Clarke," and a tribute to the late Mrs. Amasa J. Parker.

— A number of years ago Mr. J. C. Pilling undertook the compilation of a bibliography of North American languages. In the course of his work he visited the principal public and private libraries of the United States, Canada, and northern Mexico, carried on an extensive correspondence with librarians, missionaries, and others interested in the subject, and examined such printed authorities as were at hand. The results of these researches were embodied in a single volume. Since its issue he has had an opportunity to visit the national libraries of England and France, as well as a number of private ones in both these countries, and to revisit a considerable number in this country and Canada. A sufficient amount of new material has thus been collected to lead to the belief that a series of catalogues may well be prepared, each referring to one of the more prominent groups of our native languages. Of this series three have been published, relating respectively to the Eskimaian, the Siouan, and the Iroquoian families. The fourth has just been issued by the Bureau of Ethnology, and relates to the Muskogean languages; the fifth, now in preparation, will relate to the Algonquian. There are in the present catalogue 521 titular entries, of which 467 relate to printed books and articles and 54 to manuscripts. Of these, 469 have been seen and described by the compiler, — 429 of the prints and 40 of the manuscripts, — leaving as derived from outside sources 38 printed works and 14 manuscripts. Of those unseen by the writer, titles and descriptions of more than one-half have been received from persons who have actually seen the works and described them for him. In addition to these, there are given a number of full titles of printed covers, second and third volumes, etc., all of which have been seen and described by the compiler; while in the notes mention is made of 69 printed and manuscript works, 43 of which have been seen and 26 derived from other (mostly printed) sources.

INDUSTRIAL NOTES.

Guaranty Investment Company.

THE Guaranty Investment Company has adopted the policy of sending each year a committee of its investors to visit Kansas and Nebraska and report upon its loans and methods of business. The first report was made in 1888 and the second in 1889. The committee of 1888 consisted of Professor A. H. Berlin, principal of the high school, Montrose, Penn. (recently removed to Wilmington, Del.), and Major Theodore L. Poole, ex-United States pension agent, Syracuse, N.Y. They commenced their labors on Monday, June 18, 1888, by an examination of the books and statements submitted to them by the Western general manager, F. H. Wilson. Later, accompanied by the inspector of the company, they began an examination of some of the loans made by the company. This examination was commenced in Atchison County, Kan., on Tuesday, June 19, ending with Franklin County, Kan., Saturday, June 30. During this time they drove about four hundred miles and travelled by railroad seven hundred miles, and examined over forty loans made by the company. While they examined in detail over forty loans they also looked at many others in different counties that they did not have time to compare with the records. From their investigation and observations they recommended the loans made by the Guaranty Investment Company of Atchison, Kan., as a safe investment.

The committee for 1889 consisted of Dr. Francis W. Boyer, a

physician of Pottsville, Penn., M. H. Olin, president of the Citizens' Bank, Perry, N.Y., and Irving H. Tift, Esq., a lawyer of New York City. From the report, dated Atchison, Kan., June 29, 1889, it appears that their work began on Thursday, June 6, and ended on Friday, June 28. During this period they travelled over 2,150 miles, 665 of which were by carriage, and visited a large portion of Kansas and Nebraska. The trip took them through twenty-eight counties in Kansas and twenty-six in Nebraska, besides a large number of cities and towns in both States. Before commencing the journey they made an examination of the books and records of the company, submitted for inspection by the Western general manager, Mr. Frank H. Wilson. In conclusion they say that it is their opinion that Kansas and Nebraska are on the high road to prosperity, and do not see how it is possible for carefully placed farm mortgages in these States to be otherwise than safe, and they regard those of the Guaranty Investment Company to be of this character.

Any persons desiring further information upon points in the reports are requested to correspond with any member of either committee, and copies of testimonials received from persons who have made investments in these mortgages will be sent to any address. The company keeps on hand at its New York office at all times a large number of seven per cent guaranteed mortgages equal in security to any examined by the committees, and full information will be gladly given to any one, by Henry A. Riley, general Eastern manager, 191 Broadway, New York.