the auspices and guarantee of the University of Chicago, and will be free from the usual embarrassments attending the publication of a scientific magazine." In other words, it will not be depenpent upon a large list of subscribers for support. It is significant that the list of editors is largely made up of former members of the U.S. Geological Survey, but it is to be sincerely hoped that this will not prevent a free discussion in its pages of subjects upon which those outside of the Geological Survey happen to hold opinions opposed to those of the editorial staff. The editor-inchief says: "It is our desire to open the pages of the Journal as broadly as a due regard for merit will permit, and to free it as much as possible from local and institutional aspects." He likewise states what may be assumed to be the field aspired to be occupied by the new Journal, when he says that "there seems to be an open field for a periodical which specially invites the discussion of systematic and fundamental themes, and of international and intercontinental relations, and which in particular seeks to promote the study of geographic and continental evolution, orographic movements, volcanic co ordinations, and consanguinities, biological developments and migrations, climatic changes, and similar questions of wide and fundamental interest." This is assuredly a high and broad field, and to successfully cultivate it will require an equally broad and cosmopolitan management.

All the leading articles in the present number are by members of the editorial staff. The table of contents includes the following papers: "On the Pre-Cambrian Rocks of the British Isles," by Sir Archibald Geikie; "Are There Traces of Glacial Man in the Trenton Gravels?" by W. H. Holmes; "Geology as a Part of a College Curriculum," by H. S. Williams; "The Nature of the Englacial Drift of the Mississippi Basin," by T. C. Chamberlin; "Distinct Glacial Epochs and the Criteria for their Recognition," by R. D. Salisbury. There are also editorials, a review of a paper by James Geikie, analytical abstracts of current literature, and acknowledgments of articles donated to the Geological Departments of the University. The Journal will be issued semi-quarterly at the price of \$3 per annum.

Proceedings of the Ninth Annual Convention of the Association of Official Agricultural Chemists. Bulletin No. 35, U.S. Department of Agriculture, Division of Chemistry. 243 p. 8°.

The report of the Proceedings of the Association of Official Agricultural Chemists is looked forward to with expectation by every analyst. The carefully recorded laboratory experience with the "old" methods and the suggestion and regulation of the new, form together a valuable annual hardly to be dispensed with by any engaged in practical analytical work. The report of the meeting held in Washington Aug. 25, 26, and 27, 1892, being the ninth of the series, is fully as interesting as those of previous years, and, moreover, there is a very apparent improvement in the nature and method of discussion. The contents are familiar to all, being in brief as follows: Address of the President, Mr. N. T. Lupton, report on dairy products, on phosphoric acid, potash, nitrogen, soils, ash, cattle foods, sugar, fermented liquors, etc., with papers on the particular determinations, and, in conclusion, the official methods adopted in each case for the coming year.

Matter, Ether, and Motion. By A. E. Dolbear, Ph.D., Professor of Physics, Tuft's College. Boston, Lee & Shepard.

This book is written apparently for those who, having never made such a study of scientific work as would enable them to read scientific treatises, are disirous of getting a clear idea of the chief results of scientific investigation. For such this book will have a considerable value; which, however, would have been greater if the author had refrained from including a good many of his own theories. For instance, it is not good that the reader should be told, cocksuredly and in italics (pages 235-7), that "electricity is a phenomenon of rotating molecules." If the author had merely stated it as his own theory, the reader

CALENDAR OF SOCIETIES.

Society of Natural History, Boston.

April. 5. - George Lincoln Goodale, On Some Aspects of Australian Vegetation.

THE RADIOMETER.

By DANIEL S. TROY.

This contains a discussion of the reasons for their action and of the phenomena presented in Crookes' tubes.

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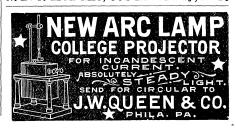
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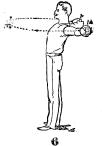


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would not be so apt to fall into error as when (as in the case considered) an entirely incorrect theory is embedded, labelless, in a mass of facts.

The book is very clearly written and the style is good. The only misprints in the book appear to be those on pages 80 and 81, where the velocity of light is twice given as 185 miles per second.

Magnetism and Electricity. By Arthur William Poyser, M A., Headmaster of Wisberh Grammar School. London and New York, Longmans, Green & Co.

This book is arranged in the same way as Silvanus P. Thomp son's text-book, and is intended for the same purpose. In some ways it is more complete than the latter, and the type is larger and clearer. The illustrations, especially, are well drawn, and it is with delight that one realizes the absence of most of the old stereotypes which have done duty in so many scores of textbooks. This is explained in the preface, where we learn that out of the 317 engravings in the book, more than 200 are from original drawings. At intervals throughout the book are given the directions for some 200 experiments, evidently carefully selected, and there are also twenty four sets of exercises given, with the answers to the more difficult examples in them. The book seems one of the best suited for teaching purposes that has appeared and is brought quite up to date. It needs amplifying, however, in those parts which relate to magnetic circuits and permeability.

Catalogue of American Localities of Minerals. By EDWARD S. DANA. From the 6th Edition of Dana's Mineralogy. New York, J. Wiley & Sons, 1893. 51 p. 8°.

THIS catalogue will serve a useful purpose in enabling students of mineralogy to readily ascertain just where in any State or Territory the best localities for minerals are. The information is classified under States, beginning with Maine and ending with Alaska, and followed by the Canadian provinces. A few general

remarks are made under each State, Territory or Province, and then follow the counties and the towns where the mineral localities are. It would have been made more valuable by the addition of an index to the minerals mentioned, since then it would have been possible to ascertain in a few moments where any particular species occurs.

AMONG THE PUBLISHERS.

S. C. GRIGGS & Co., Chicago, announce for early publication a work by Elizabeth A. Reed, author of "Hindu Literature," etc., entitled "Persian Literature, Ancient and Modern."

Mr. William Salter, the author of "Ethical Religion," has issued, through Charles H. Kerr & Co. of Chicago, a small book, entitled "First Steps in Philosophy." It is very plain and simple in style and as free as possible of technical terms; and in these respects is well adapted to its purpose. It omits so much, however, that it can hardly be deemed a sufficient introduction to philosophical study. It gives no general view of the problems of philosophy nor of the methods of studying it. The general theory of knowledge is not touched upon; and the question of theism is not raised, the first part of the book being wholly devoted to the doctrine of perception and the nature of matter. The author's views on these points are substantially those of the idealists; though be shows a certain leaning towards realism, and evidently is not quite satisfied with the idealistic theory. The second part of the book, which treats of ethics, is much more satisfactory, and will be read with interest even by those who do not accept the author's views. He discusses the nature and foundation of duty, criticises the doctrines of intuitionalists and utilitarians, and gives as his own theory one substantially like that of Hegel, which regards the complete realization of everyone's nature as the supreme end of action. Though not wholly satisfactory, this little book may serve to awaken the philosophic impulse in minds naturally susceptible of it, and be the propedeutic to more elaborate studies.

Exchanges.

[Free of charge to all, if of satisfactory character. Address N. D. C. Hodges, 874 Broadway, New York.]

Fine collection of microscopic slides for sale, or would exchange for first-class pneumatic bicycle. J. E. Whitney, Box 549, Rochester, N. Y.

For sale—A Zentmayer new model U. S. Army Hospital monocular stand. Price \$110, will sell for \$75. Address H. C. Wells, No. 151 Broadway, New York.

For sale—A complete set of the third series of the American Journal of Science (1870-1893) handsomely bound in single volumes in dark brown half morocco. Address G. H. Williams, 803 Cathedral Street, Baltimore, Md.

For sale, or for exchange for books on medicine or surgery, new editions only, a large geological library, containing nearly all the State and Government Reports since 1855. Will be pleased to answer letters of inquiry and give information. Address R. ELLSWORTH CALL, Louisville, Ky.

For exchange.—Slides of Indian Territory Loup Fork Tertiary Diatoms for other microscopic fossils. Address S. W. WILLISTON, Univ. of Kansas, Lawrence, Kans.

For exchange.—Will exchange an "Ideal" Microscope of R and J. Beck, London, 2 eye pieces 3 objectives, 3 inch, 1 inch, 1-6 inch; bull's eye con denser on stand, substage condenser, mechanica stage, etc., for any of the leading makes of type writers. Particulars by mail. DELOS FALL, Albion College, Albion, Mich.

For sale or exchange. — I have a few copies of my translation of "Strasburger's Manual of Vegetable Histology, 1887," now out of print, which I will send post-paid for \$3 or for one dozen good slides illustrating plant or animal structure. Address A. B. Hervey, St. Lawrence University, Canton, N. Y.

The undersigned has the following specimens to exchange for crystals of any eastern or foreign localities or Indian relics: tin ore, metacinnabarite, stibnite, garnierite, calenanite, hanksite, ulexite, rubellite, lepidolite, blue and green onyx, Cal. pinetite, aragonite on chalcedony, cinnabar, double refracting spar, clear and clouded, and others. J. R. Bush, care of General Delivery, Los Angeles, Cal.

For sale or exchange.—A private cabinet of about 200 species of fossils, well distributed geologically and geographically. Silurian, about 40; Devonian. about 50; Carboniferous, about 50; others, about 30. Frank S. Aby, State University, Iowa City, Ia.

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