given from the whole United States being less be than two thirds of that now known from east re of the Mississippi.

As expressed by the authors, the primary object of the present manual is—as in the "Beetles of Indiana "---" to furnish to students and tyros in entomology a simple means of enabling them in the most direct way possible to arrange, classify and determine the scientific names of the weevils in their collections." To do this, all the higher subdivisions have been carefully defined, keys for the separation of all families, tribes, genera and species have been prepared or adapted, original descriptions have been condensed so as to show more readily the principal diagnostic characters, and geographical range, time of appearance and habits recorded so far as known. The whole is preceded by a chapter on structural characters, and followed by a tolerably complete bibliography and indexes of both the beetles and the plants on which they occur. Add to this the fact that the press work leaves little to be desired and the illustrations are numerous, nearly all good, and many of them beautiful, and we have a very attractive as well as useful contribution to Coleopterology.

In a work of this sort, based upon a multiplicity of sources of information, it is inevitable that there should be some errors of fact; furthermore inasmuch as all schemes of classification and taxonomy involve so large an element of individual opinion, it is altogether unlikely that any specialist could be found who would agree entirely with the authors in their sequence of tribes, genera, etc., or in their delimitation of species. The authors, on the whole, appear to have followed a sanely conservative course, and, while the work embodies the results of the best of recent studies both in this country and in Europe, they have rarely accepted the views of the extremists, and, where differing from the authorities, have frankly stated the reasons for their conclusions.

Let no one be deceived by the words of the authors, quoted above, into believing that the book will prove a sinecure for the entomological "tyro." A difficult subject has perhaps been simplified as far as possible, but it still remains a difficult subject, and the tyro will still have to depend largely on the specialist for the determination of his specimens. On the other hand, the student with a considerable fund of experience will find this work of very great assistance. Would that we had more like it.

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H. C. FALL

SCIENTIFIC JOURNALS AND ARTICLES

Bollettino di Bibliografia e Storia delle Scienze Matematiche. Publicato per cura di Gino Loria. Torino, 1915, 1916.

Such are the conditions in Europe at the present time that both the publication and the transmission of scientific journals are attended with great difficulty. Some of these journals have been discontinued altogether, others appear in reduced form, and many are greatly delayed if, indeed, they are allowed to pass the barriers at all. Of those which reach us Professor Loria's "Bollettino" is among the most regular and among those which best preserve their usual placidity.

Since this publication consists chiefly of notes on recent mathematical works, there are but few articles that admit of interesting summary in a review of this nature. It is pleasant to observe, however, how little the war disturbs the academic atmosphere, for these mathematical notes, relating to current books of various European belligerents, give no evidence whatever of the conflict which now disturbs the world. Such, for example, are the "notizie" on "La matematica in Germania in questo ultimo quarto di secolo," "Sofia Germain" (by Schwarz), the "Materialien für eine wissenschaftliche Biographie von Gauss" (Klein and Brendel), and the "Entwickelung der Mengenlehre und ihrer Anwendungen" (Schoenfliess).

Of the original articles of a mathematicohistorical nature, mention should be made of a few which may have some interest to American readers. M. Lucien Godeaux of Liège has an article on "Un mathématicien Belge du XVIième Siècle: Jean Taisnier." Al-

though Quételet mentions this writer in his "Histoire des sciences mathématiques et physiques chez les Belges," and Jules Dewert and Modeste Soons have recently written upon his work, he is practically unknown to English and American mathematicians. Born in 1508, dying probably about 1562, he claims to have been a professor of mathematics in Rome in 1546, and he certainly held such a chair in Ferrara in 1548. His works, eleven in number, relate chiefly to the use of the sphere and the annulus, although some were purely astrological in their contents. One of his books was translated into English under the title "A Booke concerning navigation, translated into English by Richard Eden," London, n.d. Like most of the secondary writers of his time, he plagiarized freely from the works of others, but his "De annuli sphaerici fabrica & usa" (Palermo, 1550) shows not a little originality.

Professor J. H. Graf, of Berne, whose contributions to the history of mathematics in Switzerland are well known, has a series of articles on "La correspondence entre Ludwig Schläfli et des methématiciens Italiens de son epoque." This is a suitable sequence to Professor Graf's earlier articles on the correspondence between Schläfli and Jakob Steiner and between Schläfli and Cayley.

Professor G. Vivanti has an interesting note on Luigi Forni, a Pavian mathematician (1780-1856), whose Nuove Ricerche (Pavia, 1811) is not without merit. There are biographical articles of some length on Luciano Orlando (1877-1915), a prolific writer, and Ruggiero Torelli (1884-1915), a worthy contributor to modern higher algebra and the theory of curves. The numerous reviews by Professor Loria himself are of special interest.

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"THE AMERICAN MINERALOGIST"

The American Mineralogist is a new magazine, devoted to the interests of the scientific mineralogist, the student of mineralogy, curators of museums, and collectors of minerals. It is a successor to *The Mineral Collector*, founded in 1885 and discontinued in 1909; and appropriately, the first article in the new magazine consists of an appreciation of the contributions of Arthur Chamberlain, publisher of *The Mineral Collector*. Other articles in the first number treat of lamellar calcite, columnar manganocalcite, the chemical elements; and the reports of the meetings of the New York and Philadelphia Mineralogical Clubs are given. The magazine reviews abstract articles on mineralogical subjects, so as to make the work being done in this science available to those who do not have access to the more technical journals.

The second number is devoted to an account of the wonderful gem minerals of Madagascar. In the third number is an article on glauberite crystal-cavities, in which the methods used in interpreting these curious "holes" in certain geological formations are described. Stevensite, an alteration product of pectolite from New Jersey, is shown to deserve recognition as a definite mineral species by Mr. M. L. Glenn. A poem, called "The Physico-chemical View," a satire on the mannerisms of several Washington scientists, is included.

The Exchange Column of *The American Mineralogist* is an excellent feature and one that will interest every private collector or curator of a museum who may wish to dispose of his duplicate material for some specimens in which his collection is lacking. Thus both parties are benefited, and the various mineralogical dealers will keep those informed who are in need of such materials.

The American Mineralogist is edited by Wallace Goold Levison, and the associate editors are Edgar T. Wherry, of the U. S. National Museum; Samuel G. Gordon, of the Academy of Natural Sciences, Philadelphia, Pa., and W. Scott Lewis, of the Krotona Institute, Los Angeles, California. The magazine is octavo in size, and the numbers already issued have given sufficient assurance that the typography will continue to be excellent. As this special field has never before been covered, the journal should meet with considerable encouragement and success. G. F. K.