

to agree with most of the features of the moon. We cannot, however, enter into further details or explanations that are given of various other objects, interesting though they be. We can only quote one of the concluding paragraphs, as this gives some idea of the difference in conclusions which result from the study when compared with those of other authors. He says: "This sketch of the life of our nearest neighbor has but little in common with the accounts of other biographers. To her has been ascribed a fiery youth, after the manner of the sun, a middle life of dissipation, like Jupiter and Saturn, a hardening and wrinkling old age, toward which the earth is tending, and finally, the end of change—death. If the record of her scarred face has now been read aright, all that remains of the old narrative is the *denouement*: the moon is dead." JOSEPH F. JAMES.

*The Mineral Industry.* Its Statistics, Technology, and Trade, in the United States and other countries from the earliest times to the end of 1892. Vol. I. Edited by Richard P. Rothwell. New York, The Scientific Publishing Company. 1893. 628 p.

IN the years of 1874-75 and '76 *The Engineering and Mining Journal* of New York published the first complete reports of the coal production of the United States, and in 1889 as special government agent for the census, the editor of the journal, Mr. Richard P. Rothwell, collected the statistics of gold and silver. The scope was gradually extended until in January, 1892, a magnificent volume of statistics was given to the world and universal encomium heaped upon the journal and its staff for their wonderful work. Indeed such was the unstinted praise accorded it we can but wonder what language will be used for the present volume, no longer a supplementary number in journal form, but a handsome library volume of 628 pages. It is the intention to make this the first of a series to embrace within a few years the statistics and technology of the mineral interests of the world, in many cases going back historically to the earliest times and always

carried down to the date of publication. Such a vast undertaking has heretofore been considered impracticable for private enterprise and has been relegated to the unlimited resources of governments, it is worthy to note, however, that simultaneously with the issue of this volume containing all statistics accurately and systematically recorded for 1892, there appears the government publication of similar character for the year 1891. The introduction to this latter volume, by the way, speaks of "the impossibility of concluding a complete canvas of the products of huge industries like coal, iron ores, and building stone without a considerable delay after the close of the year reviewed," and yet the *Engineering and Mining Journal*, depending entirely upon personal courtesy and confidence for its success, has accomplished this feat so impossible to the expensive machinery of government. The journal is fortunate in possessing a large and carefully trained staff, and in being in communication with experts in all branches of industry the world over, but more than this is needed, and much praise is due to all connected with the enterprise. Especially is praise due to Mrs. Sophia Braeunlich, that able financier and business manager of *The Engineering and Mining Journal*, and to Mr. Richard P. Rothwell, editor of both journal and "statistics."

To attempt even a running review of this work would be out of the question, the table of contents alone occupying ten pages of small print. Suffice it to say that without exception the articles therein contained are written by men pre-eminently fitted for their best treatment, and in all cases by experts in each particular line. Among the contributors are: Dr. George Lunge, Dr. Francis Wyatt, author of "The Phosphates of America"; E. O. Leech, Director of the U. S. Mint; Professor J. F. Kemp, George F. Kunz, J. Langeloth, Dr. Thomas M. Chatard, Richard E. Chism, H. O. Hofman, Emile Delecroix, and many others of equal fame. They have been well chosen, and we congratulate them upon the part they have played in this most admirable work. C. P.

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For sale.—J. D. Dana's Report on Crustacea of the U. S. Exploring Expedition under Charles Wilkes. Text and plates well bound in three volumes, half morocco, \$75. Samuel Henshaw, Boston Society of Natural History, Boston, Mass.

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Minerals for exchange—John Holl. Rollo, Wilmington, Delaware.

For sale or exchange.—Johnson's Universal Cyclopedia, 8 vols., ed. 1888. Binding, half-morocco. Will sell cheap for cash or would exchange for typewriter. Address W. J. McKom, Mason, Mich.

I have 500 microscopic slides to exchange in lots to suit. Want Kodak, first-class field-glass or scientific books. A. C. Gruhlke, Waterloo, Ind.

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For sale or exchange—A Telescope (36 diameters, copper barrel)—for \$20 cash or scientific books of that value. A. N. Somers, La Porte, Ind.

For sale—A complete set of the Reports of the Second Geological Survey of Pa., 1874-1893, including the Grand Atlas. Publisher's price over \$115. Will sell for \$50. Address F. D. Chester, Newark, Del.

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