and by no means as probable as the author maintains. The oceans of boiling water remind one of the cataclysmal hypotheses in vogue in earlier geological speculation, and raise the question whether here also there may not be a less sensational interpretation of facts.

The lunar temperature, on the other hand, in regard to which we have some knowledge derived from quantitative measurements, is not so much as mentioned in the book.

Barnard's fifth satellite of Jupiter is given a whole page, which, while commendable as an account of recent astronomical progress, seems to show a lack of perspective, since only an equal space is devoted to the other four moons with their wonderful harmony. Moreover, in spite of the prominence given to this excessively minute body, the moon, which continues to be called by an anachronism by the Roman numeral I, is alluded to as 'the innermost.'

The 'invisible rays' of the solar spectrum are treated as if they were synonymous with the ultra-violet rays. Over a page is given to this topic, but there is no mention anywhere of the much more extensive infra-red part of the spectrum which comprises rays of greater intensity and of more importance to the earth.

The statement on page 39 that 'we find each one of the multitude of lines in the artificial iron spectrum agreeing to the last degree of precision with the corresponding line in the solar spectrum,' is not in accordance with facts. Along with many wonderful coincidences, there are some notable differences which are of very great importance as furnishing a possible key to further solar mysteries.

The description of the solar corona and of sun-spots in Chapter II. is inadequate, and something more than a bare mention of the fact that there are different classes of stellar spectra is desirable; but the list of shortcomings is not long, and the book is to be commended for its attainment of an exceptional standard of excellence.

F. W. VERY.

GENERAL.

Announcement has been made by a committee of American anthropologists, of which Mr. F. W. Hodge, managing editor of the

American Anthropologist, is secretary, of the proposed publication of a series of more than thirty folk-tales recorded and translated by the late Frank Hamilton Cushing during his long and intimate association with the Zuñi Indian tribe of New Mexico. The price of the work will be \$3.50. Information and subscription blanks can be supplied by the Secretary, whose address is Washington, D. C.

The late Professor A. W. Hughes, left in an advanced state of preparation a new volume on practical anatomy. Professor Keith, of the London Hospital College, has undertaken to complete Professor Hughes's work, which will be published by Churchill.

BOOKS RECEIVED.

Experimental Psychology. E. B. TITCHENER. New York and London, The Macmillan Company. 1901. Volume I. Part 2. Pp. xxxiii + 456. \$2.50.

Human Placentation. J. CLARENCE WEBSTER. Chicago, W. T. Keen & Co. 1901. Pp. 126 and 30 plates.

Studien über die Narkose. E. OVERTON. Jena, Fischer. 1901. Pp. x + 195. \$4.50.

Morphology of Spermatophytes. JOHN M. COULTER and CHARLES J. CHAMBERLAIN. New York, D. Appleton and Company. 1901. Pp. x + 188.

Les problèmes de la vie. ERMANNO GIGLIO-TOS. Turin, Chez l'Auteur. 1900. First Part. Pp. viii + 286. 10 fr.

Clays of New York, their Properties and Uses. Hein-Rich Ries. Albany, University of the State of New York. 1900. Pp. 593-944.

The Manual of Laboratory Physics. H. M. TORRY, and F. H. PITCHER. New York, John Wiley and Sons. London, Chapman and Hall, 1901. Pp ix + 288.

A Select Bibliography of Chemistry. 1492-1897. Section VIII. Academic Dissertations. H. CARRINGTON BOLTON. Washington, D. C., Smithsonian Institution. 1901. Pp. iv + 534.

SCIENTIFIC JOURNALS AND ARTICLES.

The Journal of the Boston Society of Medical Sciences for December 18, 1900, delayed on account of the plates, has recently been issued. It forms a volume of 180 pages and 16 plates after photomicrographs, devoted to 'A Study of the Bacteriology and Pathology of Diph-