Eclipses of the Moon in India. By Robert Sewell, late of her Majesty's Indian Civil Service, Member of the Royal Asiatic Society, &c. Pp. 13 ; tables lx. (London : Swan Sonnenschein and Co., Ltd., 1898.)

THIS work is in fact a continuation and completion of Mr. Sewell's "Indian Calendar," which was noticed in NATURE for July 9, 1896 (vol. liv. p. 219). The principal matter (besides some notes and additions to the Calendar), is a table of the times, durations, and magnitudes of all eclipses of the moon (whether visible or not in India) for the period of sixteen hundred years, from A.D. 300 to A.D. 1900. The times are reduced to the Hindu prime meridian, that of Lairka (Ujjain), the longitude of which is 75° 46' east of Greenwich, and are reckoned from mean sunrise (taken as 6h. a.m.) at that place. The calculations are founded on Oppolzer's "Canon der Finsternisse"; but another table gives the figures reduced from the *Nautical Almanac* from its commencement in 1767 (or rather 1768, as no eclipse of the moon occurred in the former year), though the figures in the "Canon" are probably more accurate than those in the Almanac before the year 1819 (not 1821), when Burckhardt's lunar tables were first brought into use in the latter. Mr. Sewell has not thought it necessary to mark the magnitude of an eclipse as greater than total, simply affixing to all such the letter "t." He acknowledges the help in the calculations afforded by Saukara Balkrishna Dikshit, formerly Pandit of the Training College, Poona, whose co-operation was so valuable in his work on the "Indian Calendar," and whose death took place early in the present year ; and also expresses his thanks for kind advice and assistance given by Prof. Turner (of Oxford) and Mr. Crommelin (of the Royal Observatory, Greenwich). The precautions taken have probably secured that accuracy which is so particularly essential in matters of this kind ; here we will merely point out two errors in p. 4 of the Introduction, where "fixtures" is printed instead of "figures," and Burckhardt's name is spelt without a "k," though Mr. Sewell is liberal of that letter in retaining the obsolete method of spelling "Almanac" with one.

W. T. LYNN.

Famous Problems of Elementary Geometry. By Felix Klein. Translated by W. W. Beman and D. E. Smith. Pp. ix + 80. (London : Ginn and Co., 1897.)

OUR mathematical readers who do not read German will be glad to know that they have now before them a translation of a discussion of three famous geometric problems of antiquity, namely, the duplication of the cube, the trisection of an angle, and the quadrature of the circle as seen through modern eyes. This discussion took place at Göttingen at a meeting of the German Association for the Advancement of the Teaching of Mathematics and the Natural Sciences, and was presented by the great German mathematician, Prof. Felix Klein, with the purpose of bringing the study of mathematics in the university and gymnasium into closer connection. Such an important work as this will doubtless be read very widely, and the joint translators have done good service in making this discussion more available by the excellent translation we have before us.

The Evolution of the Aryan. By R. von Ihering. Translated by A. Drucker. Pp. xviii + 412. (London : Sonnenschein and Co., Ltd., 1897.)

MR. A. DRUCKER has given us a translation of an unfinished work by the late Prof. von Ihering. Much of the argument of the book depends on theories which the leaders of linguistic science have now abandoned. Philologers now confess that community of language does not necessarily imply community of race, and Orientalists and other linguists are hopelessly at variance regarding the "Urheimat" of our race ; the book, though

ignoring all this, contains much wide reading and keen observation. This is apparent in matters relating to Greek, and especially to Roman, civilisation, the author's special province. In some cases a more intimate knowledge of things Indian would have improved his argument. Thus the Pali Bāveru-jātaka, known to students of folk-lore, is a very important and early witness from the Indian side to commerce between India and Babylon. The "corrective stake" (pp. 54, 55) is also illustrated by the punitive heated pillar (*sūrmī*), mentioned by Manu and earlier authorities.

Mr. Drucker's English is free and lucid ; one may quite forget that one is reading a German work of science. In the first sentence of his preface, is not "latest Sanskrit and earliest Babylonian" a slip for the reverse expression ?

C. B.

First Lessons in Modern Geology. By the late A. H. Green, M.A., F.R.S. Edited by J. F. Blake, M.A. Pp. viii + 208. (Oxford : The Clarendon Press, 1898.)

THE manuscript of this book was left by the late Prof. Green in a somewhat unfinished condition, and the editor was asked to prepare it for the press. The book is described in the preface as being practically a primer, yet in the third lesson, dealing, among other matters, with the constitution of quartz, after the barest statement of the proportion by weight in which silicon and oxygen combine chemically, and the introduction, with no explanation, of the term "atomic weights," we read : "All this the chemist would express shortly by writing for silica SiO_2 ; Si standing for twenty-eight parts by weight of silicon, O for sixteen parts by weight of oxygen, and the 2 under the O showing that in silica the oxygen is in the proportion of *twice* sixteen. SiO_2 is called the chemical formula for silica." Is this the kind of information to place before a beginner receiving his third lesson in geology ? Later on in the same lesson the chemical composition of orthoclase is dealt with in a similar manner. If the beginner himself were consulted, we imagine his third lesson in geology would be his last. Had the editor omitted these little digressions, which cannot be understood by mere reading, the educational value and the interest of the book would have been much enhanced.

First Stage Inorganic Chemistry (Practical). By Frederick Beddow, D.Sc., Ph.D. Pp. viii + 165. (London : W. B. Clive.)

THE course of practical work contained in this volume follows the elementary syllabus of the Science and Art Department's examination in inorganic practical chemistry. The syllabus gives the outlines of a reasonable course of laboratory work ; and therefore the present volume, like others constructed upon the same lines, has several good features. After a few introductory experiments in manipulation, and exemplifying characteristic properties of some common substances, the preparations and properties of a number of common elements and compounds are described. Following this are experiments on the action of heat, water, and acids on some familiar substances, simple quantitative experiments, and exercises in systematic analysis. The volume thus provides elementary students with an instructive course of work in practical chemistry.

Marvels of Ant Life. By W. F. Kirby, F.L.S., F.E.S. Pp. viii + 174. (London : S. W. Partridge and Co., 1898.)

ANTS and their habits form a subject of perennial interest to general readers, so Mr. Kirby's popular account of the more remarkable phases of ant life should be successful. The text is lightly written, for the benefit of general readers who are entirely unfamiliar with insect life in its scientific aspects ; but there is also much in it to interest attentive students of natural history.