Of the other institutions named, Dr. Meyer considers that the small museum of the Academy of Sciences is a model of its kind; and that the Art Museum is in many respects remarkable, and, like the other institutions, worthy the best attention of all interested in such matters. The Newberry and John Crerar Libraries, which are for reference only, display many features of their own, and will in the near future be of the highest importance as the scientific libraries of the Central United States. The Chicago Public Library, on the other hand, is a circulating one, which lends out, according to the author, millions more volumes than any other institution in the world; it is, in fact, a unique institution. As to the University, which is described in considerable detail, Dr. Meyer has no doubt that it is assured of a great future, the progress it has made and the influence it exerts, after an existence of only a decade, being little less than marvellous.

To all practically interested in museum and library work and progress, Dr. Meyer's observations and criticisms should be invaluable. R. L.

The Mechanical Triumphs of the Ancient Egyptians. By Commander F. M. Barber, U.S. Navy. Pp. x + 123. (London: Kegan Paul and Co., Ltd., 1900.) Price 3*s.* 6*d.*

THE writer is a well-read sailor, who has devoted much time to answering as plausibly as possible the common query of travellers, "How did the Egyptians transport such great stones from their quarries as the stones for the pyramids, the colossi and obelisks, and lift them to their present positions?"

He discusses the Egyptian knowledge of the mechanical powers, the capstan and windlass known in the first three dynasties, the single pulley B.C. 3500, the inclined plane very early, the screw and the Spanish windlass also early.

He thinks that the heavy stones of the lower parts of the pyramids were brought on rafts by water, then up long inclined planes of gentle slope to their actual positions. The lighter stones of the upper parts may have been lifted, possibly also the casing stones, by levers, but he finds reason to believe that the screw-jack was in common use for this and other purposes. He describes the quarrying, the carrying and polishing of very hard stones with such tools as the Egyptians possessed; he is much at home in his discussion of the shapes and strength of boats used for conveying two obelisks at a time and how they were towed, and he compares the modern methods of lifting obelisks into position with his plausible account of how the ancients performed such operations.

Cours de Mathématiques à l'Usage des Élèves-Architectes et Ingénieurs Professé à l'École des Beaux-Arts. Par Carlo Bourlet. Pp. iii+244. (Paris: C. Naud, 1902.) Price fr. 8.

THIS is an elementary treatise on what is often called higher mathematics, the parts of which are taken up in the following order:—Differential calculus; analytical geometry of two dimensions with calculus applications; integral calculus; three-dimensional geometry. It seems to be made up of the most elementary parts of three or four treatises, but there is nothing new in the treatment. One might have expected the author to illustrate the well-known rules of differentiation by showing how applicable they are to the problems of the builder and engineer, to have greatly shortened the proofs and lessened the number of rules for differentiation, and so forth; but we here find practically nothing of the kind. The conic sections are still the important curves; the student gets rules enough for the most elaborate differentiation and integration and, in fact, enters in the most orthodox way upon a course of pure mathematics; but this book is in no way written to satisfy the special needs of the architect or engineer. But the author is to be praised for teaching the calculus, in however dry a manner, before coordinate geometry. We wish he had used the calculus to help in teaching coordinate geometry, but he only makes a combination after he has taught both subjects.

Physical Determinations. By W. R. Kelsey, B.Sc., A.I.E.E. Pp. xii + 316. (London: Edward Arnold, no date.) Price 4*s.* 6*d.*

THIS book contains, in a space of 310 pages, 185 sections each of which deals with generally one and sometimes more experiments. The subject-matter spreads over the whole range of physics. It is consequently packed tightly; and so the author has had to omit details, but he has endeavoured to give sufficient information to enable a class to start work without waiting for individual instruction from the demonstrator. It is claimed that the book contains most of the exercises which have been set at the London Intermediate and B.Sc. examinations.

The exercises are of very variable degree of difficulty and are not graded, so that a teacher adopting this book for elementary classes will have to make a careful selection. One use of the book will be to look up the whole subject the night before an examination.

S. S.

Proceedings of the Aristotelian Society. New Series. Vol. i. Pp. 239. (London: Williams and Norgate, 1901.)

THE existence of the Aristotelian Society illustrates one of the best features of English philosophical study, its freedom from the tendency, often so strongly marked in continental countries, to organise itself into little schools, each with some master, whose decisions are unquestionable, and his band of unquestioning disciples. The present volume, like its predecessors, is pleasingly marked by the tone of free inquiry and unprejudiced discussion natural to a society in which adherents of the most various philosophical principles attempt to make themselves reciprocally intelligible. The contents of the book include contributions to most departments of philosophy, except that there is no paper dealing directly with ethics. Among the essays concerned with metaphysics the most important are the three in which Dr. Shadworth Hodgson, the Nestor of the society, defends his well-known views on causation, substance, and the nature of the conscious subject of psychology, and the discussion of identity by Mr. G. E. Moore. Of the papers on other subjects perhaps the most attractive is Mr. Sturt's on "Art and Personality." Mr. Beneke's discussion of the "Aspect Theory of the Relation of Mind to Body" is suggestive, though impaired by the writer's voluntary abstention from metaphysical thoroughness. A. E. T.

The Play of Man. By Karl Groos. Translated by Elizabeth L. Baldwin. Pp. ix + 412. (London: Heinemann, 1901.)

PROF. GROOS'S work, "Der Spiel des Menschen," has already been noticed in this column, in connection with the appearance of the German original. It is therefore superfluous to say more than that the work, both for wealth of information, soundness of judgment and charm of literary style, is in every way worthy of its earlier companion study of "The Play of Animals." Apart from its purely psychological interest, the book has a serious value for the pedagogue who desires to form his own judgment as to the educational effects of games and the uses and dangers of the play-impulse. It is to be hoped that so good a book will have in its English dress the deserved success already attained in this country and America by "The Play of Animals." The translator has done her work well, and Prof. Baldwin contributes a preface and a few footnotes.