Exercices d'Analyse, vol. 1. By Gaston Julia (edited by René Harmegnies and Roger Julia). Paris, Gauthier-Villars, 1928. vii+454 pp.

This book is a worthy descendent of a long line of French *Exercices sur le calcul infinitésimal.* Such collections of problems are intended primarily for the students who prepare themselves for the licence or the agrégation and contain problems of the type set in these examinations. A thorough knowledge of the theory is expected as well as skill in calculation and the training is directed towards developing both qualities in the students.

The present book contains a small number of carefully chosen problems, each problem followed by one or more complete solutions. About two-thirds of the first volume is devoted to the applications of analysis to geometry. An admirable account of the theory of Fourier series (pp. 120–190) is eminently suitable as outside reading for first year graduate students. This part of the book will probably be found the most useful one to the general mathematical public outside of France. The printing is good, but when will MM. Gauthier-Villars return to the use of good paper in their books?

EINAR HILLE

A History of Physics. Revised and enlarged edition. By Florian Cajori. New York, Macmillan, 1929.

The first edition of this book gave in 285 pages a concise yet detailed account of the important phases of the development of physics from ancient times to the time of publication in 1899. While many additions and alterations have been made, the new edition is substantially the same as the old so far as this part of the work is concerned. The important change in the second edition is due mainly to the excellent summary, covering about 100 pages, of the development of physics during the first twenty-eight years of the twentieth century.

The method of presentation adopted in the first edition, that is, the arrangement of the material by periods, and within a period according to the well known sub-divisions of physics, has been retained. In this connection it is interesting to note the space allotted to different periods. Thus ancient civilizations are given 22 pages; the Middle Ages and the Renaissance 32 pages; the seventeenth and eighteenth centuries 83 pages; the nineteenth century 147 pages; and the first quarter of the twentieth century, 116 pages. Taking this distribution as a fair measure of the progress of physics during these periods and taking into account the length of each period, we find that the increase of our knowledge in physics has followed practically an exponential curve, indicating that our knowledge of the physical world is not only not tending to a saturation value, but its rate of increase is rising with time.

One of the commendable features of the book consists in the numerous references to original sources.

Professor Cajori has earned the gratitude of scientists by his works on the history of science.

H. M. DADOURIAN