still unknown. Of course, these lectures are most interesting to those to whom the subject matter is already quite familiar; still there is little, if any, demand made upon the store of mathematical knowledge of the reader which a good and thorough high school course would not supply. theless, the presentations of even elementary topics by master minds are always instructive, and in this case unusually attractive as well. Historical and methodological remarks abound, and are so woven together with the mathematical material proper, and the whole is so vivified by the clear and almost chatty style of the author as to give the lectures a charm for the reader not often to be found in mathemat-The translation is well done, the publishers ical works. have presented it in appropriate form, and the work deserves a wide circle of readers. A short note by the translator on the origin of algebra, and a good index close the work, which bears a portrait of Lagrange as frontispiece.

It is to be hoped that translations into English of Lagrange's larger work on equations ("Traité de la résolution des équations numériques de tous les degrés," first edition, 1798, third edition, with analysis of the work by Poinsot, approved by Lagrange, 1826) and of Euler's Algebra with Lagrange's annotations, may follow.*

J. W. A. Young.

L'Enseignement Mathématique is the title of a new journal of which the first number has just appeared in Paris. The editors are MM. C. A. Laisant of Paris and H. Fehr of Geneva; the publishers are Carré and Naud, 3 rue Racine, Paris. There will be six numbers a year, each containing about 80 pages octavo; the annual subscription price is 15 francs within the postal union.

While published entirely in the French language, this magazine is given an international character by a "comité de patronage" consisting of twenty mathematicians representing fifteen different nationalities. The object of the new journal is to contribute to the improvement of mathematical instruction by making more widely known its organization in different countries, by discussing methods of

^{*} Editorial Note.—A translation of Euler's Elements of Algebra with notes of Bernoulli and additions of Lagrange was published by Rev. John Hewlett. The fifth edition (Longmans, Green & Co.) bears the date 1840. The preface explains that the translation was mainly due to Francis Horner. The book seems to be rare, and a new edition may be desirable.

teaching, programmes and requirements, philosophical and pedagogical questions, etc.

The contents of the first number indicate the way in which it is proposed to accomplish this object. After an introductory article by the editors, explaining the general scope of the new publication, we find articles on mathematics in Spain, by Professor Galdeano; on mathematical terminology, by M. Laisant; on scientific pedagogy, by Professor A. Binet, director of the psychological laboratory at the Sorbonne; on the teaching of "mathématiques spéciales " in France, by M. H. Laurent; on the teaching of elementary trigonometry, by Professor H. Fehr; on the teaching of the theory of vectors, by Professor Fontené. Besides these original papers there are sub-divisions devoted to notes and news, to correspondence, to bibliography and Among the latter, the review by Professor Greenreviews. hill of Professor Appell's "Éléments d'analyse mathématique (cours de l'École centrale)" may be particularly noted.

The editors call for cooperation on all persons interested in the teaching of mathematics throughout the civilized world and promise to attend, if necessary, to the translation into French of contributions written in other languages. It is to be hoped that this appeal will meet with a hearty response. Mathematical teaching is hardly anywhere organized as thoroughly and efficiently as in France; indeed, there is perhaps somewhat too much of organization and system. Just the opposite would seem to be true for most of the States of the Union; comparing notes on these questions may not be without advantage on both sides.

ALEXANDER ZIWET.

NOTES.

ATTENTION is called to a recent change in the By-Laws of the AMERICAN MATHEMATICAL SOCIETY, permitting members to commute their annual dues by a single payment of \$50. Until May 1, 1899, the treasurer will accept such payment from intending life members who have already paid the dues for 1898. New members joining the Society and desiring to begin as life members, are required to make a single payment of \$55 to cover the initiation and life membership fees.