fect is that there are hardly any examples left for the student to do by himself. Half the advantage of a course of mathematical study is lost if some facility in doing work of the same kind has not been acquired: and facility cannot be acquired without long hours of practice, any more than one learns to play the piano by listening to another person's playing.

Professor Cremona objects to the rather more common name of 'modern geometry' for the subject he is treating, that it expresses merely a relative idea, and that although the methods may be regarded as modern, yet the matter is to a great extent old. Neither objection seems to us very forcible. The characteristic of the modern geometry is its method, and not its matter, and the distinction between an ancient and a modern world has not yet ceased to have a real significance.

In all essential respects the distinguished author has accomplished his self-appointed task in an admirable manner, and English-speaking students will be very grateful to him for his labors. presentation of the subject is admirably lucid and clear, the order is well chosen, and there are many simplifications of the more laborious processes of Steiner and Von Staudt. It is a good plan to make use of M. Ed. Dewulf's proof of the proposition that lines joining corresponding points of two projective ranges envelop a conic, but it is a mistake to let the proof of the most important proposition in the whole book rest upon one of the few passages which are printed in smaller type. The extent to which the subject is developed may be gathered from the facts that the sheaf of conics through four points is not reached, and that the existence of sixty Pascal lines is only mentioned in a footnote.

## ARROWSMITH'S EDITION OF KAEGI'S RIGVEDA.

Sanscrit scholars, and those who are familiar with the value of Professor Kaegi's 'Der Rigveda, die älteste literatur der Inder,' will be pleased at any attempt to throw the work into a form that will give it a larger circulation, and at the same time increase the interest in Vedic studies by bringing an introduction to them within the reach of general readers. As contributing to this end, Dr. Arrowsmith's translation of the German edition will be welcomed, since, to quote from the preface, it places "at the command of English readers interested in the study of the Veda a comprehensive and at the same time condensed manual of Vedic research."

The Rigreda: the oldest literature of the Indians. By ADOLF KAEGI. Authorized translation, with additions to the notes, by R. Arrowsmith, Ph.D. Boston, Ginn, 1886.

This is the end which the translation has in view; and it is from a popular stand-point, as appealing to English readers, that this new piece of work must be judged. In preparing the translation, Dr. Arrowsmith has chosen to follow the author throughout; and no claim is made to originality of thought or treatment, or to the contribution of any specially new material for the elucidation of the Veda. Bearing this in mind, it must be said that the translation, as a rule, is excellently made; and it would perhaps be hypercritical to pick out the few passages in which the English is not as finished as it might be, or where we have, perhaps, too close an imitation of the German idiom or word order.

In the metrical quotations from the hymns themselves, the translator, although having the Sanscrit text constantly before him, has generally adhered, as he says, closely to Dr. Kaegi's renderings; and the design seems to have been to give a readable version in popular form, rather than always a strictly scientific translation of the Sanscrit. Such being the case, we cannot look to these renderings for any thing original; but they carry out well enough the plan proposed.

The additions to the notes consist chiefly in a number of references to the more recent literature on the subject, thus bringing the book up to date; and though by no means complete, nor even professing to be so, they will prove very welcome and useful. The introduction of the 'Frog song,' on p. 81, is a good idea, and makes an acceptable addition to the book. It may be noted, in passing, that an improvement has been made by inserting at the end of each metrical translation the numerical reference to the mandala and sūkta from which the various verses are taken, instead of reserving such references for the notes. This will prove much more convenient in a general reading of the book.

The form in which the book is presented is attractive; but it is to be regretted that numerous mistakes should have crept in, not only in the Greek and Latin quotations and in the transliteration from the Sanscrit, but even in the English portions of the work. These we shall hope to see corrected in a future edition in order that they may not mar what is otherwise admirable in form.

In conclusion, we may say that by others beside the student of Sanscrit this book will be found interesting and instructive; and, with the exception of the notes, even the general reader will be interested in its perusal. It will also, it is hoped, render somewhat more general a knowledge of the Veda, and at the same time increase the interestnow taken in oriental studies.

A. V. WILLIAMS JACKSON.