wages and piece-wages (p. 161) should clear up a great many fallacies fondly cherished by some writers on the industrial situation. On the money question Mr. Bowker is explicit, but not as emphatic as we could wish in pointing out the evils attendant upon the continuance of the present silver-coinage policy of the United States. Perhaps, however, he did not feel justified in introducing too much polemical matter into an expository treatise. On p. 236 the author touches on a point which we believe to be of great importance, because it is an illusion which is very generally cherished; that is, the mistaking unproductive consumption for productive consumption. Nine persons out of ten seem to think that the people in general are benefited when a millionnaire spends large sums of money in flowers, laces, and so forth, arguing that in such ways more money is put in circulation. Mr. Bowker says truly that "the wealth thus wasted would, more wisely used, furnish capital to many more people in creating more wealth." But he should have fully illustrated this point, using examples similar to those of Mill and Fawcett in treating this same topic. A chapter on this head would not have been out of place; and then a large supply of marked copies of the book might have been 'productively consumed' by mailing them to our national and state legislators, and to a select list of popular orators on economic subjects. We like particularly the final chapter in this book, entitled 'The end of the whole matter,' in which the author makes plain the truths that wealth is not an end in itself, and that economics is subordinate to ethics. The following passage, too, is very clear, and puts the question as to the limits of state interference on what we conceive to be the proper basis: "When the social machinery grinds out injustice, abuses men, makes the rich richer and the poor poorer, the community practically will not accept the extreme laissez faire theory; it will not let ill enough alone, but will apply factory acts to right wrongs. The evils that society has done, society must undo. On the other hand, the common sense also rejects not only the impossible communism which would reduce the industrious and the idle to a common level, but also the socialism which would put the greater portion of the social work under control of the state, instead of leaving it to individuals. Between the two lies the actual working social system, varying among different peoples and at different times, but persistently in accord with the underlying economic laws, and never for any considerable time, in any stable state, against them. This is controlled always by public opinion, the aggregate of individual intelligences, in its turn directed by education and by the mastery of leadership. And thus the promotion of economic progress resolves itself into the work of political education " (pp. 262, 263).

It is well that Mr. Bowker has put in his subtitle, 'for use in business;' for it is a peculiar yet true fact that most business-men, though they use the terms 'capital,' 'price,' 'value,' 'money,' 'rent,' profits,' and so on, every hour of their working lives, have very confused ideas as to what they mean and imply.

A plain man's talk on the labor question. By SIMON NEW-COMB. New York, Harper, 1886. 16°.

Professor Newcomb's recently published talks also come under the head of economics for the people, though the subject treated is but one of the many touched on by Mr. Bowker. We should say that the chief fault to be found with this book is that the style is almost too conversational and too familiar for dignity. The talks were originally published in the *Independent*, and from their simplicity and directness attracted much attention. Advanced political economists and erudite writers on society and its phases may sneer at Professor Newcomb's bluntness and homely illustrations, but the ordinary reader will see their force. The illustration, for example, on pp. 44, 45, would be possibly unpleasant though profitable reading for 'walking delegates.' Chapter xv., entitled 'Another talk to a knight of labor,' is excellent, and can be safely recommended not only to members of that secret organization, but to others who find much to admire and little to criticise in its platform of principles. On p. 180 and the following pages Professor Newcomb disposes very neatly of the fallacy that waste creates wealth; but whether Mr. Powderly will break any fewer ginger-ale bottles in consequence of his perusal of it. remains to be seen.

## CREMONA'S PROJECTIVE GEOMETRY.

PROFESSOR CREMONA'S new work on projective geometry makes an attractive appearance in its English dress. The characteristically English additions of the translator, together with the fact that the author himself has striven to imitate the English models, for which he professes great admiration, have had the effect to make the book quite indistinguishable, were it not for the titlepage, from a book of purely English origin.

The volume before us has the common defect of not throwing sufficient illumination upon the great central points of the theory which it constructs, and of giving too much space (and too large type) to unimportant details. Another de-

The elements of projective geometry. By LUIGI CREMONA. Tr. by Charles Leudesdorf. Oxford, Clarendon pr., 1885. 8°. 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. The 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 Rigveda: 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  $s\bar{u}kta$  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 interest now taken in oriental studies.

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