Prof. Mackenzie is an idealist in his general position, though he evidently realises the difficulties which beset an over-hasty idealism, and states his result in an avowedly tentative form.

A. E. T.

Histoire des Mathématiques dans l'Antiquité et le Moyen Age. Par H. G. Zeuthen. Traduite par J. Mascart. Pp. xvi + 296. (Paris: Gauthier-Villars, 1902). Price fr. 7.

THIS translation of Prof. Zeuthen's well-known and deservedly popular work has been revised by the author, and several interesting notes have been added by M. Paul Tannery. The greater part of the volume deals with the mathematics of the Greeks, especially their geometry; the Elements of Euclid, in particular, are analysed in considerable detail, and discussed with intelligence and sympathy. Conservatives who still rally to the cry of "Euclid, and nothing but Euclid," may be respectfully invited to study, with the help of such comments as Prof. Zeuthen's, the actual text of the Elements, which is now easily procurable in Heiberg's excellent edition. It ought, on the one hand, to increase their admiration of the Greek geometer, and, on the other, to convince them of the absurdity of supposing that a garbled travesty of a portion of his work is the best introduction to geometry to put into the hands of the English schoolboy. Another interesting section is that which deals with the mathematics of the Arabs. It is difficult to claim for them any very substantial contributions to the science; but they showed themselves apt pupils both of the Greeks and of the Indians, they kept the study of mathematics alive when Christian Europe was passing through its darkest age of ignorance and superstition, and they powerfully helped on the subsequent revival. To Moslem scholars, and their enlightened rulers, modern Europe owes a debt which is not always sufficiently realised.

M.

A la Conquête du Ciel! Contributions Astronomiques de F. C. de Nascius, en Quinze Livres. Livre Deuxième (fascicule 6 et dernier.) Pp. 84. (Nantes: Imprimerie-Libraire, Guist'hau, 1902.)

M. F. C. DE NASCIUS has favoured us from time to time with copies of his astronomical contributions, which are to extend when complete to fifteen volumes. Since each volume consists of numerous parts, it will be easily understood that no inconsiderable task awaits the reader who aspires to a complete mastery of the author's methods and teaching. Only one small part of the second volume lies before us, but we confess that we are utterly unable to comprehend its purpose or to do justice to the ingenuity that apparently underlies its construction. The general conception seems to be remotely connected with Bode's law, but is far more difficult of apprehension, for with this is connected a discussion of the "triangle of divine harmony," while over the whole hovers a bewildering but awe-inspiring theme which is expressed as algorithmic. It will, perhaps, be sufficient to say that the object of the author, if object he has, is by some simple manipulation of figures to produce quantities that shall approximate to various astronomical constants, such as the periods and distances of the planets. For example, he sets out to establish or reproduce the period of sunspots, which he gives at 1111 years. The triangle of divine harmony is, we are assured, admirably adapted for this species of discussion. This triangle happens, fortunately, to be right-angled, and two sides have the values 69 and 1789. There is a good deal about the number 69, which we are very solemnly assured is equal to $64 + 5$, and it is no doubt entirely one's own fault if he fails to correctly apprehend its true significance, but 1789 seems to be introduced here for the first time, at least in this volume, and one may be excused if he fails to perceive its actual bearing. Our author handles these

quantities in the following way. The area of the divine triangle is first found, this is then doubled to get a parallelogram, and the side of a square found the area of which is equal to the tenth part of that parallelogram. This side has for its numerical value 11110! and the author congratulates himself on his success.

For many years, we are afraid, M. de Nascius has laboured on similar lines, which are destined to bring him or his readers little profit, but which he will no doubt pursue so long as he can trace his figures. It is nearly thirty years, he tells us, since he first placed a hesitating foot on the path which was destined to lead him to such brilliant discoveries. Let us hope that he has been frequently cheered by finding some close coincidence between his calculations and observed facts, and that his delight has been as keen as that experienced by other physicists who have trod a more legitimate road and been led to more valuable results.

LETTERS TO THE EDITOR.

The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts intended for this or any other part of NATURE. No notice is taken of anonymous communications.

Mr. Marconi's Results in Day and Night Wireless Telegraphy.

READING a brief account of these results in the *Times* of June 14, I perceive that Signor Marconi advances in explanation of the greater distance at which night signals were received, that the day signalling is affected by diselectrification of the transmitting elevated conductor.

If—as I gather—Signor Marconi is referring to his observations made at positions in the Atlantic, west of England, the waves travelling westward, may not rather drift in the earth's orbital path be concerned in producing the effects observed?

The waves advancing against the orbital æther stream in the day time, with it at night, might be supposed to give rise to conditions analogous to those which affect the transmissibility of sound against or with a high wind. It will assist if we assume a retarded æther drift near the earth's surface and free motion above. But still, the difficulty in this explanation resides in the very great magnitude of the effects observed.

I write merely by way of suggestion, and in very considerable ignorance of almost every particular involved in this explanation.

J. JOLY.

Geological Laboratory, Trinity College, Dublin, June 17.

Remarkable Sunsets at Madeira.

THE last few evenings we have witnessed here some beautiful sunsets, closely resembling the sunsets observed after the Krakatoa eruption, which I remember well, *i.e.* there is the same large area of beautiful pink haze in the west and high up in the sky at and immediately after sunset. The first sunset which I felt certain was of the above character I noticed on Friday, June 6. On June 10 and yesterday the display was particularly striking. There were indications, I believe, of the pink glow on one or two evenings before June 6, but as there were a good many clouds about it was difficult to feel certain of the special character of the sunsets.

F. W. T. KROHN.

Funchal, Madeira, June 12.

THE INSTITUTION OF ELECTRICAL ENGINEERS' DEPUTATION ON ELECTRICAL LEGISLATION.

WE published an article a short time ago (*NATURE*, vol. lxvi. p. 35) on the report of the committee appointed by the Institution of Electrical Engineers to inquire into the cause of this country's backwardness in electrical industries, and stated that it had been decided to ask the Prime Minister to receive a deputation on the subject. This deputation, after being once or twice postponed, waited upon the President of the Board of Trade, the Right Hon. Gerald W. Balfour, M.P., on