

him in this, but he means Malone) to assume that reference is intended to the notion that each age was dominated by one of the seven planets. However, he shows a close correspondence between many expressions in the *Τετραβιβλος* and in Roman writers under the empire, Manilius, Vitruvius, and Pliny.

The work concludes with an *excursus* on the date of the *ἀστρολογούμενα* of Petosiris and Nechepso, which had been referred to the first century before, but Dr. Boll gives reasons for placing in the first century after, the Christian era.

W. T. L.

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.]

Platinum Resistance-Thermometers.

AT the meeting of the British Association, just coming to an end, it was pointed out to the Committee of Section A, by Mr. E. H. Griffiths, that the general adoption of the method of thermometry, founded on the variation of the electric resistance of platinum with temperature, that has been worked out by Prof. Callendar and himself, is seriously hindered by the existence of a report presented to the Belfast meeting of the Association in 1874 (British Association Report, 1874, pp. 242-249), by a Committee "appointed for the purpose of testing the new pyrometer of Mr. Siemens." As I was secretary of this Committee and drafted the report, and as all the experiments were made either by myself or under my direction, I was desired by the Committee of Section A to ask you to allow me to state in the columns of NATURE (what is indeed obvious to anyone who refers to the 1874 report) that the tests carried out by the Committee of 1874, and the conclusions arrived at by them, had reference solely to the pyrometers supplied to them for examination by Messrs. Siemens Brothers, and that they have consequently no bearing on the question of the trustworthiness or accuracy of the platinum resistance-thermometers of the kind devised by Messrs. Griffiths and Callendar.

August 15.

G. CAREY FOSTER.

International Courtesy.

I LEARN from a speech of Prof. Ludwig Boltzmann, in Section A to-day, and also from some Englishmen well acquainted with German Universities, that I have unintentionally offended the physical philosophers of Germany by one or perhaps two ill-considered and hasty expressions employed in the first edition of my "Modern Views of Electricity."

These remarks do not occur in the second edition, but mere silent withdrawal of them does not convey the information that I desire to convey to my illustrious leaders and *confrères* in the foreign scientific world. I therefore request you to permit me space to make the following *amende*.

When I said that the four great names in connection with our partial knowledge of the nature of electricity were (excluding living persons) Franklin, Cavendish, Faraday, and Maxwell, I ought to have interpolated the adjective *British* before the word "names," in order to avoid entering upon much larger questions than were at all appropriate to the expository course of lectures on which the book "Modern Views" was based.

The second remark was this:—When emphasising the great achievements of Hertz, in my lecture at the Royal Institution on "The Discharge of a Leyden Jar" (reprinted as appendix to same book), I spoke of him as "no ordinary German." Literally of course it is true, but it may easily be interpreted in a discourteous sense. It was, however, less widely known than that it is now that Hertz was a German savant of the highest

type, and this fact I wanted to express; but if the proverbial odiousness of implied comparisons had only happened to strike me, I would certainly have altered the mode of expression before any reprints of my lecture were made.

Prof. Boltzmann seems to think that the context to this remark indicates that some rancour was felt in this country that the fruits of Maxwell's theory should have been reaped by a German. That, if true, would be a serious accusation, but I can assure him that it is conspicuously untrue. To an Englishman my words would not even convey the impression. I honestly think that at the present era no trace of international jealousy exists among English and Irish physicists.

August 14.

OLIVER J. LODGE.

A Remarkable Meteor.

WHILE at Pasadena, eight miles north-east of Los Angeles, California, on July 27, a few minutes before half-past seven, the writer had his attention suddenly drawn towards the north-western horizon by a bright flash of light as of the bursting of a meteor; but on keeping his gaze fixed on the point where this flash appeared, he was surprised still more to see that instead of disappearing, as usually happens with meteors when they explode, there remained a very luminous figure, somewhat of the shape of the new moon but with more wavy outlines, and of an intense whiteness, something as of an electric light, in well-defined relief against the pale golden glow of the sky. The whole time during which this luminosity was visible was something over twenty minutes, and it had ceased to be visible at eight minutes before eight. The crescent shape was not maintained more than about three minutes, then it took the appearance of a luminous vapour or cloud rising vertically for a little distance and then bending off sharply to the left in almost an horizontal line, but not showing any tendency to dissipate or grow thinner at the end farthest from the point of origin. As time went on, the whole figure became more wavy in outline, but persistently remained fixed in the same part of the sky. The bottom, the point of origin, was slightly brighter than the rest of the figure, and a little reddish in colour, and the underside of the arm outstretched to the left was brighter than the upper side. It was clearly beyond, and in no wise connected with, the Sierra San Gabriel, which cut the sky with a dark, well-defined lune under the luminous figure. All who were watching it perceived that it was no common cloud; the north-western sky was cloudless and free from haze, and no cloud in the west at such an hour can shine with this sort of light, which indeed had more the lustre of white flame.

The cloud seemed unbroken so long as it was visible at all. It would be idle to speculate beforehand on the exact locality of this outburst, since no accurate estimate of its distance could be formed at the time; but the direction, as nearly as the writer could judge by reference to the pole star, was about north 35° to 40° west, which, projected on a map of the State, gives about the direction of Tehachapi Peak from Pasadena.

The direction in which the meteor was seen to explode, as stated by other observers all the way from the Needles in the south-eastern part of the State to Lodi and Oakland in the central counties, that is to say, from points five hundred miles apart, enables one, by projecting those bearings which are reported in most detail, viz., Fresno, whence it seemed a little north of west; Keeler, whence it also seemed a little north of west and directly beyond Mount Whitney; Tracy, whence it seemed to be in the south-east; and Pasadena, whence it seemed, as above stated, to limit the spot over which it exploded to some point in the north-western part of Fresno county or the south-western part of Merced county, both being in the San Joaquin Valley, and 250 to 300 miles from Pasadena. With much greater diffidence the writer would estimate its angular height above the true horizon at not to exceed 3°.

Los Angeles, July 29,

EDWARD WESSON.

[From newspaper cuttings sent with the foregoing it appears that the meteor was seen at the Lick Observatory at 7h. 35m., and that the explosion was heard at 7h. 36½m. At Benicia the meteor was extremely brilliant for a moment, and then disappeared in a column of white vapour about two degrees long. This cloud remained visible for a quarter of an hour. At Fresno and at Redlands the luminous stream was visible for twenty minutes. An observer at Tracy says that a loud report, resembling a clap of thunder, was heard in the south-east,