

opposite the issue of the supra-orbital nerve, and that the same hairs (which can be easily identified) return almost to the natural colour when he is free from neuralgia. He adds, however, the curious fact that a dose of alcohol, sufficiently large to produce unaccountably narcotic effects, invariably causes the same temporary change of colour in the hair of the same eyebrow.

THE GOVERNMENT ECLIPSE EXPEDITION.  
Public Bungalow, Calcutta, Dec. 23, 1871.

"THE best laid schemes of mice and men,"—I am indebted, I need not say, to Robert Burns for the sentiment,—“gang off a-gey.” Nothing, I am sure, could have been better laid than our plans, although, unfortunately, we were detailed to that “west coast” which Mr. Lockyer was warned to avoid. Still he was right in covering every available point, and we are rejoiced to hear that his party has had a complete success, while ours was as thorough a failure; since a dense mist totally obscured the sun from our view, except for a few moments before totality, when a rift for a moment opened and showed the sun about one half covered; but before the telescopes could be brought to bear the clouds closed sullenly and completely, and remained for three hours after the eclipse was over! Can you imagine the disappointment of men whose hearts were set upon one object, and who had travelled day and night for hundreds upon hundreds of miles to attain it? The failure of the eclipse party in Spain was nothing to it; we had this to look forward to. But now! Well, we must console ourselves with the hope that others have fared better. The only observations taken were some magnetic ones, by the Rev. Mr. Abbey. I fear most of the other Indian parties fared as we did.

I need hardly say that we had everything in perfect order, and that we should have obtained some very valuable observations had the eclipse been visible. But it has been decreed otherwise by the gods, and one wishes to be a heathen for a little while, to abuse Phœbus Apollo, or some of the *Di Minores*, gods of the woods and streams, which sent so thick an exhalation.

The swift darkness was very solemn, and you may believe that all the natives left work and hurried into our observatory: for either through the Englishmen on the coffee plantations, or as they say from their own astronomers, they knew that the eclipse was coming. Round about in the plantations the coolies beat tom-toms and made a terrible row, for the serpent Rahoo is about to devour the sun, the great god they worship; and, although Rahoo lies coiled round the world to keep it together, which on the whole he does very fairly, yet guns and tom-toms shall, if possible, keep him from swallowing the sun. Wild cries, shouts, yells of grief, arose round the hill whereon our observatory stood, and a body of native police, under Head-Constable Morley, a half-breed, kept the coolies from further demonstrations. Some premature and unfortunate births, which have lately taken place at Manantoddy,—and such affairs, I hear, often do accompany eclipses,—are attributed to the attempt upon the life of the sun-god by this big serpent, Rahoo.

So much for our own party. We can chronicle little but disappointment; but I am rejoiced to find, by advices that have since come to hand, that Mr. Lockyer's party had all the good fortune which their chief deserved. He had taken every precaution not to be baffled; his party was so spread about and divided, that it would have been strange indeed had he been unsuccessful. At his head-quarters at Bekul everything was prepared: and although during the previous evening high banks of cloud had rendered many hearts uneasy, still, at half-past four on the eventful day, these had drifted seaward, and the immediate future was full of bright promise. On the old fort, turned into an observatory, two large telescopes were pointed to the sun. One was occupied by Mr. Lockyer, a large 9½-inch reflector; the other was under the guidance of Capt. Maclaur and Mr. Pringle. Mr. M'Vor assisted Mr. Lockyer at the spectroscope; Capt. Christie

noted down Maclaur's observations; and General Selby, Col. Far-well, and others, had telescopes ready to sketch the corona. At a few minutes after sunrise the first contact took place; all were ready, and a strict silence reigned in the fort, broken only by noting the phenomena visible or ascertainable by telescope, spectroscope, and polariscope. Bright lines in abundance are noted by Maclaur, Mr. Lockyer observes them, and then, just when they have two minutes more to work, just one hundred and twenty seconds, they see in a leaden-coloured, but otherwise clear sky, hung the eclipsed sun. It must have been a wonderful sight in the half light,—that brightness dimmed, but not all obscured,—the sun, like the Miltonic Satan, appearing no less than “Archangel ruined,” and above and below, but not on the sides, shooting glorious diaphanous rays, symmetrical pencils of light. I hear that this party has done “noble work”; I hope that all others have been equally successful, and that the results of this expedition, of which this is my last record, will redound to the advantage of science, which, in good earnest, is the cause of Truth itself.

F. T. R.

THE DIAMANTINE COUNTRY.  
Garswood, Newton-le-Willows, Jan. 12, 1872.

THE late lamented ex-President of the Royal Geographical Society is universally quoted as a scientific conqueror for having predicted by deduction the gold discoveries in Australia. Sir Roderick I. Murchison had visited the Ural Range; he presently saw rocks from the fifth “Quarter” of the globe; he found them identical, and he prophesied accordingly.

I visited the Itacolumite regions of Minas Geraes and the Diamantine country in early July, 1867. Until then it had been the general belief that diamonds were confined to a zone bounded by lat. (north or south) 15°—2°, the sole recognized exceptions being the equatorial diggings of Borneo and Malacca.

The aspect of Minas Geraes at once assured me that the precious stone, so far from being limited to that area, would be found scattered over many parts of the world, and, in writing the ‘Highlands of the Brazil’ (vol. 2, vi., p. 80), I had hoped to announce the theory to a practical public. Unfortunately my absence in Paraguay and other parts of South America delayed the printing of the book, and Messrs. Tinsley were unable to bring it out before December 17, 1868. Meanwhile the diamond had been discovered at some fifteen places in California, in Australia, and north of the Cape, and announced by the *Melbourne Argus* and the *Colesburg Advertiser*.

Pretending to little more of science than what is known to the majority of educated Englishmen, I have therefore, if the analogy be correct, performed a great feat of induction without ever being aware of its being a feat, or without the slightest importance being attached to it by myself or others. RICHARD F. BURTON, F.R.G.S.

THE REPORT OF THE ASTRONOMER ROYAL FOR SCOTLAND.

THIS Report, which is rather discursive in its character, is chiefly marked by its financial statement, and its plea for an increased grant of 1,050*l.* a year, as necessary for the efficient working of the Observatory. The present allowances, made from H.M. Treasury, amount to the very moderate sum of 1,060*l.* per annum; and as this includes the salaries of the Astronomer Royal for Scotland and of two assistants, we cannot but agree that it is inadequate; and if there is work to be done it should be sufficiently paid for. We do not mean by this sentence to suggest that there is not work to be done by the Edinburgh Observatory. It would be a great loss to science if it were to be discontinued. We require such establishments, and more of them. The only question is, whether the efforts of such establishments are best directed when employed on meridional observations. The present state of Greenwich Observatory is such as to make meridional observations elsewhere in this

country of little comparative use; but it is hard to say whether Greenwich Observatory will always hold the wonderful position of pre-eminence in this respect which it has obtained under the guidance of Mr. Airy; and we should be sorry to see meridional observations at Edinburgh discontinued. Still, there is little good in repeating such observations, especially with inferior instruments. There are other directions in which such an observatory may at present be of more use to astronomical science. Prof. Smith has himself, by his actions and by his recommendations, already, both in this Report and elsewhere, pointed out what these directions might be. He has brought forward the idea that the Edinburgh Observatory might well do something in the cause of “peripatetic” astronomical observation. There are many points in which much good might be done in this way; for instance, in the examination of the zodiacal light, auroras, and twilight. Spectroscopic observations are of growing astronomical importance, and observations of this kind may be now said to hold in astronomy much the same sort of relative position which meridional observations did at the time of the foundation of our principal European observatories. With the new equatorial, which we are glad to see that the Edinburgh Observatory is getting, much might be done in this way. Farther, sun-spot and other observations, which are of a distinctly astronomical character, are so intimately connected both with ordinary meteorological and also with magnetical observations, that these latter ought, we think, always at present to form part of the duties of a national astronomical observatory, and distinctly call for the assistance of national money.

SOCIETIES.

ROYAL.—Jan. 11.—The President in the chair.—The following papers were read: ‘Experiments made to determine Surface Conductivity in Absolute Measure,’ by Mr. D. M'Farlane,—‘The Myology of Cheiroptera,’ by Mr. A. Macalister,—and ‘Notice of Further Researches on the Fossil Plants of the Coal-Measures,’ by Prof. W. C. Williamson.

GEOLOGICAL.—Jan. 10.—J. Prestwich, Esq., President, in the chair.—Messrs. W. Cuckburn and G. W. Stow were elected Fellows, and Dr. Dionys Stur, of Vienna, a Foreign Correspondent of the Society.—The following communications were read: ‘On Cyclostigma, Lepidodendron, and Knorria, from Kiltorkan,’ by Prof. O. Heer. In this paper the author indicated the characters of certain fossils from the Yellow Sandstone of the south of Ireland, referred by him to the above genera, and mentioned in his paper ‘On the Carboniferous Flora of Bear Island,’ read before the Society on November 9th, 1870 (see *Quar. Jour. Geol. Soc.* vol. xxvii. p. 1). He distinguished as species *Cyclostigma Kiltorkense*, (Haught.), *C. minutum* (Haught.), *Knorria acicularis*, Göpp. var. *Baillyana*, and *Lepidodendron Veltheimianum*, Sternb.—‘Notes on the Geology of the Plain of Morocco, and the Great Atlas,’ by Mr. G. Maw.

ASIATIC.—Jan. 15.—Sir Donald F. M'Leod in the chair.—Mr. E. Thomas read a paper, in which he gave the results of his latest researches in Pehlvi Palæography, and adduced some fresh material to prove the correctness of views expressed by him in former papers. Mr. Thomas, in the Society's *Journal* for 1850, had entered his dissent from the Pârsî interpretation, adopted by Anquetil du Perron and De Sacy, of a certain Sassanian character as *mn* (*man*), and, in 1852, proposed to read it as a long or double *i*, with an exact counterpart in the Chaldeo-Pehlvi. The question has lately been revived in Dr. Haug's ‘Essay on the Pahlavi Language,’ by a negation of Mr. Thomas's interpretation, and a reiteration of the Pârsî definition. Mr. Thomas's objections, however, to this are, that the advocates of the *mn* are altogether unable to explain why, although the two letters *m* and *n* occur in the same text, separately written, with an optional value of *man* or *min*, an arbitrary