information on the subject. In the islands of St. Christopher and Nevis, which form part of the division of islands commonly called the Lesser Antilles, monkeys are found in large numbers, and a planter friend in the former island, which I have recently visited, assured me that he had lately been obliged to appoint a "monkey-watchman" to protect the cane-fields and the sweet-potato fields of his estate from the destructive raids of bands of monkeys.

In the island of Nevis, which at one time must have formed part of St. Christopher, and which is now only divided from the latter by a very narrow arm of the sea, appropriately called "The Narrows," monkeys—the same as those of St. Christopher—exist in great numbers, and I may add that the tails are "perfectly prehensile," *i.e.*, "naked beneath towards the tip."

Of Trinidad I cannot speak from personal observation, but a scientific friend of mine, Dr. H. A. Alford Nicholls, who lately visited Trinidad, kindly writes to me as follows:—"Prof. Mivart has certainly made a mistake about there being no monkeys in the West Indies. I find, too, that in a work on 'Central America, the West Indies, and South America,' edited by the traveller, Bates, it is stated that there are no monkeys in the Antilles. You know more of the monkeys of St. Kitts and Nevis than I do, but I can tell you something of your Trinidad cousins. There are two kinds of monkeys in Trinidad, and as the fauna is continental, they will doubtless be found on the mainland of South America. One belongs to the Mycetes, and it is called the Red Howler, partly on account of its loud and hideous cries; the other, a diminutive specimen of the Cebidæ, is called the 'Sapajou;' it is a Cebus."

I shall be glad to supply any further information on the subject of monkeys in St. Christopher and Nevis.

Dominica, British West India, November 11 EDMUND WATT

Earthquakes in Iceland

IN NATURE, vol. xxi. p. 89, I see the earthquake which occurred in Iceland on September 24 last ascribed to "volcanic eruptions in the Krísuvík Mountains, a locality where eruptions have not been known within the memory of the present generation." The use of the word "eruption" here is misleading, for though the earthquakes, which frequently occur at Krísuvík, are no doubt caused by volcanic action, nothing of the nature of an *eruption*, in the usual sense of the word, has been known to occur there within the historical period. The boiling springs, mud caldrons, and sulphur deposits, for which Krísuvík is noted, are, on the authority of Prof. Bunsen (Letters to Berzelius), to be ascribed to a pseudo-volcanic action occurring at comparatively slight depths. Though slight earthquake shocks have frequently occurred, during the last eighteen months, while I was at Krísuvík, I have never observed that they had any effect on the boiling springs and other thermal phenomena.

The earthquake of September 24 last, though more violent than any other which I have experienced there, differed from the rest in no other respect. They are generally confined to the neighbourhood of the hot springs and sulphur beds, though the last was felt over a wider area, and seldom do any damage.

Edinburgh, December 1 W. G. SPENCE PATERSON

Diatoms in London Clay

I DO not know if diatoms have been observed in the London clay, or not. If they have not, it may interest many to know that I have discovered triangular, quadrangular, elliptical, and discoidal forms in the London clay of Sheppey. The frustules are frequently perfect, and the markings are plainly discernible as square-sided depressions or elevations; I am not certain which. One of the discoidal forms is an old friend, for I observed it in abundance two years ago; but as I then had no knowledge of diatoms, I passed large quantities by as pyritous concretions.

In my ignorance I stated in a paper on the well referred to (*Proc.* Geol. Assoc., vol. v. p. 357): "It should be mentioned that at and below 293 feet the clay was thickly studded with very minute disks of iron pyrites, each having a boss in the centre, and the edge slightly turned up all round. They were uniformly perfect, as much so as if cast in one mould."

A few days ago I saw *Anlicodiscus oreganus*, and was struck by its resemblance to the disks I had seen in the London clay. As I had not preserved any of these, I set to work to get more, if possible, and last night I was fortunate enough to find several distinct species. W. H. SHRUBSOLE

62, High Street, Sheerness-on-Sea, December 2

Colour-Blindness

THE remarks of Mr. Everett at the close of his paper (NATURE, vol. xxi. p. 62) on Prof. Hering's theory, seem to be founded on a misconception. Prof. Hering assumes, not four, but six elements of colour-sensations connected by the equations—

$$B + W = 0 \quad R + G = 0 \quad B' + Y = 0.$$

The specification of any colour in his system contains three independent variables, and is of the form

$$D = a\,W + B'\,R + c\,b,$$

and it will usually take four equations to eliminate W R and B.

It must be noted that Prof. Hering assumes that the red-green and blue-yellow sensations never occur in nature pure, but always mixed with white. If this is granted I do not think that the result of Maxwell's experiments on colour-mixture will be found inconsistent with his theory. JOHN TENNANT

19, The Boltons, S.W., November 28

Intellect in Brutes

I OFFER the following illustrations of reasoning powers in animals, should you care to insert them.

1. Some years since, while hunting in Northern Michigan, I tried, with the aid of a professional trapper, to entrap a fox who made nightly visits to a spot where the entrails of a deer had been thrown.

Although we tried every expedient that suggested itself to us, we were unsuccessful, and, what seemed very singular, we always found the empty trap sprung.

My companion insisted that the animal dug beneath it, and putting his paw beneath the jaw, pushed down the pan with safety to himself; but though the appearances seemed to confirm it, I could hardly credit his explanation. This year in another locality of the same region, an old and experienced trapper assured me of its correctness, and said in confirmation, that he had several times caught them, after they had made two or three successful attempts to spring the trap, by the simple expedient of setting it upside down, when, of course, the act of undermining and touching the pan would bring the paw within the grasp of the jaws.

2. A Dandie Dinmont terrier, after the death of his mistress, was playing with some children in a room into which was brought a photograph (large) of her, that he had never previously seen. It was placed upon the floor leaning against the wall. In the words of my informant, who witnessed it, the dog, when he suddenly caught sight of the picture, "crouched and trembled all over, his whole body quivering. Then he crept along the floor till he reached it, and, seating himself before it, began to bark loudly, as if he would say, 'Why don't you speak to me?'" The picture was moved to other parts of the room, and he followed, seating himself before it and repeating his barking.

3. The dog whose demoralisation by the salute of a monkey was published in NATURE, vol. xviii. p. 77, recently had another encounter with one, and behaved in so sneaking a manner as showed that he had not forgotten his first impression.

Boston, November 22 C. F. CREHORE

Electric Lighting

IN NATURE, vol. xx. p. 641, you say, "For the first time perhaps in the history of electric lighting two rival magneto electric machines are illuminating the same hall." I can state an earlier instance, though not an exact parallel. At the annual fair of the American Institute, held in New York during September, October, and November, 1878, the main hall was illuminated by the Wallace-Farmer machine and light, and the machinery hall—directly communicating with it, by the Brush apparatus. The two halls form practically one.

ALEX. S. GIBSON

Norwalk, Conn., U.S.A., November 14

JEAN BAPTISTE ALPHONSE CHEVALLIER

THE death is recorded on December 1 of Prof. A. Chevallier, who deserves notice here as one of the Nestors of French pharmaceutical chemistry. He was