

In conclusion, I may add that there is nothing improbable to my mind in peoples even so distant from each other as the Polynesian Islanders and the Gauls retaining in their traditions a name which had been applied to their mythical common ancestor, nor unreasonable in supposing that they and other peoples mentioned in my paper were alike derived from some region in Central Asia. My argument is simply cumulative, as there are many facts of a different kind pointing in the same direction.

I am sorry my communication has reached such an inordinate length; but having replied to "M. A. I.'s" objections, which, after his first letter, forcibly remind me of the mountain in labour bringing forth a mouse, I shall not trouble you with further correspondence on a subject which I fear is far from interesting to a majority of your readers.

C. STANILAND WAKE

#### Meteor

As I was going along the road towards Greystoke Castle at half-past eight P.M. on Friday last, April 19, I noticed a very fine meteor in a south-east direction. It was about the size of a common hand-ball, its centre being of an exceedingly brilliant white colour, surrounded by a circle of a bluish tinge, while short flickering radiations were distinctly visible on its circumference in all directions, reminding me of the spherio-stellate spiculæ of certain sponges. It was falling in a perpendicular direction, but I was not fortunate enough to see it at the beginning of its course. Its downward motion was slow and quite gradual, apparently not swifter than an ordinary india-rubber ball would fall by the gravity of its own body. There was no trail whatever left behind in its course. After two or three seconds it suddenly disappeared, before reaching the ground, without any explosion or expansion of its body. The night was very close and still, a muddiness covering the whole sky, interspersed here and there with long stratus clouds, and a beautiful halo surrounding the moon.

THOMAS FAWCETT

Blencowe School, Cumberland, April 22

#### A Waterspout

ON Saturday last, April 16, whilst fishing in the river Elwy, at a point about two miles above the well-known Cefn caves, and five from St. Asaph by the river, I witnessed a very singular phenomenon. My attention was suddenly called up-stream by a remarkably strange hissing, bubbling sound, such as might be produced by plunging a mass of heated metal into water. On turning I beheld what I may call a diminutive waterspout in the centre of the stream, some forty paces from where I was standing. Its base, as well as I could observe, was a little more than two feet in diameter. The water curled up from the river in an unbroken cylindrical form to a height of about fifteen inches, rotating rapidly, then diverged as from a number of jets, being thrown off with considerable force to an additional elevation of six or seven feet, the spray falling all round as from an elaborately arranged fountain, covering a large area. It remained apparently in the same position for about forty seconds, then moved slowly in the direction of the right bank of the river, and was again drawn towards the centre, where it remained stationary as before for a few seconds. Again it moved in the former direction, gradually diminishing and losing force as it neared the bank, and finally collapsed in the shallow water. Strange to say, its course was perpendicular to the bank and not with the current.

At the time of the occurrence the river was still high, from the recent heavy rain, though the depth of water at the spot where I first observed it was not more than four feet. The current, of course, was stronger than usual, but presented a comparatively smooth surface. The day was fine and sunny, with a slight breeze from the S.E. The event occurred about 12.15, and lasted seventy or eighty seconds, as well as I could judge. The atmosphere in the immediate vicinity seemed, from the way in which the spray was scattered, to be somewhat agitated; but my impression was that such agitation was the result of the phenomenon, rather than its cause. I had fished over the spot a few minutes previously, and examined it afterwards with great care, but saw nothing to account for the wonder.

St. Beuno's College, St. Asaph, April 9.

J. GRAY

#### Cuckoo's Eggs

THE discussion raised by Prof. Newton on the coloration of cuckoo's eggs has been very interesting doubtless to many readers

of NATURE; a mite of information from New Zealand, concerning one species of the Cuculidæ, may not be out of place.

The German theory that "the egg of the cuckoo is approximately coloured and marked like those of the birds in whose nest it is deposited, that it may be less easily recognised by the foster parents as a substituted one," does not hold good in respect to our *Chrysococcyx lucidus*, Gml., pipiwharapa, the whistler or small cuckoo.

The dupe is the pipiriri, or gray warbler, *Guygone flaviventris*, Gray, its eggs are white, dotted with red spots; the egg of the whistler of much larger size, is of a greenish dun.

However, I think it should be stated that the nest of the dupe is somewhat of a pear-shaped structure, firmly and thickly built, with a small entrance near the middle, well sheltered with feathers. Here discrimination betwixt eggs may be difficult for the foster parent, if it possesses the faculty and uses it. In the Trans. N. Z. Institute (vol. ii. pp. 58 and 65) reasons have been advanced by the writer for the selection of the warbler's nest by our brightly-plumed cuckoo; may "the dim obscure" of its interior supply another reason?

THOMAS H. POTTS

Ohimitahi, Feb. 5

#### Sun-spots and the Vine Crop

As the connection of sun-spots with terrestrial phenomena is now largely occupying the attention of scientific men, the following facts may be of some interest. The years in which the vine crop in Germany was unusually good seem (in this century, at least) to have returned at regular intervals. The close coincidence of these years with the years of minimum sun-spots is shown by the following table:—

Minimum of Sun-spots.	Wine-years.	Minimum of Sun-spots.	Wine-years.
1784.8 ...	1784	1833.8 ...	1834
1798.5 ...	(?)	1844.0 ...	1846
1810.5 ...	1811	1856.2 ...	{ 1857
1823.2 ...	1822	1857.2 ...	{ 1858
		1867.2 ...	1868

I may add that the gentleman who first remarked the regular recurrence of wine-years at intervals of about eleven years was not aware of the periodicity of the sun-spots, and could not therefore have been in any way prejudiced. The years given in the above table are the only ones known in Germany as good wine-years.

These facts agree with the results of Messrs. Piazzzi Smyth and Stone, who found that the mean temperature on the surface of the earth was subjected to a period of eleven years.

ARTHUR SCHUSTER

Owens College, Manchester, April 23

#### Tide Gauge

IN NATURE of the 18th is a letter from Mr. Pearson respecting Tide Gauges. As very little appears to be known of such instruments, we beg to inform you that we have made them for many years, and have now two finished, one for the Indian Government, and the other for the Australian Government, and we shall be happy to show them to any one wishing to see them. We think they could be made self-acting at a much less cost if the exact time of high water is not required.

449, Strand, W.C., April 19

ELLIOTT BROTHERS

#### Colour of the Hydrogen Flame

IN a communication from my zealous science-master, which I find in your issue of Thursday the 11th, it is stated that pure hydrogen has no tinge of blue in its flame (that colour being due to the presence of sulphur), and he concludes his note with a gushing tribute of his own, and the younger boys' gratitude for the "simply delightful Science Primers of Pro's. Huxley, Roscoe, and Balfour Stewart." Let me call his attention to the fact that on page 26 of his Chemistry Primer, Prof. Roscoe distinctly states that "Hydrogen is inflammable, and burns with a pale blue flame."

A GRATEFUL PUPIL OF MR. BARRETT

#### The "Cheironectes pictus"

SINCE I communicated to you an account of a fish which I caught in the Gulf weed during the homeward voyage of H.M.S. *Charybdis*, I have seen, in the February number of the *American*