large circle of readers—kindly sent me an account of her experience of the offensive use of the Cuvierian organs. She tells me that in the Bay of Rapallo at Santa Margherita, near Porto Fino, she dredged a large black Holothurian, and that "the tangled mass of white threads you mention is *so* sticky and in such quantity that, after having taken one of these animals out with my hand, I had considerable difficulty in freeing my fingers from the threads; indeed, my hand was not comfortable till I had washed it in hot water." On the other hand, an inquiry made of a gentleman living at Penzance, and interested in Echinoderms, resulted in the answer that he had never heard of the "Cotton-Spinner." F. JEFFREY BELL

The Red Glow

IN your issue of April 10 (p. 549) is the statement by an observer in Australia that the "*red glow* was margined by an *immense black bow* stretching across from north-west to south-east."

I wish to say that the above language almost exactly describes the appearance to which I alluded *on the same page* as "the *earth shadow* cutting off the upper rim of the first glow." The "black bow" of the Australian was evidently the shadow of the horizon projected on the haze stratum. In both the above cases the lower surface of the haze was evidently well defined, so that as the horizon intercepted the direct rays of the sun, a well-marked shadow moved westward and downward. Above this black rim or bow appeared the *secondary* glow, produced by the reflection of the sun's rays from that portion of the haze surface which was directly illuminated. Very often the second glow was more conspicuous and impressive than the first, because it shone against the dark sky of night.

In the *Proceedings* of some association I have just read an astonishing estimate of the height of the haze as 141 miles, based on the fact that it received the sun's rays one hour after sunset, the fact being strangely overlooked that the late reflection was a *secondary* one.

One evening the shadow or "black bow" was beautifully indented or serrated, doubtless by the shadows of remote cumuli such as are commonly seen in platoons on our evening horizons. The "black bow" was seen only during the first few days of the glows in September. S. E. BISHOP

Hawaiian Government Survey, Honolulu, May 20

P.S.—I hoped long ere this to have sent you data from the Caroline Islands received per *Morning Star*, now much overdue. We fear she has suffered disaster.

Light Phenomenon

THIS evening towards sunset, at 7.55 p.m., there was a column of light extending from the upper part of the setting sun to about 20°, the column being truncated and perpendicular to the horizon. After remaining thus for about two minutes, the sides of the pillar lost somewhat of their perpendicularity, and, with the whole volume of the sun, put on prismatic colouring, the ray (a single one, and still truncated) at times appearing to be a wave of flame. I observed this, with four or five other persons, from the cliffs, and should like to know if the peculiarity of this sunset was observed by others. It continued until 8.20 p.m., when the sun was below the horizon, and the wave of flame ceased. I can hardly better describe this ray than as being very like a northern light, only extremely circumscribed in size, and intensely brilliant. R. D. GIBNEY

Falmouth, June 21

Atmospheric Dust

IN connection with the recent experiments of Dr. Lodge and Mr. John Aitken (described in late numbers of NATURE) on the filtration of dusty atmospheres, I have ventured to call your attention to the following, as of possible interest. I have had frequent occasion to note the intensity of the so-called "rain-band," an absorption-band of terrestrial origin, due probably to the dust and water-vapour present in the atmosphere, and of just less refrangibility than the less refrangible of the D lines, and have at present two continuous records of observations taken, in the main, five times a day, running back a year and a half or so. I have also a very thorough list of the auroral displays which have occurred for the same period in this vicinity. Granting that the aurora is an electric discharge in high regions of the atmosphere, or, more accurately, where its density is inappreciable compared with that at the earth's surface, and knowing that according to these recent experiments an electric discharge is capable of precipitating the dust-particles in the atmosphere, it should follow that at times of auroral display, or immediately following, the intensity of this rain-band should be at a minimum. Searching the records to ascertain if any such correspondence could be noticed, it is quite astonishing to find how distinct and well marked this variation in the intensity of the rain-band at times of auroral occurrence is. The atmosphere is full of fine dust-particles, and our very general, though not yet decisively proven, belief is that the aurora is somewhat of a glow-like discharge from electrified air strata, in whose vicinity the density of the dielectric is inconsiderable. The direct inference is that at such times the fine dust and vapour particles are deposited, made to settle, or, uniting together, form an agglomeration, and become perhaps cloud-nuclei. Perhaps other evidence on this matter can be elicited. The records at hand show very plainly just such an agreement as was anticipated.

ALEXANDER MCADIE

26, Garden Street, Cambridge, Mass., U.S.A., June 5

Some Botanical Queries

THERE is a plant here with a very large bulb, *Scilla maritima* (?), whose flower I have not seen. I grew two of them in pots last year, but they failed. This plant is set by the peasants near the fig-trees with the idea that these latter will produce better fruit. Is this a mere superstition? or can the Scilla be connected in any way with caprification?

Is *Lilium bulbiferum* known to be polygamous? The greater part of the specimens I have found in the mountains near here are staminate, but in some there is a very minute though perfectly formed pistil. Müller, my only book of reference, says nothing on this point.

Is *Trifolium repens* among the list of cleistogamous plants? I am watching a specimen which seems to produce abundant fruit, but no ordinary flowers. LIGUS

Nice, France, June 20

Primæval Man and Working-Men Students

UNDER the above heading you published a letter from me in NATURE, August 2, 1883, p. 320, giving the names of four thoughtful artisans, who, after studying the Pitt-Rivers collection of antiquities, and reading my notes in NATURE, had made finds of Palæolithic implements in Essex. Ten months have passed since that letter was published, and a fifth student, Mr. W. Swain, has now joined the original party of four. On Sunday, June 15, these admirable workers called upon me with their recent discoveries. They consisted of fifteen Palæolithic implements found in the drift gravels of Leyton, Wanstead, and Plaistow, with the usual complement of flakes. Some of the implements were of the older abraded class, others were as keen as knives, and from my "Palæolithic Floor," traces of which, as I have pointed out, may be seen in Essex. Three nondescript tools were also lighted on, and four hammer-stones of quartzite with abraded ends, one from Nazing; five Neolithic instruments from Jordan's Wood, and a large collection of flakes.

The excursions for these tools and flakes have necessarily all been made on Sundays. The finders of the stones are not mere collectors, but men who have mastered the meaning of their subject. W. G. S.

FORESTRY

THE approaching International Forestry Exhibition at Edinburgh, which is to open on July 1 next, and which promises to be a very successful affair so far as the variety of the exhibits and the general arrangements of the Exhibition are concerned, will, it is hoped, prove something more than a mere show during the months it is open to the public. Though the objects exhibited will, in all probability, be a source of considerable attraction and instruction, inasmuch as the arrangement and scope of the several classes seem to have been carefully considered, it is much to be hoped that the Exhibition will be