the museum of the Institute of Jamaica, and later were briefly described by Messrs. Grabham and Cockerell in NATURE (1892, p. 514), when the specific term *Jamaicensis* was suggested. The year following over a dozen specimens were received by Dr. Grabham, also from Bath. The locality is in a most humid part of the eastern extremity of the island. Two or three examples have since been secured from widely separated spots, but the species has hitherto been regarded as one of much rarity, and as uncertain in its distribution. Various attempts made by different collectors to secure specimens have been unsuccessful.

Prof. E. L. Bouvier, who has lately been making a systematic study of the genus, recognises two species—*P. jamaicensis* and *P. juliformis* var. Gossei—among the Jamaica representatives, (cf. *Quart. Jour. Micr. Sci.*, vol. xliii. p. 750). Prof. Ray Lankester, on behalf of Prof. Bouvier, has recently communicated with the Institute of Jamaica asking for additional specimens. A general description of Peripatus was accordingly inserted in the local newspapers, and offers of reward were made with the object of encouraging the peasantry to search for the animal, but this was of no avail. A visit, since made by the writer, to Bath resulted in the securing of a number of examples. These were exhibited in the neighbourhood and a sum was offered for further specimens, with the result that before long numbers began to pour in and soon upwards of fifty were obtained. Dr. Grabham also secured a large supply. Afterwards more than eighty specimens were dispatched to the Museum, then another fifty were offered, and now that a local enthusiasm has been created it would seem that examples in plenty might be procured at any time. It is thus obvious that the animal is by no means so rare as has been supposed.

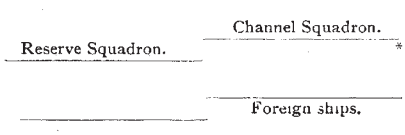
The creatures are found under stones and rotten wood, often buried for a short distance in the earth. Most are blackish brown or green, much lighter on the ventral surface; others are reddish black above and light flesh-coloured beneath; but many intermediate tints occur. A reddish-brown colour is extracted at first by alcohol, and the distinctive colours are soon lost. Specimens of all sizes were obtained, including individuals in which parturition took place during preservation. The length of the newly born was as much as 2 cm. J. E. DUERDEN.

Institute of Jamaica, Kingston, February 12.

Audibility of the Sound of Firing on February 1.

FROM the letters written to NATURE and to the *Standard* by correspondents who heard at very great distances the guns fired at Portsmouth on February 1, it seems to be the general impression that the firing was by volleys, if one may use a convenient but probably technically incorrect expression. This was not the case. It would be very desirable that the official order of firing should be published. If this is not done, there may be some interest in a note on the order as it appeared to me, watching from the sea-front near Southsea Castle.

The disposition of the fleet was roughly thus:



The first gun of each round of firing seemed to me to be fired far down the line, from the flagship of the Reserve Squadron; but of this I cannot be sure. It was immediately succeeded by the gun from the *Majestic*, flagship of the Channel Squadron; and from this the firing ran down the double line, the intervals between the successive pairs of flashes being about half a second. It was impossible to see from Southsea whether the Reserve Squadron followed the lead of the Channel Squadron or of its own flagship. In the latter case, after the leading guns from the flagships there would have been four guns, in the former case two guns every half second, for a space of some seconds.

These details are from memory, and may require some correction. The important fact is that the guns were fired in quick succession, and not simultaneously.

The line of ships was about eight miles long, roughly east and west, and Southsea was about a mile north of the eastern end. But the roll of the guns lasted only about twenty seconds—that is to say, scarcely any sound reached us from the western division of the line, which was hidden from sight by a projecting point of land. It is not surprising, therefore, that nothing was heard at Chichester and other places comparatively near Portsmouth. ARTHUR R. HINKS.

Cambridge, February 26.

Protective Markings in Animals.

I ENCLOSE a photograph of my cat asleep, in which may be plainly seen the resemblance to open eyes, borne by the markings above the orbits. In the living cat this resemblance is so striking that my attention was first drawn to it by my fancying that he was sleeping with his eyes open.

I have noticed the same markings in other cats, but never quite so distinct. The advantages, to a non-domesticated animal, of such an arrangement are obvious, and I think it may interest some of your readers. Besides these marks over the eyes, I observe in a good many cats that the fur on the lower jaw is generally light and bounded by markings following the line of the mouth, thus giving a heightened effect when open, whilst when shut, during sleep, the cat has, at a distance, the appearance of having the mouth still open. CLARENCE WATERER.

Highfield, Northdown Avenue, Margate, February 26.

Snow Crystals.

A FALL of snow stars, similar to that described by Mr. Wm. Gee (p. 420), occurred near Sutton Coldfield about 1876, as near as I can remember. I was much struck by their beauty and the graceful way they fell to the earth. C. J. WOODWARD.

Municipal Technical School, Birmingham, March 2.

THE NEW STAR IN PERSEUS.[1]

DR. COPELAND was kind enough to inform me by telegram, on the afternoon of February 22, of the discovery by Dr. Anderson of a new star in the Milky Way in Perseus on the early morning of that day. It was stated that its position was R.A. 3h. 24m. 25s. and Declination +43° 34′, its magnitude 2·7, and colour of a bluish-white. Later in the evening this information was corroborated by another telegram from the "Centralstelle" at Kiel.

Owing to cloudy weather, no photographs could be obtained at Kensington until the evening of the 25th. Momentary glimpses of the star on the evening of the 22nd, between the hours of 6 and 7.30 p.m., indicated that the Nova had considerably brightened since the time of its discovery, as it was estimated as a little brighter than a first magnitude star; no satisfactory observations of the spectrum could be made.

Another glimpse on the early morning (1.30 a.m.) of Monday (25th) showed that the star was still of about the first magnitude.

Prof. Pickering reports that the Nova was dimmer than an eleventh magnitude star on February 19. On the 23rd it was as bright as Capella.

The star, therefore, was then at least 10,000 times brighter than it was four days previously, and ranks as the brightest new star recorded since that which appeared in the year 1604.

Since the 25th the brightness has diminished slightly, and on the evening of the 27th was estimated between the first and second magnitude (1·7). If this reduction of brilliancy continues at the same rate, the new star will evidently be shorter lived than those to which it has most closely approximated in luminous intensity at the maximum, and less time will be available for studying the spectral changes which may be anticipated. I may state that Tycho's Nova (1572) was visible for nearly one and a half years, and Kepler's (1604) for about the same period.

It is interesting to note that the star was described by Dr. Anderson as being of a bluish-white colour at the

[1] Preliminary note. By Sir Norman Lockyer, K.C.B., F.R.S. Received and read before the Royal Society, February 28.