

close by, similar swarms were to be seen. Even these, however, were inaccessible; but I caught some of an apparently similar swarm drifting over the ground between the bushes, and inclose some of the specimens herewith. To me they look just like the insects which ordinarily strew one's table under the lamp at night (I notice, by the way, that to-night there are none, though the window is open as usual), and therefore I am led to suppose that the special character of the swarms noticed to-day appertains to some condition of the atmosphere, and not to the species of insect; but perhaps some of your contributors can throw light on this point. It would also be very interesting to know whether similar swarms were noticed elsewhere to-day, and whether they showed the same slant as was noticed here.

R. E. FROUDE.

Admiralty Expt. Works, Haslar, Gosport, May 27.

P.S.—The swarms of flies disappeared about 1 p.m., as the thunder clouds cleared away.

Popular Botany.

WE do not expect accurate scientific information from journalists; but so much confusion and error are seldom compressed into a small space as are to be found in a paragraph of which I send you extracts, cut from a London daily:—"A sad case of accidental poisoning by wild hemlock is reported from Tyne Dock. A little band of school children playing on some waste ground had gathered a quantity of a common variety of this dangerous plant, known to country folk as 'fool's parsley.' According to the evidence of one of the party, a little girl aged eight named Pringle, her sister 'said it was cabbage, and she should eat some.' Another boy and girl, named Shafter, who were still younger, followed her example. All three were soon afterwards taken ill. One 'complained of her legs as if they were tired'—a common symptom of hemlock poisoning—and 'her head afterwards got bad.' Pringle ultimately recovered under treatment, but the two Shafter on reaching home gradually became unconscious, and died the same afternoon within twenty minutes of each other. This species of hemlock, known to science as the *Conium maculatum*, is said to be much more poisonous in May than in any other month." It would be interesting to know what the plant really was. It can hardly have been the true hemlock, *Conium maculatum*, and instances of fatal poisoning by fool's parsley, *Aethusa cynapium*, are so rare that an authentic record would be valuable. It is difficult to imagine either of these plants being mistaken for cabbage. Can it have been *Cicuta virosa* or *Oenanthe crocata*? It would be interesting if any reader of NATURE could throw light on the subject.

The following delightful paragraph is cut from the same paper a few days later:—

"Can plants see? Darwin gave it as his opinion that some of them can [one would like to know where], and an Indian botanist relates some curious incidents which tend to verify the belief. Observing one morning that the tendrils of a convolvulus on his verandah had decidedly leaned over towards his leg as he lay in an attitude of repose, he tried a series of experiments with a long pole, placing it in such a position that the leaves would have to turn away from the light in order to reach it. In every case he found that the tendrils set themselves visibly towards the pole, and in a few hours had twined themselves closely round it."

ALFRED W. BENNETT.

Gaseous Diffusion.

IN your Notes of last week there is a description of an experiment for showing gaseous diffusion, devised by Prof. v. Dvorák, which, however, does not seem so striking as one that was shown at the Royal Institution more than twenty years ago by, I think, Dr. Odling.

A cylindrical porous battery cell was closed by a cork through which passed a vertical glass tube of about half an inch in diameter. The lower end of the tube was bent upwards into the form of a delivery tube, and was placed in a pneumatic trough, with a cylinder filled with water inverted over the end of the tube. On placing an inverted bell-jar of hydrogen over the porous cell, gas was rapidly collected in the cylinder, and this contained sufficient hydrogen to explode on the application of a flame. On removing the bell-jar, the hydrogen diffused outwards, and water was drawn up the wide tube.

Cooper's Hill, May 29.

HERBERT MCLEOD.

NOTES UPON THE HABITS OF SOME LIVING SCORPIONS.

THE literature which treats of the habits of living scorpions is not voluminous, but it labours under the disadvantages of being based largely upon undetermined species, and of being often of questionable trustworthiness with regard to the statements that are made. Even accounts that have been given of late years of the same species of scorpion differ widely as to facts of no small importance. Mons. L. Becker, for instance, asserts that the senses of hearing and seeing are highly developed in *Prionurus australis*, the thick-tailed yellow scorpion of Algeria and Egypt; Prof. Lankester, on the contrary, declares exactly the opposite to be the case. Discrepancies such as these and the deficiencies above mentioned show the need for fresh observations upon the subject, and no further excuse need be offered for publishing the following notes upon the habits of some specimens of two species of scorpions, *Parabuthus capensis* and *Euscorpium carpathicus*, which I was fortunate enough to keep for some months in captivity.

For the specimens of *Parabuthus* I gladly take this opportunity of expressing my thanks to my friend Mr. H. A. Spencer, of Cape Town, who kindly collected them for me at Port Elizabeth, while acting as medical officer on board the Union Steam Ship Company's s.s. *Mexican*; while for the *Euscorpium* I am indebted to the kindness of Dr. Gestro, of the Natural History Museum at Genoa. This last genus of scorpion Prof. Lankester has also written about; many of my observations, therefore, merely confirm those of this author. No description, however, has to my knowledge ever been published upon the habits of any species of *Parabuthus*. This genus, however, belongs to the same family as *Prionurus*, and the behaviour of the two in captivity seems to be very similar.

There is an abundance of evidence that scorpions are nocturnal, and mine were no exception to the rule. They would spend the daytime huddled together in corners of their box or under pieces of wood; at night they would wander about, presumably in search of food. It was easy, however, at any time during the day to rouse them from their sluggishness by applying a little artificial warmth to the box. One end of the box containing the *Parabuthus* was closed with a plate of perforated zinc. If this box was placed in the fender at a distance of about a couple of feet from a moderate fire, with the zinc end turned towards the grate, the scorpions would climb upon the metal plate and bask in the warmth. But immediately the box was brought near the bars of the grate they would all clamber or tumble from their position with ludicrous haste. It must not be supposed, however, that the amount of heat required to make them retreat was at all great. As a matter of fact warmth that I could without inconvenience bear for several minutes upon my hand would throw these animals at once into a state of the greatest consternation.

When walking both *Parabuthus* and *Euscorpium* carry the large pincers or chelæ well in advance of the head; these appendages thus fulfil the office of antennæ or feelers. In *Parabuthus* the body, however distended and heavy with food, is raised high upon the legs exactly as Prof. Lankester has described in *Prionurus*, and the tail is usually carried, curled in a vertical plane, over the hinder part of the back. In *Euscorpium*, on the contrary, as has also been pointed out by Prof. Lankester, the ventral surface of the body is scarcely raised from the ground during progression, and the tail, which is very slender and relatively much lighter than in *Prionurus* or *Parabuthus*, is dragged along, extended, and with a slight curl only at its hinder end. This difference in the carriage of the tail depends possibly upon the difference in its size and weight. For it seems reasonable to suppose that the heavy, robust tail of a *Parabuthus* or *Prionurus*