

from its Servant in the East, 1602-1617," there are numerous references to the various kinds of sanders wood, but they are easily distinguished. The red sanders wood always came from the Madras coast, and was sent to Europe for dyeing purposes. The white sandal wood (*Santalum album*) was used as a perfume, for medicinal baths, and for presents. Sappan wood, sapang, patanga, or Brazil wood came from Malaya and Siam from the tree called *Caesalpinia sappan*. It was one of the "vendiblest" commodities in the trade between Siam and Japan in 1615.

There is still a demand for red sanders wood, but the drug is not of so much importance as it was years ago. The reasons are well known—on account of the artificial substitutes now employed for dyeing purposes. Evidence of this is seen in the last issue of a Madras newspaper just to hand. It describes the visit of the Governor of Madras to a large modern cotton mill. One sentence reads:—"His excellency passed on to the reeling room and then to the dye house, where the dyes used are mostly aniline dyes."

Indian Museum, Calcutta.

DAVID HOOPER.

Anguillula glutinis—Paste Eels.

In Carpenter's work on the microscope, the eighth edition, so ably edited by the late Dr. Dallinger, occurs the following passage (p. 945): "This last [*A. glutinis*] frequently makes its appearance spontaneously in the midst of paste that is turning sour; but the best means of securing a supply for any occasion consists in allowing a portion of any mass of paste in which they may present themselves to dry up and then laying this by so long as it may not be wanted, to introduce it into a mass of fresh paste, which, if kept warm and moist, will be found after a few days to swarm with these curious little creatures."

As he also says that "a writhing mass of any of these species of 'eels,' is one of the most curious spectacles which the microscopist can exhibit to the unscientific observer," very many young microscopists have been led to try to obtain the eels by allowing paste to stand until sour, and also by getting dried paste known at one time to have contained "eels." Unfortunately, in this country at least so far as I know, such attempts have always failed, and I have received many letters asking for the cause of such failure.

Of course, it is generally acknowledged that no animals of the grade of these nematoid worms ever appear spontaneously; they were probably present in the water used to dilute the paste, but in paste that has been boiled and diluted with water that has been boiled they never appear, and I have tried hundreds, perhaps thousands, of experiments in this direction. And even when cold water from a pond or brook was used to dilute the paste, I never found them.

In regard to dried paste also, my experience has been different from that of Dr. Carpenter. When paste has been thoroughly dried in the open air in our climate, no eels can be made to appear by transferring some of this paste to fresh material and keeping it warm and moist. Paste may dry up to a stiff mass and the eels still live, but I have never been able to keep paste in a thin layer exposed to the air in our dry climate for one month and then resuscitate the eels. I have tried it over and over again, and the eels always disappeared. By keeping the paste slightly moist, however, the eels (or their progeny) may be kept indefinitely.

The fact that Carpenter could keep them alive after the paste had apparently dried up, may perhaps have been due to the moistness of the English climate in comparison with ours.

Fortunately, the "eels" may be found in most book-binder's paste tubs, and a sufficient amount for a start may, if properly packed, be sent by mail provided the time of transit is not more than two weeks.

Paterson, N.J., U.S.A.

JOHN PHIN.

The Fox and the Fleas.

THE story of the fox and the fleas, published in NATURE of March 23, is not current among Celtic people only. As Bohemia is a country full of fields, pastures, ponds, brooks, and forests, the last often being inhabited by foxes, it is no wonder that my father, who was a close observer of

nature, told me the same story nearly fifty years ago. But the Bohemian fox was in one point distinguished from the English fox, for, being unable to find sheep-wool and probably not trusting to hay, and yet wishing to get rid of the fleas, he was obliged to sacrifice his own fur, and so he plucked out as much of his own wool or hair with his teeth as might easily serve to collect the fleas; and the effect was superior, for the fleas could creep into the hair without noticing any change of medium during the water trick.

As regards the question about the origin of the fleas, raised by Prof. Hughes in NATURE of April 13, my experience as an old hunter is that, at least in our comparatively dry climate, the animals living in forests have an ample opportunity of gathering fleas there. If you happen to shoot a squirrel, never put it into your bag or pocket, or else in a few minutes you will be swarming with fleas which are quickly leaving the dead animal.

Once I placed a freshly shot squirrel on a newspaper, and was surprised to find what an enormous quantity of little fleas of a peculiar kind (all these different kinds of fleas were studied by Baron Rothschild) were leaving the dead animal; and yet the squirrel lives more in the trees than on the ground, and hardly approaches stables or inhabited buildings; how much more easily can a fox collect his parasites on the ground of the forest!

Some readers of NATURE may ask what means the crayfish on the immersed tail of the left-hand side fox in the interesting figure on p. 211. To this I found an answer in the invaluable book on "Animal Intelligence" by Romanes, p. 432, according to which "Olaus witnessed the fact of a fox dropping his tail among the rocks on the sea shore to catch the crabs below, and hauling up and devouring such as laid hold of it." On the contrary, it is not clear what is the matter with the tail of the right-hand fox in the figure.

I may add that while ski-ing in deep winter in the Bohemian Forest I often watched the footsteps of different wild game in the snow, and once I found a trace of a fox without being able to tell which way he was going. After having followed it for about half a mile to the summit of a mountain, I found that the fox made a turn there and walked a long way back exactly in his own footsteps. Did he intend to conceal in which direction he was going? That the fox has sometimes this intention is shown by the fact that in the proximity of inhabited places the footsteps of the fox in the snow suddenly disappear, the fox having effaced them by his tail.

BOHUSLAV BRAUNER.

Bohemian University, Prague, April 21.

Belladonna Plaister for Bee-Stings.

SOME years ago it occurred to me to try the experiment of treating bee-stings with belladonna plaister; and, as this remedy is remarkably efficacious, and as I have met no one who was aware of the cure, I have intended for a long time to ask you to put the fact on record in your columns. If the sting is but slight, there are no unpleasant effects at all when belladonna is at once applied, and the plaister may be removed after a comparatively short time; if the sting is severe—i.e., as I suppose, if it has entered a vein—it may be necessary to retain the plaister for several days; and in such case, although there will be swelling and some irritation, both these unpleasant effects will be very notably less than in cases where no belladonna has been used. Of course, as some people are extremely susceptible to bee-poison, it is quite possible that they may not find a belladonna-treated sting so small a matter as I find it; but I presume that they will find at least a proportionate alleviation. In the summer-time my children run about the garden bare-footed, and not unfrequently they step upon a bee and get stung. At once there is a shout for "belladonna"; it is put on; and we never hear another word about the sting. I have also found belladonna give great relief from a wasp-sting. I should be very glad to hear the result if anyone living in a "mosquito"-ridden part of the country would try the experiment of applying belladonna to mosquito-bites. It might well be quite useless; but, on the other hand, it might serve.

FRANK H. PERRYCOSTE.

Higher Shute Cottage, Polperro, R.S.O., Cornwall.

April 25, 1911.