

nice motor-drive, going first to see a Chinese temple where there are figures of the Buddha as he is represented in the different countries where he is worshipped. There is a tank there with numbers of sacred turtles, and you buy a bundle of a sort of water-cress with which to feed them. Then we went to the Zoo, where there are many curious birds and a nice tiger and leopard, but alas! the black panther's cage was empty. We ended up with a drive through the beautiful Botanic Gardens, feeding the monkeys as we went, but we had to hurry back to the ship, as one of the ladies did not like leaving her baby for long. We sailed that night, on the last stage of my long sea-voyage, nearly 17,000 miles in one ship and not a day's bad weather the whole time. We reached Colombo about mid-day on the 9th October and landed after lunch; a friend and I took a nice drive to the Cinnamon Gardens and other places of interest, and then she went back to the ship and I started on my train journey. One night in the train and then the short sea-crossing to India the next morning. Then another night on to Madras, where I spent one night with friends and was able to transact a good deal of Nursing Conference business, then two nights in the train to Calcutta, some visiting and shopping there, and then one more night's travelling and I was very glad to arrive back at Chitarpur after just over six months' absence and to find everybody well.

Thank you all for your kind patience with my lengthy epistles.

THE MEDICINAL LEECH

(By courtesy of the League of Red Cross Societies.)

The large family of leeches, fresh water and salt water, includes the medicinal leech whose parasitic tastes have been exploited by man for many centuries. All manner of complaints have been treated from time to time by bleeding; in particular pneumonia, headache, cerebral congestion and inflammation about the ear and eye have been subjected to the blood-sucking attentions of the leech.

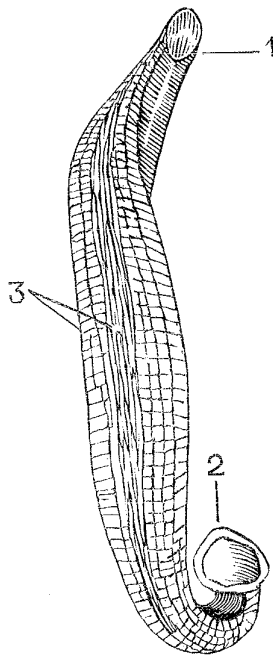
Even today the leech is held in high repute in certain quarters on account of its painless blood-sucking, but the draining of marshes and the reclaiming of waste land in which leeches used to live and breed have driven them out of many parts of the world. Most of the leeches now used in England, for example, are imported from abroad.

The colour and markings of the leech are beautiful. The back is usually an olive green, richly variegated with reddish brown, yellowish green, orange and black. The markings are repeated on each of the

34 segments. The under surface is usually yellowish green, more or less spotted with black. Along the margins are a pair of black stripes.

The adult leech may be as short as 30 mm. and as long as 125 mm.; much depends of course on whether it is measured full or fasting. The same is true of its circumference.

The head is fitted with three sharp, saw-like teeth which leave the characteristic triangular bite on the skin. The muscles passing from the head into the body are powerful and are capable of creating a vacuum and thus drawing the blood of the patient into the body of the leech. While sucking, the leech secretes a fluid which, passing into its mouth, prevents the blood of the patient from clotting in its stomach. This same fluid prevents the blood from clotting over the bite after the leech is removed; the bite continues to ooze blood and the patient thus loses a considerable quantity apart from what has been swallowed by the leech. The sucked blood passes into the crop, which has eleven large lateral partitions on each side, constituting an enormous reservoir for fluid. The provident leech has been known to live on one such meal for nine months. It



Hirudo medicinalis, about life size.
1, mouth; 2, posterior sucker; 3, sensory papillae on the anterior annulus of each segment.

has seventeen pairs of kidneys.

The handling of leeches requires some skill and practice. When hungry they need little persuasion, but sometimes they are fretful and pernickety. They are usually first dried in a cloth, and if they refuse to bite forthwith, the skin is moistened with a little sweetened milk or a drop of blood. If the leech hangs on greedily after its services are no longer required, it may be persuaded to release its grip by the application of salt, sugar or snuff to its back. If the same leech is needed again at once, it will disgorge its first meal if it is placed in a solution containing 16 parts of salt to one hundred parts of water at a temperature of 100°F.

The leech, which is hermaphrodite, lays eggs in capsules or cocoons about 24 hours after mating. These capsules are attached to

some water plant or are buried in the mud. There are 6 to 20 eggs in each capsule. When the young hatch out they are no thicker than pack-thread. These capsules are at the mercy of water rats and others, including the parent herself.

The leech takes a long time to grow up and it is not until its third year that it is useful to man. It does not mate until it is 6 or 7 years old and it may live to the age of 12 or 15 years. In the wild state it is caught by some obliging person who sits dangling his feet in a leech-infested pond. In the old leech-farms, horses, asses and cattle used to be driven periodically into the ponds to provide the leeches with blood.

Half a century ago special leech-farms in parts of France were most flourishing. In good seasons the peasants carried 60,000 leeches to market every day. They were sometimes sold wholesale by weight—a system which encouraged the vendor to give his leeches a hearty meal just before the bargain was completed.

OUR INDIAN HOSPITALS, No. 9

Welsh Mission Hospital, Shillong.

By MISS AMY BULLOCK.

This Hospital is unique in many ways, that is for Indian Hospitals. We have about 100-140 beds, for Men, Women, and Children.

Our nursing staff consists of three European Sisters and forty Khasi nurses, who are all Christians. There are twelve fully trained nurses, who are on the Staff, and the rest are in various stages of training.

The nurses nurse the male patients, just as the home nurses do. They also do everything in the way of giving and emptying bedpans, just as the nurses do in the training schools at home. We have only one sweeper on the compound, and his time is fully occupied in keeping the drains clear.

I believe that at first, Miss Buckley, who is the Matron (she is on leave just now), had to show them, by force of example, that these things could be done, and now we never have any trouble. The new nurse who comes, sees the others doing the things, and she also does them, as a matter of course. Of course, not having any caste system, makes things considerably easier. We have three Ward-maids too, and they have to go on their hands and knees, to scrub some of the floors!