

"The Echis is more aggressive than the majority of its kind."

A CHAT ABOUT INDIAN SNAKES.

BY ARTHUR MONTEFIORE, F.R.C.S.

There is no country in the world which has a greater variety of snakes than India, and none, I suppose, which can show such a high rate of mortality from "snake-bites." The latest official returns record that no less than 22,134 people were killed by snakes in one year in that country!

This enormous mortality is largely owing to the fact that the natives go about barefooted, or with useless sandals, by night as well as by day, in the jungle as well as in the town; and that they walk so quietly that the snakes have no opportunity to retreat. Then the prevalence of serpent-worship must be reckoned, as also the belief of the native in the worthless drugs and charms which form the stock-in-trade of the Hindu quack. Finally, a number of suspicious deaths are returned as from "snake-bites."

The snakes of India may be divided into three classes: the harmless and the venomous colubrine snakes, and the viperine snakes, also venomous. Of the first class—the harmless—the chief families are the "blind snakes," which rarely appear above ground; the "grovelling snakes," which live under stones and trees, in nooks and crannies; and the large family of colubridæ, which may be taken as the type of the ordinary harmless snake. These are named in accordance with their predominating characteristics, as "ground," "agile," "bush," etc. There are also families of river-snakes, tree-snakes and sand-snakes.

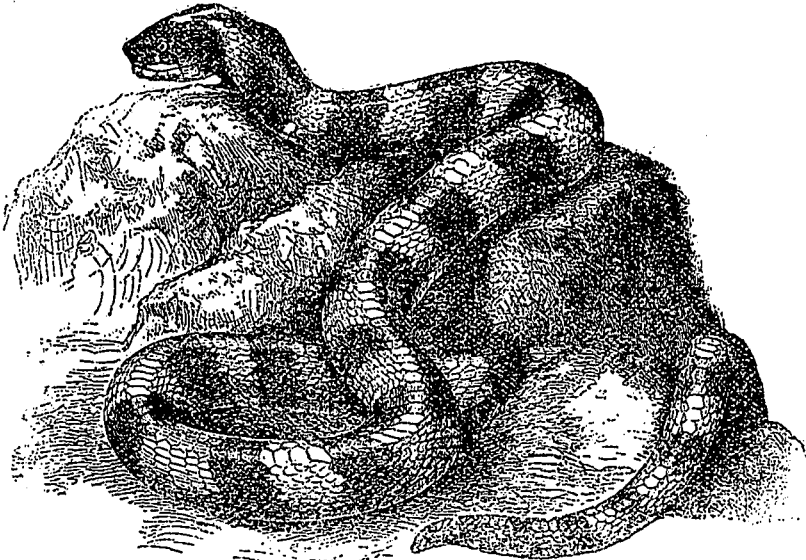
The largest and chief of the harmless—i.e., the non-venomous snakes, are the pythons. They have a tremendous girth, and are very powerful. A python only nine feet long would be over a foot in girth, and as some grow to twenty feet in length, and increase in girth proportionately, it can be readily imagined what monsters they are. Roughly speaking, the python is brown in color, with longitudinal buff stripes running along the back. The head is brown, and enclosed as it were by a buff or yellow V. The colors are rich and bright.

The second class consists of venomous colubrine snakes, and may be divided into two families—land-snakes and sea-snakes. In both families the poison fang is of a similar nature; but the tail of the sea-snakes is compressed into a paddle. The nature of the poison fang should be borne in mind in order to keep this class clear from the viperine snakes. The coluber has for a fang what is practically a perforated tooth, which is short and nearly immovable; while that of the viper is long,

curved, and capable of erection. Of the colubrine land-snakes, the naja or cobra is best known and most dreaded. This has been named by the Portuguese "Di Capello," owing to the broad expansion of the neck, which we call its "hood." The next important genus is the hamadryad, which is also hooded, and which is called by the natives *sinkerchor*, i.e., breaker of shells. It is the largest and most important of venomous snakes, frequently exceeding twelve feet in length. The third most important snake is the *Bungarus carulens*, or *karait*, as the natives call it. The *karait* is, next to the cobra, the most destructive snake in India. This is the more curious as its virus is not so deadly as some others. It grows to about four feet, but is usually found about half that length. It penetrates to the inner rooms of houses, into the bath-rooms, under the mats, and the book-cases, and indeed everywhere, even under your pillow! It is called *cerulean*, from its bluish-black back, and "white-arched" from the white streaks which arch over its back.

In form, the water-snakes are somewhat different. They not only have paddle-tipped tails, but a well-defined keel running along the under part. They rarely exceed seven feet in length. Living as they do in the water, we find they are protected from their foes by assimilation to their environment—their color being generally buff or dirty white, barred and crossed with a dull blue.

Of the viperine snakes, there are the crotalidæ, which embrace, by the way, the American rattlesnake, as well as the Australian poisonous snakes, and the viperidæ proper. The poison fang of the former genus is long, and, though capable of erection, has no special muscle for caus-



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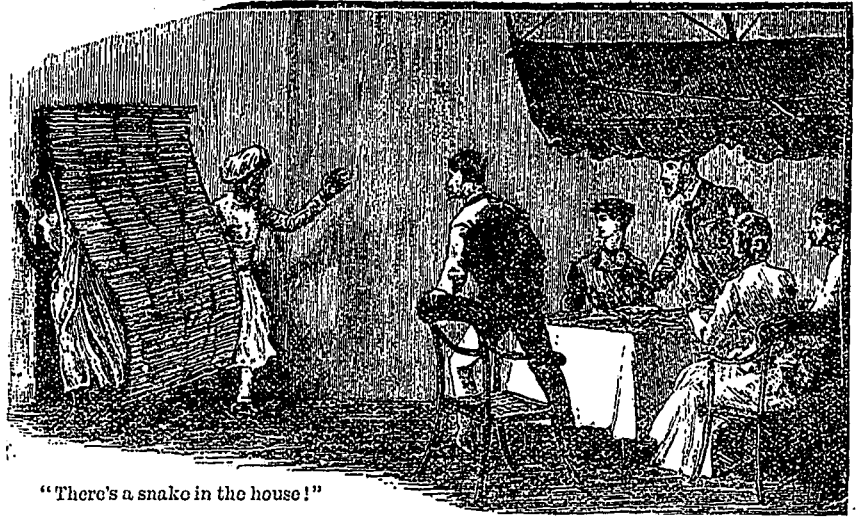
ing it; but the latter class is provided with a special erector muscle. The most common vipers are the chain-viper (genus *daboia*), and the echis carinata (genus *echis*), which is here illustrated. The echis is called by the natives of North India *afac*, which, like so many Hindustani words, is of Arabic origin. It is smaller than the *daboia*, and perhaps not quite so deadly. As, however, it has been known to kill a fowl in two minutes, it would seem, from the victim's point of view, I doubt not,

and its eye the most vicious of all snakes.

Another fruitful source of bites arises from the practice of the natives of sleeping either on the bare ground, or on low *char-poys*—rough beds made of coarse twine, and standing only a few inches above the ground. In the dead of night, a snake glides in and coils itself perhaps round one of the posts, and then a sudden movement on the part of the sleeper will easily frighten it into a self-defensive attack.

When the *samm*, or poison of the fang, has had time to paralyse the nerves, the case is almost hopeless. Immediate treatment is imperative. As an instance of this, I may mention how a friend of mine, who held a high position in India, cured several people of venomous snake-bites. Englishmen are much looked up to by the natives as "medicine men," and in the picture of the police sepoy receiving treatment at the hands of a European, we see evidence of that fact.

My friend, finding that so many natives were being killed, caused a proclamation to be made in the locality, announcing that he would cure all cases of snake-bites, provided the sufferers came to him immediately they were bitten. Shortly afterwards a man was brought to him, bitten by a *karait*. He at once ordered up ten coolies, and made them take the man, two at a time, and run him right along the terrace outside his house, and in the full glare of the tropical sun. After a couple of turns, another two men came on, and so the treatment went on, for over two



"There's a snake in the house!"

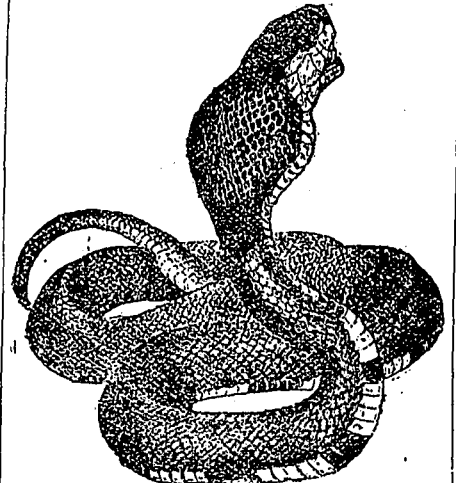
hours, till the unfortunate individual was nearly dead from exhaustion alone. But he had perspired all the poison out of him, or, at any rate, warded off the state of coma which is fatal on such occasions. I should add that my friend dosed the man immediately he arrived with a quantity of *eau de luce*, than which nothing is more effective. As he cured several people on subsequent occasions by similar treatment, there is a good deal to be said for the remedy.

A large number of lives are lost from the fact that in hot weather snakes will come into houses and huts and coil themselves round the *ghurras* and *serais*—porous earthenware pots and bottles used for water—in order to cool themselves. When these *chattis* (vessels) are suddenly taken up, the snake is sure to bite. The native huts, being devoid of windows, are quite dark, and the risk is thereby greatly enhanced. On the other hand, Europeans have well-lighted rooms, and even at night never allow themselves to be in total darkness.

I know a lady who on going to the piano to play, frequently found a snake coiled round one of the legs. On one or two occasions this happened at a dinner-party, with a dozen or more people in the room. The snake no doubt retired to the piano to avoid observation, for it would be terrified at the least noise. In fact, if you only clap your hands loudly together immediately you see a snake, it will disappear.

Constant experiences with snakes render men and women marvellously cool and collected in dealing with them. I know of a lady who when breakfasting one morning in company with several friends, suddenly said, in a quiet voice to her servant, "Bring a saucer of milk directly." The servant did so, and immediately a deadly snake glided towards it. It had been coiled round the lady's ankle—no doubt to hide itself—and her wonderful presence of mind had alone saved her.

Native servants are, as a rule, fairly courageous when they discover a snake in the house. But they generally prefer to leave the slaughtering to the *sahib*, and the picture which we give of our countrymen being disturbed at dinner by the arrival of two servants, pushing their way through the *chik* or bamboo-mat hanging over the doorway, and announcing that "there's a snake in the house!" is very true, and represents a state of things to which few people who have lived much in India are strangers.—A.I.



"The Naja or Cobra is the most dreaded."



A police sepoy bitten.