

The antennules are well developed, and the eyes are large globular and stalked.

The "rostrum" is a small fleshy foliaceous excrescence, situated in front of the mouth, and furnished with a short median finger-like papilla: its free edge is thus somewhat trilobed.

The antennæ *in the male* are more than half as long as the body.

Their *basal joint* has on the ventral surface, at the distal end, a curved rather rigid antenniform filament.

The doubly-curved *second joint* has (1) at its proximal end, dorsally, four curved flagella, one of which is much larger than the others and has its concave edge serrated; and (2) along its outer and upper surface a row of long acicular spinelets.

The *third segment*, which joins the second almost at a right angle, bifurcates from its base into (1) a short upstanding (dorsad) branch, and (2) an obliquely-directed (ventrad) branch. The outstanding dorsad branch itself soon bifurcates into (1) a stout downcurved hooklet; and (2) a slender slightly curved flagellum. The long ventrad branch consists of (1) a slender basal piece; and (2) two long slender flagella: the outer flagellum is elegantly curved and hook-like; the inner flagellum, which has its dorsal edge armed with a row of short spinelets, again bifurcates—the outer (longer) branch of this last bifurcation being also curved and hook-like.

The antennæ *in the female* form a pair of short broad leaf-like lobes—usually with a thickened fleshy midrib—bending over the eyes in repose, like curtains.

In the above description the antennæ of the male are supposed to be fairly well extended, not flexed in repose; and the animal is supposed to be in morphological position, not swimming on its back as in life. A male and an egg-laden female were liberated in the Museum tank in the hope of establishing a supply of this large and beautiful species.

An Instance of the Natural Repellent Effect of "Warning Colours."—By
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The observation here recorded appears to be noteworthy as corroborative evidence in favour of the protective value of "Warning Colours."

I have in my possession a very docile young Himalayan bear, one of whose most strongly marked appetites is for grasshoppers. He seizes

greedily, and crunches with every sign of relish, the common bright-green and dull-brown grasshoppers found in Calcutta; and one of the few displays of real ill-temper of which he has been guilty was occasioned by my attempting to pick up a large grasshopper that had dropped from his mouth.

Recently I offered him a specimen of the glaring-coloured and evil-smelling *Aularches miliaris* (Linn.) which, as soon as he smelt it, he refused in a most comical way, but without any show of anger or violent distrust.

(It may be re-called to memory that, in life, *Aularches miliaris* has the abdomen broadly cross-striped in alternate black and scarlet, and the forewings black with large canary-yellow spots, and also that it secretes a most peculiarly pungent-smelling frothy fluid.)

A little after the first refusal I again forced the insect upon him, when he stood up on his hindlegs and violently struck it out of my hand, in exactly the same way as—after a single experience of their nature—he is accustomed to treat the offer of a burning cigar-end or a lighted match.

Whenever now I show him this grasshopper (*Aularches miliaris*), he first endeavours to move off; but if he is compelled to face it, he rises and strikes one's hand such a hearty cuff that the insect is knocked out of one's grasp.

The bear also has certain amount of objection to a very large spiny-legged species of *Acridium* and to a species of *Euprepocnemis* nr. *robusta* Serv. with spiny legs, if these are offered to him alive and with their legs intact. In these cases the dislike is not to the insect, but only to its hard spiny legs, and it is not accompanied by any gesture of fear or apprehension—for it is these emotions, rather, perhaps, than blind anger, that the bear's cuff seems to be meant to express.

I may mention that the bear lives, as far as is possible, in a state of nature: it is never confined, and is only chained up when nobody can be spared to watch it.

I offer this note as a simple record of fact. So far as it goes it appears to support the almost universally accepted though now by no means unquestioned beliefs (1) that when an insect has been found by experience to be unpleasant to (taste and) smell it has only to be *seen* to be avoided: and (2) that any conspicuous markings that lead to the immediate recognition of such an insect by eyesight and at a distance are likely to be of such vital benefit to the insect as to be acted on by Natural Selection.



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