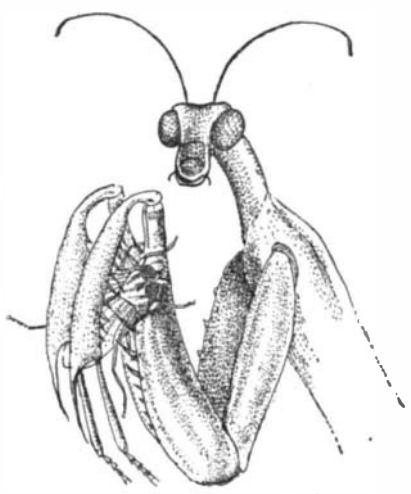
FLOWERS OF PREY.

BY J. CARTER BEARD.

Probably in some respects the most surprising result of late entomological exploration is the discovery of semblances of orchidaceous flowers endowed with animal life and voracious carnivorous appetites, that seize and incontinently devour insect vegetarians which, allured by their form and color, incautiously alight upon them. These flower insects belong to the curious family Mantidæ, of which we have a well-known member in our southern States, *Phasmomantis Carolina*, commonly called "praying mantis," though if the first part of the name was spelled with an "e" instead of an "a," it would be far more appropriate, since no known insect is more bloodthirsty and destructive of smaller and weaker individuals belonging to its class. Its form is characteristic of its predatory habits. The mantis is really a four-legged insect, for the fore limbs are so modified that they cannot under any circumstances be used in walking and are no more properly termed legs than would be the arms of men or the wings of birds. They are, in fact, the natural weapons of the insect and are used for nothing else than fighting and for capturing prey.



Upper Part of American Mantis with an Insect Which It is About to Devour.

The insect shown at Fig. 2, discovered by Wood Mason, masquerades sometimes as a pink and at others as a white orchid. The whole flower insect is either conspicuously white or of a resplendent pink color, and both in color and form perfectly imitates a flower. The lower or apparently anterior petal of an orchidaceous blossom, the labellum, often of a very curious shape, is represented by the abdomen of the insect, while the parts which might be taken, regarding it as an insect, for its wings, are actually the femurs of the two pairs of posterior limbs, so greatly expanded, flattened, and shaped in such manner as to represent the remaining petals of the flower. As the mantis rests, head downward, amid the stems and leaves of a plant, the fore legs drawn in so that they cannot be seen, the thighs of the two hind ones radiating out on each side, and the thorax and the abdomen raised at right angles to each other, the insect might easily at first sight deceive more discriminating entomologists than the honey-seekers that settle upon it. An allied species, exactly resembling a pink orchid, is mentioned by Dr. Wallace, on the authority of Sir Charles Dilke, as inhabiting Java. Its specialty is alluring and capturing butterflies. The expected guest having arrived, the seeming feast spread out for his delectation arises and devours him. Prof. S. Kurz, while at Pegu, in lower Burma, saw what he supposed to be an orchid of a species unfamiliar to him, but upon examination found it to be a mantis of the genus Gongylus. As is common with the habit of its kind when alighting upon a plant, it hung head downward, exposing the under surface to view, sometimes motionless, and sometimes swaying gently like a flower touched by gentle zephyrs. A bright violet-blue dilation of the thorax, in front of which its fore legs, banded violet and black, extended like petals, simulated the corolla of a papilionaceous flower so perfectly as to deceive the eyes of a practised botanist. An account is given in the proceedings of the Asiatic Society, Bengal, of a number of specimens of this mantis in the possession of Dr. J. Anderson. These insects came from Mindipur. Santal women and children had collected them from the twigs of a bush where they were hanging and brought them alive to a Mr. Larymore, who forwarded them to Mr. Buckland, who in turn gave them to the doctor.

Deroplatys Truncata (Truncated Mantis), from Singapore.

They are said to particularly frequent rose bushes, and at Mindipur are known as rose-leaf insects. Their wings, when the mantis is mature, are furnished with foliaceous expansions that perfectly counterfeit rose leaves. They were fed upon flies and grasshoppers, preferring the flies because the grasshoppers were evidently too vigorous for them to easily manage. The insects were immature; they did not exhibit, looking at their upper surfaces, any particularly striking peculiarities, except the leaf-like dilation of the prothorax, and the foliaceous appendages to the legs, all of which, together with the rest of the upper parts of the insect, was green. On the other hand, the mantis presents an entirely different appearance when its under surface is exposed to view. The leaf-like expansion of the prothorax, instead of green, presents a pale, clear lavender-violet hue with a faint pink bloom along the margin. The resemblance to the corolla of an orchidaceous flower thus presented is perfected by the presence of a dark brown spot in the middle over the prothorax or breast, which looks precisely like the mouth of the tube of a corolla. In addition to this, the long, slender upper part of the prothorax resembles a flower, while the fore limbs, when resting drawn up in the center of the corolla, add to and heighten the imposture.

The curious forms shown in our illustrations belong to the same genus, Deroplatys, although the first is a native of Singapore, south of the Malay Peninsula, while the Sarawaca is from Borneo. In these species the outspread wings simulate the petals of a flower.

A whole tribe of spiders, members of the Thomisadæ family, living in flower cups, assume the colors and markings of the flowers in which they lie in wait for victims.

Blossoms of the *Vibernum lantana*, a European shrub having large ovate leaves and dense cymes of small white flowers, and it may be added, our American species (*Vibernum lentago*), or sheep berry, also bearing broad, flat clusters of white flowers, are at times occupied by spiders of the same creamy-white hue as that of the blossoms, and their globular abdomens mimic the unopened buds (of which there are many in each cluster) not only in color but in shape and size. These spiders spin no web, depending upon strategy to secure their prey, and live upon their insect visitors. Later in the season spiders apparently identical with these, except in color, are found in the blossoms of the *Orchis maculata*. The spiders found here have dark reddish-brown spots on the abdomen; and in the position usually assumed by it, the Aranima, standing with depressed head, closely mimics in shape and size, in relative position, and a little way off in color, the dark purple pollinia of the flowers. Recent investigations render it extremely probable that, as first suggested by Prof. Nottridge, as the season advances, these spiders change color, and that each successive change adapts them for concealment in the flowers of some particular plant. The *Thomisus citrens* poses itself in the middle of a composite flower with legs expanded like its exterior ray. They have been observed in orchidaceous flowers with their legs expanded horizontally. Honey-bees as well as other insects have been found in their murderous clutches.

Immature Form of Rose-Leaf Mantis of the Genus Gongylus, from India.

Deroplatys Sarwace, from Borneo.

Curious Orchid Lately Discovered by Wood Mason.

Brazilian birds, flycatchers, display a brilliantly colored crest easily mistaken for a flower cup. Insects, attracted by what appears to be a freshly opened blossom, furnish the birds with food. An Asiatic lizard is entirely colored like the surface of the desert plains where it lives, except that at each angle of the mouth blooms a brilliant red folding of the flesh exactly resembling a little flower that grows in the sand. Insects lured by the seeming flower are incontinently disillusioned when they settle upon it.

FLOWER TRAPS.

In the city of New York there are only 737,477 white persons born of native parents.