

As I approached it, several times in succession, on each occasion the insect squared the elbows of its fore limbs nearly at right angles to the body, the femur bent close against the long coxa, and the tibia pressed against the femur. This alert, defensive attitude had a terrifying aspect which was enhanced by a loud, rasping sound produced by rubbing the borders of the hind femora against the rim of the fore wings. The outer free border of each fore wing is thickened by a chitinous rim which is finely serrate. In the region of the hind femur the border of the wing is slightly emarginate, allowing free play to the thigh under ordinary circumstances. The femur itself is smooth, carrying a few minute hairs, but without any rough edge.

When the insect is alarmed, each hind femur is rubbed deliberately to and fro against the saw-like edge presented to it along the concave border of the wing, and a very effective stridulating sound results from the friction. The same sound can be closely reproduced upon the dead insect by gently passing a porcupine quill backwards and forwards along the wing-border. The serrate border of the wing is also present in the female *Gongylus*, where the emargination is still more pronounced.\*\*

Quite recently I have become acquainted with a paper by J. Wood-Mason: *On the presence of a stridulating apparatus in certain Mantidæ*, (Trans. Ent. Soc. London, 1878, pp. 263-7) in which he, described the toothed edges of the tegmina of *Gongylus*, and supposed erroneously that the sound, which he had never heard, would be produced by the rubbing of the abdomen against the toothed edge. Professor Westwood asked Wood-Mason how it was that nobody had ever heard the Mantidæ stridulate, these insects being common enough where good observers have been. The answer was "that the species in which the stridulating apparatus is present are few in number;" and it may be added that they only perform under the right kind of stimulation applied at the right moment.

The homing instinct which we admire so much in bees and ants and wasps has been shown to depend to a surprising extent upon the chemical or olfactory sensitiveness of these insects, many

\*\**Spolia Zeylanica*, vol. III, p. 226, Colombo, 1906.