

twenty-eight species as representing our British contribution towards the genus. Some of these are found only in Scotland, often high up amongst the mountains, and some occur even in brackish water. The genus forms a series gradually diminishing in size from $\frac{1}{2}$ to 1-16 in., and the uninitiated would, no doubt, wish to consider the smaller species as young examples of the larger ones; but it must be remembered that insects do not grow when once they have assumed the adult form; their period of growth consists exclusively of their earlier stages, larvhood and puphood. Having once donned their wings, they have no further anxiety as to the fit of their chitinous clothing. Their dimensions are finally established. The limit of variability as to size are usually not very wide in any given species, the greatest divergence being found in subh insects as are dependent in their earlier stages upon food that is intermittent or precarious in supply. The Corixidæ possess fully-formed wings, and the hinder pairs are exquisitely delicate, and show rainbow tints. They readily take to flight, and at night are sometimes attracted to a light, so that if a window be left open on summer evenings near a pond they may be expected to be amongst the visitors that make headlong for the lamp. Dr. Puton, the French Hemipterist, says that in Mexico Corixæ are so abundant that a kind of bread is made of their eggs, and he further makes the astounding statement that on one occasion about a twelvemonth ago thousands fell from the air during a storm in Turkestan, coming down like rain in such enormous numbers as actually to extinguish a fire at a traveller's bivouac.



Fig. 1.—*Naucoris cimicoides*.

Our last representative of the Hemipter of this part of the pond is called *Naucoris cimicoides* (Fig. 1), it is a flattened creature of oval outline, with a very sharp beak which it is not at all slow to use, making its unwary captor drop it in most startled fashion under the impression that a severe wound has been inflicted. However, the pain is only temporary, the weapon being merely a piercer and not really a sting.

In all these insects, it appears at first sight as though the antennæ are wanting; this is not, however, really the case. The organs in question are very short, and concealed in depressions behind the eyes; hence the name *Cryptocerata*, hidden-horns, by which this particular section of the water-bugs is distinguished.

(To be Continued.)

MOVEMENTS OF THE EARTH.

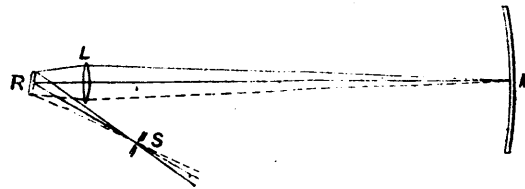


FIG. 40.—Foucault's arrangement for determining the velocity of light.

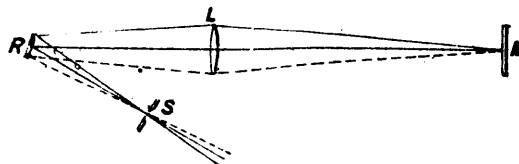


FIG. 41.—Michelson's variation of Foucault's experiment.

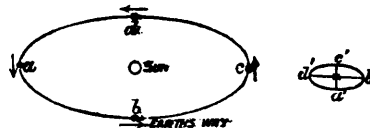


FIG. 42.—Annual change of a star's position, due to aberration: *a b c d*, the earth, in different parts of its orbit: *a' b' c' d'*, the corresponding aberration places of the star, varying from the true place in the direction of the earth's motion at the time.