SYNOPSIS OF SUBFAMILIES AND GENERA OF NORTH AMERICAN TETTIGIDAE.

(Based upon the synoptical table of Prof. Bolivar.)

BY J. L. HANCOCK, CHICAGO, ILL.

1 (2) Antennae filiform, rarely the last two articles before the extremity very little compressed.

2 (1) Face more or less oblique or perpendicular; median ocellus situated in front of the eyes.

3 (16) Anterior femora more or less compressed, carinate above.

4 (5) Frontal costa furcate between the eyes, the branches strongly diverging, forming a frontal scutellum. Subfamily CLADONOTINAE Bol.

5 (4) Pronotum largely compressed, above completely foliaceous, rounded-angular, posteriorly truncate.

6 (8) Antennae with twelve to fourteen articles; pronotum anteriorly truncate, or angulate, or rarely angulate produced, posterior angles of the lateral lobes turned downwards, more or less rounded, not obliquely truncate. Subfamily TETTIGINAE Bol.

7 (13) Vertex advanced in front of the eyes, wider than one of them, in profile united with the frontal costa, generally angulate anteriorly.

8 (6) Antennae with twelve, rarely thirteen articles; pronotum with the dorsal front margin angulate produced, median carina cristiform, more or less arched longitudinally, median lobule of the posterior margin of lateral lobe feebly developed, sub-humeral sinus for the reception of elytra shallow.

Gen. Nonotettix Morse.

9 (10) Antennae with fourteen or often thirteen articles; pronotum generally not advanced upon the head to the eyes, median lobule of posterior margin of the lateral lobe well developed, the sub-humeral sinus quite deep.

Gen. Tettix Charp.

10 (9) Vertex a little advanced in front of eyes, equal to, or considerably wider than one of them, in profile united with the frontal costa rounded, or depresso-rounded.

11 (12) Vertex considerably wider than one of the eyes, branches of the frontal costa more or less strongly divergent, antennae consisting of twelve to thirteen articles.


12 (11) Vertex equal to one of the eyes, branches of frontal costa narrowly forked, straight and evenly divergent.

Gen. Merotettix Morse.*

*Given on the authority of Prof. A. P. Morse; a recently described genus in Journ. N. Y. Ent. Soc. vol. vii, p. 199, 1899.
13 (7) Vertex not advanced in front of the eyes; median carina of pronotum scarcely elevated.

14 (15) Body usually broad between the shoulders; vertex narrower or equally wide with one of the eyes; second femoral carinae more or less flexuous, or undulate, or lobate, or clypeate, very rarely straight.

Gen. Paratettix Bol.

15 (14) Vertex strongly narrowed in front, the front border nearly one-half the breadth of an eye, or less; body usually prolongate; branches of frontal costa sub-parallel, closely approximate.

Gen. Telmatettix gen. n.

16 (3) Anterior femora above distinctly and broadly sulcate; pronotum in front produced more or less above the head, very frequently hooked, acuminate, or, to a certain extent, obtusely rounded angulate; antennae sixteen to twenty-two articles.

Subfamily Batrachidinae Bol.

17 (18) Body strongly tumid; dorsum of the pronotum convex, lightly punctate, lateral carinae in front of the shoulders wanting.

Gen. Paxilla Bol.

18 (17) Body narrower; dorsum of the pronotum, between the carina rather concave, conspersed with more or less longitudinal wrinkles, lateral carinae in front of the shoulders present.

Gen. Tettigidea Scudd.

THE "COCOONS" OR "CASES" OF SOME BURROWING CATERPILLARS.

BY CAROLINE G. SOULE, BROOKLINE, MASS.

From much watching of pupating caterpillars, especially of such sphingids and ceratocampids as go into the ground to pupate, I gradually came to doubt the exactness of the statements, made in many books, that such caterpillars spin "cases" or "cocoons" in the earth inside of which they transform.

Last summer I had a good supply of Protoparce celcus and carolina, Philampelus pandorus and achenom, Ceratmia amyntor, and Paonias excoecatus, with which I experimented.

Into tin boxes I put sifted earth deep enough to give ample room for cases. Into each box I put a larva ready to pupate, and wandering in search of a suitable place. All burrowed very soon, and I left the boxes undisturbed for a few days, that no unusual condition should affect the larvae.

On examining the boxes, which was very carefully done, I found, in every case, no sign of silk, and no "case" which held together at all. I found an oval cavity, smooth, and large enough to hold the pupa easily, allowing free motion of the abdominal segments and
Submit your manuscripts at http://www.hindawi.com