

Did they in earnest seek? He sought
 In earnest too. From bounteous store
 He loved with lavish hand to pour
 Jewels of knowledge and of thought.
 Responsive hearts, unwavering eyes
 His steadfast gaze compelled again;
 He loved the truth, his speech was plain,
 He could not stoop to compromise.

IV.

Oh! all too rare the thoughtful mind
 That keeps abreast of Science' way
 And still reveres the older day,
 The simpler faith that lags behind.
 Dead now, but while the ages run
 His work shall live; 'tis such as he
 Alone inspire posterity,
 Fathering their kind from son to son.
 We know not when our days are sped,
 And I, who through his friendship stand,
 Would lift some falterer by the hand
 Ere I lie nerveless with the dead.

Trinity College School, Port Hope.

FRANK MORRIS

SYNONYMICAL NOTES ON NORTH AMERICAN HOMOPTERA

BY EDWARD P. VAN DUZEE, BUFFALO, N. Y.

On the occasion of a recent visit to New England it was my privilege to examine three interesting collections of insects: Mr. Samuel Henshaw very kindly gave me access to the fine entomological collections of the Museum of Comparative Zoology at Cambridge; to Mr. C. W. Johnson I am indebted for an opportunity of examining the valuable remains of the Harris collection, now housed in the museum of the Boston Society of Natural History, many of the species in which were determined for Dr. Harris by Thomas Say, and are the nearest approach to Say types now available to the student of American insects; and, finally, on the way home I stopped over at Albany, where Dr. Felt very kindly opened up to my inspection the precious type specimens prepared by Dr. Fitch to accompany his "Catalogue of the Homopterous insects in the State

November, 1909.

of Natural History." While my time was all too limited, especially with the Harris collection, I made a careful examination of many of the species, and in the present paper and in the one published in the October number of this journal I give some of the more interesting results of my studies.

At the end of this paper I add a list of the type species in the several genera of the Hemiptera thus far established by me. Many of these types have already been placed, either inferentially or directly, but all are listed here for convenience of reference.

Anotia Bonnetii, Kirby.

In the Harris collection preserved in the museum of the Boston Society of Natural History, is an example of this insect which agrees exactly with my own determination of the species. It very closely resembles *Amalopota Fitchi*, but is paler, the elytra are more hyaline and have a different venation (see CAN. ENT., XXV, p. 280, Nov., 1893), the pronotum is narrower before the eyes and more produced superiorly, and the elytra are narrower and more terete. Judging from the form of the elytra I would say that the specimen standing under this name in the Fitch collection is probably *Amalopota Fitchi*. I still think it best to retain the genus *Amalopota*, although it is scarcely more distinct from *Cerisa* than is *Hynnys* from *Otiocerus*.

Lamenia vulgaris, Fitch.

An examination of the type preserved in the Fitch collection in the State Museum at Albany shows this to be the large form found on oaks throughout the Northern States. In this the male plates are very large, the outer inner edges slightly parted at base, then feebly sinuated to their distal apex, which is armed with a long inwardly curved tooth, as in the case of the species. In my description of *L. Californica* (CAN. ENT., XXII, p. 169, Aug., 1891), I applied the name *vulgaris* to another and smaller species, which, perhaps, is not distinct from *obscura*, Ball. In the northern specimens of this smaller species there is a recedant angle of the inner edge of the male plates, but its depth is subject to variation, and sufficient series might show a gradation into *obscura*, in which this angle is wanting.

Ceresa bubalus, Fabr.

Under this name in the Fitch collection is an example of *Ceresa bubalus* Fairm., as the species is determined by me in my studies in North America in the Membracidae. The varieties "a" and "b" of Fitch are my *C. pubescens*.

Ceresa patruelis, Stal.

In the collection of the Museum of Comparative Zoology at Cambridge are examples of this species from Mexico and Florida, which convince me that this is a good species quite distinct from *testacea*, Fairm., of which the same museum has a series from Mexico and Guatemala. *Ceresa patruelis* is larger, the pronotum is higher, the supra-humeral horns are longer and more elevated, leaving the metopidium more concave transversely than in *testacea*, and the last ventral segment of the female is very short, with a broad shallow notch.

Ceresa testacea is a smaller and darker species, with the edge of the pronotal carina slenderly fuscous and the last ventral segment of the female longer and more deeply and triangularly notched almost to its base.

Thelia Godingi, VanD.

There is a specimen of this species in the Fitch collection under the name *univittata*, Harris. A specimen of the latter species in the Harris collection shows my former determination to be correct.

Telamona fagi, Fitch.

An examination of the type in the Fitch collection shows it to be but a slight variation of *cristata*, Fairm., and not identical with *scalaris*, Fairm., as supposed by me. In *fagi* the colour is more fuscous and the anterior foliole is less developed, but I cannot consider it a distinct species.

Telamona concava, Fitch.

The type in the Fitch collection agrees in every respect with the species as recognized in my studies in North American Membracidae.

Telamona fasciata, Fitch.

An examination of the Fitch type shows this to be a male, as suggested by me in Psyche (V, p. 391, 1890), and the synonymy of my 1904 list must stand.

Telamona tristis, Fitch.

The type of this species in the Fitch collection is a female, as indicated by Dr. Fitch. The crest is shorter and higher than in *coryli*, and it is perhaps specifically distinct. I have recently taken a dark female of *coryli* on the hop horn-beam.

Carynota arcuata, Say.

Under this name in the Fitch collection is a specimen of an *Ophiderma*, probably *salamandra*, Fairm. I noticed the same erroneous determination in the Harris collection.

Cyrtosia fenestrata, Fitch.

The Fitch type of this species is certainly identical with the form determined by me with some doubt as *muticus*, Fabr., in my Studies in North American Membracidae, and the same determination is found in the Fitch material in the National Museum. Whether this is the true *muticus* of Fabricius is open to some doubt, although it was so determined by Dr. Osborn for the Cornell University collection, and it agrees very closely with Say's description of the Fabrician type. For the present I would use the name *Cyrtolobus fenestratus* for this species, placing *muticus*, Fabr., as a species still unrecognized in our present collections.

Cyrtolobus vau, Say.

My determination of this species is correct by both the Harris and Fitch material.

Tettigoniella gothica, Sign.

In the Harris collection is an example of this insect labelled *Tettigonia hieroglyphica*, Say, but as this specimen was not determined by Say, it need not affect the synonymy of the species. Dr. Harris may not have known the western form to which Dr. Ball has recently restricted the name *hieroglyphica*, Say.

Pediopsis trimaculata, Fitch.

An examination of the type in the Fitch collection shows that Osborn and Ball were right in placing my *insignis* as a synonym of this species. It is poorly described by Dr. Fitch.

Idiocerus maculipennis, Fitch.

I was unable to find the type of this species in the Fitch collection. It is, however, easily recognized by the description given by Dr. Fitch. Unfortunately, this name was preoccupied by *maculipennis*, Curtis. I therefore propose the name *IDIOCERUS FITCHI* for our American species.

Deltcephalus Melscheimeri, Fitch.

A careful examination of the Fitch type verifies Prof. Osborn's determination as made in his Jassidae of New York State (20th Rept., N. Y. State Ent., p. 521, 1905). The name *affinis*, G. & B., will designate the larger species formerly determined by me as *Melscheimeri*.

Scaphoideus auronitens, Prov.

In the Harris collection I find this species labelled *Jassus areatus*, Harris. I quote this MS. name, as it has already appeared in print, and in my Catalogue I suggested it as a possible misprint for *Platymetopius areatus*, which it now seems was erroneous.

Phlepsioides solidaginis, Walker.

In the Harris collection is an example of what is doubtless *Phlepsioides humidus*, Van Duzee, bearing the name *Selinocephalus solidaginis*, Harris. I see no reason why we should not identify this with the insect described by Walker as *Acocephalus solidaginis*, as he quotes Harris's MS. name and his poor description applies as well to this as to any other. Mr. C. W. Johnson has kindly compared for me specimens of both *humidus*, Van D., and *turpiculus*, Ball, with the Harris specimen, and writes that he would be inclined to consider that species as identical with *humidus*. This opinion coincides with my own, formed after a careful study of the Harris specimen, and I would sink *humidus* as a synonym of *solidaginis*, Walker.

Chlorotettix unicolor, Fitch.

The type in the Fitch collection shows my determination of this species to be correct. The name *Vanduzeei*, Baker, must be placed as a synonym of this.

TYPES OF GENERA ESTABLISHED BY THE AUTHOR.

- Brepholoxa, 1904, *type* Heidemanni, VanD.
- Xerocoris, 1906, *type* Snowi, VanD.
- Nestocoris, 1906, *type* nitens, VanD.
- Eurocalia, 1907, *type* collaris, VanD.
- Loxophora, 1908, *type* transversa, VanD.
- Pelitropis, 1908, *type* rotulata, VanD.
- Analogota, 1893, *type* Uhleri, VanD.
- Pissonotus, 1897, *type* marginatus, VanD.
- Phyllodinus, 1897, *type* nervatus, VanD.
- Laccocera, 1897, *type* vittipennis, VanD.
- Macrotomella, 1907, *type* carinata, VanD.
- Pentagramma, 1897, *type* vittatifrons, Uhler.
- Xantholobus, 1908, *type* inflatus, VanD.
- Tylocentrus, 1908, *type* reticulatus, VanD.
- Idioderma, 1909, *type* virescens, VanD.
- Nestocephalus, 1894, *type* pulicarius, VanD.
- Neoslossonia, 1909, *type* Putnami, Osb.
- Eutettix, 1892, *type* luridus, VanD.
- Acinopterus, 1892, *type* acuminatus, VanD.
- Chlorotettix, 1892, *type* unicolor, Fitch.
- Tinobregmus, 1894, *type* vittatus, VanD.