appears in the latter part of July. This moth, which is represented in fig. 3, measures, when its wings are expanded, about one and three quarter



inches; the fore wings are dark brown, shaded with paler brown, and with dots and wavy lines of dull white. The hind wings are reddish with almost a coppery lustre, becoming brown on the outer angle of the front edge of the wing, and paler towards the hinder and inner angle. The under surface of the wings is much lighter in color than the upper; the body is dark brown, with the hinder portion banded with lines of a paler hue.

## CORRESPONDENCE.

DEAR SIR,-

Mr. A. R. Grote has published a paper in the "Bulletin of the Buffalo Society of Natural Sciences," in which some statements are made which call for correction on my part. I shall not allude to his personal remarks, similar in character to those which he has made concerning others who have ventured to criticize his scientific work or to correct his mistakes ; but to the palpable blunders into which he has fallen with respect to some species recently described by me in the Proceedings of the Boston Society of Natural History. The following is a list of those of my species which were corrected (sic) by Mr. Grote : *Hadena rasilis*, *H. vulgivaga*, *Glaea sericea*, *Agrotis exertistigma*, *Xanthoptera nigrocaput*, *Copipanolis vernalis* and *Mamestra illabefacta*.

Mr. Grote states that my *H. rasilis* is a re-description of *Elaphria* grata Hübn., referred by him in the List to Caradrina ! If Mr. Grote will examine Hübner's figure, he will see that it represents a much larger, stouter, and entirely different insect. Mr. Grote has apparently overlooked

the fact that it is an excellent representation of the common species determined as *Taeniocampa oviduca* in collections; this, therefore, should be considered a synonym of *grata*, and *rasilis* remain a distinct species of *Hadena*.

My comparisons were made with two copies of the "Zutrarge;" a fine one in the library of Mr. S. H. Scudder, and another more coarsely colored in that of Harvard University.

Mr. Grote remarks that my *Hadena vulgivaga* is probably a re-description of *H. apamiformis* Guen. I am perfectly well acquainted with Guenee's species, and *vulgivaga* has not the slightest resemblance to it; it is, as I mention in the description, a new species allied to *H. rurea*.

Mr. Grote states that my *Glaea sericea* seems to be founded on a specimen sent him for determination, and which he considered identical with his *Orthosia ! apiata*. I never sent a specimen of *Glaea sericea* to Mr. Grote, and the species is entirely distinct from *apiata*. I did send Mr. Grote a variety of *apiata* for comparison with his type, and this he has probably confounded with *sericea*.

Mr. Grote remarks that my *Agrotis exertistigma* is probably only a Californian variety of *alternata*. After re-examining my material, consisting of two specimens of the former species and about twenty of the latter from Nebraska to Canada, I do not see any reason to change my opinion, but I should be happy to do so if Mr. Grote can prove the species identical.

Mr. Grote refers my Xanthoptera nigrocaput as a synonymn of X. Ridingsii Riley. The fact is that the author's copies of the first signature of Mr. Riley's paper, containing the name and a few lines of the description of his new Xanthoptera, were distributed some time before my paper appeared (I did not receive a copy, however, until January, 1875). The second signature, containing the larger part of the description, has not yet appeared, to my knowledge (Jan. 25th, 1875.)

Mr. Grote's attention having been called by me to his erroneous arrangement of the species of *Xanthoptera*, he at once improves the opportunity to found a new genus, *Exyra*. It is obvious that this genus (even if a needful one) can not stand, as it is not accompanied by a word of generic diagnosis.

In a similar manner he founds a new genus for my *semiapata*, after having only a month before (see Proc. Ac. Nat. Sci., Phil., 7, 206, 1874) entirely mistaken its generic characters and placed it in *Apamea*.

R.

Mr. Grote states that my *Copipanolis vernalis* is a re-description of his *Eutolype Rolandi*. The fact is, Mr. Grote has priority by one day (his paper was read Nov. 3rd, and mine Nov. 4th.) In the same papers were published *Apamea purpuripennis* Grote and *Orthosia baliola* Morr.; these species are synonyms and Mr. Grote's name has priority.

Lastly, Mr. Grote states that I have re-described Dr. Harvey's *Mamestra lilacina*. On the appearance of Dr. Harvey's description, I gave Mr. Grote a typical specimen of my species, and requested him to compare with the type of Dr. Harvey's species, and give his opinion. In his letter (which I should be glad to show to any one interested) he states unequivocally that the species are distinct, and on his word I published my description of *illabefacta*.

In this letter I have only referred to those mistakes of Mr. Grote's which, if allowed to remain unanswered, would create a wrong impression in regard to my work. I make no attack upon him or upon his work, although, if I were desirous of doing so, material would not be lacking.

The identification of specimens of the common Agrotis messoria Harris (already once re-described by Messrs Grote & Robinson as A. repentis) with A. lycarum Evers., a Siberian species, is an instance in point. I am yours respectfully,

H. K. MORRISON, Cambridge, Mass.

## GLAUCOPSYCHE COUPERI Grote.

Dear Sir,—

As this butterfly has lately been figured as *Pembina* Edwards, the following remarks will settle the distinction between the two species :

"With regard to the *Lycaena* from Anticosti, I presume Mr. Scudder is correct. The original *Pembina* came from Lake Winnipeg, a single specimen or a single pair, several years ago. These types were afterwards lost in a box of insects sent by me to California. I had forgotten them, and some how, another species had been assumed to be *Pembina* by Scudder and others, and I had fallen into the error myself of thinking with them that *Pembina* was allied to *Lygdamus*. I discovered the fact last year, and called Mr. Scudder's attention to it. I think this *Couperi* was what had been thought to be *Pembina*, and Grote was correct in naming it *Couperi*." Mr. Scudder writes October 10th, 1874, as follows :

"I formerly believed this to be Pembina, having received it from Edwards with that determination. I therefore named some of your first lot (as Mr. Mead says) Pembina. Afterwards I received a lot from your subsequent journeys, sent me by Grote. The specimens were poor and much rubbed, and I thought when I determined them to be distinct from the so-called *Pembina*, that  $\mathcal{J}$  and  $\mathcal{Q}$  alike had a broad marginal band. Mr. Edwards was the first to discover his own error, and drew my attention to it. We do not know *Pembina;* it is temporarily lost to science, but it will turn up one of these days. From Edwards' description and the context, it is plain that your butterflies are *not Pembina*. After Couperi was described, I saw many other and fresher specimens, and then discovered my mistake (accepted and published by Grote) about the distinction between your two lots of butterflies, and found that although Grote was in error in describing *Couperi* as distinct from the so-called Pembina, the name must stand because the first one, apart from Pembina, was given to an insect which was not Pembina.

"There are but two known species of Glaucopsyche in America:

"1. Lygdamus of the South.

"2. *Couperi* of the North, long supposed to be *Pembina* Edw., which however belongs to a distinct group."

## PAPILIO BREVICAUDA, Saunders.

I have received specimens of this butterfly from Percé, district of Gaspé, the north shore of the Gulf of St. Lawrence.

WM. COUPER, 67, Bonaventure Street, Montreal.

## COLIAS PHILODICE.

DEAR SIR,---

Mr. W. H. Edwards informs me that Mr. Mead has determined by experiment that this species becomes crimson on the contact of the wings with cyanide in the collecting bottle. This accounts for a supposed variety of *philodice* sent me by an Entomological correspondent in good faith as having been collected by her. The lady reported that she had not particularly noticed the specimen at the time of capture, but on setting her specimens she found that one of them had crimson patches on the wings. I have not seen any mention of the fact before in print, and as the illusion is very complete, owing to the brilliancy and thoroughness of the color, its true origin should be brought to notice, that others may not be deceived thereby. A. R. GROTE, Buffalo, N. Y.

DEAR SIR .---

On page 117, of vol. vi of your journal, Mr. Grote kindly furnishes us with a list of all the species of Noctuidæ common to this country and Europe, known to him. The following may, very safely, be added :

Ichthyura inclusa—Prob. I. inversa Packard. Calocampa vetusta—New York, New Jersey, &c. Graphiphora plecta Ochsen., N. Y., N. J. Agrotis ypsilon = A. suffusa; ypsilon has priority. Hadena chenopodii—New York, Michigan, New Jersey. Calligenia miniata—New York. Plusia urtica—Penn.

Eugonia magnaria-Either E. autumnalis or E. alniaria, [ forget which.

The last three I have received from Russia.

It may also interest your readers to know that *Danais archippus* is found in Queensland, without any variation that I can see. There is, too, a very suspicious resemblance between some of the Labrador species and those of Europe—for instance, between *C. phicomenes* and *C. nastes*; also between *C. pelidne* and our *C. philodice*. However, these require further investigation.

W. V. ANDREWS, New York.

Dear Sir,---

A note on p. 92, vol. vi, CAN. ENT., states that Mr. Grote, of Soc-Nat. Sci., Buffalo, received specimens of Coliadae taken by me in 1873, on Anticosti. I wish this error corrected, as that gentleman had no *Colias* from the collection made that year on the island.

WM. COUPER, 67 Bonaventure St., Montreal, P. Q.