tibia is ovoid, > femur + trochanter, first tarsal joint also ovoid, = femur, terminal joint subcylindrical, = trochanter, the terminal tarsal joint of the front leg of the female = third joint; the third and fourth joints terminate each with a pair of long spines; the first and second joints, as well as the tibia, have in addition several strong spines beneath. The palpi have a very slender terminal joint = $\frac{1}{2}$ middle joint, which is tumid.

The bursa copulatrix of the female has two sagittate chitinous patches.

Regarding A. palmeri and the allied species A. hepburni and A. walkeri, we can say nothing of their sexual structure as we have not sufficient materials for dissection. Their general resemblance to A. virgulti is obvious, and this is why we place them in this genus.

Nemeobius mexicanus, Behr, evidently an Apodemia, we have not been able to recognize.

1. Apodemia cythera.

Lemonias cythera, W. H. Edw. Trans. Am. Ent. Soc. iv. p. 345 1.

Alis testaceis marginibus externis fuscis, maculis albis nigro limbatis ad basin et serie submarginali ejusdem coloris, linea valde sinuata ultra cellulas nigra, maculas albas extus attingentibus; subtus (præsertim posticis) pallidioribus, marginibus externis haud fuscis sed fere albis nigro maculatis, ciliis alterne nigris et albis.

Q mari similis, sed major.

Hab. North America, Arizona 1.—Mexico, Northern Sonora (Morrison).

A common species in Arizona and along our northern frontier, judging from the number of specimens sent us by Mr. Morrison. It is closely allied to L. mormo of Felder and L. virgulti of Behr. Mr. Strecker, indeed, treats it as identical with the last-named species, and this again as a variety of L. mormo. The more rufous secondaries above and their lighter colour beneath, chiefly owing to the greater size of the white spots, seem to us to sufficiently distinguish it.

2. Apodemia virgulti.

Nemeobius virgulti, Behr, Proc. Cal. Ac. Nat. Sc. iii. p. 1781.

Lemonias mormo, var. virgulti, Strecker, Butt. & Moths N. Am. p. 1042.

Apodemia sonorensis, Feld. Reise d. Nov. Lep. p. 303 3.

L. cytheræ similis, sed anticis magis acutis ad basin multo fuscescentioribus; subtus posticis fuscis, maculis irregularibus albis, maculis alteris albis nigro circumcinctis ultra cellulæ medium.

Hab. North America, Southern California 1, Arizona.—Mexico, Sonora (Lorquin) 3.

Dr. Felder described this insect under the name of L. sonorensis from Mexican specimens, and we have an example of Mexican origin from Mr. Bates's collection. The latter agrees with the Californian specimens sent us from the United States as L. virgulti. It is closely allied to L. mormo, but differs in having some rufous markings on the secondaries above, and the wings of the male are perhaps a little more pointed.

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