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*Me*

IN ACCOUNT WITH

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DEALERS IN

**FINE GROCERIES,**

**FLOUR**

OF ALL GRADES,

Selected Teas, Pure Coffees & Spices,

Butter & Cheese,

CHOICE SYRUP & MOLASSES.

Canned Fruit in Variety.

ALSO

A complete assortment of Goods usually

kept in a First Class Store.

415 (= var of 411)

*Apoteles* like 411 on bottom wall inside

tree trunk near N.Y. Sept 15, 1893.

Head black, with stiff white hair. Labrum  
black. Antennae yellowish brown. Thorax  
enlarged at 12, a bent apical spine at  
4-5. Vent ① large, ②, ③, ④, ⑤, ⑥, ⑦, ⑧, ⑨, ⑩, ⑪, ⑫, ⑬, ⑭, ⑮, ⑯, ⑰, ⑱, ⑲, ⑳, ㉑, ㉒, ㉓, ㉔, ㉕, ㉖, ㉗, ㉘, ㉙, ㉚, ㉛, ㉜, ㉝, ㉞, ㉟, ㊱, ㊲, ㊳, ㊴, ㊵, ㊶, ㊷, ㊸, ㊹, ㊺, ㊻, ㊼, ㊽, ㊾, ㊿.

① minute, post stig ⑤ ⑥ on side body,  
deep black, a big irregular spot on each  
into irregular spots scattered around in  
the mesosoma, obscure at sides, ⑩ a small  
dot lat. in mesosoma, dorsal, dorsal  
bars on 8-9 wings, dorsum is above  
yellowish, near, dorsum on ①  
vent ① ② deep, ③, ④, ⑤, ⑥, ⑦, ⑧,  
so central, a line\*, ⑨, ⑩, ⑪, ⑫,  
white, ⑬-⑭ black, ⑮-⑯ white.

Feet & venter black. Hair short, sharp  
mostly, not dense, white, stiff, brownish  
sd. (\*where they are connected by a line shade)

(It is *obliquata*. See description in journal)

alc.	.32	.45	.62	.86	1.2	1.67	2.3	3.2	4.5	rat. 72
Found	.34	.4	.6	.9	1.2	1.9	2.5	3.4	4.5	

416 (J. Doll) from Guadalupe Falls

*Arachnida aulea* was ~~to be~~ identified  
 Hd narrow flattened fore, slightly retracted  
 below 2, shiny black, Body narrow,  
 lay, robust. warts large but low,  
 circular, not at all elevated. Hair very  
 thick, quite short but dense, deep  
 black. Body brownish black, denticles  
 unimaculate. Feet blackish brown.  
 The feet black. Warts pale brown  
 contrasting. Length 45-50 mm. Whole  
 body full, rounded, clipping large  
 ocelli black, mouth brown.  
 shiny blackish w. 3 ± Prod pale whitish brown  
 shading into a anilly color dorsally under  
 lens. Warts small, black, arranged normally  
 Δ c-th, the feet & abd. externally black.  
 Hair single black, rather long and  
 curving in different direction. single  
 from ①② 5-12 several from a wart on the  
 others. Some arise from s-d shading.  
 Hair points very much spinulose.  
 Under x50 the warts are rounded & gray  
 areas, scarcely elevated, smooth, the hair from  
 black tubercles in these areas.

~~Hydrated. Still  
 June 10 1894 Image July 20 1894  
 Cat no 11027~~  
 Egg of a caterpillar 1/3 sphere with 1/3  
 base, shiny beautiful pearl-like  
 diam. 6 mm. Posteriorly rounded  
 anteriorly flattened. Spinules  
 minute. Spinules  
 slightly more than 1/2 of spinules  
 the rest 1/2 of spinules  
 spinulose, mostly  
 end. ① about as large  
 as ② with but one  
 always with several  
 Hd as before in shape  
 Body very pale chocolate  
 brown s-d shaded brown.  
 Warts pale brown. S-V,  
 etc.  
 Warts small brown (sh hd. 6)  
 with a flesh-colored  
 center. Warts black. Hair of  
 a stiff, hardy kind  
 at ends than centrally,  
 white ones ant, 2.5 mm  
 total pale brown. White  
 spinules, s-d & lat lines.  
 Warts 5-10 marked in brick  
 red around ①. S-V hair very narrow, pale. Total  
 white hair obscure. Hair 2-5, 11-12 more abundant  
 & longer than central. S-V hair white, all spinulated  
 warts black, rather coarsely granular. Hd 5 ± (sh. 7)  
 A few long, all hairs at both ends  
 but 3 lat 5. S-V hair black, (sh hd. 10)  
 narrow and s-l. Warts & the feet shiny, hair black at  
 ends, foot red center, the long ant & post. hair 1 mm  
 of the s-v ones dark brown white. At first glance the  
 shiny warts look as if they were white. Spines some where  
 white Oct 10 Hd shiny black Prod black unimaculate, the  
 warts shiny, all feet reddish. Hair stiff, brist. points  
 spinulose, foot red mixed with white all over the body  
 with a fine long pale one. The small spinules white  
 S-V hair reddish pale. (sh hd 1.9)  
 Oct 15 Hd 2.0 ± Hd black, reddish, etc. lateral lamp  
 of ant. pale. Same but central wart on the side brown  
 spinules white. Hair same. S-V scarcely pale. (sh hd 2.5)  
 Oct 22 Black warts brown pair with a little red. All feet dull brown

Leaf of A. umbellifera, 5 spheres with the  
base, showing beautiful pentamerous  
arrangement. Pentamerous arrangement  
of flowers without secondary branches  
microphylls of glumes in staminal tube  
and of nucellus at summit. See the angles  
for notes on details of flower & fruit.

alc. .32 .45 .62 .86 1.2 1.67 2.3 3.2 4.5 nat. 72  
 found .34 .4 .6 .9 1.2 1.9 2.5 3.4 4.5

416 (J. Doll) from Guadalupe

*Arachnida aulea* max. ~~to~~ <sup>scarcely</sup> ~~liberated~~  
 Hd <sup>rounded as in the coll. scarcely bilobed</sup> normal flattened fore, slightly retracted  
 below 2, shiny black, Body brownish  
 lay, robust. Vents large but low,  
 circular not at all elevated. Hair very  
 bristly, quite short but dense, deep  
 black, Body brownish black, dark  
 unimaculate. Feet blackish brown  
 The feet black. Vents pale brown  
 contrasting. Length 46-50 mm. Width 4

Stage I (Sept 16) Hd bilobed <sup>lobes full, rounded, clypeus long</sup> mouth projecting  
 ocelli black, mouth brown  
 shiny blackish w. 3± Body pale whitish brown  
 shading into a milky color dorsally under  
 lens. Vents small, black, unchanged under  
 Δ etc, the feet & abd. extremely black.  
 Hair single black, rather long and  
 curving in different direction, single  
 from ① ② 5-12 several from a vent on the  
 others. Some arise from s-d shading.  
 Hair points very much spinulose.  
 Under x50 the vents are rounded Δ gray  
 areas, scarcely elevated, smooth, the hair from  
 black tubercles in these areas.

upper end 31 Hair all jet black, body earth black, warts  
 light brown, apices white, feet crimson (dull) the  
 black. No black lateral warts. pale w. Hybridated. Still  
 alive apr. 30 1894 COON June 10 1894 Imago July 20 1894  
 (Sept 17) Hair more numerous <sup>same</sup> ~~same~~  
 Cat no 11027

from each vent, black, spinulose, bristly  
 but pointed at the end. ① about as large  
 as the other vent, sometimes with but one  
 distinct hair but always with several  
 thin granulations. Hd as before in shape,  
 w. 4± (9) Hd shiny black. Body very pale chocolate  
 brown with a darker s-d shaded band.  
 A very faint narrow pale d-line. s-v,  
 vents & hair black.

Sept 22 Hd shiny black mouth brown w. <sup>(sh hd. 6)</sup>  
 dark blackish brown with a flesh colored  
 narrow, disarticulated line. Vents black Hair of  
 different lengths, rather stiff, hardy bristly  
 more abundant at the ends than centrally,  
 with a few long white ones ant, 2.5 mm  
 later d of reddish white central pale line. White  
 line above vents ③ & ④ respectively s-d & lat. line.

Sept 28 Same. Dorsal space 5-10 marked in thick  
 acid around ④. s-line very narrow, pale. Lateral  
 white line obscure. Hair 2-5, 11-12 mm abundant  
 & longer than centrally. s-v hair white, all spinulose  
 vent black rather coarsely granular. Hd 8± (sh. 9)  
 A few long pale hairs at both ends

Oct 5 s-d squarish black, <sup>(sh hd 12)</sup> in body all black with a  
 narrow red d-line. Vents & the feet shiny; hair black at  
 ends, gray red centrally, the long ant & post. hair s-v  
 of the s-v ones dark, new white, at first glance the  
 shiny vents look as if there were white specks somewhere

Oct 10 Hd shiny black. Body black unimaculate, the  
 vent shiny, all feet <sup>light</sup> reddish. Hair stiff, bristly, pointed  
 spinulose, gray red mixed with black all over the body  
 with a fine long pale one. The small spinulose white  
 s-v hair is distinct pale. (sh hd 1.9)

Oct 15 Hd 2.8± Hd black reddish vent. Lateral line  
 pale. Same as central vent on the sides brown  
 spinulose white. Hair same. s-v scarcely pale - (sh hd 2.5)  
Oct 22 black, warts brown hair with a little red tip. abd feet dull brown

Calen. 26 40 60 92 1.4 2.0 3.0 ~~4.0~~ 5.0  
 Found — — .6 1.0 1.4 2.2 3.0

417 (J. Doll) *suffusa* Schow

Spitsona-like larva of *Anachis* sp.  
 Eggs nearly spherical but with flattened base, somewhat conoidal, the apex slightly acuminate. Diam. .6 mm. Of a fleshy brown or yellow color with a shiny pearl, bluish lustre. X50 covered with large, shallow pits with ill defined edges, not sharp enough to form reticulation of the space between. [Would just head be about .35 mm?]  
 Stage hd. 6 very pale yellowish, shiny. Large cluster of ocelli black, mouth brown a blackish shade at vertex. Scarcely lobed, very slightly retracted below. Roel normal, warts quite large but colorless & inconspicuous, the hair bearing granules only black. Pale greenish yellow with a faint white dorsal line. Oth small, legs shaped, normal. Anal plate, warts ③⑤ on 1-4 and 12 tiny marked with dark orange.

from Suadajara, Mex.  
 Hair fine, not abundant or varying

Stage hd. 6 <sup>417</sup> Hd retracted, antenna marked orange ochraceous, labrum & bases of antenna yellow w. 3 <sup>ring</sup> <sup>tipped</sup>  
 Body gray <sup>punctured & wrinkled</sup>, interspersed with fine white streaks and minute black dots, a not well defined white d. line, with minute black dots in it. S-d line obsolete but its location marks a boundary where the color becomes darker gray laterally. Warts ①② <sup>yellow</sup> <sup>black</sup> <sup>obelli</sup> <sup>d. line</sup>  
 ③ orange, a bright yellow <sup>base</sup> <sup>near</sup> <sup>feet</sup> <sup>and</sup> <sup>whorls</sup> <sup>of</sup> <sup>setae</sup> <sup>etc.</sup>  
 S-d line. Warts ③ slight orange, ④ whitish. The feet orange like head, abd. slightly orange tinted. Hair dense, even length, pointed tips, heavily spiculated black & white about evenly mixed. From thro. segs & 12-13 a few slender nearly smooth white hairs of great length 15-17 mm. A neat silver gray larva. Other same but gray in 2 shades darker & most of the hairs are black. S-v region pale, yellowish, with black s-v clouded seg. plates. Difference caused mainly by the hairs. <sup>one worm</sup> <sup>Images</sup> <sup>June 1894</sup>  
 Oct 15 <sup>one worm</sup> <sup>Images</sup> <sup>June 1894</sup>  
 ⑤ slight orange, distinct as ant. effect esp on 12  
 Feet pale. Hair long, <sup>very</sup> <sup>fine</sup> abundant, black & white

June 15 1894 Hd retracted, antenae  
 marked, orange ochraceous, labrum  
 & bases of antennae yellow w. 3 v  
 Body gray, <sup>punctured &</sup> wrinkled, interspersed  
 with fine white streaks and  
 minute black dots, a not well  
 defined white d. line, with  
 minute black dots in it. s-d line  
 obsolete but its location marks a  
 boundary where the color becomes  
 darker gray laterally. Warts ①-④  
 concolorous, same pearl gray, wart  
 ⑤ orange, a bright yellow ~~above~~  
 s-s line. wart ⑥ slightly orange, ⑦  
 whitish <sup>with bases yellow like s-s line</sup>. The feet orange like head,  
 abd. slightly orange tinted. Hair  
 dense, even length, pointed bristles,  
 heavily spinulated black & white  
 about evenly mixed. From thro.  
 segs & 12-13 a few slender nearly  
 smooth white hairs of great length  
 15-17 mm. a neat silver gray larva.  
 Other same but gray is 2 shades darker  
 & most of the hairs are black. s-v region  
 pale, yellowish, with black s-v clouded  
 seg. patches. Difference caused mainly by the  
 hair Oct 15 one cocoon Imago June 1894

traces of yellow

We are indebted to  
"Catalogue of Lepidoptera"  
have relied to a great  
of synonymy of species  
Prof. J. B. Smith for  
E. L. Graef, Mr. Wm  
and Dr. A. S. Pack  
certain specimens.

Local forms, breeding  
great extent from the  
whether connected by  
mediate territory, or  
local race and local

any  
proposed  
changes



Calen. 26 40 60 92 114 2.0 3.0  
 Found — — .6 1.0 1.4 2.2 3.0

~~417 (J. Doll)~~  
 suffusa Schwan

Spit-soma-like larvae of Arachni sp.  
 Eggs nearly spherical but with flattened base, somewhat conoidal, the apex slightly acuminate. Diam. .6 mm. Of a fleshy brown or yellow color with a shiny pearl bluish lustre. X50 covered with large, shallow pits with ill defined edges, not sharp enough to form retraction of the space between. [would first head be about .35 mm?]  
 Stage hd 6 very pale yellowish, shiny. Large cluster of ocelli black, mouth brown a blackish shade at vertex. Scarcely lobed, very slightly retracted below. Body normal, vent quite large but colorous & inconspicuous, the hair bearing granules only black. Pale greenish yellow with a faint white dorsal line. Cth small, legs shaped, brownish. Anal plate hairs ②⑤ on 3-4 and 12 tiny marked with dark orange.

from Guadalupe, Mex.  
 Hair fine, not abundant, of varying lengths, brownish  
 Stage hd 1 = Same. Antennae black tipped  
 Body much same but trace of a blackish sd line. Hair more abundant, mostly short, white, but mixed with a few very long hairs, some of which are black.  
 Feet all pale, colorless, water.  
 molt 2/21 Hd bilobed brownish yellow, ocelli black, mouth brownish, fine black. (Sk. hd 1.05) W. line.  
 Body green rather ended, stage 2 area around ③ on 12 shaded with orange. Feet & acute white, a narrow defined ~~ant~~ and conspicuous white d & lateral line the latter shaded above & below with black dotting. Vent large, unicolorous, the pair granules black.  
 Hair long, stiff & straight, thin, but fine, spiracles white & black intermixed. Length 15 mm some of the hair are 3 mm long. Lateral white lines (conspicuous) Lat. one solitary vent  
 ③ Also a distinct s-s line. Fine of tracheae evident molt 2/26 Hd 2± Hd bilobed, lobe full, rounded, pale. evident; pale brownish, ocelli black, mouth dark concealed beneath the hair. 2. s-space whitish gray, d. white line narrow, discrete. Lateral space dark greenish gray, pale at ends. s-r space greenish with dist. white s-r line. Vent large <sup>pale granules black</sup> <sup>ch. l. line</sup>  
 ④ slight orange, distinct as ant. & feet esp on 12 Feet pale. Hair long, <sup>very</sup> fine, abundant, black & white

418 (J. Doll)

~~Sphinx eremita on~~ ~~Brooklyn~~  
HD. ~~Wider than wide, square on top but~~  
~~narrower just before; clypeus angled,~~  
~~suture deep. Coarsely shagreened; deep~~  
~~putty horn with a white line on each~~  
~~side, near & under. Ocelli & mouth black~~  
~~w 5 1/2 mm Body cylindrical, seg 8 annulate~~  
~~on 3 and d. a fleshy collar like projection~~  
~~Horn stout, moderate, slightly curved~~  
~~coarsely granular. Blackish putty~~  
~~trilobely curved with little black dot~~  
~~in pale circles, 7 oblique lat. pale~~  
~~shades. The feet & horn black. The~~  
~~seg without dots, smoky brown, the~~  
~~terminal shield area pale, narrowly~~  
~~lined with black, bisected by a pale~~  
~~line with black border. a black patch~~  
~~on 2 just under "collar" On 3 & 8 just~~  
~~to collar a large oval sooty black~~  
~~patch, surrounded (ant. esp.) by a white shade~~  
~~which obtain on the "collar". <sup>spruce is a</sup> black area~~

at old cherry, bayberry oak, Sept 1893. Had caltrop  
pith top of ② 6-12 and ③ 13 but no long spine  
Caltrops present before last stage.  
Full grown 16 mm without horns. Out caltropes

419 (J. Doll)

~~Euclea indeterminata~~ ~~Ed (= Parasarcophaga Redt)~~  
~~at bayberry, N. J. Sept 16, 1893. [coll. by Doll]~~  
~~(two forms gamboge yellow or vermilion red.)~~  
~~Same stage, but horns vary in length some~~  
~~nearly twice as long as others & more slender!~~  
~~Head below 2, 2 below 3. Tho feet small,~~  
~~pale, abd none; venter soft sticky,~~  
~~clean honey brown. Dorsum, side~~  
~~flattened with sd & supsting series~~  
~~of segmentary horn like process, and~~  
~~thrusts with articulating spine. S-d horns~~  
~~3-13, horn on 4, 5, 8, 11, 12 very long, the~~  
~~ones on 3 & 13 moderate, the rest very slender~~  
~~sub-spherical. Lat. horn <sup>3-4, 6-12 (not on 5)</sup> ~~3-11~~ short,~~  
~~except on n 4 which is twice as long~~  
~~as the others. Spruce's round, tho on n 5~~  
~~in line with ~~below~~ the horns, those 6-12 much below~~  
~~them, the one on 2 usually concealed~~  
~~as the segment is retracted. Feet pale,~~  
~~blotched with red or its some part,~~  
~~ocelli & mouth dark, w. mm.~~

joint 2 granular long brown. Body (A)  
 lemon yellow or (B) straw color the  
 tubercles (A) yellow, tinged with purple  
 on 3, 6-7, 9-10 or (B) vermillion red  
 with a red band along the side line,  
 lateral, along sharply horns and along  
 s-v edge. Four narrow dark purple  
 line in d space, or a bluish white  
 ground, the 2 central ||, the outer undu-  
 lating & correspond with the location  
 of the larger horns. Four smaller line  
 in lateral space separated into  
 2 pairs by a (A) yellow or (B) vermillion  
 band, only slightly undulating. A  
 circular single pair of line enclosing  
 the spiracles, the one below than  
 the most distinct & separated from  
 the other by a (A) yellow or (B)  
 vermillion band. On 3, close below  
 the super-s. horn of 12 or depressed perle  
 area with purple border. Ant edge of  
 3 & 4 purple. Circular spiracles brownish  
 Imago  
 Size 15x7. Horns on 8, 2.5-4 mm. June 1893

Cole #1 .58 ,83 1.2 1.7 2.4 3.4 4.9 rat. 70  
 7d 1.7 2.4 3.4  
 HYB. HYB.  
 II III

420 (J. Sell)

Aetia nigra (?) with big life like shed hides  
 Ash hd 1.7 All just like next stage. \*\*  
 Stage hd 2.3± Hd rounded quadrate, median  
 anterior well marked at vertex along black  
 basal joint & antennae pale salmon  
 Body velvet black, immaculate, abd feet  
 reddish. Ant long, shining black. Has  
 very bristles, but deep, short but dense  
 black with a few long pale hair just.  
 S-v hair from 5-6 very red. 7 in pair. Ant  
 molted 26 (sh. hd 2.4, 1.7) head 3- same, but  
 the feet red like later old. Spiracles white  
 Median anterior of 1st. pale. Lateral white  
 long from 1st. also 2nd. 3rd. 4th.  
 (sh. hd, same ones, by calipers { 1.90, 2.18 } (3 +  
 { 1.64, 1.74 } (2 +  
 { 1.64, 1.74 } (\*\*)  
 [Seen to be hibernating - Oct. 11, 1893]  
 Put in the ice box - Oct 13 - mid

17  
143

421 (J. Doll)

Alcoholic *Citronoma* ~~pericallus~~ <sup>splendens</sup> ~~trice~~  
 Stage hd 4.8 mm Smooth, evenly rounded dark  
 brownish black, anterior half pale, mouth  
 parts, except jaws also pale. A few short  
 pale hairs above the mouth. Body  
 cylindrical, anal feet large with  $\Delta$   
 concave plate. abd. feet long, with 2  
 rows of setiferous elongated tubercles.  
 Three rows of modified processes. ① s-d 2-13,  
 single d. on 12 & 13 with a pair on anal  
 plate; ② lat 2-13. ③ s-v, 2-13 ant. and  
 a small ④ on 2-6 <sup>ant.</sup> & 11-13, also s-v below ③  
 Processes like antlers with wh 1 & 6 thin  
 like curving branches, ④ on 2-4 & 12  
 about twice as long as the other, ② on  
 3-4 and ④ on 3 slightly longer than the  
 next. Apices minute setiferous or bare.  
 Edges of anal plate with conical setiferous  
 smooth tubercles. Color blackish, nearly  
 black. Processes all shining black except  
 the basal half of ① & ② 2-4 and the short

On anal plate & ④ on 5 & 13, which are white. Large spiracles black.

\* thicker & with more branches. In another example the bases of many of the processes are white.

Stage hd 6.2 mm (A mat. regalis head 7.0 mm)

Antennae 6.4, 6.5. Hd as before, but the pale area around the mouth spread over the sides of the lobes; ocelli black, a few very short, but bristly setae.

Processes & tubercles all proportionately much shorter than before, the longest ones scarcely more than  $\frac{1}{2}$  as long as the corresponding ones in C. regalis, the branches reduced to short conical prominences each with a very short spinous tip.

Tubercles on feet & anal plate, shorter rounded with small setae. Coloration much as before but the body's pale up to have been blackish above. A whitish sky shade. Spiracles large, black. The feet & anal plate partly pale.

172  
183

422 (J. Doll)

Alcoholic <sup>redominia</sup> Mademia inscriptura.

Head rounded, nearly square as seen in front, median suture depressed above the clypeus over vertex. Slightly glaucous green with a yellowish line from base of antenna up to vertex of lobe at one side, joining the sd line on the body.

W. 3.6 mm Body cylindrical, decreasing slightly & gradually in size from joint 5 to head. 12 a little enlarged with a moderate normal horn with rudimentary granulation. Segments rather finely 8-annulate. Green finely dotted with yellowish especially on the side with a pale sd line which runs evenly till 12 where it bends up and ends at base of horn. Spiracle white, with a narrow black edge at each side, but none above & below. The feet pale testaceous. Sm anal plate scarcely convex, pointed behind. Plate on anal feet not distinct.

423 (J. Doll)

an orange

An *Orkistrans* sent to B. N. in abundant examples from Guadaluajara, Mexico

Calc. 2.61 3.07 3.61 4.25 5.0 5.9 mt. 85

Found 2.5, 2.6 Guadaluajara, Mex.

3.0, 3.0, 3.2, 3.2

3.5, 3.58, 3.6(5), 3.7(4), 3.75(2), 3.8(6)

4.1, 4.15(2), 4.2(3), 4.25, 4.3(2), 4.4(2)

5.0, 5.4

6.0, 6.4

59 larvae

All 5 stages essentially alike except in size.

hd. med. yell, rather wider than high, clypeus large  $\Delta$ ; clypeus - covering of head not extending far back at vertex, especially ~~ventr.~~ <sup>med. suture</sup> when it is median of the fleshy back. Sutures not impressed. Faint granules or shagreened, shining; a few dark setae from the lower part. Ground sordid white, but thickly covered with elongate & rounded  $\Delta$  brown-black spots, especially along the suture & over the sides.

Labrum & basal joint of antennae

white. Hd. slightly retracted below 2. Body much flattened; with double undulate s-ridge & 1 high s-ridge. The feet large, corners with distinct claws. Abd. feet flattened, very short, rudimentary but with a pear shaped row of distinct radiating brown patches around a central depression. Feet on 7-10, 13, the last pair rather longer. 2d. to below 3rd. covered by a single large c-sh. On 3 a similar one with a fold at apical region. On 4 two plates, separated at the dorsal line, rounded post, reaching to the stigmatal region. A large  $\Delta$  anal plate on 13. These plates sordid white, marked with black blotches forming s-d & lateral bands. Body sordid blackish brown, abd. feet pale. The feet & anal plates brown-black. Rather long, but fine pale setae arise singly from minute tubercles on the feet.  $\text{O}^{\text{sd}}$  middle,  $\text{O}^{\text{lat}}$  lat,  $\text{O}^{\text{sup}}$  sup.  $\text{O}^{\text{eq}}$  & 2 on the 5-V ridges. So fine could see them. Sproach reddish brown. Body of many over with.

When used, not over outside of case.

Cases vary with material but the stuff is all laid on cross-wise. A little case 20 mm long is composed of woolly setae covered on the outside with pieces of leaves laid on flat ways. A case 80 mm long is similar but the pieces of leaves are supplemented by little sticks laid on cross-wise.

The ends are wholly of setae. Most 12 mm. Another case only 65 mm long containing a larva with hd 5.0 mm & much thicker especially ant. It is made of large sticks about 10 mm long put on crosswise with much fluffy hair with almost like pulv. It is deep is almost Δ. Width at head end 20 mm at middle 13 mm.

hd with 2 pairs 6.0 (evidently just the same)  
mes. wd 6.4 (5.4) (♂ Sh anal pl 3.8; ♀ do same)  
Larva hd 3.5. an. pl. 2.5; hd 4.8, pl. 4.2;  
a ♂ 8/11/19. hd about 4.5. Same but ~~more~~ <sup>smaller</sup> ~~than~~ <sup>than</sup> ~~last~~ <sup>last</sup>.  
♂ hd 4.5 ±

*Alibates townsendi* Riley, U.S. sent by F.D. A. Cochrane, Las Cruces, N.M.

Head and legs white with elongate black spot exactly as in 423. Labrum bases of antennae white. W 5 mm. A large white cell on 2 reaching below spiracle with a c but irregular black bands. On 3 a similar narrow plate, not very common. No distinct plate on 4 but some white & d encloses in a s-d & lateral patch like the spot on 3 & white the white is reduced, but without the dorsal mark. The feet large black. Body black, on abd. brown black, faintly marked with pale on the promerous of the propodeum & 2 s-v ridges. spiracles round, brown black.

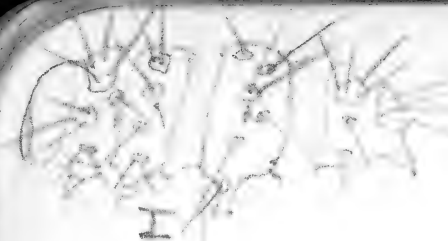
Case of thick setae smooth, brown covered with sticks laid on lengthwise  
Dead Oct 22. Hd 5.2 mm

425

Datana J from Dr. Packard from Olympic  
Mts., Nov. 6, 193. Hd higher than wide  
flat before, anterior end marked by a  
small, depressed <sup>shagreened</sup> area; surface <sup>shagreened</sup>  
shiny black or shading into dark red  
above; w. 7.8. Body normal, black,  
the hair dense, short, pale, a few  
of the spines black at base, stinging  
hair rather long & stout. Some of  
the very minute 2<sup>o</sup> hairs are brown-black.  
But the longer ones are pale. Cth  
pale (discolor), dotted with the brown  
bases of the hairs. Stripes even regular,  
about  $\frac{1}{2}$  as wide as the space, pale  
(discolor) broken up and not con-  
fluent feet. Base of all feet, and  
spots on 5-6, 11 & 12 (not on 13 or anal)  
pale, the spots occupying all the  
venter between feet & interrupting the  
medioventral line. No pedal line.  
Springs, anal plate & feet as

well as the feet & abd. ventral  
black.





Calc. 29 41 .59 .84 1.2 1.7 2.45 3.5  
 700 3 4 .65 1.1 1.4 2.0 3.5  
 25

426

*Auctia* eggs on a stone at 113<sup>th</sup> St New York Dec. 17, 1893 Velvety black, a broad even d. a 5th faintest stripe faint legs dull black, normal. Hair not very bushy, rather scant black ① ②, fringed ③ ④. IV slight intensity prominent a small spot the feet black abd. pale W. hd 3.8 mm. Lateral tubercles. The broad stripes are quite even but narrow a little toward the ends and (especially the 1st. above 2) do not quite reach the ends. Last hairs from 12-13 much longer than the other. The train is thin, not at all obscuring the bright markings.

(reared in ...)  
 Eggs from Dr. DeMeane + May 20 1897 Rounded ...  
 Hatched May 21 Hd 5.1 3 ...  
 Body pale brown ...

Not mine at West Palm Beach, Fla. in the live oak bushes

427

*Protophona melanocera*. Alcohol Dr. Packard's specimen. (ex. Jan 8, 1894) Hd large, round, granular, only 1 c-sh. normal, large, covering 2 dorsally. Ped. all granular like spring. Feet not red, abd. mes very short. Spiracle in 12 higher up than the other. Area of 1st very large covering part continuous with a bordered area on 12 ped. bordered in front by a trans elevated fold. Petal fine short, very obscure. Antennae 2 8-8 and ① 12 occur. not to be median, the 12 there is a slight prominence central, on 12 at the apex of the transverse fold

Sets normal no app. hairs iii double on 5-13 ...  
 Shed June 12 ...  
 Shed June 20 ...  
 Shed June 25 ...

Got another in house on black oak on the  
hill on the road to Longwood, Yaphank, L.  
I. Sept. 3 (1917)

428

Laccosoma chondrota One c-6. The  
coloration is entirely. Center black  
feet brown, anal plate scarcely  
enlarged. Body not granular,  
smooth, setae from distinct  
tubercles, more numerous than in  
Peroplia. Setae: ① ant, ② post,  
only a little below ①; ③ suspensory  
ant. ④⑤ in line S-V, ⑥ above base  
leg, (a few on base of leg) ⑦ composed  
of several, representing leg ⑧ each  
side median line on apical seg  
not represented when the leg is  
12 just like this. ①12 are more  
median than accounted for by the  
smaller seg. of 12 and elevation of  
apex. On the two segments are  
more than 6 setae [4.3 ① changed. ① just  
above ②  
③ post, ④ 2 stig ant. ⑤ post S-S. ⑥ S-V, as  
well as 1 seta med. to ant.]

429

Chrysomela nana Jean Paris (Blown)  
Its rounded black with blue brown, very hairy  
w. 3.8 mm. Body black, hair all narrow,  
even, closely parallel. D. line narrow, pale  
puberulous yellowish, faint at the middle of  
each segment. Adorsal line broader, even,  
a little dotted with black, bright orange  
red; S-d line narrow, dactylate, broken,  
orange; a broad space of pure color. Lateral line  
broad, orange yellow, a little mottled &  
blending into a narrow broken stigmatal  
line; substigmatal broad but rather  
faint & broken, red; venter shaded with  
pale yellow along bases of legs. Feet,  
c-6, anal pl & slight hump on 12 without  
marked hair scant, short, pale brownish  
& and so with a few groups of stiffer  
black hairs representing units ① & ②  
(better specimen)

Cale	V 4	.65	1.15	1.95	(2.35)	3.2	r.b
	4	.6	.9	1.4	2.1	3.2	r.66
Found	4	.6-.65	1.1-1.15	1.8-2.0	(2.2-2.4)	3.2	

730

Egg of *Chrysomelidae* m. *Chry.* 25 Mt.  
 Wash, Wash, Col.

Egg of *Chrysomelidae* m. *Chry.* 25 Mt.  
 with a small hole gone, white, smooth  
 stained by the brown froth in an area in

conforming to meeting of bubble

Shell with striations, same as inside.  
 Laid close to the rounded end in a  
 layer of columnar cells forming a head  
 band about 2 rows and a small tiny  
 front row by column with shiny  
 continuous surface ✓

Hatched Mar. 20 (4 rows) shiny black

w. 4 rows black, set shiny, marked  
 by a double row of minute orange dots  
 Sd - Hair very white, quite thick  
 curving forward and back s-v; rather  
 coarse. A narrow pale lat line. <sup>one</sup> <sub>row</sub>  
 pale. <sup>one</sup> <sub>row</sub> <sup>one</sup> <sub>row</sub> <sup>one</sup> <sub>row</sub> <sup>one</sup> <sub>row</sub> <sup>one</sup> <sub>row</sub>  
 equidistant - 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th  
 s-line. A s-v pale band. Hair very white.

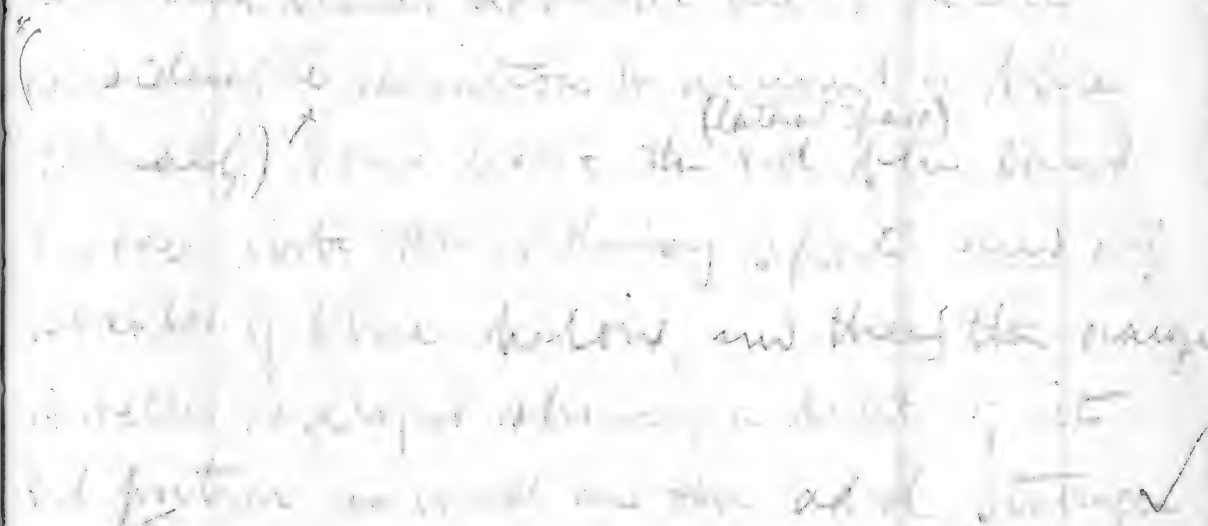
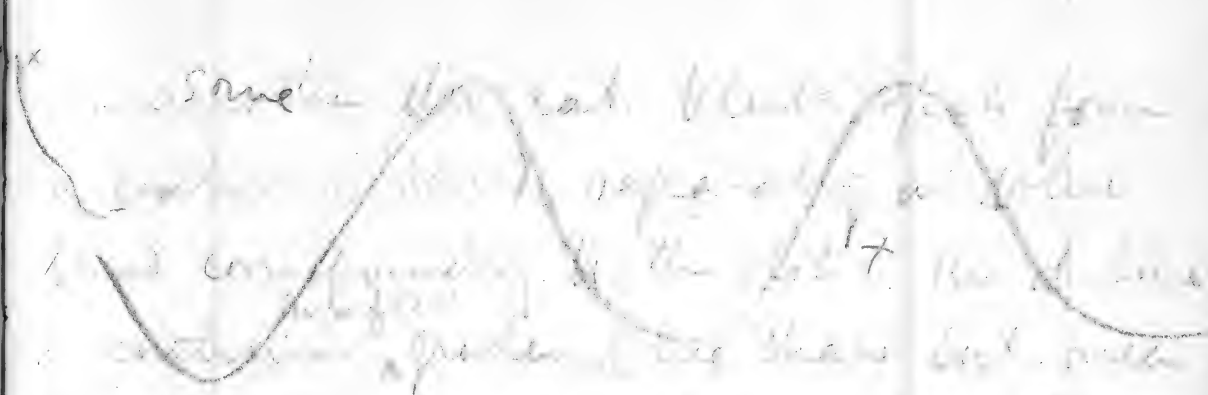
1 day. s.d. *Chrysomelidae* a little past the 1st row *Chry.*  
 later when it is 21, in a line s-v? very obscure  
 The s.d. range, striations, distinct only s-v.  
 It is wider and, and fine, but without  
 post, striated centrally, and in do  
 a narrow dark d-line & dorsal black  
 next to situated at the narrowest, it  
 hairy, several pale hairs, (1) was the  
 dorsal and narrow spot in the dorsal part  
 of many (2) (3) (4) (5) (6) (7) (8) (9) (10)  
 and one pair below (5) in the pale  
 area of the dorsal part, marked but some

*Chry.* 25 Mt. *Chry.* 25 Mt. *Chry.* 25 Mt.  
 head black, 3rd black, 4th black, 5th black, 6th black, 7th black, 8th black, 9th black, 10th black  
 hair white; w. s. row, red, black with a  
 narrow straight reddish ad dorsal line  
 sup. - 1 pair, at the end a pair of  
 each segment, absent at the lateral line  
 is with <sup>34</sup> *Chry.* 25 Mt. *Chry.* 25 Mt. *Chry.* 25 Mt.  
 line. Hair white, s-v paler. Egg, narrow  
 pale gray, a dorsal appearance when  
 does a bent. Egg of s-v pale. There are  
 most dense short hairs from the dorsal  
 and no lat. at the head, 1st row  
 to the end in last stage.

W. 3 (1) 2 black, hair abundant, set white. <sup>white s-v</sup> <sub>row</sub> <sub>10</sub>

~~light~~ ~~of~~ ~~red~~ ~~and~~ ~~line~~ ~~; its~~ ~~pale~~  
 line pale ~~blue~~ ~~and~~ ~~other~~ ~~marked~~  
 be ~~appreciable~~ ~~ly~~ ~~at~~ ~~the~~ ~~base~~ ~~of~~ ~~the~~  
 pale ~~marked~~ ~~line~~ ~~just~~  
 take a series of narrow elliptical d. blue spots  
 with pointed bases, dist on cont. ~~only~~, clearly  
 distinct. The protuberant, narrow red ad d.  
 line is at space between the blue spots. Yellow  
 pale. The red marks are much more reduced than before  
 are ~~4~~ ~~spots~~ ~~on~~ ~~the~~ ~~dark~~ ~~gray~~, blackest ~~at~~ ~~the~~ ~~top~~  
~~of~~ ~~the~~ ~~feet~~ ~~pale~~ ~~at~~ ~~the~~ ~~base~~, blue, black  
 below, the same amount white. Body  
 black, ~~marked~~ ~~with~~ ~~pointing~~ ~~blue~~  
 up the mid ~~venter~~, the blue line  
 having a series of seg. lateral blue patches.  
 2 spots black center of narrow dorsal  
 d. line to 11, to base at 12 ~~and~~ ~~the~~  
 single ~~center~~ ~~of~~ ~~the~~ ~~narrow~~ ~~and~~ ~~dorsal~~  
 line, ~~near~~ ~~red~~, ~~structure~~ ~~at~~ ~~12-13~~ ~~and~~  
 pale 5-8. 13 a black ~~mark~~ ~~at~~ ~~the~~  
 a black mark. 12 & 13 narrow ~~and~~ ~~d.~~  
 pointing blue. ~~at~~ ~~the~~ ~~base~~ ~~of~~ ~~the~~

Some of the red black spots from  
 center of the head ~~is~~ ~~the~~ ~~same~~ ~~as~~ ~~the~~  
 red ~~cont.~~ ~~of~~ ~~the~~ ~~1st~~ ~~7~~. The d. line  
 is ~~continued~~ ~~on~~ ~~the~~ ~~12th~~ ~~and~~ ~~13th~~ ~~segs~~  
 the blue ~~marks~~ ~~at~~ ~~dorsal~~ ~~on~~ ~~12~~ ~~and~~ ~~13~~  
 (12 ~~and~~ ~~13~~ ~~are~~ ~~not~~ ~~on~~ ~~the~~ ~~line~~ ~~it~~ ~~is~~ ~~only~~)  
 the red ~~line~~ ~~is~~ ~~the~~ ~~1st~~ ~~blue~~ ~~mark~~  
 the ~~red~~ ~~line~~ ~~is~~ ~~the~~ ~~1st~~ ~~blue~~ ~~mark~~  
 marked of blue patches, and then the orange  
 marked ~~at~~ ~~the~~ ~~base~~ ~~of~~ ~~the~~ ~~1st~~ ~~7~~  
 1st portion ~~is~~ ~~not~~ ~~on~~ ~~the~~ ~~ad~~ ~~d.~~ ~~line~~  
 1st 5 ~~spots~~ ~~on~~ ~~the~~ ~~1st~~ ~~7~~ ~~and~~ ~~8~~  
 marked ~~at~~ ~~the~~ ~~base~~ ~~of~~ ~~the~~ ~~1st~~ ~~7~~ ~~and~~ ~~8~~  
 half ~~of~~ ~~the~~ ~~1st~~ ~~7~~ ~~and~~ ~~8~~ ~~and~~ ~~9~~ ~~and~~ ~~10~~  
 the feet blue, ~~at~~ ~~the~~ ~~base~~ ~~of~~ ~~the~~ ~~1st~~ ~~7~~ ~~and~~ ~~8~~  
 feet ~~are~~ ~~obvious~~, ~~contrasting~~. ~~ventral~~ ~~gray~~, ~~at~~ ~~the~~ ~~base~~  
 feet ~~are~~ ~~not~~ ~~on~~ ~~the~~ ~~1st~~ ~~7~~ ~~and~~ ~~8~~ ~~and~~ ~~9~~ ~~and~~ ~~10~~  
 1st 7 ~~and~~ ~~8~~ ~~and~~ ~~9~~ ~~and~~ ~~10~~ ~~and~~ ~~11~~ ~~and~~ ~~12~~ ~~and~~ ~~13~~  
 1st 7 ~~and~~ ~~8~~ ~~and~~ ~~9~~ ~~and~~ ~~10~~ ~~and~~ ~~11~~ ~~and~~ ~~12~~ ~~and~~ ~~13~~  
 the ~~red~~ ~~line~~ ~~is~~ ~~the~~ ~~1st~~ ~~blue~~ ~~mark~~  
 - ~~the~~ ~~red~~ ~~line~~ ~~is~~ ~~the~~ ~~1st~~ ~~blue~~ ~~mark~~  
 dorsal ~~at~~ ~~the~~ ~~base~~ ~~of~~ ~~the~~ ~~1st~~ ~~7~~ ~~and~~ ~~8~~  
 dorsal ~~at~~ ~~the~~ ~~base~~ ~~of~~ ~~the~~ ~~1st~~ ~~7~~ ~~and~~ ~~8~~



as described above. The wings listed  
 stage V is later than last but the blue  
 a little less developed and not as  
 complete. (Only 3 or 4 had 6 stages)  
 (one began to come May 7) (most all ripe)  
 D. line June 6-1894 cat no 10933  
 other from C.A. Wiley, Vicks City, Minnesota  
 on wild cherry. Ripe May 15 in stage III  
 Hds 1.2 ± D. line whitish blue, and rays  
 marked distinct, sides all blue, like IV above  
 (But flower with good to none May 17)  
 (good for 1 specimen)

as described above. The wings listed  
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Several not layers) May 4 (sh hd 2.2)  
 before would closely as in stage before  
 but not quite so blue. after would

Calc.	.41	.69	1.15	1.9	3.2	rat. .60
Found	.4	.65	1.15	1.95	3.2	
<u>croza</u>	.4	.65	1.1	1.4	2.1	3.2
			#31			

Eggs of C. distincta ♀ from wood hole. Hatched March 25, 1894. Egg ring complete, edges steep, ring rather narrow and small, more a ring than patch. Well rounded with frothy covering, water ring green. Larva 1st inst. black, scarcely shiny with stiff short white hairs. w. 4 ±. Body normal, a little flattened, black with dark marks. Hair abundant, stiff, some about other longer, all pale, arrangement not evident. No warts, no rate of tubercles. Lateral line of moderate red pale shade. Spines 2-6 black, 7-10 red. 11-12 pale. 13-14 black. 15-16 red. 17-18 black. 19-20 red. 21-22 black. 23-24 red. 25-26 black. 27-28 red. 29-30 black. 31-32 red. 33-34 black. 35-36 red. 37-38 black. 39-40 red. 41-42 black. 43-44 red. 45-46 black. 47-48 red. 49-50 black. 51-52 red. 53-54 black. 55-56 red. 57-58 black. 59-60 red. 61-62 black. 63-64 red. 65-66 black. 67-68 red. 69-70 black. 71-72 red. 73-74 black. 75-76 red. 77-78 black. 79-80 red. 81-82 black. 83-84 red. 85-86 black. 87-88 red. 89-90 black. 91-92 red. 93-94 black. 95-96 red. 97-98 black. 99-100 red.

1st inst. black, scarcely shiny with stiff short white hairs. Body normal, a little flattened, black with dark marks. Hair abundant, stiff, some about other longer, all pale, arrangement not evident. No warts, no rate of tubercles. Lateral line of moderate red pale shade. Spines 2-6 black, 7-10 red. 11-12 pale. 13-14 black. 15-16 red. 17-18 black. 19-20 red. 21-22 black. 23-24 red. 25-26 black. 27-28 red. 29-30 black. 31-32 red. 33-34 black. 35-36 red. 37-38 black. 39-40 red. 41-42 black. 43-44 red. 45-46 black. 47-48 red. 49-50 black. 51-52 red. 53-54 black. 55-56 red. 57-58 black. 59-60 red. 61-62 black. 63-64 red. 65-66 black. 67-68 red. 69-70 black. 71-72 red. 73-74 black. 75-76 red. 77-78 black. 79-80 red. 81-82 black. 83-84 red. 85-86 black. 87-88 red. 89-90 black. 91-92 red. 93-94 black. 95-96 red. 97-98 black. 99-100 red.

young 2 contiguous white spots, and loss  
 the distal end piece on each segment.  
 There are a few blue specks in dorsal space and  
 the dorsum of 2 & 3 is blue. Blue band  
 is a d of dorsum by the black patches 3, 4, 12.  
 Molt April white d spots, space sq. large and  
 small dorsal on each segment.  
 10-12, each single  $\blacktriangle$ , dorsal on 3-5  
 d spots dorsal on each segment.  
 10-12, dorsal on each segment, sq. of body  
 blue, dorsal on each segment. Lateral  
 S-S, 2 sq. line pale, lateral eye  
 sq. dorsal on each segment. All with  
 pale reddish spots near dorsal line  
 replace on the dorsal line on S-S <sup>1940</sup>

blue band contain a row of black part  
 with some sides which are enlarged  
 and divide it on 3, 4 & 12 sq. of  
 body on each segment.  
 Molt 5/27 11/2 joints, blue dotted with  
 d line, large pale, lateral a trace of  
 continuous white on the joint above  
 mouth. White dots as before. The feet

pattern one partly or largely reddish  
 d space filled is with blue with a few  
 red streaks which are all nearly black  
 lined, location of  $\odot$  &  $\ominus$  black. Body  
 blue, black dotted, ventral dark grey,  
 with central black patches in orange  
 line near, orange, black edges.  
 Black spot just above lateral line small  
 lat line yellow straight, black edged.  
 spiracles black. S-S line dorsal, the  
 on a base of leg joint has more  
 distance than S-S, whitish. Feet gray,  
 pale at tips, 0-sh black, with yellow  
 lat angles. 12 enlarged & wide  
 dorsal black on the hump. Hair thin,  
 partly black d, more abundant S-S,  
 pale reddish.  $\rightarrow$  pale brown with  
 mixed. A somewhat distinct lat.  
 with on 2-segment black line. (at  
 edge 0-sh). Below lat line grayish blue  
 S-d band bright blue  
 Hds .4, .6-.65, 1.1-1.2, 1.8-2.2 <sup>are op 95 = 1.95</sup> 3.2  
 Begins to come May 10

432

reproducing of *hemisphaerica* eggs and eggs  
were observed and shiny yellowish. 75 x 1.1 mm  
from a lot of eggs from 20th. Hatched May 3  
the larvae were at water, and during 8 days  
the pupae were taken pale with 4 mm.

3rd. one large larva, 3 small, 4 tiny  
small ones reproduced it. Shiny black. The  
last legs shiny black, pale and 4, retained  
not used, the body elongated. Larva white  
anal pit and in the body of some  
dark as it is a first in the larvae 15 and  
of a white, yellow, black, and brown  
color. Skin pale, no tubercles. All feet  
black. Antennae, looks on 2, 13, 20, 21  
feet, other details on 4, 6. Hair on 4  
2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, 28th, 29th, 30th, 31st, 32nd, 33rd, 34th, 35th, 36th, 37th, 38th, 39th, 40th, 41st, 42nd, 43rd, 44th, 45th, 46th, 47th, 48th, 49th, 50th, 51st, 52nd, 53rd, 54th, 55th, 56th, 57th, 58th, 59th, 60th, 61st, 62nd, 63rd, 64th, 65th, 66th, 67th, 68th, 69th, 70th, 71st, 72nd, 73rd, 74th, 75th, 76th, 77th, 78th, 79th, 80th, 81st, 82nd, 83rd, 84th, 85th, 86th, 87th, 88th, 89th, 90th, 91st, 92nd, 93rd, 94th, 95th, 96th, 97th, 98th, 99th, 100th, 101st, 102nd, 103rd, 104th, 105th, 106th, 107th, 108th, 109th, 110th, 111th, 112th, 113th, 114th, 115th, 116th, 117th, 118th, 119th, 120th, 121st, 122nd, 123rd, 124th, 125th, 126th, 127th, 128th, 129th, 130th, 131st, 132nd, 133rd, 134th, 135th, 136th, 137th, 138th, 139th, 140th, 141st, 142nd, 143rd, 144th, 145th, 146th, 147th, 148th, 149th, 150th, 151st, 152nd, 153rd, 154th, 155th, 156th, 157th, 158th, 159th, 160th, 161st, 162nd, 163rd, 164th, 165th, 166th, 167th, 168th, 169th, 170th, 171st, 172nd, 173rd, 174th, 175th, 176th, 177th, 178th, 179th, 180th, 181st, 182nd, 183rd, 184th, 185th, 186th, 187th, 188th, 189th, 190th, 191st, 192nd, 193rd, 194th, 195th, 196th, 197th, 198th, 199th, 200th, 201st, 202nd, 203rd, 204th, 205th, 206th, 207th, 208th, 209th, 210th, 211st, 212nd, 213th, 214th, 215th, 216th, 217th, 218th, 219th, 220th, 221st, 222nd, 223rd, 224th, 225th, 226th, 227th, 228th, 229th, 230th, 231st, 232nd, 233rd, 234th, 235th, 236th, 237th, 238th, 239th, 240th, 241st, 242nd, 243rd, 244th, 245th, 246th, 247th, 248th, 249th, 250th, 251st, 252nd, 253rd, 254th, 255th, 256th, 257th, 258th, 259th, 260th, 261st, 262nd, 263rd, 264th, 265th, 266th, 267th, 268th, 269th, 270th, 271st, 272nd, 273rd, 274th, 275th, 276th, 277th, 278th, 279th, 280th, 281st, 282nd, 283rd, 284th, 285th, 286th, 287th, 288th, 289th, 290th, 291st, 292nd, 293rd, 294th, 295th, 296th, 297th, 298th, 299th, 300th, 301st, 302nd, 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Made ring of little bits of bark and later  
little conical tops in which they stayed.  
Mounted same (see sample in alcohol)  
Kutchen on May 26. active.



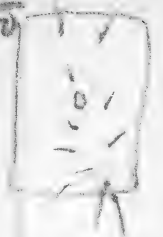
433

Looper on Crataegus, Central Park, May 1894  
 Hd depressed at vertex, clypeus labrum large  
 w, 1.8 mm. Dorsal pale purplish with  
 black mottling on middle of lobes above  
 1 & irregular longitudinal white narrow  
 lines in front, one crossing remainder of clypeus  
 the other to apex. Abd feet 10, 13. Two feet pale  
 clear. Color dorsum purplish streaked  
 with white, setae by minute black dots  
 ① and ② post. ③ supra-stig ant. ④ stig. post.  
 ⑤ S.S. ant. ⑥ & ⑦ in line, 6 being  
 up, merely the and one 7 & 8 middle post  
 in place, post ⑧ near mid-ventral line  
 mottled with sandy black & white, no  
 distinct marks, the white defined in  
 obscure patches & oblique lateral  
 shades the black as sd & S.S. shaded  
 faint. Lateral region with a reddish  
 under tone, venter pale, whitish,  
 General appearance like bark

Calc., 34 .49 .75 1.1 1.7 2.6  $\frac{66}{100}$

va beams xli

ant



viii

(See 945) 434

Looper, Linden, Maple, Plattburgh June 6 94  
 Hd 2.6 mm round, normal Δ large; rough, not  
 shiny brownish red, pale in anterior & around  
 mouth, jaw & ocelli dark. Abd feet 10, 13 latter  
 large. Tuls. i, ii, iii 1st seg post v, vi normal vii a and  
 vii b post in line with vi, vii c ant vii d  
 median in line between vii a and b. viii.  
 Double d, 6 lat narrow black line, crumpled  
 linear, a single faint ad-dorsal, a  
 dist. straight supra stig, festened up  
 and of spiracle to touch lower lat.  
 all absent on reddish cth & anal pl  
 venter, venter white, stig region yellow  
 pale & light; dorsal & lat region  
 streaked in with tan color or reddish  
 brown of darker or lighter shades between  
 the lines. spiracles black rounded

434 2.6

945 2.9 1.8

543 2.6 1.6 1.1 .85 .55 .3  
 2.4  
 2.2  
 2.5

435

larva on wood leaf  
Hatched brown, d. 1.5, white to red, feet to  
orange, green tubercles in black spots,  
c. 10. the feet and anal plate black.  
alcoholic spec. kept in N. Y.

*Erannia tiliaria* Harris  
This well known larva  
has frequently been  
referred to in econ.  
ent. lit. but I find  
no account of the  
life & desc. of all  
the stages. Harris  
gives a good general  
account of the habit  
Jaeger, Cognilecht  
Sandless & Fernald  
have also written  
on it.

434

945-

+ / i

*Erannia tiliaria* Harris  
This well known larva  
has frequently been  
referred to in econ.  
ent. lit, but I find  
no account of the  
life & desc. of all  
the stages. Harris  
gives a good general  
account of the habit  
Jaeger, Coquillett  
Saunders & Howard  
<sup>Jaeger</sup>  
have also written  
on it.

434

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MAMESTRA PURPURISSAR

435

Ureus on sand leaf  
Horned worm, body whitish, red feet  
wings green tubercles in black spots.  
est. the feet and anal plate black.  
alcoholic spec. kept in N.Y.

