Hentz, Nicholas Marcellus. 1832—1875. Collected works on *Lyssomanes*, *Attus*, *Epiblemu*m and *Synemosyna* of the United States.

Works by Nicholas Marcellus Hentz pertaining to the spiders (Araneae), including those now known as the Salticidae, are listed in the following table:

R	Publication	Pertaining to the Salticidae
[1]	1821. A notice concerning the spiders whose web is used in medicine. Journal of the Academy of Natural Sciences of Philadelphia 2: 53—55.	N/A
[2]	1832. On North American spiders. Silliman's Journal of Science and Arts 21: 99—152.	99—100, 107—109
[3]	1833. Araneides. *Latr*. The spiders. *in:* Hitchcock, Edward, Report on the geology, mineralogy, botany, and zoology of Massachusetts. Amherst, Press of J. S. and C. Adams. 564—566.	564—566
[4]	1835. List of spiders of the United States. *in:* Hitchcock, Edward, Report on the geology, mineralogy, botany, and zoology of Massachusetts, Second edition, corrected and enlarged. Amherst, Published by J. S. and C. Adams. 550—552.	550, 552
[5]	1841. Description of an American spider, constituting a new sub-genus of the tribe Inaequitelae of Latreille. Silliman's Journal of Science and Arts 41: 115—117.	N/A
[6]	1841. Species of Mygale of the United States. Proceedings of the Boston Society of Natural History 1: 41-42.	N/A
[7]	1842. Descriptions and figures of the Araneides of the United States. Boston Journal of Natural History, Volume 4, Number 1, Article 6: 54—57, Plate 7.	Introduction only
[8]	1842. Descriptions and figures of the Araneides of the United States. Boston Journal of Natural History, Volume 4, Number 2, Article 16: 223—231, Plate 8.	N/A
[9]	1844. Descriptions and figures of the Araneides of the United States. Boston Journal of Natural History, Volume 4, Number 4, Article 31: 386—396, Plates 17—19.	N/A
[10]	1845. Descriptions and figures of the Araneides of the United States. Boston Journal of Natural History, Volume 5, Number 2, Article 13: 189—202, Plates 16—17.	197—202 Plate 17
[11]	1846. Descriptions and figures of the Araneides of the United States. Boston Journal of Natural History, Volume 5, Number 3, Article 27: 352—370, Plates 21—22.	352—370 Plates 21—22
[12]	1847. Descriptions and figures of the Araneides of the United States. Boston Journal of Natural History, Volume 5, Number 4, Article 35: 443—479, Plates 23—24, 30—31.	N/A
[13]	1850. Descriptions and figures of the Araneides of the United States. Boston Journal of Natural History, Volume 6, Number 1, Article 2: 18—34, Plates 3—4.	N/A
[14]	1850. Descriptions and figures of the Araneides of the United States. Boston Journal of Natural History, Volume 6, Number 2, Article 15: 271—295, Plates 9—10.	288 Plate 10
[15]	1866. Supplement to the descriptions and figures of the araneides of the United States by Nicholas Marcellus Hentz (edited by S. H. Scudder). Proceedings of the Boston Society of Natural History 11: 103—111. with two plates.	103—106 Two plates
[16]	1875. The spiders of the United States. A collection of the arachnological writings of Nicholas Marcellus Hentz, M.D. Edited by Edward Burgess with notes and descriptions by James H. Emerton. Occasional Papers of the Boston Society of Natural History, Volume 2: i—xiii, 1—171, Plates 1—21.	48—75 Plates 7—9 Plates 17—20

Collected work on the Salticidae is presented here in order of its original publication, with a reference (R, shown in table above) in brackets at the top of each page header (yellow bar) to indicate the specific source publication. All text not included in an original publication is highlighted in red, and words either misspelled, or inappropriately used in the original are highlighted in blue. Most copies of this work that have been reviewed contain damaged illustrations, due to fading or migration of pigments. The best available versions of the original figures (including scale bars to indicate actual body length) are presented here at exactly 2 X their original size, removed from the context of their original plates and associated with respective text, to facilitate their use. The 1875 work was a collection of earlier papers, but contains enough modifications to the original text that it is also presented here, in its entirety. For purposes of

Zoological Nomenclature, the earlier papers are the definitive references. In *this versio*n, all scientific names are italicized. In general, only spiders presently associated with the Salticidae are included here.

The Plates

Hentz' plates were collected together, with additional plates, in the 1875 compendium by Edward Burgess [16]. In the process, these were renumbered as follows. Only plates figuring salticids are shown here:

Original plate	Plate in 1875 compendium [16]	Attribution (artist and engraver) at bottom of plate	
[10] XVII	7	N. M. Hentz, del.	W. H. Tappan. Sc.
[11] XXI	8	N. M. Hentz del.	W. H. Tappan Sc.
[11] XXII	9	N. M. Hentz del.	W. H. Tappan Sc.
[14] X	17	N. M. Hentz del	A. Sonrel in lapid.
[15] first plate	18		
[15] second plate	19		
[16] 20	20	EMERTON Del.	

Drawings in these plates were small, and in most of the surviving copies of this work appear to be in very poor condition.

Current Scientific Names

In part because of their early date of publication, the works of Nicholas Marcellus Hentz comprise a very important reference to North American Spiders for later arachnologists, including George and Elizabeth Peckham. Current names, based on Platnick (2009), are shown in red text next to the names assigned by Hentz, in the index [16] at the end of this collection. This will help the reader to identify the many species names by Hentz that have been retained.

Reference

Platnick, N. I. 2009. The world spider catalog, version 10.0. American Museum of Natural History, New York. http://research. amnh.org/entomology/spiders/catalog/INTRO1.html

Art. XIII.—*On North American Spiders*; by N. M. Hentz, Principal of the Female Seminary at Covington, Kentucky, and late Professor of Modern Languages in the University of North Carolina.

Letter to the Editor.

Amherst College, August 22, 1831.

PROFESSOR SILLIMAN,

Sir—Some time since I addressed a request to Nicholas M. Hentz, Esq., then Professor of Modern Languages in the University of North Carolina, and now Principal of the Female Seminary at Covington, Kentucky; that he would furnish me with a list of the Araneïdes

found in Massachusetts; as I wished, in the execution of a commission from the government, to obtain as complete a zoological catalogue for the State as was practicable. He not only complied with my request, but sent so full a view of North American Spiders, with so many valuable notes, that I immediately requested and obtained permission to send the whole for insertion in your Journal. If your views of the value of the paper correspond with my own, I shall hope you will give it a place in the next number.

With much respect,
Edward Hitchcock.

Araneïdes, (Latreille). *Aranea*, (Linnaeus).				
				No. of species.
TETRAPNEUMONES.	8 eyes; 4 mammulae, 2 very short; tooth of the mandibulae (chélicères) articulated downward,		*Oletera*	2
	6 or 8 eyes ; 6 mammulae; tooth of the mandibulae articulated laterally,		*Filistata ?*	1
			Dysdera	1
			Segestria ?	1
DIPNEUMONES.	Araneïdes forming no silken habitation, wandering; legs, 4th pair longest; eyes 8, in two rows, never both bent downward; 6 mammulae, 2 very long,		*Herpyllus*	8
	Araneïdes spinning webs, or wandering; never with all of the following characters united, 4th pair of legs longest, eyes in two rows both bent upward, and six mammulae of which two very long.	Araneïdes making a web, sedentary,	*Clubiona*	6
			Tegenaria	2
			Agelena	2
			Theridium	5
			Pholcus	1
			Linyphia	5
			Tetragnatha	2
			Epeïra	26
			Mimetus	1
		Araneïdes making no web for a constant residence,	*Thomisus*	8
			Sphasus	3
			Dolomedes	6
			Lycosa	11
			Attus	29
			Epiblemum	2
			* Species not included in *Attus*	3
				125

* From this table as drawn, the affinities of these three species are not clear. The text, however, refers to three species of *Attus* that behave like *Formica* ('*Synemosyna*').

Attus, (Walck.). *Salticus*, (Latr.).

Eyes 8, unequal in size,  ; legs usually short and proper for leaping, of different sizes; maxillae erect, rounded. Wandering in quest of prey, and leaping. Making no web, but tubes of silk for shelter, in crevices, under bark, &c. Twenty-nine species. The numerous species of this genus display skill and varied stratagems to seize their prey, which must be interesting to an observer of nature. I have preserved the name of *Attus* because the name *Atta*, previously given by Fabricius to a subdivision of *Formica*, could not be mistaken for this, any more than the Romans would *casus* for *casa*, and a thousand such words.

Epiblemum, (Mihi).

Eyes 8, somewhat unequal in size,  ; legs 1.4.3.2. or 1.$\overline{4.2}$.3.; lingua short, triangular; maxillae somewhat pointed above, and a little inclined over the lingua; mandibulae nearly horizontal, slender, as long as the cephalothorax, tooth as long. Two species. These might be left with *Attus*, to which they are closely related, but as that genus is large, it needs divisions, and the mandibulae of these offer a peculiar and striking character, I have concluded to make the first of the two following species the type of a new genus. *Epiblemum faustum* obscure, cephalothorax edged with white, with two spots on the disk also white; abdomen edged at base, and with four short bands, white. *E. Palmarum*, deep ferruginous, with two bands on the cephalothorax and the abdomen, white; second, third and fourth pair of legs whitish.

Besides these, I have three species of *Attus*, all very small, which have the habitus of *Formica*; so much like ants in many respects, that for a long time I neglected to collect them on that account. Their body is elongated, slender, nodose; and their less also are slender, either 4.3.1.2. or 4.1.2.3. The cephalothorax in one, and the abdomen in all, are contracted in the middle, so as to give them the appearance of being divided in three or four joints. The other characters coincide generally with *Attus*. They are found on plants. Should it be thought convenient, those and any other new species with those characters, might be collected under the generic name of *Synemosyna*.

It will be observed, that, in the above arrangement I have departed from that of Latreille in no essential point, but justice requires us to notice, that after the labors of the greatest living entomologist, the method of Walckenaer may still be considered as somewhat more natural than that of Latreille. I have given a sufficient account of the American genera, known to me, to allow any person whose taste may lead him to study this branch, to pursue the subject to a certain extent, and to assist in bringing my Monographia to a less imperfect state than that in which it now is. It is evident to me that if I had correspondents in the various States of this Union who would be willing to send me specimens, I could double my collection in a few years. Some persons have been kind enough to send me several interesting species, particularly Dr. Harris of Milton, and Dr. C.

Pickering of Philadelphia, to whom I am much indebted; but, when stuck through with a pin, and dried as other insects, these become so shriveled as to make it sometimes impossible to recognize them, and always so to describe new species. Spiders should be preserved in diluted alcohol, or brandy, in which they preserve their form, though their colors are usually impaired in it.

The number of 125 species will appear very large, but I could have swelled the list to 150. Spiders differ from true insects, or at least *winged* insects, in their *growing*. They come out from their eggs very minute, and continue to increase in size, probably for several years in many species; whereas, with few exceptions, insects come out of their *pupa* state, at once, with the size which is peculiar to them. The Araneïdes, in their different ages, present differences of color and marking. The *seasons* also produce a change in the colors of some spiders; and I am nearly convinced that the first frosts produce a total change in the dress of several described Epeïrae which may be referred to one name. These are the considerations which have induced me to be very cautious in adopting new species, and comparing many specimens in different seasons, when possible, before I described them.

VII. ARANEIDES. *Latr.*

THE SPIDERS

BY PROFESSOR N. M. HENTZ.

The following summary catalogue embraces a wider field than Massachusetts. The species, indeed, have been obtained from various parts of the United States. This arose from a misapprehension on the part of Professor Hentz of the precise object I had in view. Yet I did not think it important enough to request him to alter the list. The interesting notes which accompanied this catalogue, being too extended for this place, were forwarded to the editor of the American Journal of Science, and published in the 21st volume of that work [2]. The whole paper forms, indeed, a valuable monagraph of the Spiders of the United States.

Araneides, (Latreille). *Aranea*, (Linnaeus).				
				No. of species.
TETRAPNEUMONES.	8 eyes; 4 mammulae, 2 very short; tooth of the mandibulae (chélicères) articulated downward,		*Oletera*	2
	6 or 8 eyes ; 6 mammulae; tooth of the mandibulae articulated laterally,		*Filistata ?*	1
			Dysdera	1
			Segestria ?	1
DIPNEUMONES.	Araneides forming no silken habitation, wandering; legs, 4th pair longest; eyes 8, in two rows, never both bent downward; 6 mammulae, 2 very long,		*Herpyllus*	8
	Araneides spinning webs, or wandering; never with all of the following characters united, 4th pair of legs longest, eyes in two rows both bent upward, and six mammulae of which two very long.	Araneïdes making a web, sedentary,	*Clubiona*	6
			Tegenaria	2
			Agelena	2
			Theridium	5
			Pholcus	1
			Linyphia	5
			Tetragnatha	2
			Epeïra	26
			Mimetus	1
		Araneïdes making no web for a constant residence,	*Thomisus*	8
			Sphasus	3
			Dolomedes	6
			*Lycosa**	11
			Attus	29
			Epiblemum	2
		** Species not included in *Attus*		3
				125

The number of 125 species will appear very large, but I could have swelled the list to 150. Spiders differ from true insects, or at least *winged* insects, in their *growing*. They come out from their eggs very minute, and continue to increase in size, probably for several years in many species; whereas, with few exceptions, insects come out of their *pupa* state, at once, with the size which is peculiar to them. The Araneides, in their different ages, present differences of color and marking. The *seasons* also produce a change in the colors of some spiders; and I am nearly convinced that the first

* The famous Tarantula of the South of Europe, the bite of which, for many years, was supposed to produce a disease that music alone could cure, belongs to this genus: and I found on Round Hill (Mass.) a species (*Lycosa fatifera*, my catalogue) which is probably very closely related to the European species, and which dwells in holes, nearly a foot deep.

** This version differs from the other two published versions of this table, in that the 'Species not included in *Attus*' category, is included in the second division of the DIPNEUMONES.

frosts produce a total change in the dress of several described Epeirae which may be referred to one name. These are the considerations which have induced me to be very cautious in adopting new species, and comparing many specimens in different seasons, when possible, before I described them.

VII. ARANEIDES. *Latr.*

THE SPIDERS.

BY PROFESSOR N. M. HENTZ.

The following summary catalogue embraces a wider, field than Massachusetts. The species, indeed, have been obtained from various parts of the United States. This arose from a misapprehension on the part of Professor Hentz of the precise object I had in view. Yet I did not think it important enough to request him to alter the list. The interesting notes which accompanied this catalogue, being too extended for this place, were forwarded to the editor of the American Journal of Science, and published in the 21st volume of that work [2]. The whole paper forms, indeed, a valuable monagraph of the Spiders of the United States.

Attus.
- *familiaris.*
- *superciliosus.*
- *insolens.*
- *rarus.*
- *viridis.*
- *parvus.*
- *niger.*
- *castaneus.*
- *coccineus.*
- *elegans.*
- *sexpunctatus.*
- *tripunctatus.*
- *militaris.*
- *vittatus.*
- *grandis.*
- *cyaneus.*
- *audax.*
- *rufus.*
- *Nuttallii.*
- *sylvanus*
- *auratus.*
- and eight more species.

Epiblemum.
- *faustum.*
- *palmarum.*

Synemosyna.
- *formica.*
- and two more species.

The number of 125 species will appear very large, but I could have swelled the list to 150. Spiders differ from true insects, or at least *winged* insects, in their *growing*. They come out from their eggs very minute, and continue to increase in size, probably for several years in many species; whereas, with few exceptions, insects come out of their *pupa* state, at once, with the size, which is peculiar to them. The Araneides, in their different ages, present differences of color and marking. The *seasons* also produce a change in the colors of some spiders; and, I am nearly convinced that the first frosts produce a total change in the dress of several described Epeirae, which may be referred to one name. These are the considerations which have induced me to be very cautious in adopting new species, and comparing many specimens in different seasons, when possible, before I described them.

Art. VI.—DESCRIPTIONS AND FIGURES OF THE ARANEIDES OF THE UNITED STATES. By Nicholas Marcellus Hentz. (Communicated July, 1841.)

The Publishing Committee think it proper to inform the readers of this Journal, that the following article is the first of a series on the Araneides of the United States, which has been offered for publication, by the author, to the Boston Society of Natural History. These descriptions and figures will be followed hereafter by others, and the whole will form an illustrated monograph of all the Spiders observed by Professor Hentz in various parts of this country, and will supply a want

which has been long felt in this department of our Natural History.

Genus ***Lyssomanes***. Mihi.

Characters. *Cheliceres moderately strong; maxillae parallel, short, rounded; lip conical, slightly truncated at tip; eyes eight, unequal, in four rows, the first composed of two very large eyes, the second of two smaller ones, placed farther apart, on a common elevation with the two forming the third row, which is narrower, the fourth about as wide, composed of two eyes placed on separate elevations; feet, first pair longest, then the second, then the third, the fourth being the shortest.*

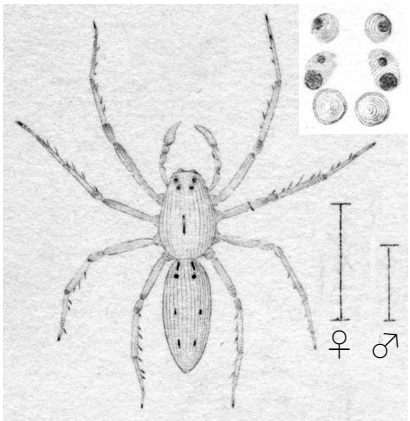
Habits. Araneïdes wandering after prey, making no web, cocoon.

Remarks. The singular spider which serves as the type of this new subgenus, could not with propriety remain in the subgenus *Attus*, in which the position of the eyes is subject to very slight variations. Its habits are analogous. This is the only spider in which the legs diminish in length from the first pair to the fourth.

This subdivision will serve as link between *Oxyopes* and *Attus*.

LYSSOMANES VIRIDIS.

Plate XVII. Fig. 3.



Description. Tender grass-green; cephalothorax with some orange-colored hairs near the eyes, and a little black line on its disk; abdomen with six or eight black dots, sometimes wanting. The two lowest large eyes are black, but appear green when seen sideways; the other six eyes stand on four tubercles. Feet hairy, except the thighs, which are bare. 1.2.3.4.

Observations. This elegant species is very active, and apparently fearless, jumping on the hand that threatens it.

Habitat. North and South Carolina.

Genus ***Attus***. Walck. (*Salticus*, Latr.)

Characters. *Cheliceres strong, not long, except in some males; maxillae parallel, widening above the insertion of the palpi, cut obliquely above the lip; lip as long as, or longer than, half the length of the maxillae, widest above the base, bluntly truncated at tip; eyes eight, unequal, in three rows, the first composed of four eyes, the two middle ones largest, the second composed of two very small eyes, placed behind the external ones of the first, the third composed of two larger eyes, placed parallel to the second row; feet varying in length.*

Habits. Araneïdes wandering after prey, making no web, but concealing themselves in a silken valve, for the purpose of casting their skin, or for hibernation.

Remarks. I have formerly stated my reason for preserving the name *Attus*, given by Walckenäer to these araneïdes. The species being very numerous, it would facilitate their study to arrange them in suitable subdivisions; but this is a difficult task. The families proposed by Walckenäer are vaguely characterized and insufficient. The relative position of the eyes offers some variations, but I could not succeed in obtaining satisfactory characters for subdivision from those variations. As the least objectionable mode, I have taken the relative lengths of the legs for the formation of my six families; that classification is somewhat artificial, but so is any other proposed. Moreover, the fifth tribe (that of the Saltatoriae) offers a very natural subdivision. The third pair of legs, when longest, enables spiders to leap to an astonishing distance. The habits of the subgenus *Attus* will be best described by the history of the different species.

Tribe I. **Pugnatoriae**, *first pair of legs longest and largest, the fourth next*.

(Pugnatoriae.) 1. ***ATTUS AUDAX***.

Plate XVII. Fig. 6, 7.

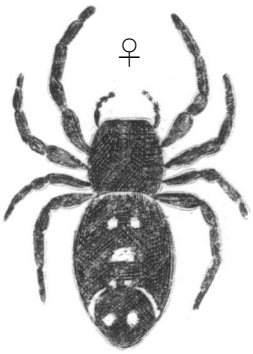
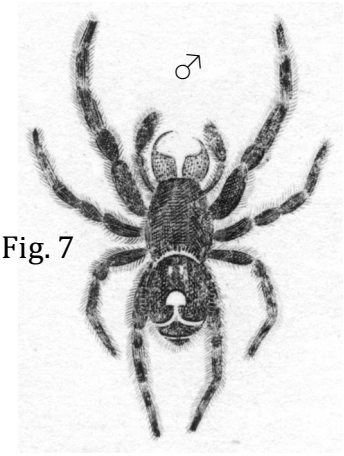
Fig. 6 

Fig. 7 

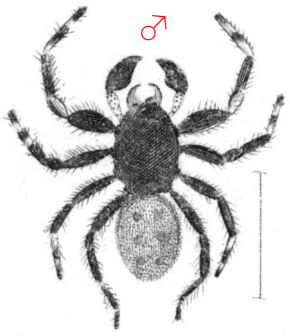
Description. Black; abdomen with a spot, several dots and lines, white; cheliceres brassy green; feet with gray and white hairs, 1.4.2.3.

Observations. There is some obscurity in regard to the distinction between this and *A. 3-punctatus* (*tripunctatus*), but there can be little doubt that there are two different species. This spider is very bold, often jumping on the hand which threatens it.

Habitat. Massachusetts.

2. ***ATTUS INSOLENS***.

Plate XVII. Fig. 8.



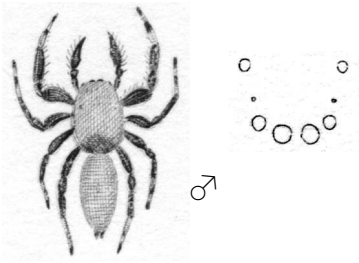
Description. Deep black; abdomen above, orange-red, with six blackish spots, wholly black beneath; cheliceres metallic green; the tip of the second joint of the palpi and the feet are varied with tufts of white hairs; the rest of the hair is black, except on the abdomen, where it is rufous above; feet, 1.4.2.3. A male.

Observations. This species is probably rare, having occurred only once.

Habitat. North Carolina.

3. ***ATTUS CARDINALIS***.

Plate XVII. Fig. 9.



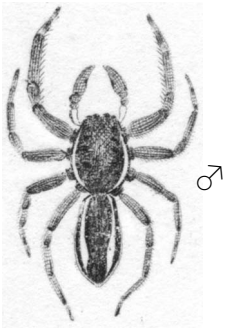
Description. Scarlet; cephalothorax darker at base; cheliceres scarlet at base, steel-blue at their apex; palpi black; feet black, two last joints rufous at base, 1.4.2.3.

Observations. I do not remember whether this spider was found by me, or given by Mr. Dutton.

Habitat. Southern States?

4. ***ATTUS CAPITATUS***.

Plate XVII. Fig. 15.



Description. Piceous; cephalothorax with a narrow white band each side, and a whitish spot on the disc; second joint of palpi covered with white hairs; abdomen above with a narrow, curved, yellowish white band near the sides, beneath yellowish on both sides; feet with a few white hairs, 1.4.2.3. A male.

Observations. This spider has great affinity with *Attus militaris*, but is sufficiently distinct. The female probably differs from this in markings, and possibly is among my

descriptions; but this can be established only by future observers, who, after all my labors, have still a wide field before them to perfect the history of the spiders of North America. This was communicated to me by Mr. Thomas R. Dutton, a young naturalist of great perseverance, energy, and discrimination, who collected it in Georgia.

5. ***ATTUS MILITARIS***.

Plate XVII. Fig. 10, 11.

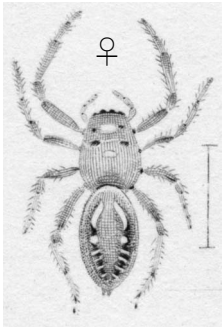
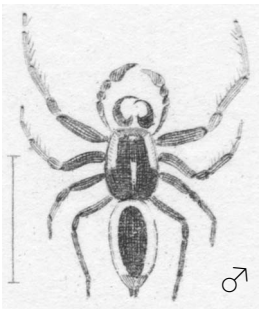
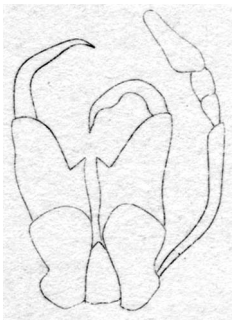
Fig. 10 

Fig. 11 



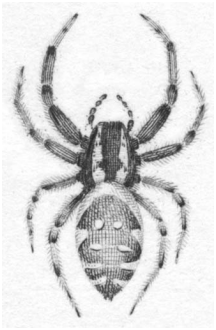
Description. Rufous, varied with brown; cephalothorax with one, sometimes two, white spots; abdomen above with two longitudinal blackish bands, on which are oblong- white dots, which near the base are usually joined so as to form a narrow band, beneath whitish with a blackish longitudinal band. Male rufous or piceous; cephalothorax with a spot and a band around the anterior portion, and a narrow longitudinal line on the disc, white; abdomen above with a white band on the margin, which does not quite reach the apex, pale grayish brown beneath; feet, in the female, 1.4. 3.2., in the male, 1.4.2.3.

Observations. Much as the sexes differ from each other, I cannot doubt their constituting one species, having repeatedly found them enclosed quietly in the same silk tube, and having always found the males and the females with the characters given above. The spots and markings of these spiders are formed by hairs or scales, which have certain metallic reflections. The motions of this spider are slow, and exhibit caution; it is found usually on trees, and often hibernates under the bark of decaying trunks. The male, remarkable for his enlarged, nearly horizontal cheliceres, is a very bold little fellow, always ready for action, and determined to see all things for himself, raising and turning his head towards the object that approaches him, and usually jumping upon his enemy instead of ingloriously retreating. This species is a common one.

Habitat. North Carolina, Alabama.

6. ***ATTUS MULTICOLOR***.

Plate XVII. Fig. 13.



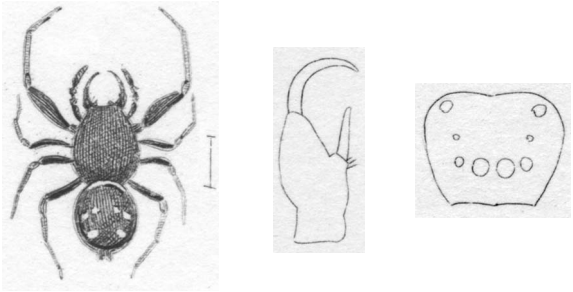
Description. Cephalothorax black, with a pale, irregular band each side of the disc; abdomen metallic green, with a band at base, and a diagonal spot each side, orange, and with eight small white spots; underneath obscure gray, with inflections of green on the pectus; feet rufous or pale, varied with piceous, 1.4. 2.3.

Observations. This species is related to *A. otiosus* and *mystaceus*, but distinct from both by the absence of the tufts of hair on the cephalothorax, and other characters. The palpi are pale yellow, and there is a black band more or less visible on each side of the abdomen.

Habitat. Alabama. June—August.

7. ***ATTUS SEXPUNCTATUS***.

Plate XVII. Fig. 14.



Description. Black; cephalothorax with the two posterior eyes near the base, which is wide and suddenly inclined at nearly a right angle with the upper surface, cheliceres with a strong inner tooth, and a long, curved fang; abdomen with six dots, and a line in front, white; feet, 1.4.2.3., first pair with enlarged thighs and quite long.

Observations. This cannot be confounded with *Attus fasciolatus*, which is also designed from a female. By the characters derived from its cheliceres, it approaches *Epiblemum*. I suppose it must be a rare species, having never met with any other specimen.

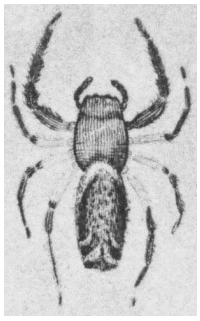
Habitat. North Carolina.

Art. XXVII.—DESCRIPTIONS AND FIGURES OF THE ARANEIDES OF THE UNITED STATES. By Nicholas Marcellus Hentz, Tuscaloosa, Alabama.

(Continued from vol. V, p. 202.)

8. ***ATTUS FALCARIUS***.

Plate XXI. Fig. 1.



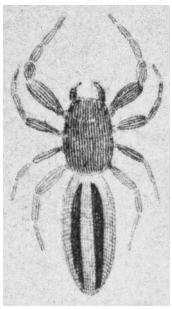
Description. Cephalothorax and abdomen covered with yellowish gray hairs, hairs longer in front of the abdomen; feet, $\overline{1.4}$., very stout, $\overline{2.3}$.

Observations. Very distinct from any other by the form of its abdomen.

Habitat. Alabama.

9. ***ATTUS BINUS***.

Plate XXI. Fig. 2.



Description. Blackish; abdomen pale bluish gray; with two parallel, longitudinal, blackish lines above; feet, 1.4. 3.2.

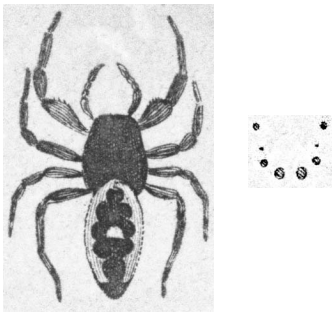
Observations. I never found more than one specimen of this very distinct species. Its abdomen was very much distended, and it moved very slowly.

Habitat. Found on Sullivan's Island, South Carolina.

Tribe II. **Luctatoriae**; *fourth pair of legs longest, the first next and largest*.

10. ***ATTUS NUTTALLII***.

Plate XXI. Fig. 3.



Description. Piceous; abdomen pale gray above, with an oblong scolloped, black, longitudinal band surrounding a small white spot; feet, 4.1. 2.3.

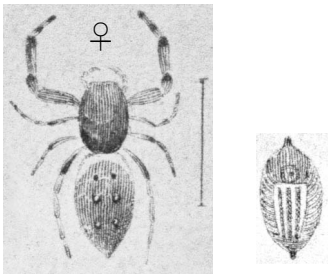
Observations. This probably very rare species was found in the hot-house of the botanic garden at Cambridge, in the

presence of the distinguished botanist and ornithologist, Thomas Nuttall.

Habitat. Massachusetts.

11. ***ATTUS CASTANEUS***.

Plate XXI. Fig. 4.



Description. Black or piceous, with some long black hairs, and short, thick, yellowish down, particularly distinct on the abdomen, which has a whitish line at base, continued on the sides to near the middle; sides of the abdomen, with oblique lines, whitish; venter with four white lines, all the lines being formed by whitish hairs; dorsum with four or six obsolete dots; feet rufous, with blackish rings, 4.1.2.3., the fourth longest and slender, the first next, very stout.

Observations. This spider is perfectly distinct from any other yet observed. It must be rare, having occurred only once, under a stone, in March.

Habitat. North Carolina.

12. ***ATTUS TAENIOLA***.

Plate XXI. Fig. 5.

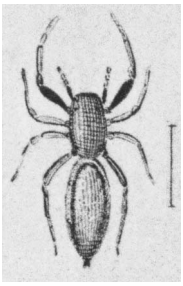
Description. Black; cephalothorax with a white fillet on each side, continued to near the base; abdomen with two longitudinal, narrow lines, composed of white dots or abbreviated lines; tarsi dark rufous or blackish. 4.1.2.3.

Observations. This is not a rare species, and shows only a moderate degree of activity.

Habitat. North Carolina, Alabama.

13. ***ATTUS ELEGANS***.

Plate XXI. Fig. 6.



Description. Pale rufous; cephalothorax with eyes nearer the apex than the base, second joint of palpi piceous; abdomen

metallic green with yellow and red reflections, a white band, widest in front and continued on the sides, but not reaching the eyes; feet, 4.1. 3.2., with a slender black edge externally, thighs of first pair black, knee pale.

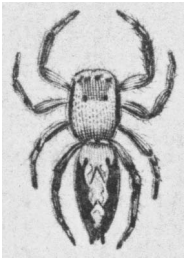
Observations. This graceful species is readily distinguished from any other, and is not very rare.

Habitat. Southern States.

Tribe III. **Insidiosae**. *Legs equal in thickness, the fourth longest, then the fifth (first).*

14. ***ATTUS FAMILIARIS***.

Plate XXI. Fig. 7.



Description. Pale gray, hairy; abdomen blackish, with a grayish, angular band, edged with whitish; feet, 4.1. 2.3.

Observations. This very common spider, almost domesticated in our houses, by its habits, deserves a longer notice than others. It dwells in cracks around sashes, doors, between clapboards, &c., and may be seen on the sunny side of the house, and in the hottest places, wandering in search of prey. It moves with agility and ease, but usually with a certain leaping gait. The moment, however, it has discovered a fly, all its motions are altered; its cephalothorax, if the fly moves, turns to it, with the firm glance of an animal which can turn its head; it follows all the motions of its prey with the watchfulness of the falcon, hurrying its steps or slackening its pace, as the case may require. Gradually, as it draws near to the unsuspecting victim, its motions become more composed, until, when very near, its movements are entirely imperceptible to the closest observation, and, indeed, it would appear perfectly motionless, were it not for the fact that it gradually draws nearer to the

insect. When sufficiently near, it very suddenly takes a leap, very seldom missing its aim. I saw one, however, make a mistake, for the object which it watched was only a portion of the wing of an hemipterous insect entangled in a loose web. It took its leap and grasped

the wing, but relinquished it immediately, apparently very much ashamed of having made such a blunder. This proves that the sight of spiders, though acute, is not unerring. Before leaping, this *Attus* always fixes a thread on the point from which it departs; by this it is suspended in the air if it miss its aim, and it is secure against falling far from its hunting grounds.

These spiders, and probably all other species, a day or two before they change their skin, make a tube of white silk, open at both ends; there they remain motionless till the moulting time arrives, and, even some days after, are seen there still, probably remaining in a secure place, for the purpose of regaining strength and activity.

Habitat. Throughout the United States.

15. ***ATTUS TRIPUNCTATUS***.

Plate XXI. Fig. 8.

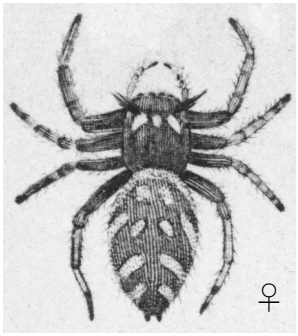
Description. Black; abdomen, with metallic reflections and white and orange-colored hairs, with a central spot and two short bands white, which are surrounded with deep black; cheliceres brassy green; feet, $\overline{4.1}$. $\overline{3.2}$.

Observations. This is perhaps the most common *Attus* in the United States. It is usually found on dead trees, under the bark of which it takes refuge, and also hibernates there, in tubes of strong white silk. The spots are often of an orange color, instead of being white.

Habitat. The United States.

16. ***ATTUS MYSTACEUS***.

Plate XXI. Fig. 9.



Description. Gray; varied with whitish spots; cephalothorax with four tufts of bristles in the region of the eyes; feet, 4.1.2.3.

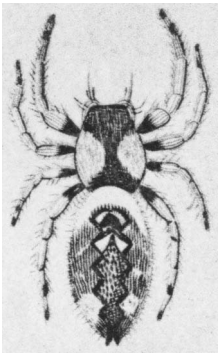
Observations. This large and very distinct species is not

rare on the eastern side of the Alleghany mountains, as far north as the 35° of latitude; but it has not been found by me in Alabama.

Habitat. North Carolina.

17. ***ATTUS OTIOSUS***.

Plate XXI. Fig. 10.



Description. Blackish, mostly covered with white hairs; cephalothorax black at base and anteriorly, two tufts of hairs each side on the region of the eyes; abdomen with a band at base, and several angular spots, white, and with a longitudinal green band more or less covered with hairs and edged with a scolloped black line each side, beneath white with a black band very wide at base, and tapering towards the apex where it branches out; feet varied with rufous and black, 1.4.2.3., the fourth slightly longest when separated from the body. A large species.

Observations. This spider, related to *A. mystaceus*, was found in mid-winter, enclosed in silk tubes, under the bark of dead trees, where great numbers were hibernating.

Habitat. North Alabama.

18. ***ATTUS FASCIOLATUS***.

Plate XXI. Fig. 11.

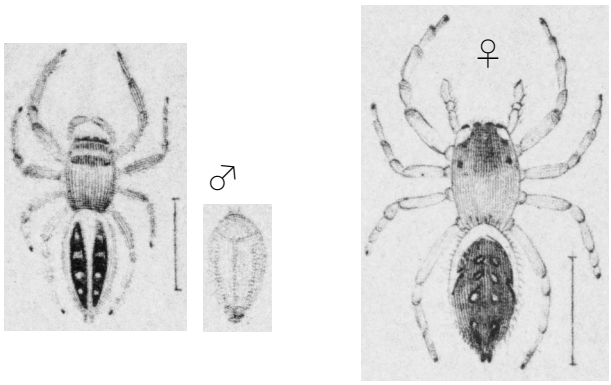
Description. Black; cephalothorax with three grayish spots; abdomen with three small spots, two abbreviated lateral lines, and an anterior one white; feet varied with rufous, 4.1.2.3.

Observations. This spider seems to be quite distinct from *A. tri-punctatus*, but may prove only a variety of that species.

Habitat. South Carolina, Massachusetts.

19. ***ATTUS RUFUS***.

Plate XXI. Fig. 12.



Description. Rufous; abdomen with a yellowish white

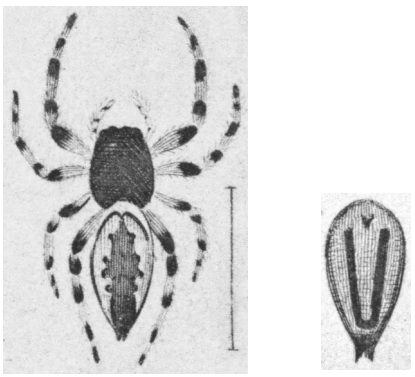
band anteriorly which extends to the sides, on the disk four white dots, and four smaller grayish ones, the dots surrounded by black rings which usually unite in the form of a longitudinal band on each side, beneath pale, with three sub-obsolete longitudinal lines; feet, 4.1. 2.3. or 4.1. 3.2., in the male 1.4.2.3.

Observations. This spider, which is not very common, is found on plants, and is not remarkably active. In the male, the abdomen is white around and between the bands.

Habitat. United States.

20. ***ATTUS PODAGROSUS***.

Plate XXI. Fig. 13.



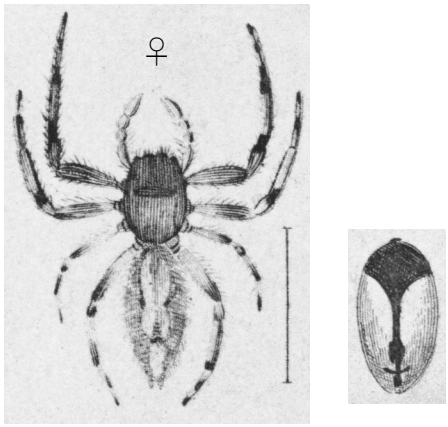
Description. Cephalothorax piceous black; abdomen pale brownish, white at base, with a scolloped dusky band; feet bright rufous, joints tipped with black, with some hairs, 4.1. 2.3. A large species.

Observations. This may be readily distinguished from *A. rupicola*, to which it is closely related.

Habitat. Alabama. November.

21. ***ATTUS RUPICOLA***.

Plate XXI. Fig. 14.



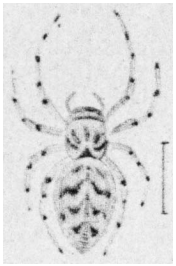
Description. Rufous, very hairy; abdomen brownish, with a paler band and two blackish dots; feet varied with blackish, in the female 4.1.2.3., in the male 1.4.2.3. A large species.

Observations. The male, which resembles the female, has invariably its first pair of legs longest and stoutest. This species was repeatedly found in cavities of limestone rocks on the margin of a river, moving cautiously and slowly on the surface of the stones, and retreating into crevices.

Habitat. Alabama. September.

22. ***ATTUS NUBILUS***.

Plate XXI. Fig. 15.



Description. Pale gray; cephalothorax with a tinge of rufous at base, and many obscure markings; abdomen with obscure, waved bands; feet with blackish rings, 4.1. 2.3. A somewhat small species.

Observations. This spider is common, usually found on the stems of plants.

Habitat. Alabama. May —July.

23. ***ATTUS HEBES***.

Plate XXI. Fig. 16.

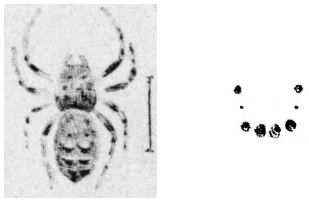
Description. Brownish; abdomen white, with a greenish spot surrounded with four black dots, near the base, and a black fascia near the apex; feet, 4.1.3.2.

Observations. This probably rare species was found on the ground, having fallen from a tree.

Habitat. Massachusetts.

24. ***ATTUS PARVUS***.

Plate XXI. Fig. 17.



Description. Grayish; abdomen with six or eight abbreviated transverse lines, white; feet varied with rufous and black, 4.1.2.3.

Observations. A somewhat obscure species, which I believe I have seen in the North.

Habitat. North Carolina, Massachusetts?

25. ***ATTUS RARUS***.

Plate XXI. Fig. 18.

Description. Blackish; cephalothorax with green scales, and some yellow ones anteriorly; abdomen with green scales,

except on a black band which surrounds the disk, a yellow band at base, extending each side, but which does not reach the middle, one large yellow dot each side near the middle, two little dots on the disk, and four terminal abbreviated bands white; beneath blackish, abdomen with some yellowish hair which forms two or four sub-obsolete, abbreviated, longitudinal lines; feet, 4.1. 2.3.

Observations. This very distinctly-marked species is probably very rare, as it occurred only once.

Habitat. North Carolina. June.

26. ***ATTUS NIGER***.

Plate XXI. Fig. 19.

Description. Deep black; legs pale testaceous, 4.1.3.2.

Observations. This small species is remarkable on account of its activity in running and leaping.

Habitat. North Carolina.

27. ***ATTUS ? GRACILIS***.

Plate XXI. Fig. 20.

Description. Rufous; cephalothorax very prominent anteriorly, wider behind the middle; abdomen narrower, slender, fusiform, nipples long; feet long and slender, 4.1. 3.2.

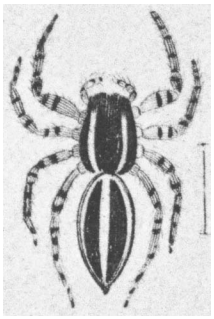
Observations. This cannot be *Synemosyna scorpionia*; but may ultimately be referred to that division.

Habitat. Alabama. August.

Tribe IV. **Metatoriae**; *legs subequal in thickness, the fourth longest, then the third*.

28. ***ATTUS LEOPARDUS***.

Plate XXI. Fig. 21.



Description. Cephalothorax black, rufous about the eyes,

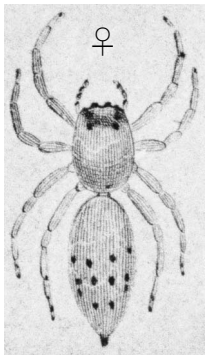
with a curved white line each side; abdomen with two opposed lenticular black bands surrounded with white, pale gray underneath, with two sub-obsolete longitudinal, whitish lines; feet rufous with many black rings, 4.3.2.1.

Observations. This spider is common. The female is often found under stones with its cocoon, which is white.

Habitat. Alabama. May.

29. ***Attus puerperus***.

Plate XXI, Fig. 22.



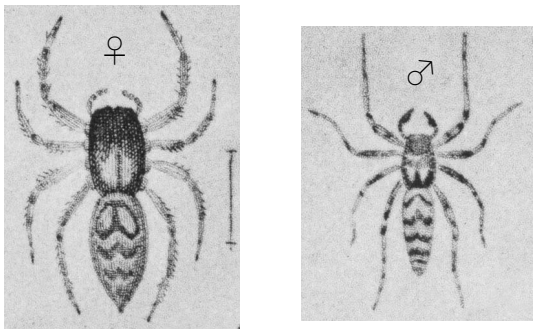
Description. Testaceous or yellowish; intermediate small eyes, and the two last, borne on elevations; abdomen with about twelve black dots, underneath with a black spot near the apex; feet, 4.3.1.2. or 3.4.1.2.

Observations. Mr. Thomas R. Dutton, who brought this from Georgia, gave me another one, which was not, like this, replete with eggs. The abdomen not being distended, the dots appeared less regular and distinct.

Habitat. Georgia.

30. ***ATTUS VITTATUS***.

Plate XXII. Fig. 23.



Description. Cephalothorax and trophi rufous varied with blackish; abdomen gray, with reddish curved bands; feet pale rufous or yellowish, 4.3.1.2., in the male 4.1.2.3. and speckled with black dots.

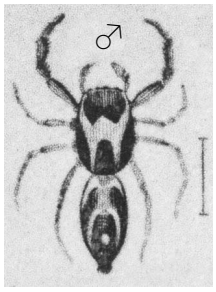
Observations. With some hesitation I refer to the same species the drawings of a male, and that of a female, which I had considered as distinct, on account of the difference in the respective length of the legs. In the genus *Attus* that character is sometimes a sexual distinction.

Habitat. North Carolina, Alabama.

Tribe V. **Saltatoriae**; *third pair of legs longest, then commonly the fourth*.

31. ***ATTUS CORONATUS***.

Plate XXII. Fig. 1.



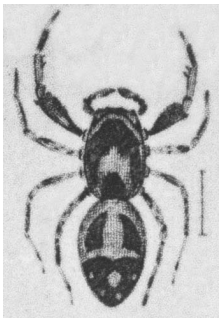
Description. Pale dusky; cephalothorax varied with black, a scarlet spot between the eyes and the cheliceres; abdomen with two curved bands and about three spots, white; pale beneath without distinct spots; legs, with first pair stoutest, black on the internal side, 3.4.1.2.

Observations. The bright scarlet spot on its front gives to this spider a whimsical air of fierceness, which is heightened by its attitudes and singular motions. The lighter spots on the cephalothorax are produced by yellowish hairs. It is not very rare. It is probably quite distinct from *A. coecatus*.

Habitat. Alabama. May —July.

32. ***ATTUS COECATUS***.

Plate XXII. Fig. 2.



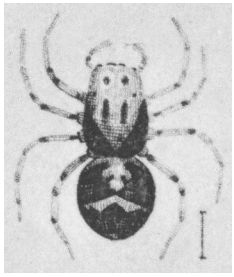
Description. Brownish obscure; cephalothorax with a red spot under the eyes, and with a basal spot and large fascia black; abdomen varied with black and brownish obscure, pale bronzed beneath; feet, first pair stoutest, black with a line of yellowish scales above, antepenultimate joint with two long, black scales or spatulae, thighs with thick tufts of black hairs, the other legs varied with black and brownish, 3.4.1.2. A small species.

Observations. This species, though very different in marking, is very closely related to *A. coronatus*.

Habitat. Alabama. September.

33. ***ATTUS PULEX***.

Plate XXII. Fig. 3.



Description. Pale brownish; cephalothorax large, varied

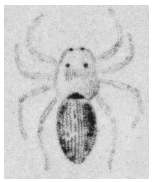
with piceous, edged widely with blackish towards the base; abdomen nearly orbicular, piceous, varied with whitish spots, and a band at base; feet varied with piceous, 3.4.1.2. A small species. Male like the female.

Observations. This little spider is common near the ground, where it may be seen moving with sudden, rapid motions, and jumping, like a flea, to great distances. It is a well-characterized species.

Habitat. Alabama. April—May.

34. ***ATTUS ROSEUS***.

Plate XXII. Fig. 4.



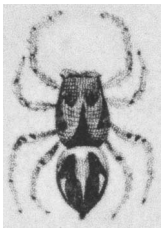
Description. Cephalothorax white, blackish at base; abdomen roseate, with a whitish base; feet pale yellow, 3.4.1.2.

Observations. This small species is not unfrequently found on grass, in May and June.

Habitat. Massachusetts.

35. ***ATTUS VIRIDIPES***.

Plate XXII. Fig. 5.



Description. Cephalothorax rufous, with black bands and spots; abdomen white, with two black angular bands; anterior feet greenish; the other feet varied with rufous, blackish and white, 3.1.4.2.

Observations. This small spider is usually found on the ground, on sand or on grass, in constant activity. When any object approaches it, it lifts itself on its posterior limbs to reconnoitre the enemy or the prey. It never was seen large.

Habitat. South Carolina.

36. ***ATTUS AURATUS***.

Plate XXII. Fig. 6.

Description. Black; palpi, sides of the cephalothorax and four spots above, silvery white; abdomen with a cross and circular band, golden color; feet varied with rufous, 3.4.1.2.

Observations. This beautiful species seems to fear the light; for I never found it except when enclosed in the old shells of the pupae of some hymenopterous insect. It is rare.

Habitat. South Carolina.

37. ***ATTUS MULTIVAGUS***.

Plate XXII. Fig. 7.

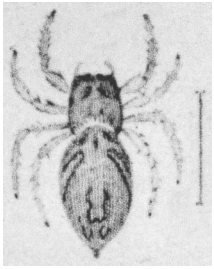
Description. Piceous; palpi pale; abdomen gray, with curved bands, dots and a spot white, pale underneath with a longitudinal darkish line and a pale one each side, all sub-obsolete; feet, 3.4.1.2. A middle-sized species.

Observations. This species in markings resembles *A. fasciolatus*, but is quite distinct from it.

Habitat. Alabama. April.

38. ***ATTUS CRISTATUS***.

Plate XXII. Fig. 8.



Description. Pale brownish; cephalothorax with small dusky marks, palpi very small; abdomen with curved dusky lines, and a tuft of white hairs at base, pale underneath, with two sub-obsolete, approximate longitudinal paler lines; feet pale, 3.4.1.2.

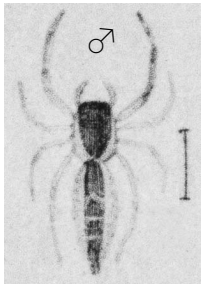
Observations. The tuft of white hairs on the base of the abdomen, and projecting over the cephalothorax, is not peculiar to this species alone, but by other characters it is sufficiently distinguished.

Habitat. Alabama. July—August.

Tribe VI. **Ambulatoriae**; *legs usually slender, the first pair longest, the fourth next*.

39. ***ATTUS MITRATUS***.

Plate XXII. Fig. 9.



Description. Pale above and beneath; cephalothorax with

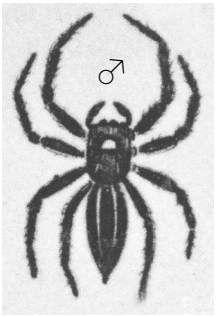
a broad pale brownish band; abdomen with a pale brownish band, interrupted with yellowish in about three places; feet, 1.4.2.3. A small species.

Observations. This is not a rare species. It is usually found on plants, moving slowly on the stems.

Habitat. Alabama. April—May.

40. ***ATTUS SYLVANUS***.

Plate XXII. Fig. 10.



Description. Piceous; cephalothorax reddish anteriorly, with a yellowish spot on the disk, and four oblique slender lines of the same color; abdomen with two parallel longitudinal yellowish lines; thighs rufous at base, except the first pair; feet, 1.3.2.4.

Observations. This graceful species is found commonly on the trunks of trees, moving rather slowly, and walking backwards when threatened by an enemy. It moves its anterior feet like palpi, as if to feel its way in its progression.

Habitat. South Carolina.

41. ***ATTUS SUPERCILIOSUS***.

Plate XXII. Fig. 11.

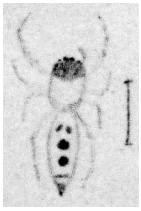
Description. Cephalothorax black between the eyes, deep ferruginous at base, covered anteriorly with golden or greenish scales, a tuft of hairs between the eyes; abdomen black, with the same kind of scales, the absence of which forms obsolete blackish lines on the disk, beneath with such scales also; pectus and thighs glabrous, ferruginous; feet with a black fillet externally, antepenultimate joint of first pair with a tuft of black hairs, 1.4.2.3.

Observations. This singular species can be readily distinguished by the tuft of hairs placed above the lower row of eyes, and resembling eyebrows. It is probably rare.

Habitat. North Carolina.

42. ***ATTUS MORIGERUS***.

Plate XXII. Fig. 12.



Description. Cephalothorax ferruginous, covered with silvery down, through which the color can be seen, particularly about the eyes; abdomen above dark brown, covered with silvery down, four spots and a band glabrous; beneath pale; feet pale yellowish, with some hairs, 1.4.2.3.

Observations. This little spider may be seen usually on leaves, where it frequently makes its tubes. It has been seen on the hickory and the mulberry trees.

Habitat. North Carolina, Alabama. April, May.

43. ***ATTUS CYANEUS***.

Plate XXII. Fig. 13.

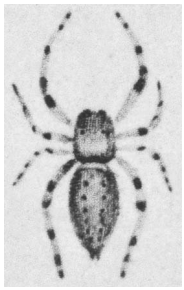
Description. Brassy green; body short; feet, $\overline{1.4}$. $\overline{3.2}$. Small.

Observations. This small but brilliant spider is found on plants, during all the warm season.

Habitat. North Carolina, Alabama.

44. ***ATTUS CANONICUS***.

Plate XXII. Fig. 14.



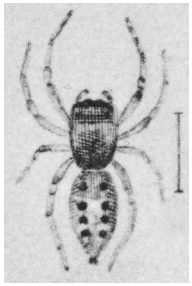
Description. Rufous, or deep orange; abdomen with a longitudinal row of black dots, seven or eight on each side above; feet with black rings; cephalothorax and anterior part of the abdomen covered with dense yellowish rufous hair. Feet, $\overline{1.4}$. $\overline{2.3}$.

Observations. Found in Cambridge, Massachusetts, in August.

Habitat. Massachusetts.

45. ***ATTUS OCTAVUS***.

Plate XXII. Fig. 15.



Description. Grayish brown; abdomen above with eight

large black dots, two green spots, and some white marks, gray beneath; feet rufous, $\overline{1.4}$.2.3.

Observations. This is a common species in the south. A specimen was found with legs 4.1.$\overline{3.2}$., shorter, and with blackish rings. Is it a different species? It is not probable that this can be referred to *A. hebes*.

Habitat. Alabama. July—August.

Genus ***Epiblemum***. Mihi.

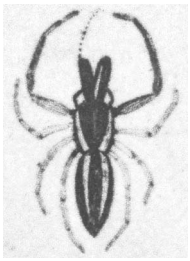
Characters. *Cheliceres very long, slender, horizontal, in both sexes, fang nearly as long; maxillae parallel, wide at base, narrowed above the insertion of the palpi, cut obliquely on both sides towards the point; lip conical; eyes eight, unequal, in three rows, the first composed of four, the two middle ones somewhat larger, the second composed of two very small ones placed nearer the third row, which is composed of two larger ones; feet, first pair longest, then the fourth, the third or second shortest.*

Habits. Araneïdes wandering after prey, making no web, cocoon.

Remarks. The characters of this subgenus are quite sufficient to separate and distinguish the species composing it from *Attus*. Even allowing that the character derived from the extreme length of the cheliceres were limited to the males, the great number of species contained in *Attus* would authorize naturalists to separate such as have that character under a separate denomination. But it seems that this peculiarity may be confined to the females in some species; as, a male of *E. palmarum* was found with short cheliceres; but these were nevertheless horizontal.

1. ***EPIBLEMUM PALMARUM***.

Plate XXII. Fig. 16.



Description. Rufous or dark brown; cephalothorax and

abdomen with a whitish band on each side above; feet whitish, except the first pair which are rufous, 1.$\overline{4.2}$.3.

Observations. Cuvier, in his Règne Animal, IV, p. 264, says that some males of *Attus* have elongated cheliceres. But this was a female; and a male was found in North Carolina, corresponding to this in every particular, except that the cheliceres were not elongated, but *they were horizontal*. The subgenus *Attus* is so large that some good subdivision is required. Like *Tetragnatha*, this spider

extends its legs in one line along the twig or blade on which it rests.

Habitat. South and North Carolina.

A male was found in Alabama, corresponding with this in every respect. He was bold, and moved with a ludicrous motion of his first pair of legs, which he waved to and fro, in advancing towards the body which was extended against him.

2. ***EPIBLEMUM FAUSTUM***.

Plate XXII. Fig. 17.

Description. Piceous; cephalothorax with the margin and two spots white; abdomen with the base and four short lines white; feet, 1.4.3.2.

Observations. This species was found common in Cambridge, Massachusetts, on walls, on the south side.

Habitat. Massachusetts.

Genus ***Synemosyna***. Mihi.

Characters. *Cheliceres short in the females; maxillae slightly inclined toward the tip, truncated at tip; lip short, rounded; eyes eight, unequal, in three rows, the first composed of four eyes, the two middle ones largest, the second composed of two small ones placed nearer the first than the third, which is composed of two larger eyes; feet slender,*

the fourth pair longest, the other three variable; body elongated, nodose, abdomen contracted near the middle.

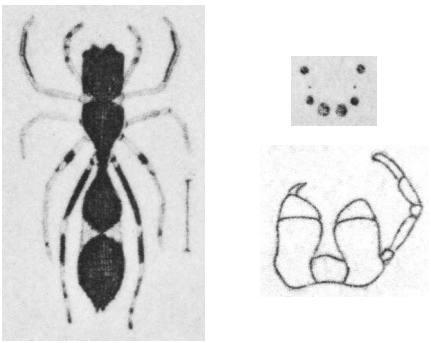
Habits. Araneïdes wandering after prey, making no web, but silk tubes, for hibernation, running on plants like ants, which they resemble; cocoon.

Remarks. This differs in many points from *Myrmecia*, Latr., Ann. des Sc. Nat. IV. p. 261, and yet seems to be closely related to it. That subdivision is not known to me, though it is said in that work that some species are found in Georgia. In *Myrmecia* the cheliceres are large, in this, they are small, at least in the females; in that subgenus the maxillae are rounded and hairy, the abdomen is much shorter than the cephalothorax, and they have other characters which do not belong to this.

I have already pointed out the features, and proposed a name for this singular subdivision, in a paper published in Silliman's Journal [2]. I have, since writing that article, discovered one species, in addition to the three mentioned there. They are all anomalous, and differ from each other in many points; while they agree in the characters which I have assigned. They hibernate in silk tubes, under the bark of trees.

1. ***SYNEMOSYNA FORMICA***.

Plate XXII. Fig. 18.



Description. Rufous; cephalothorax very long, contracted in the middle, tapering towards the base, and with two lateral yellowish spots; abdomen contracted in the middle, also with two lateral yellow spots, each where the contraction appears; feet slender, varied with yellowish and black, 4.3.1.2., tibiae of the first pair and part of the tarsus black underneath. Male with very large cheliceres; legs, 4.1.3.2.

Observations. This spider cannot be placed in the subgenus *Myrmecia*, of Latreille, as described in the fourth vol. of the Ann. des Sc. Nat., or in vol. IV. p. 261 of the Règne Ani-

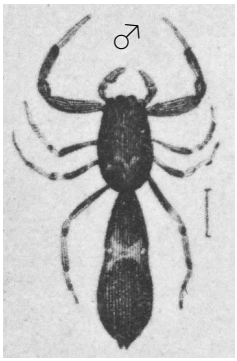
mal, for the following reasons; the eyes are very unequal in size, and not placed in the manner described; the cheliceres are large only in the males; and the length of the feet is not the same. It is possible, however, that the insects drawn by Abbot belong to this division; for, being very small, probably the situation of the eyes may not have been correctly observed. Be this as it may, the subgenus *Myrmecia*, or *Myrmecium*, is closely related to this.

I had seen individuals of this species running on the blades of grass and stems of weeds, long before I distinguished them from ants. They move with agility and can leap, but their habitus is totally different from *Attus*. They move by a regular progression or regular walk, very different from the halting gait of that subgenus.

Habitat. North Carolina, Alabama.

2. ***SYNEMOSYNA SCORPIONIA***.

Plate XXII. Fig. 19.



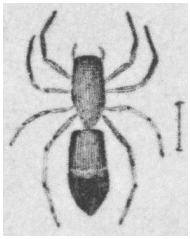
Description. Piceous; cephalothorax with two sub-obsolete, pale spots; posterior eyes placed near the base, and remote from the rest; abdomen slightly contracted near the middle, with a yellowish indented spot; feet rufous, 4.1.2.3., first pair very stout; sexes alike, the cheliceres not being enlarged in the male.

Observations. This small spider is somewhat rare, and was found in the winter months.

Habitat. North Carolina.

3. ***SYNEMOSYNA EPHIPPIATA***.

Plate XXII. Fig. 20.



Description. Rufous; cephalothorax wide in the region of the eyes, tapering towards the base; abdomen depressed before the middle, widest beyond the middle, a transverse paler band near the middle, piceous towards the apex; feet,

with the interior edge black, two last joints of second pair black, penultimate and antepenultimate joints of the leg of the fourth pair dusky, 4.2.3.1.

Observations. This is a very distinct species, found hibernating in silk tubes under bark, making such tubes when confined. The male, with cheliceres not enlarged, was found agreeing with the above description in the minutest particular. This shows beyond any doubt that the species is distinct from *S. formica*.

Habitat. Alabama. December.

4. ***SYNEMOSYNA PICATA***.

Plate XXII. Fig. 21.

Description. Black; legs varied with rufous and black, second pair black beneath, fourth black except the knee which is pale beneath; palpi pale, basal joint piceous; feet, 4.3.2.1.

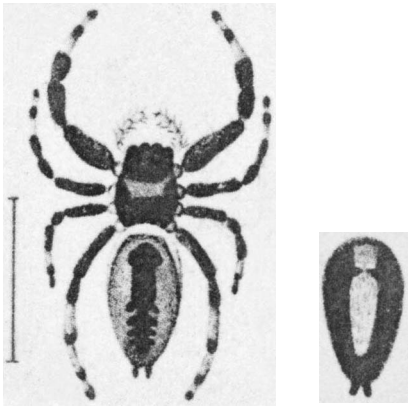
Observations. This is evidently distinct from the other species, particularly by its form. I once enclosed a male and a female of this species in a glass tube. They very soon formed separate habitations of silk; but on the third or fourth day, the male was dead near the tent of the female,

and she had made a lenticular white cocoon, containing four eggs as large as those of large Araneïdes. That female had a white streak on each side of the abdomen.

Habitat. North Carolina, Alabama.

ATTUS SINISTER.

Plate X. Fig. 12.



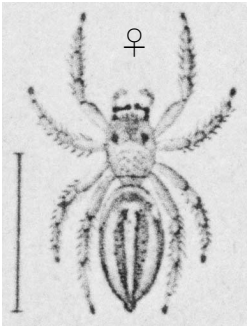
Description. Black, varied with rufous; abdomen whitish at base; venter with an interrupted ash-colored band; feet 4.1.2.3.

Observation. This spider should be placed in my tribe of the Luctatoriae.

Habitat. Alabama.

ATTUS RETIARIUS.

Plate X. Fig. 11.



Description. Livid greenish; cephalothorax with an indistinct brown spot; abdomen with two abbreviated brownish bands, approaching towards the apex.

Observations. This *Attus* was discovered and delineated by my son, Charles A. Hentz, whose attention is more particularly drawn towards the study of Ichthyology. He found the female devouring her male. I believe the markings of the male differ from those of the female. It belongs to my tribe of the Metatoriae.

***SYNEMOSYNA NOXIOSA*.**

Plate X. Fig. 10.

Description. Piceous; abdomen very slightly contracted near the base, with an interrupted whitish line across. Feet 1,4.2.3.; first pair stout.

Habitat. Alabama.

SYNOPSIS OF GENERA AND SPECIES.

		VOL.	PAGE.	PLATE.	FIG.
Genus *Lyssomanes*, Hentz.		V.	197		
Lyssomanes	*viridis*	V.	198	XVII.	3
Genus *Attus*, Walck.		V.	198		
Attus	*audax*	V.	199	XVII.	6,7
Attus	*insolens*	V.	200	XVII.	8
Attus	*cardinalis*	V.	200	XVII.	9
Attus	*capitatus*	V.	200	XVII.	15
Attus	*militaris*	V.	201	XVII.	10, 11
Attus	*multicolor*	V.	202	XVII.	13
Attus	*sexpunctatus*	V.	202	XVII.	14
Attus	*falcarius*	V.	352	XXI.	1
Attus	*binus*	V.	352	XXI.	2

Attus	*Nuttallii*	V.	352	XXI.	3
Attus	*castaneus*	V.	353	XXI.	4
Attus	*taeniola*	V.	353	XXI.	5
Attus	*elegans*	V.	353	XXI.	6
Attus	*familiaris*	V.	354	XXI.	7
Attus	*tripunctatus*	V.	355	XXI.	8
Attus	*mystaceus*	V.	355	XXI.	9
Attus	*otiosus*	V.	356	XXI.	10

Attus	*fasciolatus*	V.	356	XXI.	11
Attus	*rufus*	V.	356	XXI.	12
Attus	*podagrosus*	V.	357	XXI.	13
Attus	*rupicola*	V.	357	XXI.	14
Attus	*nubilis*	V.	358	XXI.	15
Attus	*hebes*	V.	358	XXI.	16
Attus	*parvus*	V.	358	XXI.	17
Attus	*rarus*	V.	358	XXI.	18
Attus	*niger*	V.	359	XXI.	19
Attus	*gracilis*	V.	359	XXI.	20
Attus	*leopardus*	V.	359	XXI.	21
Attus	*puerperus*	V.	360	XXI.	22
Attus	*vittatus*	V.	360	XXI.	23
Attus	*coronatus*	V.	361	XXII.	1
Attus	*coecatus*	V.	361	XXII.	2
Attus	*pulex*	V.	361	XXII.	3
Attus	*roseus*	V.	362	XXII.	4
Attus	*viridipes*	V.	362	XXII.	5
Attus	*auratus*	V.	362	XXII.	6
Attus	*multivagus*	V.	363	XXII.	7
Attus	*cristatus*	V.	363	XXII.	8
Attus	*mitratus*	V.	363	XXII.	9
Attus	*sylvanus*	V.	364	XXII.	10
Attus	*superciliosus*	V.	364	XXII.	11
Attus	*morigerus*	V.	365	XXII.	12
Attus	*cyaneus*	V.	365	XXII.	13
Attus	*canonicus*	V.	365	XXII.	14
Attus	*octavus*	V.	365	XXII.	15
Attus	*sinister*	VI.	288	X.	12
Attus	*retiarius*	VI.	288	X.	11
Genus *Epiblemum*, Hentz.		V.	366		
Epiblemum	*palmarum*	V.	366	XXII.	16
Epiblemum	*faustum*	V.	367	XXII.	17
Genus *Synemosyna*, Hentz.		V.	367		
Synemosyna	*formica*	V.	368	XXII.	18
Synemosyna	*scorpionia*	V.	369	XXII.	19
Synemosyna	*ephippiata*	V.	369	XXII.	20
Synemosyna	*picata*	V.	370	XXII.	21
Synemosyna	*noxiosa*	VI.	288	X.	10

Supplement to the Descriptions and Figures of the Araneides of the United States. By the late Nicholas Marcellus Hentz.

Some years since, Professor Hentz published in our Journal* an illustrated monograph of the Araneldes of the United States. The original drawings, with many appended notes, came by this means into the possession of the Society. Finding that many of the drawings of parts, and a few notes upon the structure and habits of this rather neglected group had been omitted, I have carefully gleaned whatever seemed to be of any importance, for publication in the Society's Proceedings as an appendix to his Monograph.

A few of the original drawings engraved on the plates in our Journal are unfortunately missing; these are the ones figured on plates viii and xvii of Vol. IV. *Herpyllus dubius* is stated in the text to be figured on plate xxiv, fig. 24 of Vol. V, but no such figure is there, and no drawing of that species can be found. All the others are in the Society's possession.

It is worthy of remark in this connection, that the principal localities from which Professor Hentz obtained his Araneides were Northampton, Mass., College Hill, N. C, and Tuscaloosa, Ala., and that when "the United States" is given as the habitat of a species, it simply means that he had specimens from Massachusetts, and from one of the southern localities.

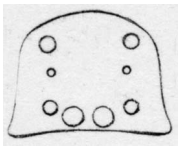
S. H. Scudder.

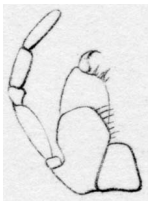
* Boston Journal of Natural History, Vol. IV., pp. 54—7, 223—31, 386—96; pls. vii, viii, xvii—xix. Vol, v., pp. 189—202, 352—70, 443—79; pls. xvi, xvii, xxi-xxiv, xxx, xxxi. Vol. VI., pp. 18—35, 271—95; pls. iii, iv, ix, x. The numbers xvi, xxi—xxiv have unfortunately been used twice in numbering the plates of Vol. V.

Lyssomanes viridis. Fig. 91, trophi, wanting the palpus. Taken in April and June.

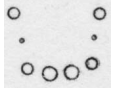
Attus audax. Northampton, Mass. Taken in May and July.

Attus auratus. Fig. 65, eyes; fig. 92, trophi.

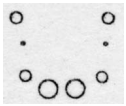
65 

92 

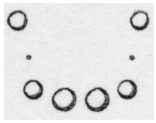
Attus canonicus. Fig. 6, eyes. The jaws are very short.



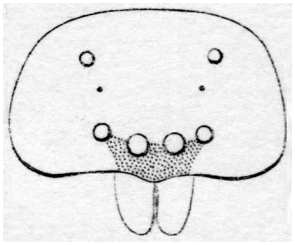
Attus capitatus. Fig. 26, eyes. The mandibles have not so sharp an inner point as in *A. militaris*: the white band on the cephalothorax reaches neither the base nor the front; the yellowish white band on each side of the abdomen is blackish on the extreme sides; in the description given in the Boston Journal of Natural History, Vol. V., p. 200, it is stated that the second joint of the palpi is covered with white hairs; on the sheet containing the drawing it is stated that it is the first joint which is so characterized.



Attus castaneus. Fig. 36, eyes.

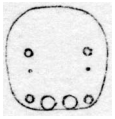


Attus coronatus. Fig. 82, eyes,



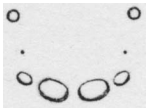
Attus cristatus. Fig. 112, lower surface of abdomen.

Attus cyaneus. Fig. 66, eyes. Taken in April, May, June, etc.



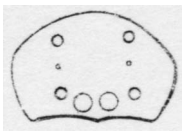
Attus elegans. Fig. 2, eyes. Taken in July.

Attus falcarius. Fig. 35, eyes. Taken August 6.

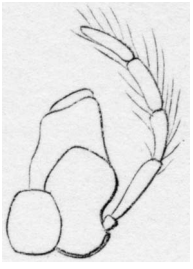


Attus familiaris. Fig. 74, eyes; fig. 99, trophi.

74

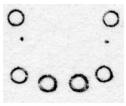


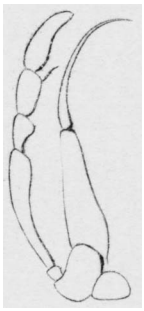
99



Attus fasciolatus. Fig. 63, eyes.

Attus gracilis. Fig. 57, eyes; fig. 107, trophi.

57 

107 

Attus hebes. Fig. 3, eyes. Taken in June.

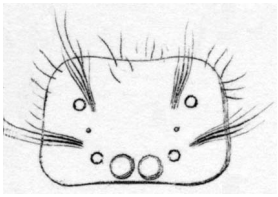
Attus insolens. Besides the second joint of the palpi and the feet, the knee of the first pair of legs is also varied with spots of white hairs.

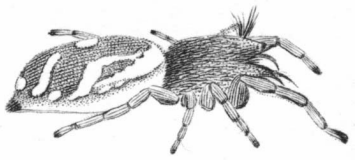
Attus militaris. Taken in March, May and December. ♂ with the abdomen covered on the disc with golden hair or scales; the legs also with more scattered hairs of the same color.

Attus mitratus. Only males were found.

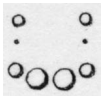
Attus morigerus. Taken October 17.

Attus mystaceus. Fig. 76, eyes; fig. 119, lateral view. Specimens taken in the fall were kept through the winter.

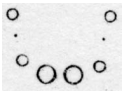
76 

119 

Attus niger. Fig. 4, eyes. Taken in July.



Attus nubilus. Fig. 27, eyes.



Attus otiosus. The legs are varied with rufous and black, with tufts of whitish hairs; the spots on the body vary a little in different specimens.

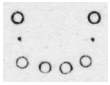
Attus podagrosus. Cheliceres darkish, but not green.

Attus puerperus. Fig. 28, eyes.

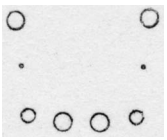
Attus pulex. A male one-third as large as the specimen figured in the Boston Journal of Natural History, Vol. V., pl. xxii, fig. 3, was taken May 29.

Attus retiarius. Legs arranged 4, 3, 1, 2. Taken in Alabama in May.

Attus roseus. Fig. 15, eyes.

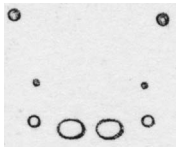


Attus rufus. Fig. 37, eyes. Body covered with thick and long white hairs; cheliceres bright rufous, black at the apex, with a line of white hairs between them and the eyes. Alabama in May, July and August; in Carolina in August; and in Massachusetts in the collection of Prof Peck, taken in July.

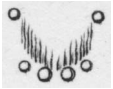


Attus sexpunctatus. Taken in July.

Attus sinister. Fig. 38, eyes.

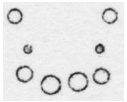


Attus superciliosus. Fig. 5, eyes. On the antepenultimate joint of all the legs there is a black fillet on the anterior side, which is faintly continued on the preceding and following joints, and even on the thighs. Taken in June.

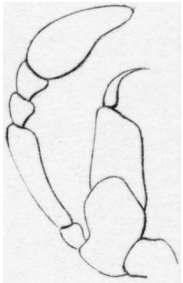


Attus sylvanus. Fig. 58, eyes; fig. 108, trophi.

58

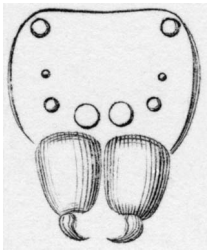


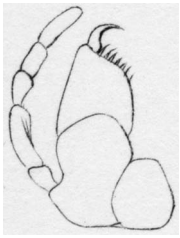
108



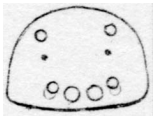
Attus taeniola. Taken in May.

Attus tripunctatus. Fig. 75, eyes and extremities of cheliceres; fig. 106, trophi; very common in New England.

75 

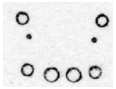
106 

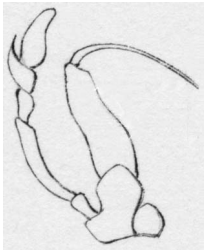
Attus viridipes. Fig. 64, eyes.



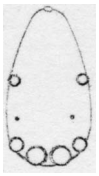
Attus vittatus. Cephalothorax with two rufous conic spots united at base; body pale beneath. Taken in May.

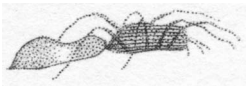
Epiblemum faustum. Fig. 59, eyes; fig. 109. trophi. Taken in June.

59 

109 

Synemosyna ephippiata. Fig. 68, eyes; fig. 114, lateral view.

68 

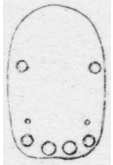
114 

Synemosyna formica. Taken in April, May and July.

Synemosyna noxiosa. Taken in April and May.

Synemosyna picata. Taken in June.

Synemosyna scorpionia. Fig. 67, eyes. The ♂ was taken in November; the ♀ in February, a little larger than the ♂, and with the abdomen very slightly contracted.



OCCASIONAL PAPERS

OF THE

BOSTON SOCIETY OF NATURAL HISTORY

II

BOSTON:
PRINTED FOR THE SOCIETY.
1875.

THE SPIDERS OF THE UNITED STATES.

A COLLECTION OF

THE ARACHNOLOGICAL WRITINGS

OF

NICHOLAS MARCELLUS HENTZ, M.D.

EDITED BY

EDWARD BURGESS,

WITH NOTES AND DESCRIPTIONS BY JAMES H. EMERTON.

BOSTON:

BOSTON SOCIETY OF NATURAL HISTORY.

1875.

PREFACE.

Among the pioneers in the study of American Entomology, Nicholas Marcellus Hentz must take a prominent position. That he was an entomologist of general attainments, his correspondence with Harris —already familiar to the readers of the first volume in this series of "Occasional Papers"— bears abundant witness, but with the study of American Arachnology his name and his writings are almost exclusively associated.

In selecting the Spiders for his special study, he found not only an interesting, but an almost entirely unexplored field. Before his time, with the exception of a few accidental descriptions scattered through the works of writers, for the most part European, nothing relating to North American Spiders had been published. This was perhaps, on the whole, fortunate, for as he lived for the greatest part of the time in places where great libraries were inaccessible, the danger of repeating the work of others was avoided. But whether his choice was accidental or predetermined, he began, soon after settling in America, a diligent study of these insects, and devoted all the time

which could be spared from the busy profession of teaching, to the observation of their habits, and to the collection, description and representation of the various species.

After publishing a few short papers in Silliman's Journal, and in the Journal of the Philadelphia Academy of Arts and Sciences, he brought together his extensive series of notes and paintings and offered them to the Boston Society of Natural History for publication in its Journal.

The Society readily undertook the publication of such a valuable contribution to American Natural History, but the cost of illustrating such a number of forms rendered it necessary to extend its publication over a long series of years. Thus, as I understand from his son, Hentz never revised or even saw but the first one or two parts of his work. In the course of publication a number of drawings, illustrating details of structure for the most part, as well as a few notes, were set aside, probably to lessen, as far as possible, the expense. This material was, however, later collected by the former Secretary of the Society, Mr. S. H. Scudder, and published, in the form of a supplement to Hentz's monograph, in its 'Proceedings.'

As many parts of this work have been long out of print, the Council of the Society has determined to republish in a connected form all of Hentz's arachnological writings, and thus to prepare the foundation necessary for future work in a field in which as little progress since, as before, Hentz's time has been made. To render tlie work as valuable as possible, Mr. J. H. Emerton, who has paid

much attention to the study of our native spiders, has added a very considerable number of notes, descriptions and synonymical remarks, which will prove of great assistance to the student. Two new plates from his skillful

pencil farther illustrate the subject. These notes have been printed in smaller type and, with Mr. Emerton's initials, inclosed in brackets. The Society is also indebted to Mr. Wm. E. Holden, of Marietta, Ohio, for some additional notes to which his name is appended.

The proportion of species identified by Mr. Emerton is, perhaps, small, a fact not to be wondered at when we consider how many Southern forms were described by Hentz, for the recognition of which, extensive collecting in the South is necessary. Among the species identified, a number have proved identical with European forms, and Hentz's names must yield to those longer established.

To aid the student in referring to the original place of publication, the pagination of the latter has been inserted in blackfaced type in the text of the present work. For the same reason the original numbers remain on the plates, although these are now referred to by new numbers for the sake of convenience. As the stones from which the lithographic plates were taken were destroyed, and as unfortunately several of the copper plates are also missing, it has been necessary to reproduce nearly half of the plates in this edition by some method of photography, a work which has been entrusted to Mr. E. Bierstadt, of New York. Although the Alberttype plates by no means equal the originals either in beauty or in clearness, it is hoped that most of the figures will be recognizable without difficulty.

After Hentz's death his collection of spiders came into the hands of the Society, but has long since been almost entirely destroyed. The remains now consist of portions of sixty specimens gummed on cards, and of these, only twenty-seven

can be identified by their labels. In the absence therefore of the type specimens the beautiful collection of Hentz's paintings and drawings, carefully preserved in the Society's library, is the surest basis remaining for the identification of his species. So far as it has been possible to compare those drawings with specimens they are correct in colors and markings, but seem to have been drawn without measurements, and the legs in nearly all cases are too short. The figures of the eyes are generally good, but those of the maxillae and mandibles are of little use.

Having thus explained the origin, purpose and plan of this volume, it remains only to present a sketch of Prof. Hentz's life, which, brief as it is, will be, I hope, interesting to Entomologists.

The materials enabling me to do this have been kindly furnished by his eldest son, Dr. Charles Arnould Hentz, of Florence, Alabama.

Nicholas Marcellus Hentz was born in Versailles, July 25, 1797. His father, an advocate by profession, was actively engaged as a politician at the time of Hentz's birth, and had been, shortly before this event, obliged to flee from his home in Paris, and to conceal himself in Versailles under the assumed name of Arnould. To the agonizing fears and alarms which his mother was obliged to undergo during this period, Hentz was wont to attribute the peculiarities of his nervous system, which were, as will be seen, very remarkable.

At the early age of between twelve and fourteen years he began the study of minature painting, for which he showed great talent and became highly proficient. He soon, however, became interested in medicine and entered the Hospital Val-de-

Grâce as a student. His son still possesses, in an old parchment-covered memorandum book, the following record in Hentz's then boyish hand-writing, "le vendredi 22 octobre 1813, j'ái été au Val-de-Grâce, M. Hentz." There he remained, busied with his studies and duties as hospital assistant, until the fall of Napoleon, when his father was proscribed and obliged to flee to America, whither Nicholas and one of his brothers accompanied their parents.

The party sailed from Havre-de-Grâce, in the bark "Eugene," Jan. 22, 1816, and arrived in New York City on March 19. Here and in Elizabeth Town they spent a few weeks in collecting their personal effects and making arrangements to move into the interior, an undertaking which was then quite formidable. They arrived in Wilkesburg, Pennsylvania, in the latter part of April, where it is probable that Hentz's parents finally settled.

Hentz himself for several succeeding years lived in Boston and Philadelphia, where he taught French and miniature painting. He also passed a short time on Sullivan's Island, near Charleston, S. C, as tutor in the family of a wealthy planter, a Mr. Marshall. All this time, whenever leisure hours allowed it, he was engaged in entomological studies, directing his special attention, as has already been said, to the spiders. While in Philadelphia he became intimate with the naturalist, Le Sueur. Le Sueur was accustomed to etch his own drawings, and having the use of his press, etc., Hentz made etchings of some of his spiders, as well as of an alligator, which he had dissected to study the nature of its circulation.

In the winter of 1820—21, he attended a course of medical lectures in Harvard University, but finally abandoned the study

of medicine, and engaged himself as teacher in a school for boys at Round Hill, Northampton, Mass., where Bancroft, the historian, was also employed. Here he was married to Miss Caroline Lee Whiting, the daughter of Gen. John Whiting, of Lancaster, on Sept. 30, 1824, and Mrs. Caroline Lee Hentz became afterwards well known as a poet and novelist.

Soon after their marriage, Hentz and his wife removed to Chapel Hill, N. C, where he had been offered the chair of modern languages in the State University. In 1830 he moved to Covington, Ky., to take charge of a female seminary, and a year or two after, to Cincinnati, where he was similarly engaged. "A graceful allusion," writes Dr. Hentz, "is made to them during this time, in Mansfield's 'Life of Daniel Drake,' 1855, p. 226."

In 1834 they again removed to Florence, Ala., and there for eight years conducted a flourishing school, the "Locust Hill Female Academy." In 1842 they went to Tuskaloosa, and in 1846 to Tuskegee, both towns in Alabama, and the following year to Columbus, Georgia, all the time engaged in similar teaching.

In the latter place in 1849, Hentz' s health began to fail, his whole nervous system giving away. He grew gradually more and more infirm, and became a regular user of morphine, which he took daily for several years before his death. He moved, finally, to the residence of his son Charles in Mariana, Fla., where he died November 4, 1856.

In person, Prof. Hentz was a small, spare man, about five feet and a half in height, and weighing only one hundred and ten or one hundred and fifteen pounds. Although of a genial, affectionate, and generous nature, his peculiarly nervous organ-

ization made him often morbidly sensitive and suspicious, and a prey to groundless fears, which not a little marred his enjoyment of life. He was educated in the Roman Catholic religion, but in 1835 joined the Presbyterian Church. During his whole life he had a most remarkable habit of suddenly resorting to mental, ejaculatory prayer. Without regard to circumstances, in any place, or among any people, he would sometimes, without apparent external reason, take off his hat, or perhaps drop on his knees, press his hands to his forehead, and raising his eyes heavenward, remain in more or less protracted prayer. He had also several regular places for this singular custom, as before his study-door, which he never entered without stopping a moment in silent prayer, and beneath a picture he had made of the "All-seeing Eye"; indeed, the constant pressure of his forehead against the wall in these places left an indelible mark.

He was extremely fond of exercise, and his Saturday half-holidays were invariably spent in long walks with his sons in the woods, carefully collecting insects and observing their habits. For amusement he delighted in fishing and gunning.

He was a great friend of Dr. Thaddeus Wm. Harris (one of his sons, Dr. T. W. Hentz of Columbus, Ga., was named after him), and after separated from him by his own removal to the South, a constant correspondence, mostly entomological, was kept up between the two friends, a portion of which, as already remarked, was published in the first volume of this series.

[From the Am. Jour. Science and Arts, xxi, 99.] Taken from [2].

Art. XIII. On North American Spiders. By N. M. Hentz, Principal of the Female Academy at Covington, Kentucky, and late Professor of Modern Languages in the University of North Carolina.

LETTER TO THE EDITOR.

Amherst College, August 22, 1831.

Professor Silliman:

Sir— Some time since I addressed a request to Nicholas M. Hentz, Esq., then Professor of Modern Languages in the University of North Carolina, and now Principal of the Female Seminary in Covington, Kentucky; that he would furnish me with a list of the Araneïdes [100] found in Massachusetts; as I wished, in the execution of a commission from the government, to obtain as complete a zoological catalogue for the State as was practicable. He not only complied with my request, but sent so full a view of North American Spiders, with so many valuable notes, that I immediately requested and obtained permission to send the whole for insertion in your Journal. If your views of the value of the paper correspond with my own, I shall hope you will give it a place in the next number.

With much respect,
Edward Hitchcock.

Araneïdes, (Latreille). *Aranea*, (Linnaeus).				No. of species.
TETRAPNEUMONES.	8 eyes; 4 mammulae, 2 very short; tooth of the mandibulae (chélicères) articulated downward,		*Oletera*	2
	6 or 8 eyes ; 6 mammulae; tooth of the mandibulae articulated laterally,		*Filistata ?*	1
			Dysdera	1
			Segestria ?	1
DIPNEUMONES.	Araneïdes forming no silken habitation, wandering; legs, 4th pair longest; eyes 8, in two rows, never both bent downward; 6 mammulae, 2 very long,		*Herpyllus*	8
	Araneïdes spinning webs, or wandering; never with all of the following characters united, 4th pair of legs longest, eyes in two rows both bent upward, and six mammulae of which two very long.	Araneïdes making a web, sedentary,	*Clubiona*	6
			Tegenaria	2
			Agelena	2
			Theridium	5
			Pholcus	1
			Linyphia	5
			Tetragnatha	2
			Epeïra	26
			Mimetus	1
		Araneïdes making no web for a constant residence,	*Thomisus*	8
			Sphasus	3
			Dolomedes	6
			Lycosa	11
			Attus	29
			Epiblemum	2
			* Species not included in *Attus*	3
				125

* From this table as drawn, the affinities of these three species are not clear. The text, however, refers to three species of *Attus* that behave like *Formica* ('*Synemosyna*'). Thus it is likely that these are part of the "Araneïdes making no web for a constant residence."

Attus, (Walck.). *Salticus*, (Latr.).

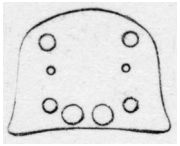


Plate 18.65

Eyes 8, unequal in size, Pl. 18, fig. 65; legs usually short and proper for leaping, of different sizes; maxillae erect, rounded. Wandering in quest of prey, and leaping. Making no web, but tubes of silk for shelter in crevices, under bark, etc.

Twenty-nine species. The numerous species of this genus display skill and varied strategems to seize their prey, which must be interesting to an observer of nature. I have preserved the name of *Attus* because the name *Atta*, previously given by Fabricius to a subdivision of *Formica*, could not be mistaken for this, any more than the Romans would *casus* for *casa*, and a thousand such words. [108]

Epiblemum, (Mihi).

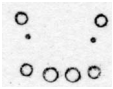


Plate 18.59

Eyes 8, somewhat unequal in size, Pl. 18, fig. 59; legs 1.4.3.2. or 1.$\overline{4.2}$.3.; lingua short, triangular; maxillae somewhat pointed above, and a little inclined over the lingua; mandibulae nearly horizontal, slender, as long as the cephalothorax, tooth as long. Two species. These might be left with *Attus*, to which they are closely related, but as that genus is large, it needs divisions, and the mandibulae of these offer a

[16] 12

peculiar and striking character, I have concluded to make the first of the two following species the type of a new genus. *Epiblemum faustum* obscure, cephalothorax edged with white, with two spots on the disk also white; abdomen edged at base, and with four short bands, white. *E. palmarum*, deep ferruginous, with two bands on the cephalothorax and the abdomen, white; second, third and fourth pair of legs whitish.

Besides these, I have three species of *Attus*, all very small, which have the habitus of *Formica*; so much like ants in many respects, that for a long time I neglected to collect them on that account. Their body is elongated, slender, nodose; and their less also are slender, either 4.3.1.2. or 4.1.2.3. The cephalothorax in one, and the abdomen in all, are contracted in the middle, so as to give them the appearance of being divided in three or four joints. The other characters coincide generally with *Attus*. They are found on plants. Should it be thought convenient, those and any other new species with those characters, might be collected under the generic name of *Synemosyna*.

It will be observed, that, in the above arrangement I have departed from that of Latreille in no essential point, but justice requires us to notice, that after the labors of the greatest living entomologist, the method of Walckenaer may still be considered as somewhat more natural than that of Latreille. I have given a sufficient account of the American genera, known to me, to allow any person whose taste may lead him to study this branch, to pursue the subject to a certain extent, and to assist in bringing my Monographia to a less imperfect state than that in which it now is. It is evident to me that if I had correspondents in the various States of this Union who would be willing to send me specimens, I could double my collection in a few years. Some persons have been kind enough to send me several interesting species, particularly Dr. Harris of Milton, and Dr. C. [109] Pickering of Philadelphia, to whom I am much indebted; but, when stuck through with a pin, and dried as

[16] 13

other insects, these become so shriveled as to make it sometimes impossible to recognize them, and always so to describe new species. Spiders should be preserved in diluted alcohol, or brandy, in which they preserve their form, though their colors are usually impaired in it.

The number of one hundred and twenty-five species will appear very large, but I could have swelled the list to one hundred and fifty. Spiders differ from true insects, or at least winged insects, in their growing. They come out from their eggs very minute, and continue to increase in

size, probably for several years in many species; whereas, with few exceptions, insects come out of their pupa state, at once, with the size which is peculiar to them. The Araneïdes, in their different ages, present differences of color and marking. The *seasons* also produce a change in the colors of some spiders; and I am nearly convinced that the first frosts produce a total change in the dress of several described Epeïrae which may be referred to one name. These are the considerations which have induced me to be very cautious in adopting new species, and comparing many specimens in different seasons, when possible, before I described them.

---

[16] 15

[From the Bost. Journ. Nat. Hist., IV, 54.] Reference [7].

Art. VI.—Descriptions and Figures of the Araneides of the United States. By Nicholas Marcellus Hentz.

(Communicated July, 1841.)

The Publishing Committee think it proper to inform the readers of this Journal, that the following article is the first of a series on the Araneides of the United States, which has been offered for publication, by the author, to the Boston Society of Natural History. These descriptions and figures will be followed hereafter by others, and the whole will form an illustrated monograph of all the Spiders observed by Professor Hentz in various parts of this country, and will supply a want [55] which has been long felt in this department of our Natural History.

[16] 48

The following account is copied primarily from references [10], [11], and [14], with additional material from [15], the *Supplement*, and some original modifications and content. Notes added by J. H. Emerton are indicated with 'J. H. E.' Note references to page numbers in the source document, in brackets. Here the plate, but not figure, numbers have also been changed from the source. Note that although it differs slightly from the original, this represents the version of Hentz work that was most accessible to later arachnologists, including the Peckhams.

Genus ***Lyssomanes***. Mihi.

Characters. *Cheliceres moderately strong; maxillae parallel, short, rounded; lip conical, slightly truncated at tip; eyes eight, unequal, in four rows, the first composed of two very large eyes, the second of two smaller ones, placed farther apart, on a common elevation with the two forming the third row, which is narrower, the fourth about as wide, composed of two eyes placed on*

[16] 49

separate elevations; feet, first pair longest, then the second, then the third, the fourth being the shortest. [198.]

Habits. Araneides wandering after prey, making no web, cocoon. [198.]

Remarks. The singular spider which serves as the type of this new subgenus, could not with propriety remain in the subgenus *Attus*, in which the position of the eyes is subject to very slight

variations. Its habits are analogous. This is the only spider in which the legs diminish in length from the first pair to the fourth.

This subdivision will serve as link between *Oxyopes* and *Attus*.

Lyssomanes viridis.

Pl. 7, fig. 3

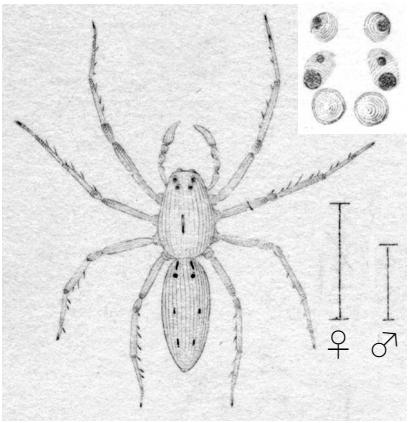


Plate 18.91

Description. Tender grass-green; cephalothorax with some orange-colored hairs near the eyes, and a little black line on its disk; abdomen with six or eight black dots, sometimes wanting. The two lowest large eyes are black, but appear green when seen sideways; the other six eyes stand on four tubercles. Feet hairy, except the thighs, which are bare. 1.2.3.4.

Observations. This elegant species is very active, and apparently fearless, jumping on the hand that threatens it.

Habitat. North and South Carolina.

[Pl. 18, fig. 91, trophi, wanting the palpus. Taken in April and June. *Supplement*.]

Genus ***Attus***. Walck. (*Salticus*, Latr.)

Characters. *Cheliceres strong, not long, except in some males; maxillae parallel, widening above the insertion of the palpi, cut obliquely above the lip; lip as long as, or longer than, half the length of the maxillae, widest above the base, bluntly truncated at tip; eyes eight, unequal, in three rows, the first composed of four*

eyes, the two middle ones largest, the second composed of two very small eyes, placed behind the external ones of the first, the third composed of two larger eyes, placed parallel to the second row; feet varying in length. [199.]

Habits. Araneides wandering after prey, making no web, but concealing themselves in a silken valve, for the purpose of casting their skin, or for hibernation.

Remarks. I have formerly stated my reason for preserving the name *Attus*, given by Walckenäer to these Araneides. The species being very numerous, it would facilitate their study to arrange them in suitable subdivisions; but this is a difficult task. The families proposed by Walckenäer are vaguely characterized and insufficient. The relative position of the eyes offers some variations, but

I could not succeed in obtaining satisfactory characters for subdivision from those variations. As the least objectionable mode, I have taken the relative lengths of the legs for the formation of my six families; that classification is somewhat artificial, but so is any other proposed. Moreover, the fifth tribe (that of the Saltatoriae) offers a very natural subdivision. The third pair of legs, when longest, enables spiders to leap to an astonishing distance. The habits of the subgenus *Attus* will be best described by the history of the different species.

Tribe I. **Pugnatoriae**, *first pair of legs longest and largest, the fourth next*.

1. ***Attus audax***.

Pl. 7, figs. 6, 7.

Fig. 6

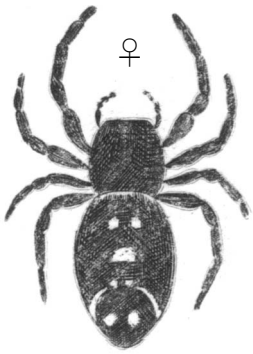
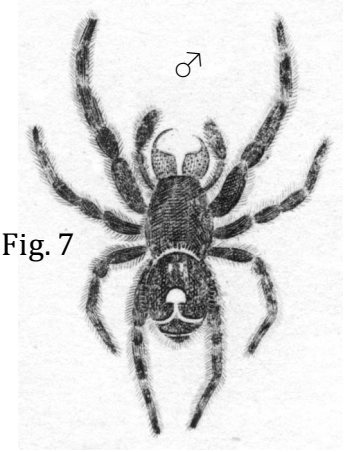


Fig. 7



Description. Black; abdomen with a spot, several dots and lines, white; cheliceres brassy green; feet with gray and white hairs, 1.4.2.3.

Observations. There is some obscurity in regard to the distinction between this and *A. 3-punctatus* (*tripunctatus*), but there can be

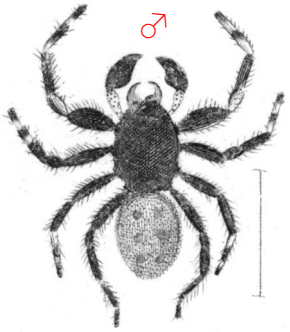
little doubt that there are two different species. This spider is very bold, often jumping on the hand which threatens it.

Habitat. Massachusetts. [200.]

[Northampton, Mass. Taken in May and July. *Supplement*.]

2. ***Attus insolens***.

Pl. 7, fig. 8.



Description. Deep black; abdomen above, orange-red, with six blackish spots, wholly black beneath; cheliceres metallic green; the tip of the second joint of the palpi and the feet are varied with tufts of white hairs; the rest of the hair is black, except on the abdomen, where it is rufous above; feet, 1.4.2.3. A male.

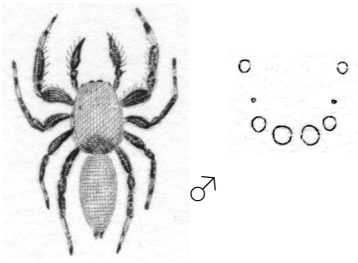
Observations. This species is probably rare, having occurred only once.

Habitat. North Carolina.

[Besides the second joint of the palpi and the feet, the knee of the first pair of legs is also varied with spots of white hairs. *Supplement*.]

3. ***Attus cardinalis***.

Pl, 7, fig. 9.



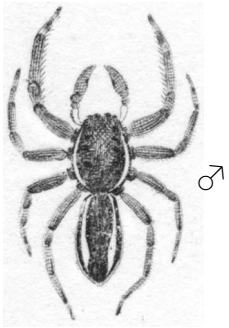
Description. Scarlet; cephalothorax darker at base; cheliceres scarlet at base, steel-blue at their apex; palpi black; feet black, two last joints rufous at base, 1.4.2.3.

Observations. I do not remember whether this spider was found by me, or given by Mr. Dutton.

Habitat. Southern States?

4. ***Attus capitatus***.

Pl. 7, fig. 15.



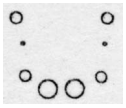


Plate 18.26

Description. Piceous; cephalothorax with a narrow white band each side, and a whitish spot on the disc; second joint of palpi covered with white hairs; abdomen above with a

narrow, curved, yellowish white band near the sides, beneath yellowish on both sides; feet with a few white hairs, 1.4.2.3. A male.

Observations. This spider has great affinity with *Attus militaris*, but is sufficiently distinct. The female probably differs from this in markings, and possibly is among my [201] descriptions; but this can be established only by future observers, who, after all my labors, have still a wide field before them to perfect the history of the spiders of North America. This was communicated to me by Mr. Thomas R. Dutton, a young naturalist of great perseverance, energy, and discrimination, who collected it in Georgia.

[Pl. 18, fig. 26, eyes. The mandibles have not so sharp an inner point as *A. militaris*; the white band on the cephalothorax reaches neither the base nor the front; the yellowish white band on each side of the abdomen is blackish on the extreme sides; in the description it is stated that the second joint of the palpi is covered with white hairs; on the sheet containing the drawing it is stated that it is the first joint which is so characterized. *Supplement*.]

5. ***Attus militaris***.

Pl. 7, figs. 10, 11.

Fig. 10

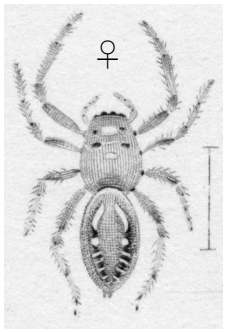
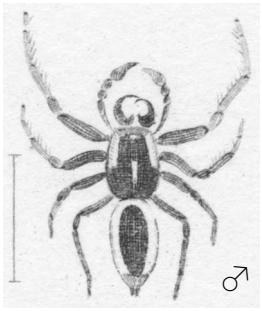
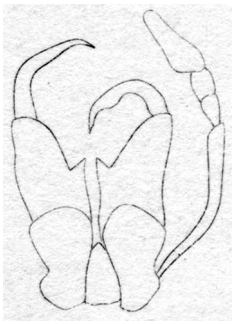


Fig. 11





Description. Rufous, varied with brown; cephalothorax with one, sometimes two, white spots; abdomen above with two longitudinal blackish bands, on which are oblong- white dots, which near the base are usually joined so as to form a narrow band, beneath whitish with a blackish longitudinal band. Male rufous or piceous; cephalothorax with a spot and a band around the anterior portion, and a narrow longitudinal line on the disc, white; abdomen above with a white band on the margin, which does not quite reach the apex, pale grayish brown beneath; feet, in the female, 1.4. 3.2., in the male, 1.4.2.3.

Observations. Much as the sexes differ from each other, I cannot doubt their constituting one species, having repeatedly found them enclosed quietly in the same silk tube, and having always found the males and the females with the characters given above. The spots and markings of these spiders are formed by hairs or scales, which have certain metallic reflections. The motions of this spider are slow, and exhibit caution; it is found usually on trees, and often hibernates under the bark of decaying trunks. The male, remarkable for his enlarged, nearly horizontal cheliceres, is a very bold little fellow, always ready for action, and determined to see all things for himself, raising and turning his head towards the object that approaches him, and usually jumping upon his enemy instead of ingloriously retreating. This species is a common one.

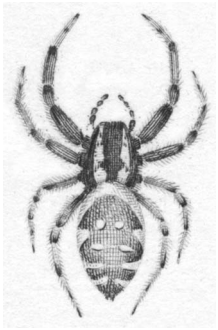
Habitat. North Carolina, Alabama. [202.]

[Taken in March, May and December. ♂ with the abdomen covered on the disc with golden hairs or scales; the legs also with more scattered hairs of the same color. *Supplement*.]

[Mayport, Fla.; Marietta, Ohio, ♂; Charlestown, Mass., ♂; Hyde Park, Mass. Wm. Holden. J. H. E.]

6. ***Attus multicolor***.

Pl. 7, fig. 13.



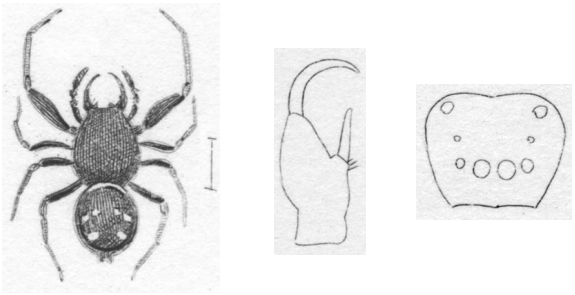
Description. Cephalothorax black, with a pale, irregular band each side of the disc; abdomen metallic green, with a band at base, and a diagonal spot each side, orange, and with eight small white spots; underneath obscure gray, with inflections of green on the pectus; feet rufous or pale, varied with piceous, 1.4. 2.3.

Observations. This species is related to *A. otiosus* and *mystaceus*, but distinct from both by the absence of the tufts of hair on the cephalothorax, and other characters. The palpi are pale yellow, and there is a black band more or less visible on each side of the abdomen.

Habitat. Alabama. June—August.

7. ***Attus sexpunctatus***.

Pl. 7, Fig. 14.



Description. Black; cephalothorax with the two posterior eyes near the base, which is wide and suddenly inclined at nearly a right angle with the upper surface, cheliceres with a strong inner tooth, and a long, curved fang; abdomen with six dots, and a line in front, white; feet, 1.4.2.3., first pair with enlarged thighs and quite long.

Observations. This cannot be confounded with *Attus fasciolatus*, which is also designed from a female. By the characters derived from its cheliceres, it approaches *Epiblemum*. I suppose it must be a rare species, having never met with any other specimen.

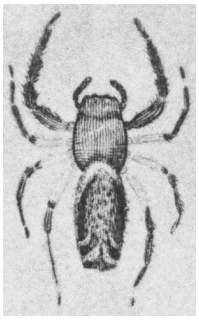
Habitat. North Carolina.

[Taken in July. *Supplement*.]

[Continued from vol. V, p. 202.] From reference [11], beginning on page 352.

8. ***Attus falcarius***.

Pl. 8, fig. 1.



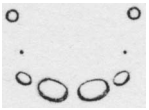


Plate 18.35

Description. Cephalothorax and abdomen covered with yellowish gray hairs, hairs longer in front of the abdomen; feet, 1.4., very stout, 2.3.

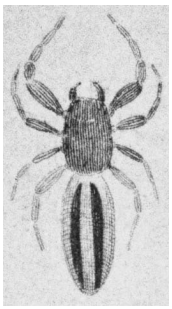
Observations. Very distinct from any other by the form of its abdomen.

Habitat. Alabama.

[Pl. 18, fig. 35, eyes. Taken August 6. *Supplement*.]

9. ***Attus binus***.

Pl. 8, fig. 2.



Description. Blackish; abdomen pale bluish gray; with two parallel, longitudinal, blackish lines above; feet, 1.4. 3.2.

Observations. I never found more than one specimen of this

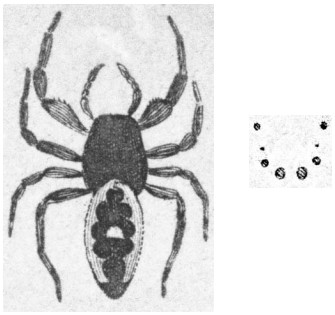
very distinct species. Its abdomen was very much distended, and it moved very slowly.

Habitat. Found on Sullivan's Island, South Carolina.

Tribe II. **Luctatoriae**; *fourth pair of legs longest, the first next and largest*.

10. ***Attus nuttallii***.

Pl. 8, fig. 3.



Description. Piceous; abdomen pale gray above, with an oblong scalloped, black, longitudinal band surrounding a small white spot; feet, 4.1. 2.3.

Observations. This probably very rare species was found in the hot-house of the botanic garden at Cambridge, in the [353] presence of the distinguished botanist and ornithologist, Thomas Nuttall.

Habitat. Massachusetts.

11. ***Attus castaneus***.

Pl. 8, fig. 4.

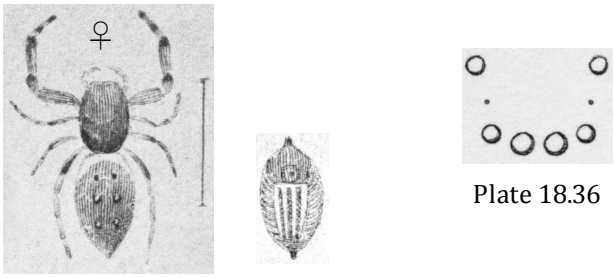


Plate 18.36

Description. Black or piceous, with some long black hairs, and short, thick, yellowish down, particularly distinct on the abdomen, which has a whitish line at base, continued on the sides to near the middle; sides of the abdomen, with oblique lines, whitish; venter with four white lines, all the lines being formed by whitish hairs; dorsum with four or six obsolete dots; feet rufous, with blackish rings, 4.1.2.3., the fourth longest and slender, the first next, very stout.

Observations. This spider is perfectly distinct from any other yet observed. It must be rare, having occurred only once, under a stone, in March.

Habitat. North Carolina.

[Pl. 18, fig. 36, eyes. *Supplement*.]

12. ***Attus taeniola***.

Pl. 8, fig. 5.

Description. Black; cephalothorax with a white fillet on each side, continued to near the base; abdomen with two longitudinal, narrow lines, composed of white dots or abbreviated lines; tarsi dark rufous or blackish. 4.1.2.3.

Observations. This is not a rare species, and shows only a moderate degree of activity.

Habitat. North Carolina, Alabama.

[Taken in May. *Supplement*.]

13. ***Attus elegans***.

Pl. 8, fig. 6.

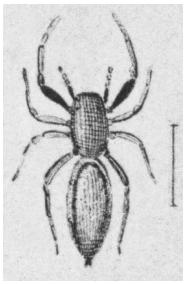


Plate 18.2

Description. Pale rufous; cephalothorax with eyes nearer the apex than the base, second joint of palpi piceous; abdomen [354] metallic green with yellow and red reflections, a white band, widest in front and continued on the sides, but not reaching the eyes; feet, $\overline{4.1}$. $\overline{3.2}$., with a slender black edge externally, thighs of first pair black, knee pale.

Observations. This graceful species is readily distinguished from any other, and is not very rare.

Habitat. Southern States.

[Pl. 18, fig. 2, eyes. Taken in July. *Supplement*.]

Tribe III. **Insidiosae**. *Legs equal in thickness, the fourth longest, then the first.*

14. ***Attus familiaris***.

Pl. 8, fig. 7.

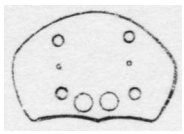


Plate 18.74

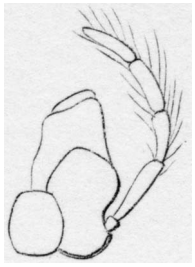
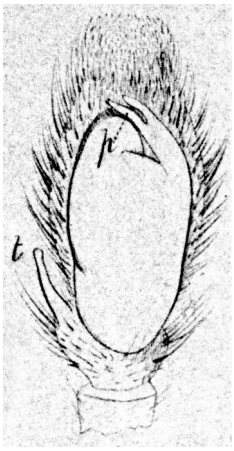


Plate 18.99

Plate 20.5



Description. Pale gray, hairy; abdomen blackish, with a grayish, angular band, edged with whitish; feet, $\overline{4.1}.\ \overline{2.3}$.

Observations. This very common spider, almost domesticated in our houses, by its habits, deserves a longer notice than others. It dwells in cracks around sashes, doors, be-

tween clapboards, etc., and may be seen on the sunny side of the house, and in the hottest places, wandering in search of prey. It moves with agility and ease, but usually with a certain leaping gait. The moment, however, it has discovered a fly, all its motions are altered; its cephalothorax, if the fly moves, turns to it, with the firm glance of an animal which can turn its head; it follows all the motions of its prey with the watchfulness of the falcon, hurrying its steps or slackening its pace, as the case may require. Gradually, as it draws near to the unsuspecting victim, its motions become more composed, until, when very near, its movements are entirely imperceptible to the closest observation, and, indeed, it would appear perfectly motionless, were it not for the fact that it gradually draws nearer to the insect. When sufficiently near, it very suddenly takes a leap, very seldom missing its aim. I saw one, however, make a mistake, for the object which it watched was only a portion of the wing of an hemipterous insect entangled in a loose web. It took its leap and grasped [355] the wing, but relinquished it immediately, apparently very much ashamed of having made such a blunder. This proves that the sight of spiders, though acute, is not unerring. Before leaping, this *Attus* always fixes a thread on the point from which it departs; by this it is suspended in the air if it miss its aim, and it is secure against falling far from its hunting grounds.

These spiders, and probably all other species, a day or two before they change their skin, make a tube of white silk, open at both ends; there they remain motionless till the moulting time arrives, and, even some days after, are seen there still, probably remaining in a secure place, for the purpose of regaining strength and activity.

Habitat. Throughout the United States.

[Pl. 18, fig. 74, eyes; fig. 99, trophi. *Supplement*.]

[♀, length 10.5 mm.; cephalothorax 4.4 mm.; legs 9, 7.8, 7.8, 9 mm.

♂, length 10 mm.; cephalothorax 4.6 mm.; legs 11.5, 9.3, 8, 9.8 mm.

Palpus of ♂. Pl. 20, fig. 5.

Salem, Mass. May 30, ♂ and ♀ on fences. October 27, in bags under bark.

Providence, R. I. November 11, in bags under bark.

Ohio, ♂♀, Northern Illinois, ♀, Wm. Holden. J. H. E.]

15. ***Attus tripunctatus***.

Pl. 8, fig. 8.

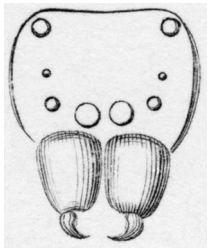


Plate 18.75

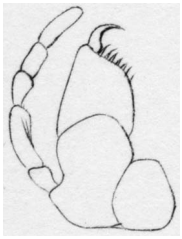


Plate 18.106

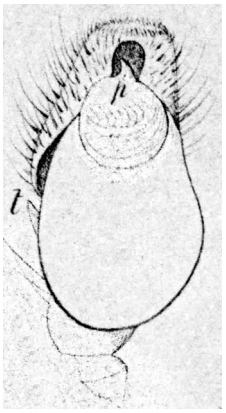


Plate 20.6

Description. Black; abdomen, with metallic reflections and white and orange-colored hairs, with a central spot and two short bands white, which are surrounded with deep black; cheliceres brassy green; feet, 4.1. 3.2.

Observations. This is perhaps the most common *Attus* in the United States. It is usually found on dead trees, under the bark of which it takes refuge, and also hibernates there, in tubes of strong white silk. The spots are often of an orange color, instead of being white.

Habitat. The United States.

[Pl. 18, fig. 75, eyes and extremities of cheliceres; fig. 106, trophi. Very common in New England. *Supplement*.]

[♀, length 8.6 mm.; cephalothorax 4 mm.; legs 8.2, 6.5, 6.5, 8,5 mm.

♂, length 8 mm.; cephalothorax 3.5 mm.; legs 8.2, 6.5, 6, 7.2 mm.

Palpus of ♂. Pl. 20, fig. 6.

Salem, Mass. March, in bags under stones. May 20, ♂.

Beverly, Mass. July 1, young.

Boston, Mass. December 7, in tubes in cocoons of *Epeira riparia*.

Providence, R. I.; Indianapolis, Indiana.

Ohio, ♂♀; Ann Arbor, Mich., ♂♀; Ft. Towson, Red River, Ark., ♂♀; Knoxville, Tenn., ♂♀; East Florida, ♀; North Carolina, ♀. Wm. Holden. J. H. E.]

16. ***Attus mystaceus***.

Pl. 8, fig. 9.

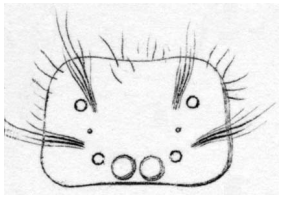
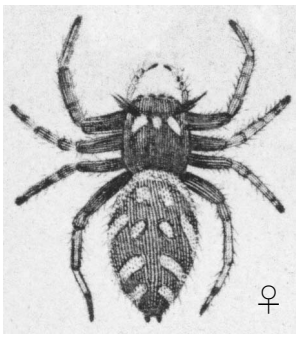


Plate 18.76



♀

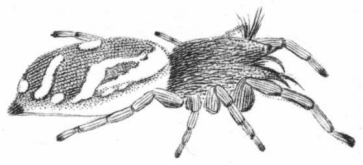


Plate 19.119

Description. Gray; varied with whitish spots; cephalothorax with four tufts of bristles in the region of the eyes; feet, 4.1.2.3.

[16] 59

Observations. This large and very distinct species is not [356] rare on the eastern side of the Alleghany mountains, as far north as the 35° of latitude; but it has not been found by me in Alabama.

Habitat. North Carolina.

[Pl. 18, fig. 76, eyes. Pl. 19, fig. 119, lateral view. Specimens taken in the fall were kept through the winter. *Supplement*.]

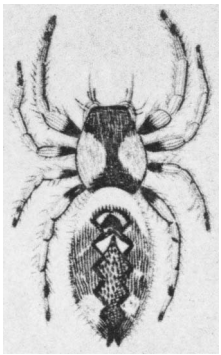
[♀, length 11.6 mm.; cephalothorax 5.2 mm.; legs 9.6, 8, 5 (8.5), 8, 10.6 mm.

This is one of the most common species of *Attus* around Boston. It is found at all seasons in thick tubes of white silk, under stones. None of my specimens have the tufts of hairs on the head as distinct as in Hentz's figure. I do not know the male.

Salem, Mass. March, old and young in bags under stones. July 18, ♀, in bag with cocoon of young. September and October, in bags under stones. Providence, R. I. Ohio, ♂♀; St. Louis, Mo.; Ft. Towson, Red River, Ark., ♀. Wm. Holden. J. H. E.]

17. ***Attus otiosus***.

Pl. 8, fig. 10.



Description. Blackish, mostly covered with white hairs; cephalothorax black at base and anteriorly, two tufts of hairs each side on the region of the eyes; abdomen with a band at base, and several angular spots, white, and with a longitudinal green band more or less covered with hairs and edged with a scalloped black line each side, beneath white with a black band very wide at base, and tapering towards the apex where it branches out; feet varied with rufous and black, 1.4.2.3., the fourth slightly longest when separated from the body. A large species.

Observations. This spider, related to *A. mystaceus*, was found in mid-winter, enclosed in silk tubes, under the bark of dead trees, where great numbers were hibernating.

Habitat. North Alabama.

[The legs are varied with rufous aud black, with tufts of whitish hairs; the spots on the body vary a little in different specimens. *Supplement*.]

18. ***Attus fasciolatus***.

Pl. 8, fig. 11.

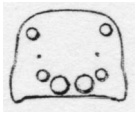


Plate 18.63

Description. Black; cephalothorax with three grayish spots; abdomen with three small spots, two abbreviated lateral lines, and an anterior one white; feet varied with rufous, 4.1.2.3.

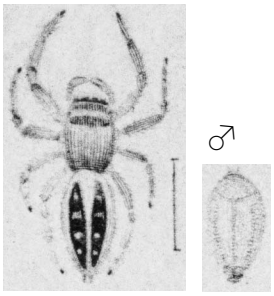
Observations. This spider seems to be quite distinct from *A. tripunctatus*, but may prove only a variety of that species.

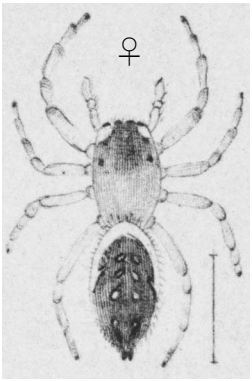
Habitat. South Carolina, Massachusetts.

[Pl. 18, fig. 63, eyes. *Supplement*.]

19. ***Attus rufus***.

Pl. 8, fig. 12.





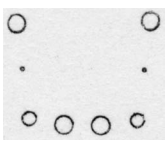


Plate 18.37

Description. Rufous; abdomen with a yellowish white [357] band anteriorly which extends to the sides, on the disk four white dots, and four smaller grayish ones, the dots surrounded by black rings which usually unite in the form of a longitudinal band on each side, beneath pale, with three sub-obsolete longitudinal lines; feet, 4.1. 2.3. or 4.1. 3.2., in the male 1.4.2.3.

Observations. This spider, which is not very common, is found on plants, and is not remarkably active. In the male, the abdomen is white around and between the bands.

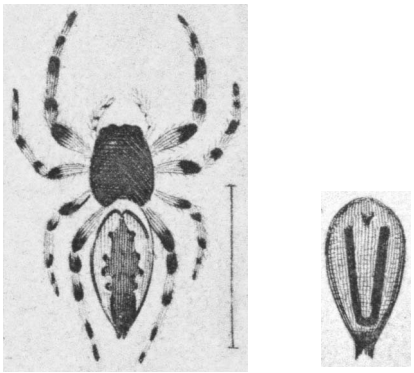
Habitat. United States.

[Pl. 18, fig. 37, eyes. Body covered with thick and long white hairs; cheliceres bright rufous, black at the apex, with a line of white hairs between them and the eyes. Alabama in May, July and August; in Carolina in August; and in Massachusetts in the collection of Prof. Peck, taken in July. *Supplement*.]

[16] 61

20. ***Attus podagrosus***.

Pl. 8, fig. 13.



Description. Cephalothorax piceous black; abdomen pale brownish, white at base, with a scalloped dusky band; feet bright rufous, joints tipped with black, with some hairs, 4.1. 2.3. A large species.

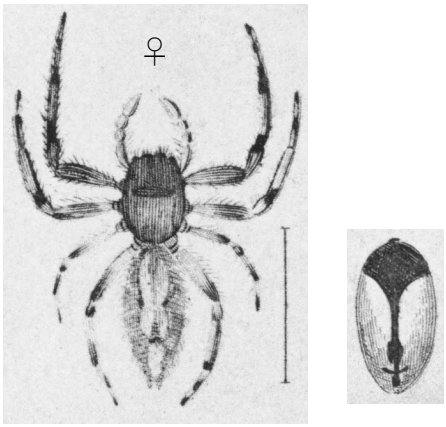
Observations. This may be readily distinguished from *A. rupicola*, to which it is closely related.

Habitat. Alabama. November.

[Cheliceres darkish, but not green. *Supplement*.]

21. ***Attus rupicola***.

Pl. 8, fig. 14.



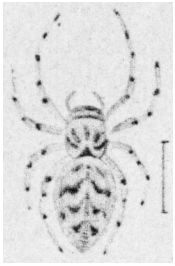
Description. Rufous, very hairy; abdomen brownish, with a paler band and two blackish dots; feet varied with blackish, in the female 4.1.2.3., in the male 1.4.2.3. A large species.

Observations. The male, which resembles the female, has invariably its first pair of legs longest and stoutest. This species was repeatedly found in cavities of limestone rocks on the margin of a river, moving cautiously and slowly on the surface of the stones, and retreating into crevices.

Habitat. Alabama. September. [358.]

22. ***Attus nubilus***.

Pl. 8, fig. 15.



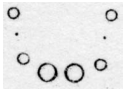


Plate 18.27

Description. Pale gray; cephalothorax with a tinge of rufous at base, and many obscure markings; abdomen with obscure, waved bands; feet with blackish rings, 4.1. 2.3. A somewhat small species.

Observations. This spider is common, usually found on the stems of plants.

Habitat. Alabama. May —July.

[Pl. 18, fig. 27, eyes. *Supplement*.]

23. ***Attus hebes***.

Pl. 8, fig. 16.

Plate 18.3

Description. Brownish; abdomen white, with a greenish spot surrounded with four black dots, near the base, and a black fascia near the apex; feet, 4.1.3.2.

Observations. This probably rare species was found on the ground, having fallen from a tree.

Habitat. Massachusetts.

[Pl. 18, fig. 3, eyes. Taken in June. *Supplement*.]

24. ***Attus parvus***.

Pl. 8, fig. 17.

Description. Grayish; abdomen with six or eight abbreviated transverse lines, white; feet varied with rufous and black, 4.1.2.3.

Observations. A somewhat obscure species, which I believe I have seen in the North.

Habitat. North Carolina, Massachusetts?

25. ***Attus rarus***.

Pl. 8, fig. 18.

Description. Blackish; cephalothorax with green scales, and some yellow ones anteriorly; abdomen with green scales, [359] except on a black band which surrounds the disk, a yellow band at base, extending each side, but which does not reach the middle, one large yellow dot each side near the middle, two little dots on the disk, and four terminal abbreviated bands white; beneath blackish, abdomen with some yellowish hair which forms two or four sub-obsolete, abbreviated, longitudinal lines; feet, 4.1. 2.3.

Observations. This very distinctly-marked species is probably very rare, as it occurred only once.

Habitat. North Carolina. June.

26. ***Attus niger***.

Pl. 8, fig. 19.

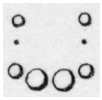


Plate 18.4

Description. Deep black; legs pale testaceous, 4.1.3.2.

Observations. This small species is remarkable on account of its activity in running and leaping.

Habitat. North Carolina.

[Pl. 18. fig. 4, eyes. Taken in July. *Supplement*.]

27. ***Attus ? gracilis***.

Pl. 8, fig. 20.

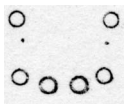


Plate 18.57

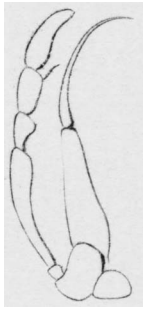


Plate 18.107

Description. Rufous; cephalothorax very prominent anteriorly, wider behind the middle; abdomen narrower, slender, fusiform, nipples long; feet long and slender, 4.1. 3.2.

Observations. This cannot be *Synemosyna scorpionia*; but may ultimately be referred to that division.

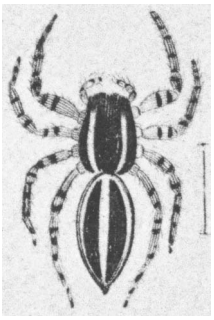
Habitat. Alabama. August.

[Pl. 18, fig. 57, eyes; fig. 107, trophi. *Supplement*.]

Tribe IV. **Metatoriae.** *Legs subequal in thickness, the fourth longest, then the third.*

28. ***Attus leopardus***.

Pl. 8, fig. 21.



Description. Cephalothorax black, rufous about the eyes, [360] with a curved white line each side; abdomen with two opposed lenticular black bands surrounded with white, pale gray underneath, with two sub-obsolete longitudinal, whitish lines; feet rufous with many black rings, 4.3.2.1.

Observations. This spider is common. The female is often found under stones with its cocoon, which is white.

Habitat. Alabama. May.

[♀, length 9.2 mm.; cephalothorax 3.7 mm.; legs 4.5, 4.5, 5.8, 7.5 mm.

One specimen from Mt. Tom, Holyoke, Mass.

Marietta, O. (Ohio?), ♂♀; Rushville, 0., ♀. Wm. Holden. J. H. E.]

[16] 64

29. ***Attus puerperus***.

Pl. 8, fig. 22.

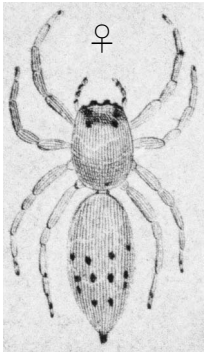


Plate 18.28

Description. Testaceous or yellowish; intermediate small eyes, and the two last, borne on elevations; abdomen with about twelve black dots, underneath with a black spot near the apex; feet, 4.3.1.2. or 3.4.1.2.

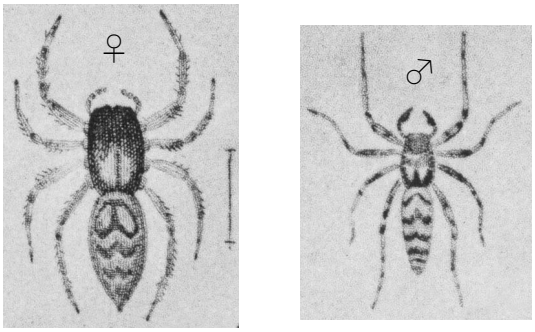
Observations. Mr. Thomas R. Dutton, who brought this from Georgia, gave me another one, which was not, like this, replete with eggs. The abdomen not being distended, the dots appeared less regular and distinct.

Habitat. Georgia.

[Pl. 18, fig. 28, eyes. *Supplement*.]

30. ***Attus vittatus***.

Pl. 8, fig. 23.



Description. Cephalothorax and trophi rufous varied with blackish; abdomen gray, with reddish curved bands; feet pale rufous or yellowish, 4.3.1.2., in the male 4.1.2.3., and speckled with black dots.

Observations. With some hesitation I refer to the same species the drawings of a male, and that of a female, which I had considered as distinct, on account of the difference in the respective length of the legs. In the genus *Attus* that character is sometimes a sexual distinction.

Habitat. North Carolina, Alabama. [361.]

[Cephalothorax with two rufous conic spots united at base; body pale beneath. Taken in May. *Supplement*.]

[Malden, Mass., ♀. Wm. Holden. J. H. E.]

Tribe V. **Saltatoriae**. *Third pair of legs longest, then commonly the fourth*.

31. ***Attus coronatus***.

Pl. 9, fig. 1.

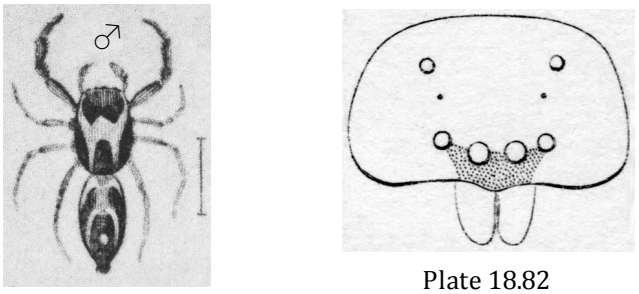


Plate 18.82

Description. Pale dusky; cephalothorax varied with black, a scarlet spot between the eyes and the cheliceres; abdomen

with two curved bands and about three spots, white; pale beneath without distinct spots; legs, with first pair stoutest, black on the internal side, 3.4.1.2.

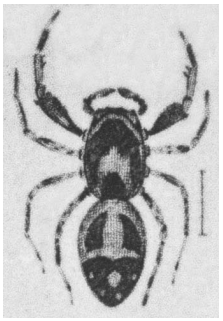
Observations. The bright scarlet spot on its front gives to this spider a whimsical air of fierceness, which is heightened by its attitudes and singular motions. The lighter spots on the cephalothorax are produced by yellowish hairs. It is not very rare. It is probably quite distinct from *A. coecatus*.

Habitat. Alabama. May —July.

[Pl. 18, fig. 82, eyes. *Supplement*.]

32. ***Attus coecatus***.

Pl. 9, fig. 2.



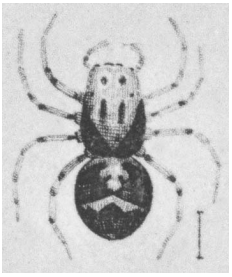
Description. Brownish obscure; cephalothorax with a red spot under the eyes, and with a basal spot and large fascia black; abdomen varied with black and brownish obscure, pale bronzed beneath; feet, first pair stoutest, black with a line of yellowish scales above, antepenultimate joint with two long, black scales or spatulae, thighs with thick tufts of black hairs, the other legs varied with black and brownish, 3.4.1.2. A small species.

Observations. This species, though very different in marking, is very closely related to *A. coronatus*.

Habitat. Alabama. September.

33. ***Attus pulex***.

Pl. 9, fig. 3.



Description. Pale brownish; cephalothorax large, varied [362] with piceous, edged widely with blackish towards the base; abdomen nearly orbicular, piceous, varied with whitish spots, and a band at base; feet varied with piceous, 3.4.1.2. A small species. Male like the female.

Observations. This little spider is common near the ground, where it may be seen moving with sudden, rapid motions, and

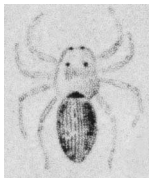
jumping, like a flea, to great distances. It is a well-characterized species.

Habitat. Alabama. April—May.

[A male one-third as large as the specimen figured, Pl. 9, fig. 3, was taken May 29. *Supplement*.]

34. ***Attus roseus***.

Pl. 9, fig. 4.



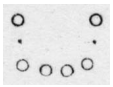


Plate 18.15

Description. Cephalothorax white, blackish at base; abdomen roseate, with a whitish base; feet pale yellow, 3.4.1.2.

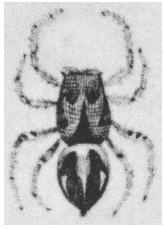
Observations. This small species is not unfrequently found on grass, in May and June.

Habitat. Massachusetts.

[Pl. 18, fig. 15, eyes. *Supplement*.]

35. ***Attus viridipes***.

Pl. 9, fig. 5.



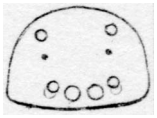


Plate 18.64

Description. Cephalothorax rufous, with black bands and spots; abdomen white, with two black angular bands; anterior feet greenish; the other feet varied with rufous, blackish and white, 3.1.4.2.

Observations. This small spider is usually found on the ground, on sand or on grass, in constant activity. When any object approaches it, it lifts itself on its posterior limbs to reconnoitre the enemy or the prey. It never was seen large.

Habitat. South Carolina.

[Pl. 18, fig. 64, eyes. *Supplement*.]

36. ***Attus auratus***.

Pl. 9, fig. 6.

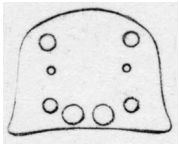


Plate 18.65

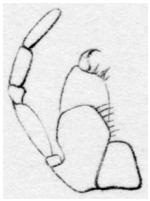


Plate 18.92

Description. Black; palpi, sides of the cephalothorax and four spots above, silvery white; abdomen with a cross and circular band, golden color; feet varied with rufous, 3.4.1.2. [363.]

[16] 67

Observations. This beautiful species seems to fear the light; for I never found it except when enclosed in the old shells of the pupae of some hymenopterous insect. It is rare.

Habitat. South Carolina.

[Pl. 18, fig. 65, eyes; fig. 92, trophi. *Supplement*.]

[Mayport, Fla., ♀. Wm. Holden. J. H. E.]

37. ***Attus multivagus***.

Pl. 9, fig. 7.

Description. Piceous; palpi pale; abdomen gray, with curved bands, dots and a spot white, pale underneath with a longitudinal darkish line and a pale one each side, all sub-obsolete; feet, 3.4.1.2. A middle-sized species.

Observations. This species in markings resembles *A. fasciolatus*, but is quite distinct from it.

Habitat. Alabama. April.

[Zanesville, O., ♀. Wm. Holden. J. H. E.]

38. ***Attus cristatus***.

Pl. 9, fig. 8.

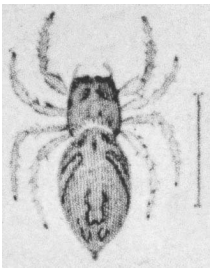


Plate 19.112

Description. Pale brownish; cephalothorax with small dusky marks, palpi very small; abdomen with curved dusky lines, and a tuft of white hairs at base, pale underneath, with two sub-obsolete, approximate longitudinal paler lines; feet pale, 3.4.1.2.

Observations. The tuft of white hairs on the base of the abdomen, and projecting over the cephalothorax, is not peculiar to this species alone, but by other characters it is sufficiently distinguished.

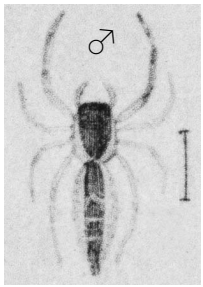
Habitat. Alabama. July—August.

[Pl. 19, fig. 112, lower surface of abdomen. *Supplement*.]

Tribe VI. **Ambulatoriae**; *legs usually slender, the first pair longest, the fourth next*.

39. ***Attus mitratus***.

Pl. 9, fig. 9.



Description. Pale above and beneath; cephalothorax with [364] a broad pale brownish band; abdomen with a pale brownish band, interrupted with yellowish in about three places; feet, 1.4.2.3. A small species.

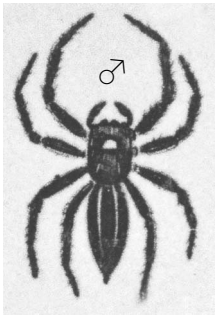
Observations. This is not a rare species. It is usually found on plants, moving slowly on the stems.

Habitat. Alabama. April—May.

[Only males were found. *Supplement*.]

40. ***Attus sylvanus***.

Pl. 9, fig. 10.



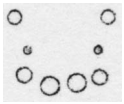


Plate 18.58

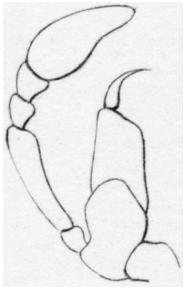


Plate 18.108

Description. Piceous; cephalothorax reddish anteriorly, with a yellowish spot on the disk, and four oblique slender lines of the same color; abdomen with two parallel longitudinal yellowish lines; thighs rufous at base, except the first pair; feet, 1.3.2.4.

Observations. This graceful species is found commonly on the trunks of trees, moving rather slowly, and walking backwards when threatened by an enemy. It moves its anterior feet like palpi, as if to feel its way in its progression.

Habitat. South Carolina.

[Pl. 18, fig. 58, eyes; fig. 108, trophi. *Supplement*.]

41. ***Attus superciliosus***.

Pl. 9, fig. 11.

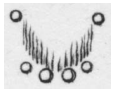


Plate 18.5

Description. Cephalothorax black between the eyes, deep ferruginous at base, covered anteriorly with golden or greenish scales, a tuft of hairs between the eyes; abdomen black, with the same kind of scales, the absence of which forms obsolete

blackish lines on the disk, beneath with such scales also; pectus and thighs glabrous, ferruginous; feet with a black fillet externally, antepenultimate joint of first pair with a tuft of black hairs, 1.4.2.3.

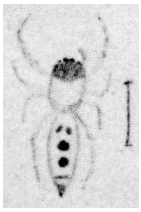
Observations. This singular species can be readily distinguished by the tuft of hairs placed above the lower row of eyes, and resembling eyebrows. It is probably rare.

Habitat. North Carolina. [365.]

[Pl. 18, fig. 5, eyes. On the antepenultimate joint of all the legs there is a black fillet on the anterior side, which is faintly continued on the preceding and following joints, and even on the thighs. Taken in June. *Supplement*.]

42. ***Attus morigerus***.

Pl. 9, fig. 12.



Description. Cephalothorax ferruginous, covered with silvery down, through which the color can be seen, particularly about the eyes; abdomen above dark brown, covered with silvery down, four spots and a band glabrous; beneath pale; feet pale yellowish, with some hairs, 1.4.$\overline{2.3}$.

Observations. This little spider may be seen usually on leaves, where it frequently makes its tubes. It has been seen on the hickory and the mulberry trees.

Habitat. North Carolina, Alabama. April, May.

[Taken October 17. *Supplement*.]

43. ***Attus cyaneus***.

Pl. 9, fig. 13.

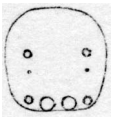


Plate 18.66

Description. Brassy green; body short; feet, $\overline{1.4}$. $\overline{3.2}$. Small.

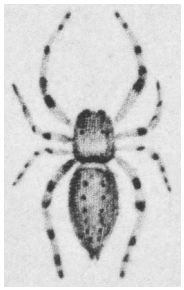
Observations. This small but brilliant spider is found on plants, during all the warm season.

Habitat. North Carolina, Alabama.

[Pl. 18, fig. 66, eyes. Taken in April, May, June, etc. *Supplement*.]

44. ***Attus canonicus***.

Pl. 9, fig. 14.



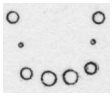


Plate 18.6

Description. Rufous, or deep orange; abdomen with a longitudinal row of black dots, seven or eight on each side above; feet with black rings; cephalothorax and anterior part of the abdomen covered with dense yellowish rufous hair. Feet, 1.4. 2.3.

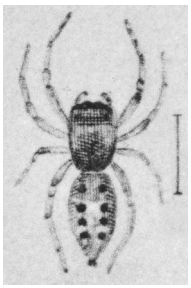
Observations. Found in Cambridge, Massachusetts, in August.

Habitat. Massachusetts.

[Pl. 18, fig. 6, eyes. The jaws are very short. *Supplement*.]

45. ***Attus octavus***.

Pl. 9, fig. 15.



Description. Grayish brown; abdomen above with eight [366] large black dots, two green spots, and some white marks, gray beneath; feet rufous, 1.4.2.3.

Observations. This is a common species in the south. A specimen was found with legs 4.1.3.2., shorter, and with blackish rings. Is it a different species? It is not probable that this can be referred to *A. hebes*.

Habitat. Alabama. July—August.

Genus ***Epiblemum***. Mihi.

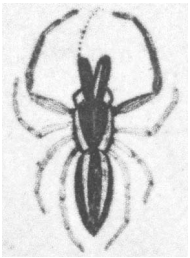
Characters. *Cheliceres very long, slender, horizontal, in both sexes, fang nearly as long; maxillae parallel, wide at base, narrowed above the insertion of the palpi, cut obliquely on both sides towards the point; lip conical; eyes eight, unequal, in three rows, the first composed of four, the two middle ones somewhat larger, the second composed of two very small ones placed nearer the third row, which is composed of two larger ones; feet, first pair longest, then the fourth, the third or second shortest.*

Habits. Araneides wandering after prey, making no web, cocoon.

Remarks. The characters of this subgenus are quite sufficient to separate and distinguish the species composing it from *Attus*. Even allowing that the character derived from the extreme length of the cheliceres were limited to the males, the great number of species contained in *Attus* would authorize naturalists to separate such as have that character under a separate denomination. But it seems that this peculiarity may be confined to the females in some species; as, a male of *E. palmarum* was found with short cheliceres; but these were nevertheless horizontal.

1. ***Epiblemum palmarum***.

Pl. 9, fig. 16.



Description. Rufous or dark brown; cephalothorax and [367] abdomen with a whitish band on each side above; feet whitish, except the first pair which are rufous, 1.4.2.3.

Observations. Cuvier, in his Règne Animal, IV, p. 264, says that some males of *Attus* have elongated cheliceres. But this was a female; and a male was found in North Carolina, corresponding to this in every particular, except that the cheliceres were not elongated, but *they were horizontal*. The subgenus *Attus* is so large that some good subdivision is required. Like *Tetragnatha*, this spider extends its legs in one line along the twig or blade on which it rests.

Habitat. South and North Carolina.

A male was found in Alabama, corresponding with this in every respect. He was bold, and moved with a ludicrous motion of his first pair of legs, which he waved to and fro, in advancing towards the body which was extended against him.

2. ***Epiblemum faustum***.

Pl. 9, fig. 17.

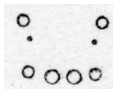


Plate 18.59

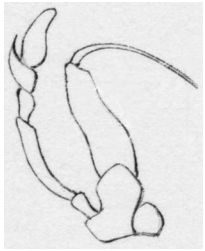
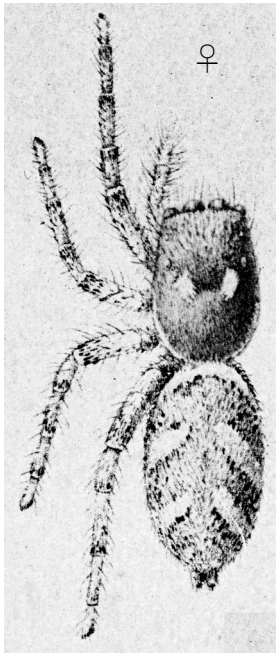


Plate 18.109



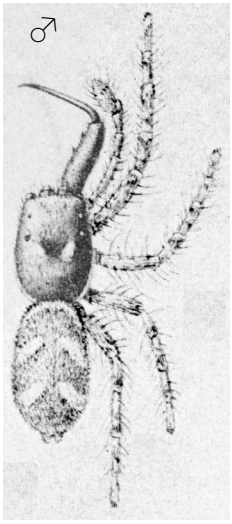
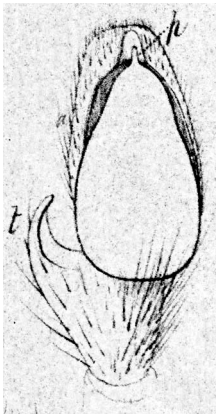


Plate 20.8



Description. Piceous; cephalothorax with the margin and two spots white; abdomen with the base and four short lines white; feet, 1.4.3.2.

[16] 72

Observations. This species was found common in Cambridge, Massachusetts, on walls, on the south side.

Habitat. Massachusetts.

[Pl. 18, fig. 59, eyes; fig. 109, trophi. Taken in June. *Supplement*.]

[Pl. 20, fig. 8. Adult ♂ and ♀, and palpus of ♀ (♂).

The females do not have long horizontal mandibles like the males. Probably identical with *Salticus scenicus* Blackw., Spiders of Great Britain and Ireland, and *Calliethera histrionicus* Sim., Monograph. des Attides, Ann. Soc. Ent. France.

Salem, Mass., Providence, R. I., Albany, N. Y., on fences and houses at all seasons. J. H. E.]

Genus ***Synemosyna***. Mihi.

Characters. *Cheliceres short in the females; maxillae slightly inclined toward the tip, truncated at tip; lip short, rounded; eyes eight, unequal, in three rows, the first composed of four eyes, the two middle ones largest, the second composed of two small ones placed nearer the first than the third, which is composed of two larger eyes; feet slender,* [368] *the fourth pair longest, the other three variable; body elongated, nodose, abdomen contracted near the middle.*

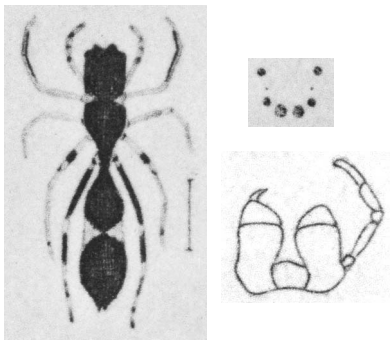
Habits. Araneides wandering after prey, making no web, but silk tubes, for hibernation, running on plants like ants, which they resemble; cocoon.

Remarks. This differs in many points from *Myrmecia*, Latr., Ann. des Sc. Nat. IV. p. 261, and yet seems to be closely related to it. That subdivision is not known to me, though it is said in that work that some species are found in Georgia. In *Myrmecia* the cheliceres are large, in this, they are small, at least in the females; in that subgenus the maxillae are rounded and hairy, the abdomen is much shorter than the cephalothorax, and they have other characters which do not belong to this.

I have already pointed out the features, and proposed a name for this singular subdivision, in a paper published in Silliman's Journal. I have, since writing that article, discovered one species, in addition to the three mentioned there. They are all anomalous, and differ from each other in many points; while they agree in the characters which I have assigned. They hibernate in silk tubes, under the bark of trees.

1. ***Synemosyna formica***.

Pl. 9, fig. 18.



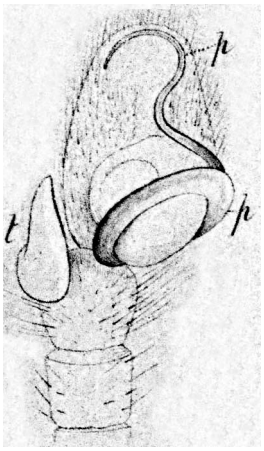


Plate 20.9

Description. Rufous; cephalothorax very long, contracted in the middle, tapering towards the base, and with two lateral yellowish spots; abdomen contracted in the middle, also with two lateral yellow spots, each where the contraction appears; feet slender, varied with yellowish and black, 4.3.1.2., tibiae of the first pair and part of the tarsus black underneath. Male with very large cheliceres; legs, 4.1.3.2.

Observations. This spider cannot be placed in the subgenus *Myrmecia*, of Latreille, as described in the fourth vol. of the Ann. des Sc. Nat., or in vol.IV. p. 261 of the Règne Ani-[369]mal, [369] for the following reasons; the eyes are very unequal in size, and not placed in the manner described; the cheliceres are large only in the males; and the length of the feet is not the same. It is possible, however, that the insects drawn by Abbot belong to this division; for, being very small, probably the situation of the eyes may not have been correctly observed. Be this as it may, the subgenus *Myrmecia*, or *Myrmecium*, is closely related to this.

I had seen individuals of this species running on the blades of grass and stems of weeds, long before I distinguished them from ants. They move with agility and can leap, but their habitus is totally different from *Attus*. They move by a regular progression or regular walk, very different from the halting gait of that subgenus.

Habitat. North Carolina, Alabama.

[Taken in April, May and July. *Supplement*.]

[Length of ♀ 4 mm.; legs 2.2, 2.4, 3.6 mm. (Fourth leg?)

Palpus of ♂. Pl. 20, fig, 9.

The only male I have seen has short mandibles, and is otherwise much like the female.

Ipswich, Mass. June 17, ♂, F. G. Sanborn.

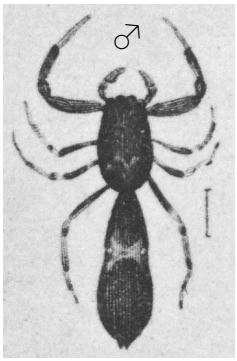
Holyoke, Mass. July 4, many females.

Malden, Mass. H. L. Moody.

Washington, D. C. E. P. Austin. J. H. E.]

2. ***Synemosyna scorpionia***.

Pl. 9, fig. 19.



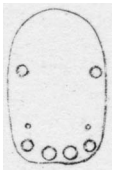


Plate 18.67

Description. Piceous; cephalothorax with two sub-obsolete, pale spots; posterior eyes placed near the base, and remote from the rest; abdomen slightly contracted near the middle, with a yellowish indented spot; feet rufous, 4.1.2.3., first pair very stout; sexes alike, the cheliceres not being enlarged in the male.

Observations. This small spider is somewhat rare, and was found in the winter months.

Habitat. North Carolina.

[Pl. 18, fig. 67, eyes. The ♂ was taken in November; the ♀ in February, a little larger than the ♂, and with the abdomen very slightly contracted. *Supplement*.]

[Marietta, Ohio. Wm. Holden. J. H. E.]

3. ***Synemosyna ephippiata***.

Pl. 9, fig. 20.

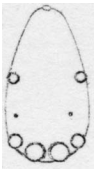
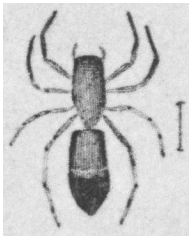


Plate 18.68



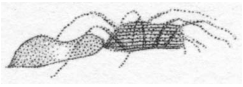


Plate 19.114

Description. Rufous; cephalothorax wide in the region of the eyes, tapering towards the base; abdomen depressed before the middle, widest beyond the middle, a transverse paler band near the middle, piceous towards the apex; feet, [370] with the interior edge black, two last joints of second pair black, penultimate and antepenultimate joints of the leg of the fourth pair dusky, 4.2.3.1.

[16] 75

Observations. This is a very distinct species, found hibernating in silk tubes under bark, making such tubes when confined. The male, with cheliceres not enlarged, was found agreeing with the above description in the minutest particular. This shows beyond any doubt that the species is distinct from *S. formica*.

Habitat. Alabama. December.

[Pl. 18, fig. 68, eyes; Pl. 19, fig. 114, lateral view. *Suppl*.]

4. ***Synemosyna picata***.

Pl. 9, fig. 21.

Description. Black; legs varied with rufous and black, second pair black beneath, fourth black except the knee which is pale beneath; palpi pale, basal joint piceous; feet, 4.3.2.1.

Observations. This is evidently distinct from the other species, particularly by its form. I once enclosed a male and a female of this species in a glass tube. They very soon formed separate habitations of silk; but on the third or fourth day, the male was dead near the tent of the female, and she had made a lenticular white cocoon, containing four eggs as large as those of large Araneïdes. That female had a white streak on each side of the abdomen.

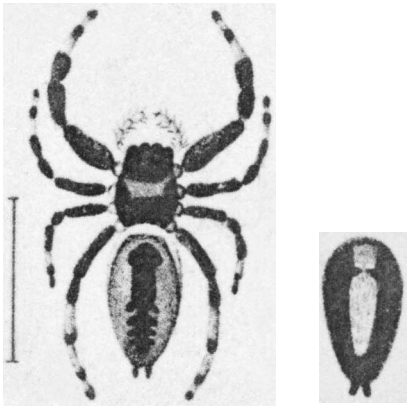
Habitat. North Carolina, Alabama.

[Taken in June. *Supplement*.]

The next pages, beginning with 161, were taken from reference [14], beginning on page 288 of that publication.

Attus sinister.

Pl. 17, fig. 12.



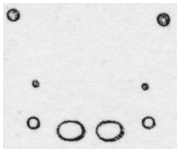


Plate 18.38

Description. Black, varied with rufous; abdomen whitish at base; venter with an interrupted ash-colored band; feet 4.1.2.3.

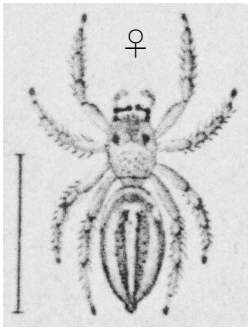
Observation. This spider should be placed in my tribe of the Luctatoriae.

Habitat. Alabama.

[Pl. 18, fig. 38, eyes. *Supplement*.]

Attus retiarius.

Pl. 17, fig. 11.



Description. Livid greenish; cephalothorax with an indistinct brown spot; abdomen with two abbreviated brownish bands, approaching towards the apex.

Observations. This *Attus* was discovered and delineated by my son, Charles A. Hentz, whose attention is more particularly drawn towards the study of Ichthyology. He found the female devouring her male. I believe the markings of the male differ from those of the female. It belongs to my tribe of the Metatoriae.

***Synemosyna noxiosa*.**

Pl. 17, fig. 10.

Description. Piceous; abdomen very slightly contracted

near the base, with an interrupted whitish line across. Feet 1,4.2.3.; first pair stout.

Habitat. Alabama.

The index presented here is an original contribution, similar in content to the *synopsis of genera and species* prepared by Hentz for his earlier work. Here species names have been alphabetized.

INDEX.

Attus	*morigerus*	69	IX, 12.	*Hentzia mitrata* (Hentz 1846)
	multicolor	53	VII, 13.	*Paraphidippus aurantius* (Lucas 1833)
	multivagus	67	IX, 7.	*nomen dubium*
	mystaceus	58	VIII, 9; XVIII, 76; XIX, 119.	*Phidippus mystaceus* (Hentz 1846)
	niger	63	VIII, 19; XVIII, 4.	*Maevia inclemens* (Walckenaer 1837)
	nubilus	61	VIII, 15; XVIII, 27.	*Pelegrina galathea* (Walckenaer 1837)
	Nuttallii	55	VIII, 4; XVIII, 36.	*Phidippus insignarius* C. L. Koch 1846
	octavus	70	IX, 15.	*Pelegrina proterva* (Walckenaer 1837)
	otiosus	59	VIII, 10.	*Phidippus otiosus* (Hentz 1846)

		Page.	*Illustration.*	*Name (Platnick 2009)*
Attus	*parvus*	62	VIII, 17.	*Pelegrina galathea* (Walck. 1837)
	podagrosus	61	VIII, 13.	*Phidippus clarus* Keyserling 1885
	puerperus	64	VIII, 22; XVIII, 28.	*Thiodina puerpera* (Hentz 1846)
	pulex	65	IX, 3.	*Naphrys pulex* (Hentz 1846)
	rarus	62	VIII, 18.	*nomen dubium*
	retiarius	161	XVII, 11.	*Thiodina sylvana* (Hentz 1846)
	roseus	66	IX, 4; XVIII, 15.	*Habronattus decorus* (Blackwall 1846)
	rufus	60	VIII, 12; XVIII, 37.	*Phidippus cardinalis* (Hentz 1845)
	rupicola	61	VIII, 14.	*Platycryptus undatus* (De Geer 1778)
	sexpunctatus	54	VII, 14.	*Zygoballus sexpunctatus* (Hentz 1845)
	sinister	161	XVII, 12; XVIII, 38.	*nomen dubium*
	superciliosus	68	IX, 11; XVIII, 5.	*Tutelina elegans* (Hentz 1846)
	sylvanus	68	IX, 10; XVIII, 58, 108.	*Thiodina sylvana* (Hentz 1846)
	taenifolia	56	VIII, 5.	*Metacyrba taeniola* (Hentz 1846)
	tripunctatus	58	VIII, 8; XX, 6.; XVIII, 75, 106.	*Phidippus audax* (Hentz 1845)
	viridipes	66	IX, 5; XVIII, 64.	*Habronattus viridipes* (Hentz 1846)
	vittatus	64	VIII, 23.	*Maevia inclemens* (Walckenaer 1837)

		Page.	*Illustration.*	*Name (Platnick 2009)*
Epiblemum		11, 70		
	faustum	12, 71	IX, 17; XVIII, 59, 109; XX, 8.	*Salticus scenicus* (Clerck 1757)
	palmarum	12, 71	IX, 16.	*Hentzia palmarum* (Hentz 1832)

		Page.	*Illustration.*	*Name (Platnick 2009)*
Lyssomanes		48		*Lyssomanes* Hentz 1845
	viridis	49	VII, 3; XVIII, 91.	*Lyssomanes viridis* (Walckenaer 1837)

		Page.	*Illustration.*	*Name (Platnick 2009)*
Salticus	*scenicus*	72		*Salticus scenicus* (Clerck 1757)
Synemosyna		12, 72		*Synemosyna* Hentz 1846
	ephippiata	74	IX, 20; XVIII, 68; XIX, 114.	*Peckhamia scorpionia* (Hentz 1846)
	formica	73	IX, 18; XX, 9.	*Synemosyna formica* Hentz 1846
	noxiosa	161	XVII, 10.	*Synageles noxiosus* (Hentz 1850)
	picata	75	IX, 21.	*Peckhamia picata* (Hentz 1846)
	scorpionia	74	IX, 19; XVIII, 67.	*Peckhamia scorpionia* (Hentz 1846)