THE SPIDERS OF MARYLAND

by

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of the University of Maryland in partial
fulfillment of the requirements for the
degree of Doctor of Philosophy

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INTRODUCTION

The information presented in the following manuscript is the result of two and one half years of intensive collecting and study of spiders occurring in the state of Maryland. Several thousand specimens have been examined, catalogued, and placed in the collection of the Department of Entomology at the University of Maryland, College Park, Maryland.

Part I of this paper is devoted to a systematic list of the species of spiders occurring in the state. Included in the list are records of the distribution of the species throughout the state, and ecological notes gathered at the time the specimens were collected. References to the original descriptions of the species are also included along with references to more recent descriptions that are at this time more available to the public.

Part II is composed of a brief discussion of the general external anatomy, the biology and the collection and preservation of spiders. A large part of this section is devoted to the descriptions of ninety-nine common species. Analytical keys to the families and genera listed in this section, five plates of drawings, and a short glossary are also included.

Part I An Annotated List With Descriptions of Eight New Species

INTRODUCTION

The following list of species is composed mainly of records obtained by the author, although many were obtained through the efforts of friends, co-workers, and members of the author's family. Table 2 gives a list of the collectors with the initials used in the distributional data. A very few records were taken from available literature.

Alexander Petrunkevitch's latest system for the arrangement of families has been used with little modification, but for ease in handling, the genera have been listed alphabetically under the families, and the species under the genera. Subspecies and varieties have in all but one instance, the case of A. trifolium candicans McCook, been included under the discussion of the species. Eight new species collected in the state have been described and listed under their respective genus and family, and the types deposited in the collection at the American Museum of Natural History. Six new species have been listed simply as species, undescribed; they have been sent to specialists in whose hands they were already in manuscript, or being used in the revision of certain genera. Table 1 shows the distribution of the genera, species and varieties in the families.

The notes on the ecology of each species must in many cases be considered incomplete and in others inadequate due to the rare or uncommon occurrence of the spider in question. It is felt, however, that the information given will be of some

assistance to future arachnologists in pointing out situations in which certain species can be expected to occur.

Distributional records have been limited to a single record in each county in order to conserve space. In obtaining records on the distribution of the species each county was visited at least once by the author and his wife for the express purpose of collecting spiders. Additional material was obtained by the author whose work has taken him to many sections of the state. Certain counties show a preponderance of records as the author lives in Prince Georges County, vacations in the western end of the state, and worked one summer in Harford County. All records were made by the author unless otherwise designated.

TABLE 1. THE TAXONOMIC DISTRIBUTION OF MARYLAND SPIDERS

ORDER ARANEA

Suborder Mygalomorphae

Families	Genera	Species	Varieties	Recorded Species	New Species
Ctenizidae	2	2	0	0	0
Atypidae	1	1	0	1	0
Total	3	3	0	1	0

Suborder Dipneumonomorphae

Oecobiidae	1	2	0	0	0
Scytodidae	2	1	0	0	1
Pholcidae	2	2	0	0	0
Mimetidae	2	3	0	0	0
Uloboridae	2	2	0	0	0
Dictynidae	3	8	0	0	0
Micryphantidae	23	36	0	2	1
Amaurobiidae	2	4	0	0	0
Agelenidae	5	15	0	1	3
Pisauridae	3	9	1	1	0
Lycosidae	8	34	0	2	0
Oxyopidae	1	3	0	0	0
Theridiidae	18	36	0	0	3
Linyphiidae	12	24	0	0	2
Argiopidae	21	49	1	0	1
Thomisidae	12	32	0	4	0
Gnaphosidae	9	13	0	1	1
Clubionidae	9	21	0	0	2
Salticidae	25	45	0	0	0
Segestriidae	1	1	0	0	0
Dysderidae	1	1	0	0	0
Oonopidae	1	1	0	0	0
Hahniidae	2	4	0	0	0
Anyphaenidae	3	7	0	0	0
Total	148	353	2	11	14
Grand Total	151	356	2	12	14

TABLE 2. KEY TO THE INITIALS OF COLLECTORS

Name of Collector	Initials Used in Manuscript
Mr. Richard Ballinger	R. B.
Mr. Earl Beardsley	E. B.
Dr. William E. Bickley	W. E. B.
Mr. C. V. Bowers	C. V. B.
Dr. Ernest N. Cory	E. N. C.
Mr. Joseph Ditman	J. D.
Dr. Lewis P. Ditman	L. P. D.
Mr. Elmo Enzor	E. E.
Mr. John H. Fales	J. H. F.
Mr. John N. Hamlet	J. N. H.
Mr. Leonard Handen	L. H.
Miss Elizabeth Haviland	E. H.
Mrs. Edith Brechbill Hitz	E. B. H.
Dr. Walter Jeffers	W. J.
Mr. George Kieffer	G. K.
Mr. Paul Knight	P. K.
Dr. Robert A. Littleford	R. A. L.
Mrs. Elsie V. Muma (Mother)	E. V. M.
Mr. Harold E. Muma (Brother)	H. E. M.
Mr. Harold H. Muma (Father)	H. H. M.
Mrs. Katharine E. Muma (Wife)	K. E. M.
Mr. Robert W. Muma (Brother)	R. W. M.
Mr. E. G. Meyer	E. G. M.
Mr. John Oltman	J. O.
Mr. Irvin Raabe	I. R.
Mr. Earl Ruleman	E. R.
Mr. Irvin Schloss	I. S.
Mr. Rufus Vincent	R. V.
Mr. George Vogt	G. V.
Mr. Harvey O. Webster	H. O. W.

ORDER ARANEAE

Suborder Mygalomorphae

Family Ctenizidae

Genus Pachylomerides Strand

Pachylomerides carabivorus Atkinson
Original Description: Entomol. Americ., 1886, Vol. 2, p. 133. (Pachylomerus)
Available Description: Ann. Ent. Soc. Amer., 1929, Vol. 22, p. 511, pl. 1, figs. 1-9. (Pachylomerus)
Ecology: One young specimen believed to be this species ballooned onto the sifting cloth while the author was sifting hardwood forest litter in a ravine near Cumberland, Maryland.
Distribution: Allegany County, 1 yg. spm., Cumberland.

Genus Antrodiaetus Ausserer

Antrodiaetus shoemakeri Petrunkevitch
Original Description: Ann. Ent. Soc. Amer., 1925, Vol. 18, p. 318, pl. 20, figs. 3, 5, 6, 11. (Bachybothrium)
Available Description: Ibid.
Ecology: One male washed down into sunken porch during rain storm. Other workers record it from river banks.
Distribution: Prince Georges County, 1 male, College Park, M. H. M. and W. J.

Family Atypidae

Genus Atypus Latreille

Atypus bicolor Lucas
Original Description: Ann. Soc. Entom. France, 1836, Vol. 5, p. 213, pl. 5, fig. 5.
Available Description: Amer. Mus. Novit., 1936, No. 895, p. 13, figs. 7, 13, 24, 25, 28, and 29.
Ecology: The tubular webs of this species are built at the bases of trees, particularly young white oaks. They extend twelve or more inches into the ground and four to eight inches up the trees. Some webs may be built on vertical bands or large stones. All of the webs seen by the author have been in low sandy land, but others have been found by others on hill sides and crests.

Atypus niger Hentz
Original Description: Jour. Boston Soc. N. H., 1842, Vol. 4, p. 224, pl. 8, fig. 1.
Available Description: Bull. Amer. Mus. Nat. Hist., 1913,

Vol. 32, p. 259, figs. 1 and 1 c. (as milberti Walck.)
Ecology: Presumably the same as that of bicolor.
Distribution: Recorded from Maryland by A. Petrunkevitch and others in Catalogue of American Spiders, Part I.

Suborder Dipneumonomorphae

Family Oecobiidae

Genus Oecobius Lucas

Oecobius parietalis Hentz
Original Description: Jour. Boston Soc. N. H., 1850, Vol. 6, p. 35. (Thalmia)
Available Description: Trans. Conn. Acad. Sci., 1909, Vol. 14, p. 212, pl. 8, figs. 1 to 1 e. (Thalmia)
Ecology: Warm, dry, dusty buildings are the environs of this species. They are usually found on, under and around stacked newspapers, magazines or books.
Distribution: Prince Georges County, 1 female, College Park, William Heffner.

Oecobius texanus Bryant
Original Description: Psyche, 1936, Vol. 43, p. 87, figs. 8 a-8 e.
Available Description: Ibid.
Distribution: Prince Georges County, 1 female and young, College Park, M. H. M. and K. E. M.

Family Scytodidae

Genus Loxoceles Lowe

Loxoceles marylandicus New Species
Male--Total length 7.75 mms.; carapace length 3.75 mms., carapace width 3.00 mms.; length of abdomen 4.00 mms., width of abdomen 2.25 mms.

Carapace yellow darkening to brown on the cephalic part and across the eyes. Sternum yellow; labium and endites yellow at base and brown at apex. Legs yellow below and brown above. Palpi yellow except for tarsi which are reddish brown. All segments and appendages of the carapace have red margins and there is a suggestion of red in all brown markings. Abdomen dusky yellow above and below with the venter being slightly lighter. Spinnerets colored like abdomen.

Body typical, cephalothorax nearly as wide as long and greatly narrowed in front; clypeus slanting. Six eyes in three groups of two each forming a strongly recurved row; the eye groups separated by one and one half the diameter of the anterior median eyes. Brown hairs and spines on

thoracic part of carapace scattered irregularly, on cephalic part spines are arranged in seven parallel rows extending from the eyes back to the cervical grooves; carapace margined with groups of curved spines. Fang of the chelicerae opposed by a long stout spur; chelicerae fused for more than one third of their length from their base. Legs heavily spined with the anterior faces of the first femora being the most densely clothed. Abdomen densely clothed with long brown hairs. Anterior spinnerets longer than posterior spinnerets, colulus present. Tibia of palpus twice as long as wide; bulb of palpus wider than length of alveolus, embolus strongly bent.

The affinities of this species are not clear but is apparently close to Loxoceles reclusus Gertsch and Mulaik from which it differs in color and spination.

Type Locality--College Park, Maryland; male holotype collected on log April 9, 1941.

Genus Scytodes Latreille

Scytodes thoracica Latreille

Original Description: Tabl. Meth. des Insectes, 1804, p. 134.

Available Description: The Spider Book, Comstock, Revised 1940, p. 317.

Ecology: These spiders inhabit dark corners and similar conditions in warm, dry, dusty houses. In Maryland they may be found under boards and stones out of doors in summer months.

Distribution: Anne Arundel County, 1 yg. female, Gibson Island, E. E.; Baltimore City, 1 male, L. H.; Prince Georges County, 1 female, Berwyn, W. J.

Family Pholcidae

Genus Pholcus Walckenaer

Pholcus phalangioides Fuesslin

Original Description: Verz, Schweiz, Insekten, 1775, p. 60.

Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 20, pl. 6, figs. 2-2 a.

Ecology: The webs of this species are found in basements of houses, in outhouses, in milksheds and under greenhouse benches. They are large and loose tangled webs. The spider hangs upside down on the web, vibrating it rapidly when disturbed.

Distribution: Allegany County, several yg. females, Westernport; Calvert County, 1 female, Solomon's Island, R. A. L.; Harford County, several females, Churchville; Prince Georges County, 4 females, College Park, O. Reynolds.

Genus Spermophora Hentz

Spermophora meridionalis Hentz
Original Description: Amer. Jour. Sci. Arts, 1841, Vol. 41, p. 116.
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 31, pl. 6, fig. 3.
Ecology: This spider is found under the same conditions as P. phalangioides Fuesslin, but is more frequently found in basements and cellars. The web is an extremely loose tangled web.
Distribution: Allegany County, 2 females, Westernport; Calvert County, 1 female, R. A. L.; Prince Georges County, 1 female and 1 male, N. H. M. and K. E. M.

Family Mimetidae

Genus Ero Koch

Ero furcata Villiers
Original Description: Car. Linn. Ent., 1789, Vol. 4, p. 129.
Available Description: The Spider Book, Comstock, Revised, 1941, p. 533.
Ecology: This species is found under boards, stones and leaves in moist, shady woodland and near rivers and streams.
Distribution: Prince Georges County, 1 female, College Park, E. E.

Genus Mimetus Hentz

Mimetus notius Chamberlin
Original Description: Pomona College Jour. Ent. and Zool., 1923, Vol. 15, No. 1, p. 7, figs. 4 and 10.
Available Description: Ibid.
Ecology: These spiders are cannabalistic creeping slowly over low bushes and shrubs hunting their prey. Sometimes they may be found occupying the webs of other spiders, but as far as it is known they spin no webs.
Distribution: Charles County, 1 female, W. J.; Montgomery County, 1 male, Silver Spring; Wicomico County, 1 female, Salisbury, W. J.

Mimetus puritanus Chamberlin
Original Description: Pomona College Jour. Ent. and Zool., 1923, Vol. 15, No. 1, p. 5, figs. 1 and 6.
Available Description: Ibid.
Ecology: The environment of this species is much the same as that of notius except that the latter tends to favor stream banks and other moist situations more than this species.
Distribution: Harford County, 1 female, Churchville; Prince Georges County, 1 female, Berwyn, J. N. H.; Wicomico County, 1 male, Salisbury, W. J.

Family Uloboridae

Genus Hyptiotes Walckenaer

Hyptiotes cavatus Hentz
Original Description: Jour. Boston Soc. N. H., 1847, Vol. 5, p. 466. (Cyllopoda)
Available Description: Pop. Sci. Mo., 1875, p. 2.
Ecology: This spider builds a triangular web that appears to be a sector of an orb web. Webs are suspended between the dead twigs of conifers. Pine woodland and thickets are the environs of these spiders. They favor pine thickets on the tops and sides of hills.
Distribution: Anne Arundel County, 2 males, Annapolis; Cecil County, 1 yg. male, Elkton; Garrett County, 1 female and 1 male, Deep Creek Lake; Howard County, 2 females and 1 male, Skaggsville, L. P. D.; Prince Georges County, 2 females, College Park.

Genus Uloborus Latreille

Uloborus americanus Walckenaer
Original Description: Ins. Apt., 1842, Vol. 2, p. 229.
Available Description: Trans. Conn. Acad. Sci., 1888, Vol. 7, p. 454, pl. 11, fig. 1 to 1 e.
Ecology: The orb webs of this species contain a hackled band spiral thread and are found on cool moist shaded cliffs, walls and sometimes in cool woodland. Young spiders over winter under dead leaves.
Distribution: Caroline County, 1 female, American Corners; Montgomery County, 3 females, Great Falls; Prince Georges County, 1 male, College Park, E. B.; Somerset County, 1 male, Dividing Creek Swamp.

Family Dictynidae

Genus Dictyna Sundevall

Dictyna cruciata Emerton
Original Description: Trans. Conn. Acad. Sci., 1888, Vol. 7, p. 448, pl. 9, fig. 6-6 a.
Available Description: Ibid.
Ecology: These spiders over winter under dead leaves. In the summer they may be taken by sweeping tall grasses in low meadowland near woodland.
Distribution: Prince Georges County, 2 females, College Park.

Dictyna foliaceae Hentz
Original Description: Jour. Boston Soc. N. H., 1850, Vol. 6, p. 277.
Available Description: The Spider Book, Comstock, Revised 1940, p. 285, fig. 271.

Ecology: The webs of this species are built on curled leaves of low bushes and herbs. Specimens are most easily taken by sweeping open glades in woodland and taller plants in open fields.
Distribution: Anne Arundel County, 2 females, Bay Ridge, R. W. M.; Baltimore County, 4 females, Loch Raven; Cecil County, 1 female, Elkton; Garrett County, 1 female, Deep Creek Lake; Montgomery County, 1 female, Redland; Prince Georges County, 2 males, College Park; Somerset County, 1 female, Dividing Creek Swamp.

Dictyna formidolosa Gertsch and Ivie
Original Description: Proc. Acad. Nat. Sci. Phila., 1911, p. 44, pl. 34, fig. 9.
Available Description: Ibid.
This species was renamed from D. armata Bands (not Thorell) by Gertsch and Ivie, Amer. Mus. Novit., 1936, No. 858, p. 10.
Ecology: Only one specimen, a female, has been sifted from hardwood leaves in Maryland.
Distribution: Allegany County, 1 female, Cumberland.

Dictyna frondea Emerton
Original Description: Trans. Conn. Acad. Sci., 1888, Vol. 7, p. 449, pl. 9, fig. 9-9 e.
Available Description: Ibid.
Ecology: Same as that for D. foliaceae Hentz.
Distribution: Anne Arundel County, 1 male, Bay Ridge, R. W. M.; Garrett County, 1 male, Deep Creek Lake; Prince Georges County, 1 female, College Park; Washington County, 1 female, Sideling Hill, R. W. M.

Dictyna sublata Hentz
Original Description: Jour. Boston Soc. N. H., 1850, Vol. 6, p. 276.
Available Description: The Spider Book, Comstock, Revised 1940, p. 282, figs. 263, 264, 265 and 266.
Ecology: The web of this species, unlike most species of this genus, contains a retreat. They are found in the windows and corners of rooms in old houses and sometimes on trees and bushes out of doors.
Distribution: Cecil County, 1 male, Fair Hill; Garrett County, 1 male, Deep Creek Lake; Prince Georges County, 1 female, Bowie.

Dictyna volucripes Keyserling
Original Description: Verh. zool. bot. Ges. Wien., 1881, p. 286.
Available Description: Trans. Conn. Acad. Sci., 1888, Vol. 7, p. 446, pl. 9, fig. 2-2 f.
Ecology: This species is another foliage loving one that builds a web much like that of D. sublata near the tops of high weeds. Specimens are collected by sweeping open fields and woodlands.

Distribution: Montgomery County, 1 male, Silver Spring; Prince Georges County, 1 female and 2 males, Berwyn.

Genus Lathys Simon

Lathys foxi Marx
Original Description: Proc. Ent. Soc. Wash., 1890, Vol. 2, p. 35. (Prodalia)
Available Description: The Spider Book, Comstock, Revised 1940, p. 280, fig. 260.
Ecology: Two young females believed to be this species were sifted from hardwood leaves.
Distribution: Prince Georges County, 2 yg. females, College Park, K. E. M.

Genus Scotolathys Simon

Scotolathys pallidus Marx
Original Description: Proc. Ent. Soc. Wash., 1890, Vol. 2, p. 34. (Neophanes)
Available Description: The Spider Book Comstock, Revised 1940, p. 289, fig. 272.
Ecology: This species has been taken by sifting sphagnum moss and moist leaves.
Distribution: Prince Georges County, 1 male, College Park.

Family Micryphantidae

Genus Aduva Bishop and Crosby

Aduva flaveola Banks
Original Description: Proc. Acad. N. S. Phila., 1892, p. 39, pl. 4, fig. 15. (Tmeticus)
Available Description: Proc. Biol. Soc. of Wash., 1936, Vol. 49, p. 40, pl. 1, fig. 4-7.
Ecology: The one male collected in Maryland was taken sweeping meadowland.
Distribution: Prince Georges County, 1 male, Berwyn.

Genus Catabrithorax Chamberlin

Catabrithorax plumosus Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, p. 53, pl. 15, figs. 3-36. (Tmeticus)
Available Description: N. Y. State Mus. Bull., 1928, No. 278, p. 70.
Ecology: One male collected by sweeping grasses has been found in the state.
Distribution: Garrett County, 1 male, Deep Creek Lake.

Genus Ceraticelus Simon

Ceraticelus alticeps Fox

Original Description: Ent. Soc. Wash. Proc., 1891, Vol. 2, p. 45. (Erigone)
Available Description: N. Y. State Mus. Bul., 1925, No. 264, p. 13, pl. 2, figs. 10-14.
Ecology: Specimens of this species have been taken by sweeping herbage near streams and by sifting moderately dry hardwood leaves.
Distribution: Garrett County, 1 female, Swallow Falls; Prince Georges County, 1 female and 1 male, College Park; Somerset County, 1 male, Dividing Creek Swamp.

Ceraticelus atriceps Cambridge
Original Description: Zool. Soc. London Proc., 1874, p. 436, pl. 35, fig. 7. (Erigone)
Available Description: N. Y. State Mus. Bull., 1925, No. 264, p. 15, pl. 2, fig. 15, 16, and pl. 3, figs. 17-18.
Ecology: In Maryland this species has been collected by beating scrub pines and associated plants.
Distribution: Allegany County, 1 female, Cumberland; Garrett County, 1 female, Swallow Falls; Prince Georges County, 3 females, College Park.

Ceraticelus carinatus Emerton
Original Description: Trans. Conn. Acad. Sci., 1911, Vol. 16, p. 388, pl. 1, fig. 5. (Ceratinella)
Available Description: N. Y. State Mus. Bull., 1925, No. 264, p. 17, pl. 3, figs. 24-26.
Ecology: This species has been collected by sifting leaves over bogs and by sifting sphagnum moss in Maryland.
Distribution: Prince Georges County, 4 males and 9 females, College Park.

Ceraticelus creolus Chamberlin
Original Description: N. Y. State Mus. Bull., 1925, No. 264, p. 19, pl. 4, figs. 27-31.
Available Description: Ibid.
Ecology: This species is taken by beating over swampy woodland and by sifting moss.
Distribution: Cecil County, 2 females, Elkton; Garrett County, 1 female, Deep Creek Lake; Prince Georges County, 1 male, College Park, H. B.; Somerset County, 1 male, Princess Anne.

Ceraticelus emertoni Cambridge
Original Description: Zool. Soc. London Proc., 1874, p. 435, p. 35, fig. 6. (Erigone)
Available Description: N. Y. State Mus. Bull., 1925, p. 20, pl. 4, figs. 32-36 and p. 12, fig. 112.
Ecology: In the summer this species can be taken by beating low herbage. It over winters under leaves in moist woodland.
Distribution: Allegany County, 1 female, Dans Rock, H. E. M.; Anne Arundel County, 1 female, Gibson Island; Garrett County, 1 male, Deep Creek Lake; Harford County, 1 male, Churchville;

Montgomery County, 1 male and 1 female, Silver Spring; Prince Georges County, 3 females, Branchville, E. B.

Ceraticelus fissiceps Cambridge
Original Description: Zool. Soc. London Proc., 1874, p. 438, pl. 55, fig. 8. (Erigone)
Available Description: N. Y. State Mus. Bull., 1925, p. 22, pl. 5, figs. 39-43 and pl. 12, fig. 111.
Ecology: The only specimens of this species were collected while sweeping herbage around a spring.
Distribution: Garrett County, 11 females and 6 males, Deep Creek Lake.

Ceraticelus limnologicus Crosby and Bishop
Original Description: N. Y. State Mus. Bull., 1925, p. 32, pl. 7, figs. 61-65.
Available Description: Ibid.
Ecology: This species is taken in moist situations by sweeping, sifting leaves or sifting moss.
Distribution: Prince Georges County, 2 males and 1 female, Riverdale, H. S. Barber; Worcester County, 2 females, Snow Hill.

Ceraticelus micropalpis Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 36, pl. 8, fig. 5. (Ceratinella)
Available Description: N. Y. State Mus. Bull., 1925, No. 264, p. 33, pl. 7, figs. 66-71.
Ecology: These spiders hibernate in moderately dry hardwood leaves where they may be taken by sifting.
Distribution: Allegany County, 1 male and 1 female, Cumberland; Caroline County, 1 male, Goldsboro.

Ceraticelus minutus Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 36, pl. 8, fig. 4. (Ceratinella)
Available Description: N. Y. State Mus. Bull., 1925, No. 264, p. 34, pl. 8, figs. 72-78.
Ecology: Same as for C. Micropalpis Em.
Distribution: Prince Georges County, 2 males, College Park, R. W. M.

Ceraticelus paschalis Crosby and Bishop
Original Description: N. Y. State Mus. Bull., 1925, No. 264, p. 40, pl. 9, figs. 92-94.
Available Description: Ibid.
Ecology: One female collected sifting sphagnum moss has been taken in Maryland.
Distribution: Prince Georges County, 1 female, Branchville.

Ceraticelus pygmaeus Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 24, pl. 7, fig. 4. (Ceratinella)
Available Description: N. Y. State Mus. Bull., 1925, No.

264, p. 41, pl. 10, figs. 95-97.
Ecology: Specimens of this species have been collected entirely by sifting leaves in moist woodland.
Distribution: Prince Georges County, 1 male and 1 female, Branchville, K. E. M.; Washington County, 1 male and 1 female, Delamere, R. W. M.

Genus Ceratinops Banks

Ceratinops carolina Banks
Original Description: Proc. Phila. Acad. N. S., 1911, p. 447, pl. 34, fig. 2. (Diplocephalus)
Available Description: Ann. Ent. Soc. Amer., 1933, Vol. 26, p. 111, pl. 1, figs. 6-9.
Ecology: One pair of spiders belonging to this species were taken while sweeping herbage near a stream bank.
Distribution: Garrett County, 1 male and 1 female, Swallow Falls.

Genus Ceratinopsidis Bishop and Crosby

Ceratinopsidis formosa Banks
Original Description: Proc. Phila. Acad. N. S., 1892, p. 34, pl. 5, fig. 35. (Cornicularia)
Available Description: Jour. N. Y. Ent. Soc., 1930, Vol. 38, p. 29, figs. 39-42.
Ecology: These spiders may be collected by beating bushes and low trees. In early fall they may be found on the ground under leaves and rubble.
Distribution: Garrett County, 1 male and 4 females, Deep Creek Lake; Howard County, 1 female, Skaggsville, J. and L. P. D.; Prince Georges County, 1 female, College Park, E. E.

Genus Ceratinopsis Emerton

Ceratinopsis interpres Cambridge
Original Description: Proc. London Zool. Soc., 1874, p. 430, pl. 55, fig. 1. (Erigone)
Available Description: Jour. N. Y. Ent. Soc., 1930, Vol. 38, p. 19, figs. 14-17.
Ecology: In the summer these spiders may be taken by beating low bushes and shrubs; in the winter they may be sifted from leaves in moist woodland.
Distribution: Garrett County, 1 female, Deep Creek Lake; Prince Georges County, 1 male and 1 female, College Park; Washington County, 2 females and 1 male, Sideling Hill, R. W. M.; Worcester County, 5 females and 4 males, Snow Hill.

Ceratinopsis purpurescens Keyserling
Original Description: Spinn. Am. Therid., 1886, Vol. 2, p. 187, pl. 17, fig. 248.
Available Description: Jour. N. Y. Ent. Soc., 1930, Vol.

38, p. 25, figs. 31-35.
Ecology: Same as that of C. interpres Cambridge.
Distribution: Calbert County, 1 female, Lusby; Caroline County, 2 males and 2 females, Ridgely, G. V. and L. P. D.; Montgomery County, 1 female, Great Falls; Prince Georges County, 5 males and 1 female, Berwyn.

Genus Cornicularia Menge

Cornicularia communis Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 41, pl. 11, fig. 3.
Available Description: Jour. N. Y. Ent. Soc., 1931, Vol. 39, p. 366, figs. 24-26.
Ecology: Of the two males collected in Maryland, one was taken sweeping herbage, the other sifting leaves.
Distribution: Garrett County, 1 yg. male, Deep Creek Lake; Prince Georges County, 1 male, College Park.

Cornicularia pallida Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 42, pl. 11, fig. 7.
Available Description: Jour. N. Y. Ent. Soc., 1931, Vol. 39, p. 372, figs. 43-48.
Ecology: One female of this species was taken while sifting hardwood leaves.
Distribution: Allegany County, 1 female, Cumberland.

Genus Dicymbium Menge

Dicymbium elongatum Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 44, pl. 10, fig. 2. (Lophomma)
Available Description: Jour. N. Y. Ent. Soc., 1938, Vol. 46, p. 68, figs. 25-30.
Ecology: Two males of this species were sifted from sphagnum moss.
Distribution: Prince Georges County, 2 males, Branchville.

Genus Eperigone Crosby and Bishop

Eperigone maculata Banks
Original Description: Phil. Acad. Sci. Proc., 1892, p. 41, pl. 4, fig. 23. (Tmeticus)
Available Description: N. Y. State Mus. Bull., 1928, No. 278, p. 84, pl. 10, fig. 127-131.
Ecology: This species has been taken in Maryland by sweeping low grassland and by sifting leaves over swampy land.
Distribution: Prince Georges County, 1 male and 1 female, College Park; Washington County, 1 female, Clearspring, R. W. M.

Eperigone simplex Emerton

Original Description: Trans. Conn. Acad. Sci., 1913, Vol. 18, p. 216, pl. 2, fig. 3. (Tmeticus)
Available Description: N. Y. State Mus. Bull., 1928, No. 278, p. 58, pl. 11, fig. 136-138.
Ecology: One male of this species was sifted from sphagnum moss.
Distribution: Prince Georges County, 1 male, Branchville.

Eperigone trilobata Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 53, pl. 15, fig. 4. (Tmeticus)
Available Description: N. Y. State Mus. Bull., 1928, No. 278, p. 61, pl. 11, figs. 143-146.
Ecology: One male of this species was taken on the ground.
Distribution: Prince Georges County, 1 male, College Park.

Genus Epiceraticelus Crosby and Bishop

Epiceraticelus fluvialis Crosby and Bishop
Original Description: Jour. N. Y. Ent. Soc., 1931, Vol. 39, p. 380, figs. 76-79.
Available Description: Ibid.
Ecology: In late winter or early spring specimens may be sifted from moderately dry leaves. They may be taken by sweeping open fields in summer.
Distribution: Caroline County, 1 male, Goldsboro; Prince Georges County, 1 male and 1 female, College Park, K. E. M.

Genus Eridantes Bishop and Crosby

Eridantes erigonoides Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 50, pl. 14, fig. 3. (Lophocarenum)
Available Description: Ann. Ent. Soc. Amer., 1933, Vol. 26, p. 146, pl. 6, figs. 150-158.
Ecology: Specimens have been taken in houses, sweeping grasses, sifting leaves and under boards.
Distribution: Cecil County, 1 female, Elkton; Prince Georges County, 1 male, College Park, K. E. M.

Genus Erigone Audoin

Erigone autumnalis Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 58, pl. 17, fig. 8.
Available Description: N. Y. State Mus. Bull., 1928, No. 278, p. 19, pl. 2, figs. 18-20.
Ecology: These spiders may be seen in late summer and early fall "ballooning" on threads of silk. They may be collected in numbers at this time by sweeping tall grasses or sifting moderately dry leaves.
Distribution: Allegany County, 1 male, Cumberland, M. H. and H. E. M.; Prince Georges County, 1 male and 1 female, College Park.

Erigone tenuipalpus Emerton
Original Description: Trans. Conn. Acad. Sci., 1911, Vol. 16, p. 395, pl. 3, fig. 4. (Tmeticus)
Available Description: N. Y. State Mus. Bull., 1928, No. 278, p. 41. pl. 7, fig. 71-74.
Ecology: Of the two males collected in Maryland, one was taken sifting sphagnum moss, the other sweeping grasses.
Distribution: Prince Georges County, 1 male E. B.

Genus Gonatium Menge

Gonatium rubens Blackwall
Original Description: Long. Edinb. Phil. Mag., 1833, No. 3, p. 189. (Neriene)
Available Description: Jour. N. Y. Ent. Soc., 1935, Vol. 43, p. 255, figs. 44-47.
Ecology: Specimens collected in Maryland were taken under boards.
Distribution: Allegany County, 1 male, Twiggtown, H. E. M.; Anne Arundel County, 1 female, Annapolis; Montgomery County, 1 female and 1 male, Cabin John, Shoemaker.

Genus Grammonota Emerton

Grammonota inornata Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 39, pl. 10, fig. 5.
Available Description: Ibid.
Ecology: Two males have been taken in houses in Maryland.
Distribution: Prince Georges County, 1 male, College Park, W. J.

Grammonota ornata Cambridge
Original Description: Proc. Zool. Soc. London, 1875, p. 395. (Erigone)
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 39, pl. 10, fig. 3.
Ecology: This species may be collected by sweeping swamp grasses and sedges.
Distribution: Allegany County, 7 males and 13 females, Cumberland, R. W. M.; Caroline County, 1 female.

Genus Hypselistes Simon

Hypselistes florens Cambridge
Original Description: Proc. Zool. Soc. London, 1875, p. 403. (Erigone)
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 46, pl. 12, fig. 3. (Lophocarenum)
Ecology: Supposedly this species is found on bushes in the summer.
Distribution: Recorded by Fox from Maryland, 8 females.

Genus Origanates Crosby and Bishop

Origanates rostratus Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 49, pl. 14, fig. 1. (Lophocarenum)
Available Description: Ann. Ent. Soc. Amer., 1933, Vol. 26, p. 154, pl. 7, figs. 181-185.
Ecology: All specimens taken in Maryland have been sifted from leaves in moist woodland.
Distribution: Prince Georges County, 2 males and 2 females, College Park.

Genus Pelecopsidis Crosby and Bishop

Pelecopsidis frontalis Banks
Original Description: Jour. N. Y. Ent. Soc., 1904, Vol. 2, p. 111, pl. 5, fig. 1. (Lophocarenum)
Available Description: Jour. N. Y. Ent. Soc., 1935, Vol. 43, p. 31, figs. 1-6.
Ecology: Only two females have been collected sifting leaves in Maryland.
Distribution: Prince Georges County, 2 females, College Park.

Genus Sciastes Bishop and Crosby

Sciastes sp.
Undescribed
Ecology: Common in sphagnum moss in one locality in Maryland.
Distribution: Prince Georges County, Several males and females, Branchville.

Genus Scylaceus Bishop and Crosby

Scylaceus pallidus Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 55, pl. 16, fig. 4. (Tmeticus)
Available Description: Jour. N. Y. Ent. Soc., 1938, Vol. 46, p. 91, figs. 77-80.
Ecology: Specimens may be taken in winter by sifting leaves in moist to moderately dry woodland.
Distribution: Allegany County, 1 male and 1 female, Cumberland; Prince Georges County, 5 males and 6 females, College Park.

Genus Scyletria Bishop and Crosby

Scyletria jona Bishop and Crosby
Original Description: Jour. N. Y. Ent. Soc., 1938, Vol. 46, p. 90, figs. 75-76.
Available Description: Ibid.
Ecology: A pair of spiders belonging to this species were sifted from moderately dry leaves in Maryland.

Distribution: Prince Georges County, 1 male and 1 female, Lanham.

Genus Souessoula Crosby and Bishop

Souessoula parva Banks
Original Description: Proc. Ent. Soc. Wash., 1899, Vol. 4, p. 192. (Tmeticus)
Available Description: Ibid.
Ecology: Several specimens have been sifted from moderately dry leaves in the state.
Distribution: Prince Georges County, 1 male and 1 female, College Park.

Genus Walckenaera Blackwall

Walckenaera vigilax Blackwall
Original Description: Ann. Mag. N. H., 1853, Vol. 11, p. 244, fig. 120. (Neriene)
Available Description: Jour. N. Y. Ent. Soc., 1931, Vol. 39, p. 378, figs. 71-75.
Ecology: Several specimens have been collected in Maryland by sifting sphagnum moss and moist leaves, and by sweeping grasses in marshy woodland.
Distribution: Montgomery County, 1 male, Silver Spring; Prince Georges County, 1 male and 2 females, Branchville.

Genus Wubana Chamberlin

Wubana drassoides Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 72, pl. 23, fig. 5. (Bolyphantes)
Available Description: Jour. N. Y. Ent. Soc., 1934, Vol. 42, p. 215, pl. 14, figs. 1, 4, 8, and 9.
Ecology: Recorded species, no environs mentioned.
Distribution: Recorded by Emerton from Montgomery County, 1 female (the allotype), Cabin John.

Family Amaurobiidae

Genus Amaurobius Koch

Amaurobius bennetti Blackwall
Original Description: Ann. Mag. N. H., 1846, Vol. 17, p. 41. (Ciniflo)
Available Description: The Spider Book, Comstock, Revised 1940, p. 276, figs. 255, 256, and 257.
Ecology: The tangled webs plus the tubular retreats are built in the cracks of cliffs, under boards and stones and under loose bark. This species has not been found east of the mountainous counties.
Distribution: Allegany County, 1 female, Dans Rock, H. E. M.; Garrett County, 1 female, Swallow Falls.

Amaurobius ferox Walckenaer
Original Description: Ins. Apt., 1837, Vol. 1, p. 606.
Available Description: The Spider Book, Comstock, Revised 1940, p. 277, figs. 258-259.
Ecology: This species is found under the same conditions as A. bennetti Blackwall, but it has not been taken from the western counties.
Distribution: Prince Georges County, 5 females and 2 males, College Park, E. E.

Genus Titanoeca Thorell

Titanoeca americana Emerton
Original Description: Trans. Conn. Acad. Sci., 1888, Vol. 7, p. 452, pl. 10, fig. 4.
Available Description: Ibid.
Ecology: Several specimens believed to be this species have been collected in their webs under stones and logs in moderately dry situations.
Distribution: Allegany County, 2 yg. males, Twiggtown, H. E. E.

Titanoeca brunnea Emerton
Original Description: Trans. Conn. Acad. Sci., 1888, Vol. 7, p. 453, pl. 10, fig. 5.
Available Description: Ibid.
Ecology: One male found under a log.
Distribution: Prince Georges County, 1 male, College Park.

Family Agelenidae

Genus Agelenopsis Geibel

Agelenopsis emertoni Chamberlin and Ivie
Original Description: Bull. Univ. Utah, Biol. Series, 1935, No. 2., p. 33, pl. 14, fig. 110.
Available Description: Ann. Ent. Soc. Amer., 1941, Vol. 34, p. 593, figs. 5, 28, and 30.
Ecology: The typical funnel webs are built under stones and boards, on the side of houses and trees and in other places where funnel web spiders build. This species is usually slightly smaller than other species of this genus.
Distribution: Allegany County, 1 female, Rocky Gap; Anne Arundel County, 2 females, Parole; Prince Georges County, 1 female and 1 male, College Park.

Agelenopsis kastoni Chamberlin and Ivie
Original Description: Ann. Ent. Soc. Amer., 1941, Vol. 34, p. 591, figs. 2, 18, and 35.
Available Description: Ibid.
Ecology: Presumably same as other species of the genus.
Distribution: Reported from Maryland by W. J. Gertsch.

Agelenopsis naevia Walckenaer
Original Description: Tabl. Aran., 1805, p. 51. (Agelena)
Available Description: Ann. Ent. Soc. Amer., 1941, Vol. 34, p. 597, figs. 9, 25, and 36.
Ecology: Webs of this species are often built in small shrubs as well as in places designated for A. emertoni Chamberlin and Ivie. This species is probably the largest of this genus in Maryland.
Distribution: Baltimore County, 1 female, North Point, I. R.; Baltimore City, 1 female, I. R.; Garrett County, 1 male, Oakland, E. N. C.; Montgomery County, 1 female, Four Corners; Prince Georges County, 1 female, Berwyn, W. J.

Agelenopsis pennsylvanica Koch
Original Description: Die Arachniden, 1843, Vol. 10, p. 111, pl. 354, fig. 828. (Agelena)
Available Description: Ann. Ent. Soc. Amer., 1941, Vol. 34, p. 589, figs. 1, 16 and 40.
Ecology: Webs are found in places where other species build but seem to build more frequently near buildings.
Distribution: Baltimore City, 1 female, I. S.; Carroll County, 1 male, Westminster, R. V.; Garrett County, 1 female, Deep Creek Lake; Prince Georges County, 1 female, Laurel, L. P. D.; Washington County, 1 female, Hagerstown, Chamberlin and Ivie.

Agelenopsis utahana Chamberlin and Ivie
Original Description: Bull. Univ. Utah, Biol. Series, 1933, No. 2, p. 43, figs. 113-115. (Agelena)
Available Description: Ann. Ent. Soc. Amer., 1941, Vol. 34, p. 601, figs. 12, 23, and 38.
Ecology: This species builds its webs in much the same places as A. pennsylvanica Koch.
Distribution: Allegany County, 1 female, Cresaptown; Garrett County, 1 male, Deep Creek Lake.

Genus Cicurina Menge

Cicurina arcuata Keyserling
Original Description: Verh. zool.-bot. Ges. Wien, 1887, Vol. 37, p. 460, pl. 6, fig. 25.
Available Description: Trans. Conn. Acad. Sci., 1889, Vol. 8, p. 195, pl. 7, figs. 2a and 7.
Ecology: These spiders may be found in their webs under stones and logs.
Distribution: Allegany County, 4 males and 1 female, Rocky Gap; Garrett County, 1 male, Deep Creek Lake; Prince Georges County, College Park, Recorded by Chamberlin and Ivie.

Cicurina brevis Emerton
Original Description: Trans. Conn. Acad. Sci., 1889, Vol. 8, p. 30, pl. 8, fig. 5. (Tegenaria)
Available Description: Amer. Mus. Novit., 1936, No. 850,

p. 8, figs. 3, 5, and 13 a-d.
Ecology: Same as that of C. arcuata Keyserling.
Distribution: Allegany County, 1 female, Dans Rock, H. L. M.; Garrett County, 1 female, Swallow Falls; Prince Georges County, 2 females, College Park, L. E.

Cicurina minima Chamberlin and Ivie
Original Description: Bull. Univ. Utah, Biol. Series, 1940, Vol. 5, No. 9, p. 31, pl. 3, fig. 19 and pl. 9, fig. 70.
Available Description: Ibid.
Ecology: One female believed to be this species was taken under a board.
Distribution: Prince Georges County, 1 female, College Park, L. E.

Cicurina pallida Keyserling
Original Description: Verh. zool.-bot. Ges Wien, 1887, Vol. 37, p. 462, pl. 6, fig. 26.
Available Description: Amer. Mus. Novit., 1936, No. 50, p. 7, fig. 12.
Ecology: Same as that of C. arcuata Keyserling.
Distribution: Garrett County, 1 female, Deep Creek Lake, K. E. K.; Prince Georges County, 1 male, College Park, J. O.

Cicurina placida Banks
Original Description: Proc. Acad. Phila., 1892, p. 27, pl. 1, fig. 77.
Available Description: Amer. Mus. Novit., 1936, No. 850, p. 10, figs. 1, 9, and 11.
Ecology: Same as that for C. arcuata Keyserling.
Distribution: Allegany County, 1 female and 1 male, Dans Rock; Montgomery County, 1 male, Great Falls; Prince Georges County, 1 female, College Park.

Genus Coras Simon

Coras angularis New Species
Male--Total length 8.75 mms.; carapace length 4.50 mms.; carapace width 3.25 mms.; length of abdomen 4.25 mms.; width of abdomen 2.75 mms.

Carapace light yellow, darker on cephalic part and over eyes; dark grey radiating bands typical of genus present but not extending to margins on thoracic part forming a broad light marginal band. Sternum brownish grey with a thin yellow longitudinal line running from the anterior margin to just behind the middle. Labium and endites dusky brown with labium somewhat darker. Chelicerae dusky brown; palpi and legs light yellowish grey spotted with dark grey. Dorsum of abdomen mottled with dark grey and light yellow, the most uniform marks being a dark basal median lanceolate band extending one half the length of the abdomen behind which is a series of chevrons. Venter mottled with two light parallel lines extending from epigastric furrow to

spinnerets; spinnerets dusky grey.

Body slight, legs moderately long and chelicerae quite robust. Anterior eye row lightly procurved, posterior row moderately so; median ocular quadrangle longer than wide and slightly narrowed in front. Clypeus little wider than the diameter of the anterior median eyes. Posterior spinnerets almost twice as long as anterior pair; they are short and well separated, one is acute the other rounded at the tip. Leg spination typical.

Female--Total length 11.25 mms.; carapace length 5.75 mms.; carapace width 3.75 mms.; length of abdomen 5.50 mms.; width of abdomen 4.00 mms.

Color and form much the same as that of male except the colors are more distinct, the body more robust and the legs shorter and stouter. Median groove of epigynum is short, wide and indistinct posteriorly.

This species is closely related to Coras medicinalis Hentz from which it may be separated by details of the palpus and epigynum.

Type Locality--Swallow Falls State Park, Maryland; male holotype collected under bark, August 24, 1942. Female allotype collected under bark, August 23, 1942, at Deep Creek Lake near Swanton, Maryland.

Coras crescentis New Species

Female--Total length 11.00 mms.; carapace length 4.75 mms.; carapace width 3.50 mms.; length of abdomen 6.25 mms.; width of abdomen 4.00 mms.

Carapace yellow darkening to light brown on cephalic part, radiating bands on thoracic part brown and not extending to lateral and posterior margins. Sternum reddish brown with a light median longitudinal band that is indistinct near the middle. Chelicerae dark reddish brown. Labium and endites brown. Legs yellowish brown with two dark spots below on each femur; metatarsi of legs darker than other segments. Palpi yellowish brown with apical segments dark. Abdomen mottled greyish brown and yellow with a dark median longitudinal herringbone stripe. Venter with a wide dark band extending from epigastric furrow to spinnerets; there are light irregular spots near the central part of this band. Spinnerets are light brown.

Body robust, legs moderately long and stout, and chelicerae robust. Anterior eye row very lightly procurved, posterior row moderately so; median ocular area longer than wide and narrowed in front. Clypeus wider than diameter of anterior median eyes. Spination of legs typical of genus. Epigynum with opening near anterior margin, median longitudinal groove absent.

This species is similar to Coras lamellosus Keyserling from which it may be distinguished by the smaller size, more distinct abdominal pattern, and the absence of a median plate covering the opening of the epigynum.

Type Locality--Dans Rock near Vale Summit, Maryland; female holotype collected under a board, November 23, 1941.

Coras fidelis Banks
Original Description: Proc. Acad. N. S. Phila., 1892, p. 24. (Coelotes)
Available Description: The Spider Book, Comstock, Revised, 1940, p. 610, figs. 676-677.
Ecology: These spiders are found in funnel webs with retreats that lead under stones, boards, logs or loose bark.
Distribution: Allegany County, 2 females, Rocky Gap; Garrett County, 2 females, Great Falls; Prince Georges County, 1 female, Berwyn, W. J.

Coras lamellosus Keyserling
Original Description: Verh. zool.-bot. Ges. Wien, 1887, p. 469. (Coelotes)
Available Description: Ibid.
Ecology: This species has been found under bark in one locality in Maryland.
Distribution: Garrett County, 1 male and 1 female, Deep Creek Lake.

Coras medicinalis Hentz
Original Description: Jour. Bost. Soc. N. S., 1847, Vol. 5, p. 462. (Tegenaria)
Available Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 27, pl. 7, fig. 1.
Ecology: Same as that for C. fidelis Banks.
Distribution: Garrett County, 1 male, Salt Rock Creek; Harford County, 1 female, Churchville; Montgomery County, 1 female, Silver Spring; Prince Georges County, 1 female, College Park, E. B.

Coras parallelis New Species
Female--Total length 11.50 mms.; carapace length 5.25 mms.; carapace width 4.00 mms.; length of abdomen 6.25 mms.; width of abdomen 4.00 mms.

Carapace yellow darkening on the cephalic part, radiating lines on thoracic part not extending to lateral and posterior margins. Chelicerae reddish brown. Sternum brown with light median longitudinal band that is indistinct. Labium and endites brown. Legs yellowish brown spotted and banded with dark greyish brown. Palpi yellow with terminal segments brown. Abdomen mottled grey and light yellow with one or two indistinct light chevrons just over the light brown spinnerets. Venter light with several irregular dark spots.

Body, legs and chelicerae typical of the genus. Anterior eye row lightly procurved, posterior row moderately so; median ocular area slightly longer than wide and narrowed in front. Clypeus somewhat longer than the diameter of the anterior median eyes with the latter

somewhat smaller than typical for the genus. Median groove of the epigynum narrow and long.

This species is close to Coras medicinalis Hentz from which it may be distinguished by the deeper epigynal groove.

Type Locality--Princess Anne, Maryland; female holotype collected on ground, October 29, 1941, by W. Barb.

Genus Tegenaria Latreille

Tegenaria derhami Scopoli

Original Description: Ent. Carmoli, 1763, p. 400.
Available Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 29, pl. 7, fig. 6.
Ecology: The webs of this species are built in dark corners of basements, barns, sheds, etc.
Distribution: Allegany County, 2 females, Rocky Gap, H. E. M.; Harford County, 1 male and 1 female, Churchville; Prince Georges County, 1 male, College Park.

Genus Wadotes Chamberlin

Wadotes calcaratus Keyserling

Original Description: Verh. zool.-bot. Ges. Wien, 1887, p. 450. (Tegenaria)
Available Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 28, pl. 7, fig. 2.
Ecology: These spiders build their webs under stones, boards and occasionally in unfinished basements.
Distribution: Allegany County, 2 females, Cumberland; Harford County, 3 yg. females, Churchville; Montgomery County, 1 female, Great Falls.

Wadotes hybridus Emerton

Original Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 29, pl. 7, fig. 4. (Coelotes)
Available Description: Ibid.
Ecology: Same as that for W. calcaratus Keyserling. None of these spiders have been found in buildings.
Distribution: Allegany County, 4 females, Cumberland.

Family Pisauridae

Genus Dolomedes Latreille

Dolomedes pinicola Hentz

Original Description: Bost. Jour. Nat. Hist., 1850, Vol. 6, p. 287, pl. 10, fig. 14. (Micrommata)
Available Description: N. Y. State Mus. Bull., 1924,

No. 252, p. 60, pl. 35.
Ecology: The only specimen collected in Maryland, a young female, was collected by beating small trees.
Distribution: Caroline County, 1 yg. female, Ridgely, L. P. D. and G. V.

Dolomedes scriptus Hentz
Original Description: Bost. Jour. Nat. Hist., 1845, Vol. 5, p. 189, pl. 16, fig. 1.
Available Description: N. Y. State Mus. Bull., 1924, No. 252, p. 44, pl. 22, pl. 24, fig. 2.
Ecology: This species is found in moist situations and near open water, beneath stones, under bark, near docks, and in and around boathouses.
Distribution: Garrett County, 1 female, Deep Creek Lake, H. H. M.; Prince Georges County, 2 males and 1 female, W. J.

Dolomedes atriatus Geibel
Original Description: Zeit. Ges. Natur., 1869, Vol. 33, p. 252.
Available Description: N. Y. State Mus. Bull., 1924, No. 252, p. 57, pl. 33, fig. 1, pl. 34, fig. 2.
Ecology: One young female, believed to be this species, was found on a rocky beach in the western part of the state.
Distribution: Garrett County, 1 yg. female, Deep Creek Lake.

Dolomedes tenebrosus Hentz
Original Description: Bost. Jour. Nat. Hist., 1843, Vol. 4, p. 396, pl. 19, figs. 10-13.
Available Description: N. Y. State Mus. Bull., 1924, No. 252, p. 40, pl. 20, pl. 21, figs. 2-5.
Ecology: This species is found in the basements of houses, on the banks of streams, near open water, beneath stones, under bark, near docks, and in and around boathouses.
Distribution: Montgomery County, 1 female, Silver Spring, J. Fales; Prince Georges County, 1 male, Berwyn, W. J.

Dolomedes triton sexpunctatus Hentz

Original Description: Jour. Bost. Soc. N. H., 1845, Vol. 5, p. 191, pl. 16, figs. 5-6. (Dolomedes sexpunctatus)
Available Description: N. Y. State Mus. Bull., 1924, No. 252, p. 52, pl. 29, figs. 1-2.
Ecology: This subspecies of D. triton triton Walckenaer found among the grasses and reeds along the shores of rivers, streams, ponds, lakes and other bodies of water. When disturbed it runs across the water and dives beneath the surface.
Distribution: Baltimore City, 1 yg. female, I. R.; Harford County, 1 female and 1 male, Churchville; Kent County, 1 yg. female, Chestertown, I. R.; Prince Georges County, 2 yg. females, Berwyn, N. J.

Dolomedes urinator Hentz
Original Description: Bost. Jour. N. H., 1845, Vol. 5, p. 190, pl. 16, fig. 3.
Available Description: N. Y. State Mus. Bull., 1924, No. 252, p. 36, pl. 16, pl. 33, fig. 3.
Ecology: All specimens of this species have been found on water or near water.
Distribution: Baltimore City, 1 female, I. R.; Prince Georges County, 2 females, Berwyn.

Dolomedes vittatus Walckenaer
Original Description: Hist. Nat. Ins. Apt., 1837, Vol. 1, p. 347.
Available Description: N. Y. State Mus. Bull., 1924, No. 252, p. 47, pl. 24, fig. 3, pl. 28.
Ecology: This species is found in the same situations as D. urinator Hentz.
Distribution: Recorded from Cabin John and Cedar Grove by Dr. Bishop in his Revision of the Pisauridae of the United States.

Genus Pisaurina Simon

Pisaurina brevipes Emerton
Original Description: Trans. Conn. Acad. Sci., 1911, Vol. 16, p. 400, pl. 4, figs. 6-6 a. (Pisaura)
Available Description: N. Y. State Mus. Bull., 1924, No. 252, p. 26, pl. 7, fig. 2 and pl. 33, fig. 5.
Ecology: Several young females of this species were taken sweeping grasses over swampy woodland.
Distribution: Somerset County, 4 yg. females, Princess Anne.

Pisaurina mira Walckenaer
Original Description: Hist. Nat. Ins. Apt., 1837, Vol. 1, p. 357. (Dolomedes)
Available Description: N. Y. State Mus. Bull., 1924, No. 252, p. 23, pl. 5, fig. 1, pl. 8, fig. 3, pl. 9, figs. 2-5, pl. 11.
Ecology: This species is common on low bushes, shrubs and herbs. It is found in both moist and moderately dry situa-

tions. The nursery webs are built in the tops of low bushes and weeds.

One young female taken beating bushes on the edge of a stream near Ridgely, Maryland by L. P. Ditman and G. Vogt, appears to be the variety P. mira var. subinflata Hentz.

Distribution: Allegany County, 1 female, Cumberland, E. V. M.; Anne Arundel County, 1 yg. male, Parole; Caroline County, 1 yg. female, Ridgely, L. P. D. and G. V.; Prince Georges County, 1 male, College Park.

Genus Thanatidius Simon

Thanatidius dubius Hentz

Original Description: Bost. Jour. N. H., 1847, Vol. 5, p. 448, pl. 23, fig. 11. (Thomisus)

Available Description: N. Y. State Mus. Bull., 1924, No. 252, p. 17, pl. 1, pl. 33, fig. 2.

Ecology: The only specimens taken in Maryland were collected beside water.

Distribution: Calvert County, 1 male, Solomon's Island, R. A. L.; Prince Georges County, 1 female, College Park.

Family Lycosidae

Genus Arctosa Koch

Arctosa funerea Hentz

Original Description: Jour. Bost. Soc. N. H., 1844, Vol. 4, p. 393, pl. 18, fig. 11. (Lycosa)

Available Description: Proc. Acad. Nat. Sci. Phila., 1908, p. 287, pl. 10, fig. 3.

Ecology: This small wolf spider is found under trash, stones, boards and logs on the ground.

Distribution: Baltimore City, 1 male, I. S.; Calvert County, 1 yg. male, Solomon's Island, R. A. L.; Harford County, 1 male, Churchville; Prince Georges County, 1 male and 1 female, Berwyn, N. J.

Arctosa littoralis Hentz

Original Description: Jour. Bost. Soc. N. A., 1844, Vol. 4, p. 388, pl. 17, fig. 9. (Lycosa)

Available Description: Proc. Calif. Acad. Sci., 1924, Vol. 12, pp. 673-674.

Ecology: The light tan color of this species makes it hard to collect from the sandy beaches that are its habitat. They may be found under debris on hot days, but run over the sands when the weather is cool.

Distribution: Calvert County, 1 male and 3 yg. females, Scientist's Cliffs; Worcester County, 1 yg. female, Ocean City, L. P. D.

Arctosa virgo Chamberlin

Original Description: Bull. Mus. Comp. Zool., 1925, Vol. 67, p. 226. (Allocosa)
Available Description: Ibid.
Ecology: The habits and habitat of this recorded species are not known to the author.
Distribution: This species is recorded from Baltimore, Maryland by Dr. W. J. Gertsch, Amer. Mus. Novit., 1934, No. 693, p. 7.

Genus Geolycosa Montgomery

Geolycosa pikei Marx
Original Description: Amer. Nat., 1881, p. 398. (Lycosa)
Available Description: Amer. Mid. Nat., 1942, p. 20, figs. 27, 28, 45, 62, 63, 79, 89, 103, and 113.
Ecology: This spider is a burrowing species. The burrows are from twelve to eighteen inches deep and are dug in sand dunes and in flat sandy areas. Several young specimens believed to be this species have been taken in the state.
Distribution: Prince Georges County, 2 females, Berwyn; Worcester County, 5 yg. spms., Ocean City.

Geolycosa turricola Treat
Original Description: Harpers Monthly, 1880, pp. 710-718 and 857-861. (Tarentula)
Available Description: Amer. Mid. Nat., 1942, p. 26, figs. 13, 14, 42, 53, 54, 87, and 116.
Ecology: Not known to the author, recorded.
Distribution: Recorded by W. J. Gertsch from Baltimore City, 1 male; Anne Arundel County, 2 females.

Genus Lycosa Latreille

Lycosa aspersa Hentz
Original Description: Jour. Bost. Soc. N. H., 1844, Vol. 4, p. 389.
Available Description: Proc. Acad. Nat. Sci. Phila., 1908, p. 236.
Ecology: This species has been found in fields and grassland near woodland. The burrow of this species has never been seen by the author. All specimens collected in Maryland have been females taken over recently plowed or excavated fields.
Distribution: Garrett County, 1 female, Deep Creek Lake; Harford County, 1 female, Churchville; Prince Georges County, 1 female, Lanham.

Lycosa avara Keyserling
Original Description: Verh. zool.-bot. Ges. Wien., 1876, p. 661.
Available Description: Trans. Conn. Acad. Sci., 1909, Vol. 14, p. 202, pl. 7, fig. 2.
Ecology: This species is found under trash and boards on the ground. The single male collected was taken in a

building.
Distribution: Allegany County, 1 female, Cumberland; Montgomery County, 1 female, Silver Spring, H. B. M.; Prince Georges County, 1 male, College Park, G. V.

Lycosa avida Walckenaer
Original Description: Ins. Apt., 1837, Vol. 1, p. 322.
Available Description: Trans. Conn. Acad. Sci., 1885, Vol. 6, p. 489, pl. 47, fig. 6.
Ecology: This species builds very shallow pits or burrows under boards and stones in open fields and on beaches.
Distribution: Calvert County, 1 female, Scientist's Cliffs; Cecil County, 1 yg. male and 1 female, Elkton; Garrett County, 1 female, Deep Creek Lake; Harford County, 1 female, Churchville; Prince Georges County, 1 female, Berwyn.

Lycosa baltimoreana Keyserling
Original Description: Verh. zool.-bot. Ges. Wien, 1876, p. 632.
Available Description: Trans. Conn. Acad. Sci., 1909, Vol. 14, p. 203, pl. 7, fig. 1.
Ecology: One female was found under a log in Maryland, and a male was taken at Rehoboth Beach, Delaware under litter on the beach by L. P. Ditman and G. B. Vogt.
Distribution: Harford County, 1 female, Churchville.

Lycosa carolinensis Walckenaer
Original Description: Ins. Apt., 1837, Vol. 1, p. 285.
Available Description: Trans. Conn. Acad. Sci., 1885, Vol. 4, p. 486, pl. 47, fig. 1.
Ecology: All specimens collected in Maryland have been taken in or near houses.
Distribution: Prince Georges County, 1 female, College Park, G. V.

Lycosa frondicola Emerton
Original Description: Trans. Conn. Acad. Sci., 1885, Vol. 6, p. 484, pl. 46, fig. 3.
Available Description: Proc. Acad. Nat. Sci. Phila., 1908, p. 258.
Ecology: Only one specimen of this species has been taken in Maryland. It was found under a stone about half way up a mountain in the western part of the state.
Distribution: Allegany County, 1 female, Rocky Gap, H. E. M.

Lycosa helluo Walckenaer
Original Description: Ins. Apt., 1837, Vol. 1, p. 337.
Available Description: Proc. Acad. Nat. Hist. Phila., 1908, p. 226.
Ecology: This species is common in Maryland under boards, stones and trash in fields, woods and near buildings.
Distribution: Allegany County, 1 female, Cumberland; Baltimore County, 1 female, Avalon, I. S.; Caroline County, 1 female, Goldsboro; Cecil County, 1 female, Elkton; Garrett

County, 1 female, Deep Creek Lake; Harford County, 1 female, Churchville; Howard County, 1 female, Ellicott City; Montgomery County, 1 female, Bethesda; Prince Georges County, 1 female, Berwyn, E. B.; Somerset County, 1 female, Princess Anne; Worcester County, 1 male, Pocomoke City.

Lycosa nigruarata Montgomery
Original Description: Proc. Acad. Nat. Sci. Phila., 1902, p. 564.
Available Description: Trans. Conn. Acad. Sci., 1885, Vol. 6, p. 485, pl. 46, fig. 6. (kochi)
Ecology: These interesting wolf spiders are found under leaves, trash and logs in and near woodland.
Distribution: Anne Arundel County, 1 male and 2 females, Gibson Island; Charles County, 1 female, Waldorf; Garrett County, 3 males, Deep Creek Lake, H. E. and K. E. M.; Prince Georges County, 1 female, Berwyn, W. J.

Lycosa punctulata Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., Vol. 4, p. 390.
Available Description: Trans. Conn. Acad. Sci., 1909, Vol. 14, p. 206, pl. 7, fig. 4.
Ecology: This species is found among the grass, weeds and rubble in open fields.
Distribution: Allegany County, 1 female, Cumberland; Caroline County, 1 female; Howard County, 1 female, Glenelg; Prince Georges County, 1 male, College Park, R. B.

Lycosa rabida Walckenaer
Original Description: Ins. Apt., 1837, Vol. 1, p. 320.
Available Description: Proc. Acad. Nat. Sci. Phila., 1908, p. 253.
Ecology: The habitat of this species is the same as that of L. punctulata Hentz.
Distribution: Anne Arundel County, 1 female, Galesville, H. O. W.; Baltimore County, 1 female, North Point, I. R.; Cecil County, 1 yg. female, Elkton; Garrett County, 1 male, Deep Creek Lake; Harford County, 2 females, Churchville; Montgomery County, 1 female, Silver Spring, E. B. H.; Prince Georges County, 1 female, W. J.

Lycosa riparia Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1844, Vol. 4, p. 389.
Available Description: Proc. Acad. Nat. Sci. Phila., 1908, p. 235.
Ecology: These spiders are found under boards, stones, etc. on the ground.
Distribution: Prince Georges County, 1 male, College Park.

Lycosa sepulchralis Montgomery
Original Description: Proc. Acad. Nat. Sci. Phila., 1902, p. 543.

Available Description: Ibid.
Ecology: This species is found under boards, stones and logs, on dry hillsides and occasionally in houses.
Distribution: Anne Arundel County, 1 female, Bay Ridge; Cecil County, 1 female, North East; Howard County, 1 female, Ellicott City, G. V.; Kent County, 1 male, Pleasant Hill; Prince Georges County, 1 female, Berwyn, E. B.

Lycosa shenandoa Chamberlin and Ivie
Original Description: Bull. Univ. Utah, 1942, Vol. 32, p. 37, fig. 78. (Trochosa)
Available Description: Ibid.
Ecology: Two females of this species have been found under boards near water in Maryland.
Distribution: Calvert County, 1 female, Scientist's Cliffs; Prince Georges County, 1 female, Laurel, L. P. D.

Genus Pardosa Koch

Pardosa distincta Blackwall
Original Description: Anns. and Mag. N. H., London, 1846, Vol. 17, p. 32. (Lycosa)
Available Description: Trans. Conn. Acad. Sci., 1885, Vol. 6, p. 496, pl. 49, fig. 3.
Ecology: Six females of this species were taken under logs in an open field.
Distribution: Garrett County, 6 females, Deep Creek Lake, M. H., K. E. and H. E. M.

Pardosa floridana Banks
Original Description: Jour. N. Y. Ent. Soc., 1896, Vol. 4, p. 192.
Available Description: Proc. Acad. Nat. Sci. Phila., 1904, p. 136, pl. 7, fig. 1, pl. 8, fig. 15.
Ecology: Maryland specimens of this species have been taken in marshy open fields under boards.
Distribution: Calvert County, 1 male, Solomon's Island, R. A. L.; Worcester County, 1 female, Pocomoke City.

Pardosa lapidicina Emerton
Original Description: Trans. Conn. Acad. Sci., 1885, Vol. 6, p. 494, pl. 48, figs. 5-5 e.
Available Description: Ibid.
Ecology: All specimens in Maryland were taken under stones on a rocky beach.
Distribution: Garrett County, 4 females, Deep Creek Lake.

Pardosa milvina Hentz
Original Description: Jour. Bost. Soc. N. H., 1844, Vol. 4, p. 392, pl. 18, fig. 8.
Available Description: The Spider Book, Comstock, Revised 1940, p. 662, fig. 731 (i) and fig. 732 (e).
Ecology: The species is very common in low swampy fields where it hides under boards, logs, stones or litter. When

disturbed they run rapidly over the ground with hopping movements.
Distribution: Allegany County, 1 female, Dans Rock, H. E. M.; Baltimore County, 1 female, Towson; Calvert County, 1 female, Solomon's Island, M. A. L.; Cecil County, 1 female, Fair Hill; Frederick County, 2 females, Lewistown, W. J.; Garrett County, 2 females and 3 males, Deep Creek Lake; Harford County, 2 males and 6 females, Churchville; Montgomery County, 1 female, Pennyfield; Prince Georges County, 2 males, Berwyn, W. J.; Queen Annes County, 1 female, Matapeake; Worcester County, 1 male, Pocomoke City.

Pardosa moesta Banks
Original Description: Proc. Acad. N. S. Phila., 1892, p. 70, pl. 3, fig. 44.
Available Description: Ibid.
Ecology: One female of this species was taken sweeping an open field.
Distribution: Garrett County, 1 female, Deep Creek Lake.

Pardosa saxatilis Hentz
Original Description: Jour. Bost. Soc. N. H., 1844, Vol. 4, p. 392, pl. 18, figs. 9 and 10.
Available Description: Bull. Amer. Mus. N. H., 1913, Vol. 32, p. 258, pl. 48, fig. 7.
Ecology: Same as that of P. milvina Hentz.
Distribution: Cecil County, 1 female, Elkton; Garrett County, 2 females, Deep Creek Lake; Somerset County, 1 male, Princess Anne.

Pardosa xerampelina keyserling
Original Description: Verh. zool.-bot. Ges. Wien., 1876, p. 662.
Available Description: Proc. Acad. Nat. Sci. Phila., 1908, p. 198.
Ecology: One female of this species was found under a stone on a rocky beach.
Distribution: Garrett County, 1 female, Deep Creek Lake.

Genus Pirata Sundevall

Pirata insularis Emerton
Original Description: Trans. Conn. Acad. Sci., 1885, Vol. 6, p. 492, pl. 48, fig. 8.
Available Description: Proc. Acad. Nat. Sci. Phila., 1908, p. 309.
Ecology: This species is found under logs and stones in swampy fields and near streams.
Distribution: Cecil County, 2 females, Elkton; Harford County, 4 females, Churchville; Montgomery County, 3 females, Great Falls; Prince Georges County, 1 female, Branchville.

Pirata marxi Stone
Original Description: Proc. Acad. Nat. Sci. Phila., 1900,

p. 429.
Available Description: Ibid.
Ecology: Three females of this species were collected under boards in moist open woodland.
Distribution: Prince Georges County, 3 females, College Park, E. E.

Pirata maculata Emerton
Original Description: Trans. Conn. Acad. Sci., 1909, Vol. 14, p. 209, pl. 6, fig. 10.
Available Description: Ibid.
Ecology: This species is found under litter in moist situations.
Distribution: Anne Arundel County, 2 females, Bay Ridge; Frederick County, 1 female, Lewistown; Prince Georges County, 1 female, Berwyn, N. J.

Pirata minuta Emerton
Original Description: Trans. Conn. Acad. Sci., 1885, Vol. 6, p. 493, pl. 48, fig. 10.
Available Description: Proc. Acad. Nat. Sci. Phila., 1908, p. 301.
Ecology: This tiny spider is found under stones, boards and logs, on beaches and low open fields.
Distribution: Cecil County, 2 females, Pleasant Hill; Garrett County, 3 females, Deep Creek Lake, K. E. M.; Harford County, 1 female, Churchville; Prince Georges County, 1 female, College Park, K. E. M.

Pirata montana Emerton
Original Description: Trans. Conn. Acad. Sci., 1885, Vol. 6, p. 493, pl. 49, fig. 5.
Available Description: Proc. Acad. Nat. Sci. Phila., 1908, p. 301.
Ecology: Same as that of P. minuta Em.
Distribution: Frederick County, 1 female, Lewistown; Garrett County, 4 females, Deep Creek Lake; Wicomico County, 1 female, Salisbury, N. J.

Pirata sedentarius Montgomery
Original Description: Proc. Acad. Nat. Sci. Phila., 1904, p. 312.
Available Description: Ibid.
Ecology: The single male collected in Maryland was found under bark.
Distribution: Prince Georges County, 1 male, College Park.

Genus Schizocosa Chamberlin

Schizocosa bilineata Emerton
Original Description: Trans. Conn. Acad. Sci., 1885, Vol. 6, p. 496, pl. 49, fig. 4. (Pardosa)
Available Description: Proc. Acad. Nat. Sci. Phila., 1908, p. 218.

Ecology: All specimens collected in Maryland were taken on the fringes of woodland near water.
Distribution: Allegany County, 3 females, Cumberland; Montgomery, 1 male, Great Falls.

Schizocosa crassipes Walckenaer
Original Description: Ins. Apt., 1837, p. 323. (Lycosa)
Available Description: Bull. Amer. Mus. Nat. Hist., 1911, Vol. 29, p. 578.
Ecology: This species is found under logs, stones, etc. in fields and open woodland.
Distribution: Anne Arundel County, 4 females, Parole; Baltimore County, 1 female, Loch Raven; Cecil County, 1 male, Pleasant Hill; Charles County, 1 female, Indian Head, I. S.; Garrett County, 6 females, Deep Creek Lake; Harford County, 5 females, Churchville; Prince Georges County, 1 male, Berwyn, W. J.

Schizocosa duplex Chamberlin
Original Description: Bull. Mus. Comp. Zool., 1924, Vol. 67, p. 231.
Available Description: Am. Mus. Novit., 1937, No. 909, p. 17, fig. 18.
Ecology: Only one male found under a board in open woodland has been identified from Maryland by the author.
Distribution: Montgomery County, 1 male recorded from Forestville by I. Fox; Prince Georges County, 1 male, Berwyn, E. B.

Schizocosa saltatrix Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1844, Vol. 4, p. 387. (Lycosa)
Available Description: Proc. Acad. Nat. Sci. Phila., 1908, p. 215, pl. 16, figs. 2 and 4.
Ecology: Same as for S. crassipes Walck.
Distribution: Harford County, 5 females, Churchville; Prince Georges County, 2 males, College Park.

Genus Trabea Simon

Trabea aurantiaca Emerton
Original Description: Trans. Conn. Acad. Sci., 1885, Vol. 6, p. 499, pl. 49, fig. 6. (Aulonia)
Available Description: Proc. Acad. Nat. Sci. Phila., 1909, p. 296.
Ecology: One female was taken under a board on a sawdust pile.
Distribution: Anne Arundel County, 1 female, Parole.

Family Oxyopidae

Genus Oxyopes Latreille

Oxyopes aglossus Chamberlin
Original Description: Ent. News, 1929, Vol. 40, p. 17, figs. 1-2.
Available Description: Ibid.
Ecology: Two females have been collected in Maryland by beating brush.
Distribution: Calvert County, 1 female, Solomon's Island, R. A. L.; Prince Georges County, 1 female, College Park.

Oxyopes salticus Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1845, Vol. 5, p. 196.
Available Description: The Spider Book, Comstock, Revised 1940, p. 668.
Ecology: This species and the following species run rapidly over the foliage of small trees, shrubs, and herbs from which they may be collected by beating. They are captured occasionally by mud dauber wasps, O. scalaris Hentz being taken more frequently.
Distribution: Allegany County, sev. spms., Cresaptown; Anne Arundel County, 2 males, Bay Ridge, R. W. M.; Calvert County, 1 female, North Beach; Frederick County, 1 male and 1 female, Thurmont; Montgomery County, sev. spms., Silver Spring; Prince Georges County, sev. spms., College Park; Saint Marys County, 1 female, Great Mills; Somerset County, 2 males, Princess Anne; Washington County, 1 male, Keedysville, W. J.; Wicomico County, 1 male, Salisbury, W. J.

Oxyopes scalaris Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1845, Vol. 5, p. 196.
Available Description: The Spider Book, Comstock, Revised 1940, p. 668.
Ecology: Same as for O. salticus Hentz which see.
Distribution: Charles County, 9 females and 8 males, W. J.; Frederick County, 1 female, Thurmont; Prince Georges County, 4 yg. females, College Park; Wicomico County, 10 females and 4 males, Salisbury, W. J.

Family Theridiidae

Genus Ancylorrhanis Simon

Ancylorrhanis hirsutum Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 29, pl. 6, fig. 6. (Pholcomma)
Available Description: Ibid.
Ecology: Specimens belonging to this species have been sifted from moist hardwood leaves in Maryland.
Distribution: Prince Georges County, 2 females and 1 male, College Park, K. E. M.

Genus Asagena Sundevall

Asagena americana Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 23, pl. 4, fig. 6.
Available Description: The Spider Book, Comstock, Revised 1940, p. 379, fig. 369.
Ecology: These spiders are found under boards and stones near buildings and in moderately dry leaves. The steel blue mud dauber collects them frequently.
Distribution: Garrett County, 4 females, Deep Creek Lake; Prince Georges County, 1 female, Berwyn, W. J.; Washington County, 1 yg. female, Clearspring, R. W. M.

Genus Conopistha Karsch

Conopistha cancellata Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1850, Vol. 6, p. 278. (Theridium)
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 26, pl. 5, fig. 4. (Lasaeola)
Ecology: This species is a commensal species and is found in the webs of other spiders, principally orb-webs and funnel webs.
Distribution: Dorchester County, 1 yg. male, Sharpstown; Montgomery County, 2 males, Great Falls; Prince Georges County, 1 yg. female, Branchville; Wicomico County, 3 females, Salisbury, W. J.

Conopistha ocula New Species
Female--Total length 4.75 mms.; carapace length 1.75 mms.; carapace width 1.00 mms.; length of abdomen 3.00 mms.; width of abdomen 2.50 mms.; height of abdomen 5.50 mms.

Carapace reticulate brown, darker at the margins and on the median ocular area, with three short longitudinal black bands near the middle on the posterior margins and with a pair of S-shaped red brown bands on either side of the median furrow. Legs dark brown marked with elongate reticulate areas. Sternum, labium, endites and palpi dark brown. Chelicerae colored like the carapace and lighter at their bases. Abdomen reticulate brown, somewhat lighter than carapace; front face of abdominal hump marked with two light indistinct longitudinal bands that end in two eye-shaped light areas. Six irregular light areas surround the apex of the abdominal hump. Spinnerets dark brown; venter brown with two light areas just in front of spinnerets.

Shape of carapace typical of genus; anterior median eyes situated on broad tubercle extending over strongly convex clypeus. Both eye rows lightly procurved with median ocular area wider than long and slightly narrowed in front. Eyes of posterior row subequal in size, anterior median eyes larger than anterior laterals. Sternum truncate with undulate lateral margins; labium wider than long and fused to sternum. Abdomen bluntly triangular having greater height than length or width with the apex rounded.

Spinnerets very short. Openings of epigynum triangular in outline and separated by slightly less than the width of one opening.

This species is related to Conopistha globosa Keyserling from which it may be distinguished by the roughly triangular form of the abdomen and the triangular openings of the epigynum.

Type Locality--Salisbury, Maryland; female holotype collected on web, June 26, 1942 by W. Jeffers.

Conopistha trigona Hentz

Original Description: Jour. Bost. Soc. Nat. Hist., 1850, Vol. 6, p. 280. (Theridion)

Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 23, pl. 5, fig. 1.

Ecology: The same as for C. cancellata Hentz except that this species is found more frequently in the webs of M. labyrinthea Hentz.

Distribution: Anne Arundel County, 2 yg. males, Annapolis; Garrett County, 1 female, Swallow Falls; Prince Georges County, 1 male, College Park, K. E. M.; Somerset County, 2 yg. females, Dividing Creek Swamp; Wicomico County, 1 female, Salisbury, W. J.

Genus Crustulina Menge

Crustulina altera Gertsch and Archer

Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 20, pl. 4, fig. 2.

Available Description: Amer. Mus. Novit., 1942, No. 1171, p. 1, fig. 9.

The species Crustulina (Steatoda) guttata of Emerton is distinct from Crustulina (Theridion) guttata of Wider, hence the new name proposed by Drs. W. J. Gertsch and A. F. Archer.

Ecology: All specimens taken in Maryland were sifted from moderately dry leaves.

Distribution: Caroline County, 3 males and 2 females, Goldsboro; Prince Georges County, 1 female, College Park, K. E. M.

Genus Dipoena Thorell

Dipoena dorsata New Species

Female--Total length 1.75 mms.; carapace length .75 mms.; carapace width .50 mms.; length of abdomen 1.00 mms.; width of abdomen .75 mms.

Carapace dusky yellow with a darker reticulum extending in all directions from the median furrow. Sternum, labium and endites dusky yellow. Legs and palpi dark yellow with the tibiae and metatarsi of the legs having wide dark rings at the base. Abdomen brownish black, finely spotted and streaked with trey. Spinnerets yellow.

Form typical of genus; carapace broadly oval in outline,

somewhat narrower in front than behind and arched high at the eye region; abdomen oval in outline and gently flattened dorsally. Anterior eye row moderately procurved, posterior row strongly so; anterior median eyes twice the diameter of the anterior laterals in size, situated on tubercle over convex clypeus. Median ocular area wider than long and narrowed behind. Clypeus three times as wide as the anterior median eyes. Legs moderately long and robust. Carapace naked except for a few spines on clypeus; legs moderately spined; abdomen clothed with many short dark spines above and long spines below. Opening of epigynum oval in outline with a thickened ridge on posterior margin.
Type Locality--Churchville, Maryland, female holotype collected under board, June 28, 1941. Immature female paratype collected sifting leaves, College Park, Maryland, October 19, 1941. Immature female paratype collected sifting leaves, College Park, Maryland, April 19, 1941.

Dipoena niger Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 21, pl. 4, fig. 4.
Available Description: Ibid.
Ecology: Specimens of this species can be collected by beating brush or sweeping herbage.
Distribution: Caroline County, 1 yg. female, Ridgely, L. P. D. and O. V.; Calvert County, 1 female, Lusby; Garrett County, 1 yg. female, Deep Creek Lake; Prince Georges County, 1 female, College Park.

Genus Enoplognatha Pavesi

Enoplognatha marmorata Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1850, Vol. 6, p. 273. (Theridium)
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 20, pl. 4, fig. 3. (Steatoda)
Ecology: This species builds a tangled web beneath stones and boards near buildings.
Distribution: Prince Georges County, 1 male, College Park, H. O. W.; Wicomico County, 8 females, Salisbury, W. J.

Enoplognatha puritana Chamberlin
Original Description: Can. Ent., 1936, Vol. 43, p. 6.
Available Description: Ibid.
Ecology: This species is found in the same situations as E. marmorata Hentz, and appears occasionally in moderately dry to wet leaves.
Distribution: Prince Georges County, 1 female, Berwyn; Washington County, 1 yg. male and 1 yg. female, Delamere, R. W. M.

Genus Episinus Latreille

Episinus amoenus Banks

Original Description: Proc. Acad. Nat. Sci. Phila., 1911, p. 445, pl. 35, figs. 13 and 15.
Available Description: The Spider Book, Comstock, Revised 1940, p. 357, figs. 335-336.
Ecology: This spider runs about on the foliage of low bushes and trees from which it may be collected by sweeping.
Distribution: Dorchester County, 1 male, Sharptown; Prince Georges County, 1 female, College Park, E. B.

Genus Euryopis Menge

Europis argentea Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 27, pl. 5, fig. 5.
Available Description: The Spider Book, Comstock, Revised 1940, p. 359.
Ecology: This species has been taken by sifting leaves and beating brush in Maryland.
Distribution: Allegany County, 1 yg. male, Cumberland; Somerset County, 1 male, Princess Anne.

Euryopis funebris Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1850, Vol. 6, p. 276. (Theridium)
Available Description: The Spider Book, Comstock, Revised 1940, p. 359, fig. 338.
Ecology: Specimens of this species have been collected sifting leaves, under litter and on the sides of buildings.
Distribution: Anne Arundel County, 1 yg. male, Annapolis; Caroline County, 1 yg. female, Goldsboro; Prince Georges County, 1 male, Berwyn, W. J.

Genus Latrodectus Walckenaer

Latrodectus mactans Fabricius
Original Description: Ent. Syst., 1793, Vol. 2, p. 410. (Araneus)
Available Description: Insect Life, Riley and Howard, 1888. Vol. 1, p. 204.
Ecology: The bite of this spider, the black widow is poisonous. It is found in greenhouses, barns and sheds and under boards, stones and litter. The steel blue mud dauber collects this spider for provisioning its nest.
Distribution: Anne Arundel County, 1 yg. female, Bay Ridge; Baltimore County, 2 females, Mills, Gibson; Calvert County, 1 female, Solomon's Island, R. A. L., Caroline County, 1 female, Matapeake; Somerset County, 1 yg. female, Princess Anne; Wicomico County, sev. spms., Salisbury, W. J.; Worcester County, 1 female, Pocomoke City.

Genus Paidisca Crosby and Bishop

Paidisca marxi Crosby
Original Description : Can. Ent., 1906, p. 309, (Histagonia)

Available Description: Ibid.
Ecology: Two males, one of which has been misplaced in the authors collection, have been sifted from leaves in Maryland.
Distribution: Prince Georges County, 1 male, College Park, K. E. M.

Genus Romphaea Koch

Romphaea fictilium Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1850, Vol. 6, p. 282. (Theridium)
Available Description: The Spider Book, Comstock, Revised 1940, p. 352, fig. 326.
Ecology: One female was captured by sweeping swamp grasses.
Distribution: Prince Georges County, 1 female, Branchville, K. E. M.

Genus Robertus Cambridge

Robertus pumilus Emerton
Original Description: Trans. Conn. Acad. Sci., 1909, Vol. 14, p. 183, pl. 1, fig. 2. (Pedanostethus)
Available Description: Ibid.
Ecology: This spider is found under rocks and boards.
Distribution: Garrett County, 1 male, Deep Creek Lake; Prince Georges County, 1 female, College Park.

Robertus riparius Keyserling
Original Description: Die Spinn. Amer., 1886, Vol. 2, No. 2, p. 265. (Pedanostethus)
Available Description: Trans. Conn. Acad. Sci., 1909, Vol. 14, pl. 1, fig. 1.
Ecology: This species may be sifted from moderately dry leaves and is also found under stones and boards.
Distribution: Prince Georges County, 3 females, College Park.

Genus Spintharus Hentz

Spintharus flavidus Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1850, Vol. 6, p. 284.
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 28, pl. 5, fig. 7.
Ecology: These spiders hang beneath the leaves of small trees and bushes. Specimens may be collected by beating.
Distribution: Anne Arundel County, 3 females and 1 male, Annapolis; Charles County, 2 females and 1 male, Fort Washington; Garrett County, 1 female, Salt Rock Creek; Howard County, 7 females, Skaggsville, L. P. D.; Prince Georges County, 1 female, College Park, G. V.; Somerset County, 2 females, Princess Anne; Washington County, 1 female, Town Hill.

Genus Steatoda Sundevall

Steatoda borealis Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1850, Vol. 6, p. 274. (Theridium)
Available Description: The Spider Book, Comstock, Revised 1940, p. 375, fig. 363.
Ecology: This species is found under boards, stones and rubbish on loosely tangled webs. In late fall specimens may be found under loose bark on dead trees.
Distribution: Allegany County, 1 male, Cumberland; Anne Arundel County, 1 male, Gibson Island; Carroll County, 4 yg. females, Westminster, R. V.; Garrett County, 1 female, Deep Creek Lake; Harford County, 2 females, Churchville; Montgomery County, 1 female, Silver Spring; Prince Georges County, 2 males, Berwyn, W. J.; St. Marys County, 1 male, Abell.

Teutana triangulosa Walckenaer
Original Description: Faune Paris, 1802, Vol. 2, p. 207. (Steatoda)
Available Description: The Spider Book, Comstock, Revised 1940, p. 376, figs. 364-365.
Ecology: The tangled webs of these spiders may be found in buildings, particularly in basements or cellars and in greenhouses. Webs are usually built on the floor or at lower angles of boxes, windows etc.
Distribution: Allegany County, 1 female, Cumberland; Baltimore City, 1 yg. female, L. H.; Montgomery County, 1 female, Silver Spring, W. J.; Prince Georges County, 1 male, College Park, A. E. M.

Genus Theridion Walckenaer

Theridion australe Banks
Original Description: Proc. Ent. Soc. Wash., 1890, Vol. 4, p. 191. (Theridium)
Available Description: Ibid.
Ecology: Most of the specimens of this species have been taken from the nest of the steel blue mud dauber. One female was collected under a board.
Distribution: Queen Annes County, 1 female, Matapeake; Wicomico County, 25 females and 1 male, Salisbury, W. J.

Theridion differens Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 9, pl. 1, fig. 1. (Theridium)
Available Description: The Spider Book, Comstock, Revised 1940, p. 376, figs. 351-352.
Ecology: The delicate webs of this species are found on low bushes and herbs. They contain silken retreats. The spiders may best be collected by sweeping.
Distribution: Anne Arundel County, 1 female, Annapolis; Baltimore County, 1 female, St. James Corner; Calvert County,

1 male, Scientist's Cliffs; Caroline County, 1 male, American Corners; Garrett County, 1 female, Deep Creek Lake; Harford County, 1 male, Churchville; Howard County, 1 female, Skaggsville, L. P. D.; Montgomery County, 1 male, Silver Spring; Prince Goerges County, 1 male, Riverdale; Wicomico County, 1 male, Salisbury.

Theridion frondeum Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1850, Vol. 6, p. 277. (Theridium)
Available Description: The Spider Book, Comstock, Revised 1940, p. 362, figs. 346-347.
Ecology: These spiders build their webs on bushes and weeds in open woodland and fields. Females and egg sacs are often seen in a curled leaf at one side of the web.
Distribution: Anne Arundel County, 1 female, Bay Ridge; Cecil County, 1 male and 2 females, Elkton; Garrett County, 2 females, Deep Creek Lake; Harford County, 1 female, Churchville; Montgomery County, 1 female, Redland; Prince Georges County, 3 females and 2 males, College Park.

Theridion globosum Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1850, Vol. 6, p. 279. (Theridium)
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 14, pl. 2, fig. 3. (Theridium)
Ecology: All males taken in Maryland were collected sweeping low herbage in open woodland; one female was found under loose bark on a dead tree.
Distribution: Prince Georges County, 1 male, College Park, I. S.

Theridion kentuckyense Keyserling
Original Description: Die Spinn. Amer., 1884, Vol. 2, No. 1, p. 78. (Theridium)
Available Description: Trans. Conn. Acad. Sci., 1909, Vol. 14, p. 180, pl. 1, fig. 6. (Theridium)
Ecology: Males of this species have been collected by sweeping grasses, females both out of doors and inside houses.
Distribution: Caroline County, 1 male, Ridgely, L. P. D.; Garrett County, 1 male, Swallow Falls; Prince Georges County, 1 female, College Park, J. G. Mutziger; Wicomico County, 1 female, Salisbury, W. J.

Theridion murarium Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 11, pl. 1, fig. 5. (Theridium)
Available Description: The Spider Book, Comstock, Revised 1940, p. 368, fig. 353.
Ecology: Same as that of T. differens Emerton.
Distribution: Anne Arundel County, 1 female, Annapolis; Calvert County, 3 males, Solomon's Island, R. A. L.; Caroline County, 3 males, Ridgely, L. P. D. and G. V.; Garrett County, 1 female, Deep Creek Lake; Harford County, 1 female

Churchville; Prince Georges County, 1 female, College Park, K. E. M.; Wicomico County, 1 female, Salisbury.

Theridion pennsylvanicum Emerton
Original Description: Bull. Amer. Mus. Nat. Hist., 1913, Vol. 32, Art. 13, p. 255, fig. 1, pl. 48. (Theridium)
Available Description: Ibid.
Ecology: One male collected in the state was taken sweeping low herbs and brush.
Distribution: Montgomery County, 1 male, Silver Spring.

Theridion punctosparsum Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 12, pl. 1, fig. 6. (Theridium)
Available Description: The Spider Book, Comstock, Revised 1940, p. 365, fig. 348.
Ecology: This species is found under stones and boards, and in cool buildings such as milk sheds and spring houses.
Distribution: Allegany County, 1 female, Rocky Gap, H. E. M.; Harford County, 1 female and 1 male, Churchville; Prince Georges County, 1 female, College Park, E. E.

Theridion redemptum Gertsch and Mulaik
Original Description: Am. Mus. Novit., 1936, No. 865, p. 13, figs. 14-15.
Available Description: Ibid.
Ecology: The webs of this species are found on or near the ground usually under boards or other litter.
Distribution: Frederick County, 1 male, Lewistown; Prince Georges County, 1 female, College Park, E. E.

Theridion reticulateum New Species
Male--Total length 1.75 mms.; carapace length .75 mms.; carapace width .50 mms.; length of abdomen 1.00 mms.; width of abdomen 1.00 mms.

Carapace pale yellow with a narrow median band extending from the dorsal eye row to the median furrow, margins seamed with black. Eyes narrowly ringed with reddish brown. Sternum pale yellow and seamed with black. Mouthparts and legs colored like carapace; legs slightly darker at distal eyes of segments with femora, patellae, tibiae and metatarsi having incomplete rings below or on lateral face near distal end. Abdomen a reticulated chalky white marked dorsally with an undulating folium having dusky margins. Venter marked transversely just behind epigastric furrow with reticulate white color. Spinnerets pale yellow.

Anterior eye row lightly procurved, posterior row moderately so. Eyes subequal in size except for anterior medians which are slightly smaller than the others; anterior median eyes on small tubercles; median ocular area about as long as wide and narrowed perceptibly behind. Width of clypeus three times the diameter of the anterior median eyes. Carapace clothed with a few curved bristles on the cephalic part.

Abdomen subglobose and clothed with pale erect bristles. Embolus of palpus long with a double curve.

This species is closely related to Theridion dulcineum Gertsch and Archer from which it may be distinguished by the color pattern and details of the palpus.

Type Locality--College Park, Maryland, male holotype collected sweeping, November 6, 1941, by E. Beardsley; male paratype collected in garden, August, 1942, at Baltimore, Maryland, by I. Schloss.

Theridion rupicola Emerton

Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 10, pl. 2, fig. 2. (Theridium)

Available Description: The Spider Book, Comstock, Revised 1940, p. 362, fig. 345.

Ecology: All specimens of the species were taken under stones on a dry hillside.

Distribution: Allegany County, 1 yg. female, Twiggtown.

Theridion sexpunctatum Emerton

Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 12, pl. 2, fig. 5. (Theridium)

Available Description: Ibid.

Ecology: This species can be collected by sweeping herbage in open woodland.

Distribution: Garrett County, 1 female, Swallow Falls; Prince Georges County, 1 yg. female, Riverdale; Wicomico County, 1 yg. female, Salisbury, W. J.

Theridion spirale Emerton

Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 10, pl. 1, fig. 2. (Theridium)

Available Description: The Spider Book, Comstock, Revised 1940, p. 369, figs. 355-356.

Ecology: Same as that of T. differens Emerton.

Distribution: Anne Arundel County, 1 female, Annapolis; Baltimore County, 1 female, Loch Raven; Caroline County, 1 female, Denton; Dorchester County, 1 female, Sharptown; Garrett County, 1 female, Deep Creek Lake; Prince Georges County, 1 female, Berwyn, W. J.

Theridion studiosum Hentz

Original Description: Jour. Bost. Soc. Nat. Hist., 1850, Vol. 6, p. 274. (Theridium)

Available Description: The Spider Book, Comstock, Revised 1940, p. 365, fig. 350.

Ecology: These spiders are communal in habits. They have been collected from one locality in Maryland where hundreds of webs were found on the lower branches of elm trees. The webs sometimes merge which causes the spiders to appear to live together in large webs. The webs are typical of foliage loving theridiids.

Distribution: Montgomery County, 2 females, Great Falls.

Theridion tepidariorum Koch
Original Description: Die Arachn., 1841, Vol. 8, p. 75. (Theridium)
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 13, pl. 2, fig. 1. (Theridium)
Ecology: This spider is common in houses and other buildings where its web is found at upper angles of windows, in corners of rooms, etc. Occasionally it is taken out of doors in hollow logs and trees.
Distribution: Allegany County, 1 female, Westernport; Baltimore City, 1 yg. female, L. H., Calvert County, 1 female, Solomon's Island, H. A. L.; Garrett County, 1 male, Deep Creek Lake, E. V. H.; Prince Georges County, sev. spms., College Park; Queen Annes County, 1 female, Kent Narrows.

Theridion unimaculatum Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 75, pl. 2, fig. 4. (Theridium)
Available Description: The Spider Book, Comstock, Revised 1940, p. 364.
Ecology: All specimens of this species have been taken sweeping weeds in low open fields.
Distribution: Cecil County, 4 females, Fair Hill.

Genus Theridula Emerton

Theridula sphaerula Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1850, Vol. 6, p. 279, pl. 9, fig. 22. (Theridium)
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 25, pl. 5, fig. 3.
Ecology: Specimens of this species may be collected by sweeping herbage and low bushes.
Distribution: Anne Arundel County, 1 female, Bay Ridge, R. W. M.; Garrett County, 1 male, Deep Creek Lake; Harford County, 1 male, Churchville; Montgomery County, 1 male and 1 female, Silver Spring; Prince Georges County, 2 females and 2 males, Berwyn, E. B.

Genus Ulesanis Koch

Ulesanis americana Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 28, pl. 6, fig. 1.
Available Description: The Spider Book, Comstock, Revised 1940, p. 371, fig. 359.
Ecology: One female collected by sifting moderately dry leaves has been taken in Maryland.
Distribution: Prince Georges County, 1 female, Lanham.

Family Linyphiidae

Genus Bathyphantes Menge

Bathyphantes angulatus Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 71, pl. 22, fig. 5.
Available Description: Ibid.
Ecology: Specimens of this species have been sifted from leaves and collected under bark.
Distribution: Prince Georges County, 7 males and 3 females, College Park; Washington County, 1 male, Smithsburg, W. J.

Bathyphantes formicus Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 71, pl. 12, fig. 7.
Available Description: Ibid.
Ecology: Two males of this species were collected beating brush.
Distribution: Prince Georges County, 2 males, College Park.

Bathyphantes micarius Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 71, pl. 12, fig. 6.
Available Description: Ibid.
Ecology: One male of this species was collected in a greenhouse under rubbish.
Distribution: Prince Georges County, 1 male, College Park.

Bathyphantes nigrinus Westring
Original Description: Gotheborgs Vet. Vitt. Samh. Handl., Ny. Tidsfr., 1851, Vol. 2, p. 38.
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 65, pl. 10, fig. 2. (Diplostyla)
Ecology: In late fall and winter these spiders may be sifted from leaves; in the summer they may be found under boards, stones and trash.
Distribution: Allegany County, 1 female, Dans Rock, H. E. M.; Cecil County, 1 male, Northeast; Prince Georges County, 1 female, Berwyn, W. J.; Washington County, 1 female, Delamere, R. W. M.

Genus Drapetisca Menge

Drapetisca alteranda Chamberlin
Original Description: Can. Ent., 1909, p. 368.
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 67, pl. 21, fig. 2. (D. socialis)
Ecology: All specimens of this species have been found on tree trunks. They build no webs.
Distribution: Garrett County, 1 male, 2 females, Deep Creek Lake.

Genus Florinda Cambridge

Florinda coccinea Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1850, Vol. 6, p. 30, (Linyphia)

Available Description: The Spider Book, Comstock, Revised 1940, p. 399, fig. 397. (Linyphia)
Ecology: One female and one young female have been found under litter in Maryland.
Distribution: Calvert County, 1 female and 1 yg. female, Solomon's Island, R. A. L.

Genus Frontinella Cambridge

Frontinella communis Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1850, Vol. 6, p. 28. (Linyphia)
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 62, pl. 18, fig. 2. (Linyphia)
Ecology: The web of this species is a compound web. It is composed of a bowl shaped sheet over a flat sheet, above which a tangled maze is hung. Webs are found on pines, cedars and other evergreens in the field. In gardens the webs may be built on any ornamental shrub. During the winter young specimens may be sifted from moderately dry leaves.
Distribution: Allegany County, 1 yg. female, Cumberland, M. H. and H. E. M.; Anne Arundel County, 3 females, Annapolis; Caroline County, 1 yg. female, Goldsboro; Frederick County, 1 female, Weaverton; Garrett County, 1 yg. female, Deep Creek Lake; Harford County, 1 male, Churchville; Montgomery County, 1 male, Silver Spring; Prince Georges County, 3 females, Berwyn, W. J.; Queen Annes County, 1 yg. female, Centerville; Somerset County, 3 females, Dividing Creek Swamp.

Genus Helophora Menge

Helophora insignis Blackwall
Original Description: Trans. Linn. Soc. Lond., 1841, Vol. 18, p. 662.
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 67, pl. 21, fig. 3.
Ecology: Several females have been taken sweeping low bushes.
Distribution: Garrett County, 4 females, Deep Creek Lake.

Genus Lepthyphantes Menge

Lepthyphantes leprosus Ohlert
Original Description: Arachn. Studien, 1865, p. 12. (Linyphia)
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 68, pl. 21, fig. 4.
Ecology: Several specimens of this species were collected under boards.
Distribution: Harford County, 3 males and 2 females, Churchville.

Lepthyphantes nebulosus Sundevall
Original Description: Svenska. Vet. Akad. Handl., 1829, p. 218. (Bathyphantes)

Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 69, pl. 22, fig. 1. (Bathyphantes)
Ecology: The flat sheet webs of this species are found under stones and boards. The spiders hang beneath the webs.
Distribution: Allegany County, 1 male and 4 females, Cumberland; Prince Georges County, 2 females, Branchville; Washington County, 1 male, Clearspring, R. W. M.

Lepthyphantes sabulosus Keyserling
Original Description: Die Spinnen. Amer., 1886, Vol. 2 (2), p. 70. (Bathyphantes)
Available Description: Ibid.
Ecology: One male of this species has been collected under a board in Maryland.
Distribution: Prince Georges County, 1 male, College Park.

Lepthyphantes zebra Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 69, pl. 22, fig. 2. (Bathyphantes)
Available Description: Ibid.
Ecology: One male was taken under a stone in Maryland.
Distribution:Allegany County, 1 male, Dans Rock, H. E. M.

Genus Linyphia Latreille

Linyphia clathrata Sundevall
Original Description: Svenska. Vet. Akad. Handl., 1829, p. 218.
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 62, pl. 18, fig. 3.
Ecology: The webs of this species are built close to the ground often under boards and stones.
Distribution: Allegany County, 1 yg. female, Cresaptown, H. E. M.; Garrett County, 1 yg. female, Deep Creek Lake; Prince Georges County, 1 yg. female, College Park, E. B.

Linyphia maculata Emerton
Original Description: Trans. Conn. Acad. Sci., 1909, Vol. 14, p. 195, pl. 4, fig. 10.
Available Description: Ibid.
Ecology: One female has been taken in the state by sifting leaves.
Distribution: Prince Georges County, 1 female, College Park.

Linyphia marginata Koch
Original Description: Herr. Schaeff. Deutschl. Ins., 1834, heft 187, p. 21.
Available Description: The Spider Book, Comstock, Revised 1940, p. 404, figs. 404-405.
Ecology: Webs are found in the same situations as F. communis Hentz. The webs are compounded of a loose tangled web in the center of which is a fine dome-like sheet web. The spiders hang on the lower surface of the dome and pull captured prey down through it.

Distribution: Allegany County, 1 female, Cumberland; Charles County, 1 male, Wide Water, W. J.; Frederick County, 3 females and 1 male, Sugar Loaf Mountain; Garrett County, 1 yg. female, Swallow Falls; Montgomery County, 1 yg. female, Great Falls; Prince Georges County, 1 female, Berwyn, W. J.; Washington County, 2 males, Town Hill.

Linyphia pusilla Sundevall
Original Description: Svenska Vet. Akad. Handl., 1829, p. 214.
Available Description: The Spider Book, Comstock, Revised 1940, p. 412, figs. 411-412.
Ecology: All specimens of this spider collected in Maryland were taken sweeping grasses. The web of this species is believed to be a flat web built in grass close to the ground.
Distribution: Garrett County, 1 yg. female, Deep Creek Lake; Harford County, 1 male, Churchville.

Linyphia variabilis Banks
Original Description: Proc. Acad. Nat. Sci. Phila., 1892, p. 42.
Available Description: The Spider Book, Comstock, Revised 1940, p. 399, fig. 398.
Ecology: This species has been taken in Maryland both by sweeping grasses and sifting leaves.
Distribution: Harford County, 1 female, Churchville; Prince Georges County, 1 male, Berwyn, W. J.

Genus Microneta Menge

Microneta cornupalpis Cambridge
Original Description: Proc. Zool. Soc. Lond., 1875, p. 401. (Erigone)
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 75, pl. 23, fig. 2.
Ecology: This species has been sifted from sphagnum moss and leaves over swampy land.
Distribution: Prince Georges County, 3 females, Branchville.

Microneta olivacea Emerton
Original Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 75, pl. 24, fig. 7.
Available Description: Ibid.
Ecology: Several specimens of this species were sifted from leaves in moist woodland.
Distribution: Prince Georges County, 3 females and 1 male, College Park.

Microneta viaria Blackwall
Original Description: Trans. Linn. Soc. Lond., 1841, Vol. 18, p. 645. (Neriene)
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 73, pl. 23, fig. 1.
Ecology: Two males were found under stones in the state.

Distribution: Prince Georges County, 2 males, College Park.

Micronета zonaria Keyserling
Original Description: Die Spinn. Amer., 1886, Vol. 2 (2), p. 196.
Available Description: Ibid.
Ecology: Specimens of this species have been taken sweeping grasses and sedges in low and swampy fields and by sifting leaves in moist woodland.
Distribution: Montgomery County, 1 male, Silver Spring; Prince Georges County, 2 females, Branchville; Queen Annes County, 1 female, Matapeake.

Micronета sp. (1)
Undescribed.
Ecology: One female was taken under stones.
Distribution: Allegany County, 1 female, Cresaptown, H. E. M.

Micronета sp. (2)
Undescribed.
Ecology: One male of this species was collected by sifting moderately dry leaves.
Distribution: Prince Georges County, 1 male, Lanham.

Genus Nesticus Thorell

Nesticus pallidus Emerton
Original Description: Am. Nat., 1875, Vol. 9, p. 279.
Available Description: The Spider Book, Comstock, Revised 1940, p. 438.
Ecology: This species has been found in caves in complete darkness, but it also occurs out of doors under stones and boards.
Distribution: Prince Georges County, 1 female, Berwyn, W. J.; Washington County, 3 females, Crystal Grottoes, K. E. M.

Genus Pityohyphantes Simon

Pityohyphantes phrygianus Koch
Original Description: Die Arachn., 1836, Vol. 3, p. 83. (Linyphia)
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 69, pl. 19, fig. 1.
Ecology: The web of this species is found on bushes, low trees, overhanging ledges, and dry stream beds. It is composed of a tangled web below which a nettled hammock-like sheet web is suspended.
Distribution: Baltimore County, 1 female, Avalon, L. H.; Garrett County, 3 females, Deep Creek Lake; Prince Georges County, 2 females, College Park.

Genus Stemonyphantes Menge

Stemonyphantes lineatus Keyserling
Original Description: Die Spinn. Amer., 1886, Vol. 2 (2) p. 64.
Available Description: Trans. Conn. Acad. Sci., 1882, Vol. 6, p. 64, pl. 20, fig. 1.
Ecology: One female was taken in a peach orchard on one of the trees.
Distribution: Washington County, 1 female, Smithsburg, W. J.

Genus Tapinopa Westring

Tapinopa bilineata Banks
Original Description: Jour. N. Y. Ent. Soc., 1893, p. 128.
Available Description: The Spider Book, Comstock, Revised 1940, p. 12, fig. 8.
Ecology: One young male spider believed to be this species was collected under bark.
Distribution: Garrett County, 1 yg. male, Deep Creek Lake.

Family Argiopidae

Genus Acacesia Simon

Acacesia folifera Marx
Original Description: Proc. U. S. Nat. Mus., 1890, Vol. 12, p. 545. (Epeira)
Available Description: Trans. Conn. Acad. Sci., 1884, Vol. 6, p. 318, pl. 34, fig. 10 and p. 37, figs. 6-10. (Epeira)
Ecology: This species is found in burnt over or lumbered woodland, in upland thickets, and in brush. The webs are vertical orb webs.
Distribution: Cecil County, 1 yg. female, Northeast; Dorchester County, 1 yg. female, Sharptown; Garrett County, 1 female, Deep Creek Lake; Harford County, 1 male, Churchville; Montgomery County, 1 female, Great Falls, K. E. M.; Somerset County, 1 female, Princess Anne; Washington County, 1 female, Smithsburg, W. J.; Wicomico County, 1 yg. female, Salisbury, W. J.

Genus Acanthepeira Marx

Acanthepeira stellata Walckenaer
Original Description: Tabl. Aran., 1805, p. 65, fig. 54. (Epeira)
Available Description: The Spider Book, Comstock, Revised 1940, p. 470, figs. 468, and 469. (Marxia)
Ecology: The web of this spider is vertical and is built close to the ground on weeds such as goldenrod, asters, etc. and in open fields. It is also found resting at the hub of the web or on adjacent plants.
Distribution: Allegany County, 2 females, Cumberland, H. E. M.; Caroline County, 1 yg. female, American Corners; Dorchester County, 2 females, Finchville; Frederick County, 1

yg. female, New Windsor; Garrett County, 1 male, Deep Creek Lake; Howard County, 3 yg. females, Savage; Kent County, 1 yg. male, Chestertown, I. R.; Montgomery County, 1 female, Silver Spring, E. B. H.; Prince Georges County, 1 female, College Park, K. E. M.; Somerset County, 3 yg. females, Dividing Creek Swamp.

Genus Aranea Linnaeus

Aranea cavatica Keyserling
Original Description: Verh. zool.-bot. Ges Wien, 1881, Vol. 31, p. 269, pl. 11, fig. 1. (Epeira)
Available Description: Trans. Conn. Acad. Sci., 1884, Vol. 6, p. 302, pl. 33, fig. 10, fig. 8 and fig. 35. (E. cinerea)
Ecology: One female was found on her large orb web on a ledge near a mountain spring.
Distribution: Garrett County, 1 female, Boiling Spring.

Aranea displicata Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 476, pl. 31, fig. 17. (Epeira)
Available Description: The Spider Book, Comstock, Revised 1940, p. 508, figs. 524-525.
Ecology: Specimens taken in Maryland were collected by sweeping low grasses or were found on the ground and under stones. The web is small and vertical.
Distribution: Allegany County, 1 yg. female, Cumberland; Garrett County, 4 yg. females, Deep Creek Lake; Prince Georges County, 1 female, Berwyn, W. J.

Aranea miniata Walckenaer
Original Description: Ins. Apt., 1837, Vol. 2, p. 39. (Epeira)
Available Description: The Spider Book, Comstock, Revised 1940, p. 488, fig. 492.
Ecology: This species has been collected in Maryland by beating and sweeping low bushes and herbs. The author has not seen the web.
Distribution: Caroline County, 1 female, Ridgely, L. P. D. and G. V.; Prince Georges County, 1 female, Berwyn, E. B.; Somerset County, 1 yg. female, Dividing Creek Swamp; Wicomico County, 2 females, Salisbury, W. J.

Aranea nivea Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 474, pl. 31, fig. 9. (Epeira)
Available Description: Ibid.
Ecology: All but one specimen of this species have been taken from mud daubers nests. One male was found on the top of an automobile where it had apparently fallen from a tree. This species apparently has two forms or varieties. One variety has unmarked legs and cephalothorax while the other has the yellow of these parts heavily spotted with red.
Distribution: Prince Georges County, 11 males and 9 females,

Berwyn, W. J.; Wicomico County, 3 yg. males and 5 females, Salisbury, W. J.

Aranea nordmanni Thorell
Original Description: Syn. Eur. Spid., 1870, p. 4. (Epeira)
Available Description: Trans. Conn. Acad. Sci., 1884, Vol. 6, p. 301, pl. 33, fig. 6. (Epeira)
Ecology: This species has been taken in dense woodland near water. The webs are vertical and are on small trees or tall bushes between three and six feet off the ground. The spiders rest in silken nests built in curled leaves at upper angles of the webs.
Distribution: Garrett County, 2 females, Boiling Springs; Wicomico County, 1 female, Salisbury, W. J.

Aranea pegnia Walckenaer
Original Description: Ins. Apt., 1837, Vol. 2, p. 80. (Epeira)
Available Description: The Spider Book, Comstock, Revised 1940, p. 508, fig. 526.
Ecology: This species has been found only on or near buildings in Maryland. The web is a vertical orb web.
Distribution: Prince Georges County, 1 male, Berwyn, W. J.

Aranea raji Scopoli
Original Description: Ent. Carniolica Exhib. Ins. Carn. Indig., 1763, p. 394.
Available Description: Trans. Conn. Acad. Sci., 1884, Vol. 6, p. 309, pl. 33, figs. 1-2, p. 35, figs. 17-18. (Epeira insularis and marmorea)
Ecology: The large vertical webs of this species are built three to eight feet off the ground on small trees or large bushes. The spiders rest in a curled leaf nest at an upper angle of the web.

In Maryland, the marmorea variety or color pattern has not been found to occur simultaneously with the typical conspicellata pattern. There have been only two females of the marmorea pattern collected. These were taken in September in the mountainous western end of the state.
Distribution: Anne Arundel County, 2 females, Annapolis; Frederick County, 3 females, Brunswick; Garrett County, 1 male and 1 female, Deep Creek Lake; Prince Georges County, 1 female, Berwyn, W. J.; Queen Annes County, 2 females, Centerville; Somerset County, 1 female, Princess Anne.

Aranea undata Olivier
Original Description: Encyl. Method., 1789, Vol. 4, p. 200.
Available Description: The Spider Book, Comstock, Revised 1940, p. 500, figs. 510, 511 and 512.
Ecology: The vertical webs of this house Aranea have been found on oyster houses and wharves on the Chesapeake Bay. The spiders rest in a silken nest at an upper angle of the web.
Distribution: Calvert County, 2 females, Solomon's Island,

R. A. L.; Queen Annes County, sev. spms., males and females, Kent Narrows.

Aranea thaddeus Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 473, pl. 31, fig. 6. (Epeira)
Available Description: The Spider Book, Comstock, Revised 1940, p. 504, figs. 519-523.
Ecology: The vertical webs of this species are found on small bushes and tall weeds in open woodland and occasionally in low fields. The spider rests in a silken lattice-like nest on a curled leaf at an upper angle of the web.
Distribution: Montgomery County, 1 female, Four Corners; Prince Georges County, 1 female, Berwyn, W. J.; Queen Annes County, 1 female, Centerville; Wicomico County, 1 male, Salisbury.

Aranea trifolium Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 471, pl. 31, fig. 1. (Epeira)
Available Description: The Spider Book, Comstock, Revised 1940, p. 493, figs. 501-504.
Ecology: The vertical webs of this species are found on tall bushes in low open woodland. The spider rests in a leafen retreat at an upper angle of the web.
Distribution Garrett County, 1 male, Deep Creek Lake; Prince Georges County, 1 female, College Park.

Aranea trifolium var. candicans
Original Description: Amer. Spid., 1894, Vol. 3, p. 146. (Epeira)
Available Description: The Spider Book, Comstock, Revised 1940, p. 495, figs. 503 and 505.
Ecology: The web of this species occurs in the same situations as A. trifolium, Hentz, but is more frequently found in low marshy or swampy fields on tall weeds.
Distribution: Allegany County, 1 female, Cumberland, E. V. M.; Garrett County, 1 female, Boiling Springs.

Aranea foliata Fourcroy
Original Description: Entomologia Parisiensis, 1785, Vol. 2.
Available Description: Trans. Conn. Acad. Sci., 1884, Vol. 6, p. 305, pl. 33, fig. 5 and pl. 35, fig. 12. (Epeira)
Ecology: The vertical orb webs are built on the sides of buildings, under eaves and occasionally in buildings and on bushes and trees near buildings. The spiders rest in a silken retreat at an upper angle of the web.
Distribution: Calvert County, 3 females, Solomon's Island, R. A. L.; Garrett County, 2 females and 1 male, Deep Creek Lake; Prince Georges County, 2 females, Riverdale, K. E. M.; Wicomico County, 6 yg. females, Salisbury, W. J.

Genus Argiope Audouin

Argiope aurantia Lucas
Original Description: Ann. Soc. Ent. France, 1833, Vol. 2, p. 87, pl. 5, fig. 1.
Available Description: The Spider Book, Comstock, Revised 1940, p. 448, figs. 443-446. (Miranda)
Ecology: The vertical or angular webs are built close to the ground on fences, bushes, weeds, etc, in low fields and open woodland. In some localities this species is particularly numerous over swampy land or near rivers and lakes. The web contains a stabilimentum on which the spider rests.
Distribution: Baltimore County, 1 male, Towson; Cecil County, 1 female, Elkton, S. Booth; Dorchester County, 1 male, Sharptown; Garrett County, 1 male, Deep Creek Lake; Howard County, 1 male, Skaggsville, L. P. D.; Prince Georges County, 2 females, Berwyn, W. J.; Saint Marys County, 1 male, Point Lookout; Worcester County, 1 female, Berlin.

Argiope trifasciata Forskal
Original Description: Descript. Anim., 1775. (Aranea)
Available Description: The Spider Book, Comstock, Revised 1940, p. 452, figs. 447-453. (Metargiope)
Ecology: Much the same as that of A. Aurantia Lucas except that it prefers open fields and swamps. The spider rests on the stabilimentum.
Distribution: Allegany County, 1 female, Flintstone; Caroline County, 2 yg. males, American Corners; Charles County, 1 yg. female, Waldorf; Dorchester County, 1 yg. female, Finchville; Frederick County, 2 females, Frederick; Garrett County, 1 male, Deep Creek Lake; Howard County, 1 male, Skaggsville, L. P. D.; Kent County, 1 yg. female, Chestertown, I. R.; Saint Marys County, 1 yg. male, Great Mills; Somerset County, 1 male, Dividing Creek Swamp.

Genus Cyclosa Menge

Cyclosa conica Pallas
Original Description: Spicil. Zool., 1772, Vol. 1, p. 48.
Available Description: Trans. Conn. Acad. Sci., 1884, Vol. 6, p. 321, pl. 34, fig. 3.
Ecology: The small vertical webs are built on small trees and bushes in open woodland and thickets. The spider rests on the hub of the web.
Distribution: Garrett County, 2 females and 1 male, Deep Creek Lake; Prince Georges County, 1 female, Berwyn, W. J.

Cyclosa turbinata Walckenaer
Original Description: Ins. Apt., 1842, Vol. 2, p. 140. (Epeira)
Available Description: The Spider Book, Comstock, Revised 1940, p. 468, fig. 467.
Ecology: Same as for C. conica Pallas except that it is also found near buildings.
Distribution: Kent County, 1 female, Fairlee; Wicomico

County, 1 female, Salisbury, W. J.

Genus Eustala Simon

Eustala anastera Walckenaer
Original Description: Ins. Apt., 1837, Vol. 2, p. 33. (Epeira)
Available Description: The Spider Book, Comstock, Revised 1940, p. 524, figs. 549-554.
Ecology: The small vertical web is built in many different places ranging from thick woodland to gardens and buildings, being often numerous in pine thickets. The spider is extremely variable in form varying from the typical shape to the Cyclosa-like form, and rests on twigs, etc. adjacent to the web.
Distribution: Anne Arundel County, 1 male, Galesville, H. O. W.; Baltimore County, 1 female, Gunpowder River; Caroline County, 10 spms., Ridgely, L. P. D. and G. V.; Charles County, 1 female, La Plata; Garrett County, 1 female, Deep Creek Lake, K. E. M.; Queen Annes County, 1 female, Centerville; Saint Marys County, 1 female and 1 male, Abell, W. J.; Washington County, 1 female, Smithsburg, W. J.; Wicomico County, 1 female, Salisbury, W. J.; Worcester County, 1 male, Snow Hill.

Genus Gea Koch

Gea heptagon Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 4, p. 20, pl. 3, figs. 5-6. (Epeira)
Available Description: The Spider Book, Comstock, Revised 1940, p. 457.
Ecology: One female of this species was found in a mud dauber wasp's nest.
Distribution: Wicomico County, 1 female, Salisbury, W. J.

Genus Larinia Simon

Larinia directa Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 478, pl. 31, fig. 21. (Epeira)
Available Description: Ent. News, 1894, Vol. 4, p. 8.
Ecology: All specimens of this species collected in Maryland were found under stones or boards or were taken by sweeping grasses and weeds.
Distribution: Anne Arundel County, 1 yg. female, Gibson Island, E. E.; Caroline County, 1 yg. female; Montgomery County, 1 yg. male, Silver Spring; Prince Georges County, 1 male, Berwyn.

Genus Leucauge White

Leucauge venusta Walckenaer
Original Description: Ins. Apt., 1837, Vol. 2, p. 90. (Epeira)

Available Description: Trans. Conn. Acad. Sci., 1884, Vol. 6, p. 332. (Epeira hortorum)
Ecology: The webs of this species are horizontal or angular and are built in many places, but occur more frequently in open woodland near water. The web often is compound, containing both a tangled web and an orb web.
Distribution: Anne Arundel County, 1 female, Bay Ridge; Calvert County, 1 female, Scientist's Cliffs; Montgomery County, 4 females, Great Falls; Prince Georges County, 1 male, College Park, K. E. M.; Wicomico County, 1 female, Salisbury, W. J.

Genus Mangora Cambridge

Mangora gibberosa Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 457, pl. 31, fig. 20. (Epeira)
Available Description: Trans. Conn. Acad. Sci., 1884, Vol. 6, p. 317, pl. 34, fig. 1 and pl. 36, fig. 17. (Epeira)
Ecology: The webs of this species are built on low grasses and weeds and are horizontal or angular. The spiders rest at the hub of the web on the lower surface dropping to the ground at the slightest disturbance.
Distribution: Anne Arundel County, 1 female, Bay Ridge; Baltimore County, 1 female, Towson; Calvert County, 1 male and 1 female, Lusby; Cecil County, 1 male, Northeast; Charles County, 4 males and 1 female, La Plata; Dorchester County, 2 yg. females, Finchville; Garrett County, 1 male and 1 female, Deep Creek Lake; Harford County, 1 female, Churchville; Kent County, 4 spms., Chestertown; Prince Georges County, 1 male and 1 female, College Park, I. S.; Queen Annes County, 1 female, Matapeake; Saint Marys County, 1 yg. female, Point Lookout; Somerset County, 1 female, Princess Anne; Wicomico County, 1 female, Salisbury, W. J.

Mangora maculata Keyserling
Original Description: Verh. zool-bot. Ges Wien, 1865, Vol. 14, p. 827, pl. 18, figs. 24-27. (Epeira)
Available Description: The Spider Book, Comstock, Revised 1940, p. 518.
Ecology: The web of this species is built in the same situations as M. gibberosa Hentz, but it is more frequently found near water. It is perpindicular or angled and the spider is not as shy as gibberosa.
Distribution: Anne Arundel County, 1 male, Bay Ridge; Calvert County, 1 male, North Beach; Harford County, 1 yg. male, Churchville; Kent County, 1 yg. female, Chestertown, I. R.; Montgomery County, 3 yg. males and 1 yg. female, Great Falls; Prince Georges County, 2 females, Berwyn, W. J.; Somerset County, 1 female, Princess Anne.

Mangora placida Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 475, pl. 31, fig. 12. (Epeira)

Available Description: The Spider Book, Comstock, Revised 1940, p. 518, fig. 544.
Ecology: This is the least common of the three species of Mangora in Maryland. The webs seen by the author were vertical and built on honeysuckle (Lonicera). The spiders rest on the hub of the web.
Distribution: Anne Arundel County, 1 yg. female, Annapolis; Prince Georges County, 4 yg. males, Branchville; Somerset County, 4 spms., Dividing Creek Swamp.

Genus Mastophora Holmberg

Mastophora bisaccata Emerton
Original Description: Trans. Conn. Acad. Sci., 1885, Vol. 6, p. 325, pl. 34, fig. 11. (Cyrtarachne)
Available Description: Ibid.
Ecology: One female of this species was found clinging to a shattered web in dense woodland. An egg case believed to be that of this species was jug shaped and fastened securely to a small twig.
Distribution: Anne Arundel County, 1 female, Annapolis.

Genus Meta Koch

Meta menardi Latreille
Original Description: Hist. Nat. Crust. et. Ins., 1804, Vol. 7, p. 266. (Aranea)
Available Description: The Spider Book, Comstock, Revised 1940, p. 433, figs. 431-432.
Ecology: These spiders inhabit caves and range from the zone of partial darkness to total darkness. They may, however, be found occasionally in deep pits and crevices in the western part of the state. The wide meshed webs may be perpindicular, angular or rarely perfectly horizontal. The spiders rest on the hub of the web or under an adjacent rock ledge.
Distribution: Garrett County, 2 males and 1 female, Backbone Mountain.

Genus Metepeira Cambridge

Metepeira labyrinthea Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 471, pl. 31, fig. 3. (Epeira)
Available Description: Trans. Conn. Acad. Sci., 1884, Vol. 6, p. 314, pl. 34, fig. 8, pl. 36, fig. 11. (Epeira)
Ecology: The vertical webs are built almost any place on anything. The nest is in dead curled leaves just above the combination orb and tangled web. A chain of flattened egg sacs, usually extends upward and downward from this nest.
Distribution: Anne Arundel County, 1 female, Annapolis; Garrett County, 5 males, Deep Creek Lake; Kent County, 1 yg. female, Chestertown, I. R.; Prince Georges County, 1 female, W. J.; Queen Annes County, 2 females, Centerville; Somerset County, 3 females, Dividing Creek Swamp, Washington County,

3 females, Smithsburg, W. J.; Wicomico County, 2 females, Salisbury, W. J.

Genus Micrathena Sundevall

Micrathena gracilis Walckenaer
Original Description: Ins. Apt., 1837, Vol. 2, p. 193. (Plectana)
Available Description: Trans. Conn. Acad. Sci., 1884, Vol. 6, p. 21, pl. 38, fig. 10. (Acrosoma rugosa)
Ecology: The webs are vertical or angled and are built between two trees or tall bushes from three to ten feet off the ground. The orb is relatively small with long guy lines. The spiders rest at the hub of the web with the head down.
Distribution: Anne Arundel County, 1 male, Robert Crane Highway; Charles County, 1 female, Indian Head, I. S.; Harford County, 2 females, Churchville; Montgomery County, 1 female, Great Falls; Prince Georges County, 1 female, College Park, W. J.; Queen Annes County, 1 female, Centerville; Washington County, 1 female, Smithsburg, W. J.

Micrathena reduviana Walckenaer
Original Description: Ins. Apt., 1837, Vol. 2, p. 201. (Plectana)
Available Description: Trans. Conn. Acad. Sci., 1884, Vol. 6, p. 327, pl. 38, fig. 10. (Acrosoma mitrata)
Ecology: This species builds its web in open or dense woodland. The web is similar to that of M. gracilis Walck., but is smaller and not hung as high.
Distribution: Anne Arundel County, 2 females, Annapolis; Calvert County, 1 female, Solomon's Island, R. A. L.; Frederick County, 1 female, Sugar Loaf Mountain; Harford County, 1 female, Churchville; Prince Georges County, sev. spms., Berwyn, W. J.; Queen Annes County, 4 females, Centerville; Somerset County, 1 female, Dividing Creek Swamp.

Micrathena sagitta Walckenaer
Original Description: Ins. Apt., 1837, Vol. 2, p. 174. (Plectana)
Available Description: Trans. Conn. Acad. Sci., 1884, Vol. 6, p. 213, pl. 38, figs. 5, 6, 7, and 8. (Acrosoma spinea)
Ecology: This species builds its web closer to the ground than the other spiny bellied spiders and does not employ the long guy lines. It is found in open woodland, thickets and occasionally in open fields. The spiders rest at the hubs of the webs.
Distribution: Baltimore County, 1 female, Gunpowder River, G. K.; Calvert County, 1 female, Solomon's Island, R. A. L.; Garrett County, 2 yg. females and 2 males, Deep Creek Lake; Harford County, 1 yg. female, Churchville; Somerset County, 1 female, Princess Anne; Wicomico County, 1 yg. female, Salisbury, W. J.

Genus Mimognatha Banks

Mimognatha foxi McCook
Original Description: Amer. Spid., 1893, Vol. 3, pl. 29, Fig. 1. (Theridium)
Available Description: Trans. Amer. Ent. Soc., 1896, Vol. 23, p. 66. (Mysmena bulbifera)
Ecology: One male of this species was collected in Maryland by sweeping grasses.
Distribution: Prince Georges County, 1 male, Berwyn.

Genus Neoscona Simon

Neoscona arabesca Walckenaer
Original Description: Ins. Apt., 1837, Vol. 2, p. 74. (Epeira)
Available Description: Amer. Spiders, 1894, Vol. 3, p. 148. (Epeira)
Ecology: These spiders build low vertical webs on small trees, bushes, weeds, etc, in open woodland and fields, on shrubs, vines, fences, etc, in gardens and occasionally on the sides of houses.
Distribution: Anne Arundel County, 1 female, Robert Crane Highway; Baltimore County, 1 female, Gunpowder River, G. K.; Carroll County, 1 female, Westminster; Charles County, 1 male and 1 female, La Plata; Garrett County, 2 females, Deep Creek Lake; Prince Georges County, 1 male, Berwyn, E. B.; Somerset County, 1 female, Dividing Creek Swamp.

Neoscona benjamina Walckenaer
Original Description: Ins. Apt., 1837, Vol. 2, p. 42. (Epeira)
Available Description: Amer. Spiders, 1893, Vol. 3, pl. 1, fig. 7, pl. 2, figs. 4-5. (Eperia)
Ecology: This is the house Neosconid which builds its vertical webs under eaves and on the sides of buildings and occasionally wanders inside little used buildings. It also builds on tall shrubs and small trees.
Distribution: Baltimore City, 1 female, G. K.; Caroline County, 1 male, American Corners; Dorchester County, 1 male, Finchville; Frederick County, 1 female, Brunswick; Howard County, 1 male, Clarksville; Prince Georges County, 1 female, Berwyn; Queen Annes County, 2 females, Centerville; Somerset County, 2 females, Dividing Creek Swamp; Washington County, 1 female, Boonesboro, E. B. H.

Neoscona domicilorum Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 469, pl. 3, fig. 7. (Epeira)
Available Description: Ala. Mus. Nat. Hist., 1940, Mus. paper 14, p. 48, pl. 4, fig. 2.
Ecology: Three females of this well marked species were taken from webs similar to those of N. benjamina Walck. in open woodland.
Distribution: Somerset County, 3 females, Dividing Creek Swamp.

Neoscona minima Cambridge
Original Description: Biol. Centr. Amer., 1904, Vol. 2, p. 471, pl. 64, figs. 11-12.
Available Description: Ibid.
Ecology: Same as that of N. arabesca Walck. in Maryland, although it tends to be more numerous in the eastern and southern counties while arabesca is more numerous in the central and western counties.
Distribution: Anne Arundel County, 1 female, Bay Ridge, R. W. M.; Carroll County, 1 female, Westminster; Frederick County, 1 male, Frederick; Garrett County, 1 female, Deep Creek Lake; Harford County, 1 male, Churchville; Prince Georges County, 1 female, Berwyn, E. B.; Queen Annes County, 1 female, Matapeake; Saint Marys County, 1 male, Great Mills; Somerset County, 3 females, Dividing Creek Swamp; Wicomico County, 1 male and 1 female, Salisbury, W. J.

Neoscona pratensis Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 475, pl. 31, fig. 11. (Epeira)
Available Description: Trans. Conn. Acad. Sci., 1884, Vol. 6, p. 310, pl. 33, fig. 15 and pl. 36, fig. 9. (Epeira)
Ecology: Several young females were taken while sweeping weeds and grasses on a lake shore.
Distribution: Garrett County, 6 yg. females, Deep Creek Lake.

Genus Pachygnatha Sundevall

Pachygnatha furcillata Keyserling
Original Description: Verh. zool.-bot. Ges Wien, 1883, p. 661.
Available Description: Ibid.
Ecology: All specimens of this species collected in the state have been taken by sweeping over swamps or by sifting leaves over swampy land.
Distribution: Garrett County, 1 male, Deep Creek Lake; Prince Georges County, 2 females and 1 male, College Park; Somerset County, 1 male, Dividing Creek Swamp.

Pachygnatha tristriata Koch
Original Description: Die Arachn., 1845, Vol. 12, p. 145.
Available Description: Trans. Conn. Acad. Sci., 1909, Vol. 14, p. 202, pl. 5, fig. 6.
Ecology: Same as that of P. brevis Keyserling, except that many specimens have been taken under stones.
Distribution: Allegany County, 1 female, Dans Rock, H. E. M.; Anne Arundel County, 1 female, Gibson Island; Garrett County, 1 female, Deep Creek Lake, K. E. M.; Prince Georges County, 2 males and 1 female, Lanham, J. C.

Genus Singa Koch

Singa pratensis Emerton
Original Description: Trans. Conn. Acad. Sci., 1884, Vol.

6, p. 322, pl. 34, fig. 16 and pl. 37, figs. 14-17.
Available Description: The Spider Book, Comstock, Revised 1940, p. 476, fig. 475.
Ecology: All Maryland specimens of this species were taken by sweeping grasses over swampy areas.
Distribution: Allegany County, 2 yg. females and 1 yg. male, Cumberland, M. H. M. and H. E. M.; Caroline County, 5 spms., Denton; Garrett County, 6 spms., Deep Creek Lake; Somerset County, 1 yg. female, Princess Anne.

Singa truncata Banks
Original Description: Jour. N. Y. Ent. Soc., 1901, p. 188.
Available Description: Trans. Conn. Acad. Sci., 1884, Vol. 6, p. 323, pl. 37, fig. 18.
Ecology: This species may be taken by sweeping open woodland, or by sifting moderately dry leaves.
Distribution: Allegany County, 1 yg. female, Cumberland; Caroline County, 2 yg. females, Goldsboro; Prince Georges County, 2 females, Upper Marlboro.

Singa sp.
Undescribed.
Ecology: Specimens of this species have been taken sweeping open fields and under bark.
Distribution: Prince Georges County, 1 male, College Park, H. O. W.

Genus Tetragnatha Latreille

Tetragnatha elongata Walckenaer
Original Description: Tabl. Aran., 1805, p. 68.
Available Description: The Spider Book, Comstock, Revised 1940, p. 425, figs. 424-425.
Ecology: The angular to vertical webs of this species are found on bushes, vines, weeds and small trees. Often the spiders may be found resting on the hubs of the webs but may be on an adjacent plant or object.
Distribution: Baltimore County, 1 yg. female, Gunpowder River, G. K.; Charles County, 1 female, Indian Head, I. S.; Montgomery County, 1 female, Redland; Prince Georges County, 1 male, Bowie; Worcester County, 1 female, Snow Hill.

Tetragnatha laboriosa Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1850, Vol. 6, p. 27, pl. 4, fig. 3.
Available Description: The Spider Book, Comstock, Revised 1940, p. 426, fig. 426.
Ecology: These spiders spin horizontal webs close to the ground in open fields and along streams and lakes. Often this species can be collected in numbers by sweeping weeds and grasses.
Distribution: Anne Arundel County, 1 male, Bay Ridge; Baltimore City, 2 females, L. H.; Caroline County, 1 female, Denton; Dorchester County, 1 female, Sharptown; Frederick

County, 2 females, New Windsor; Garrett County, 1 male and 1 female, Deep Creek Lake; Montgomery County, 1 male and 1 female, Redland; Prince Georges County, 1 male and 1 female, College Park; Saint Marys County, 1 male, Great Mills.

Tetragnatha munda Chamberlin and Gertsch
Original Description: Jour. Ent. Zool. Claremont, 1929, p. 21, fig. 3-4.
Available Description: Ibid.
Ecology: Same as that of T. elongata Walck. except that this species apparently prefers open fields more than the latter does.
Distribution: Anne Arundel County, 1 male, Galesville, H. O. W.; Calvert County, 1 male, Solomon's Island; Charles County, 1 male, Waldorf; Frederick County, 2 yg. females, Thurmont; Garrett County, 1 male, Swallow Falls; Harford County, 1 female, Churchville; Howard County, 1 male and 3 females, Savage; Prince Georges County, 1 male and 1 female, College Park.

Tetragnatha pallescens Cambridge
Original Description: Biol. Centr. Amer., 1903, Vol. 2, p. 437.
Available Description: Proc. Acad. Nat. Sci., Phila., 1892, Vol. 42, p. 51, pl. 5, fig. 88. (T. pallidus)
Ecology: The angular or horizontal webs of this species are built near ponds, springs, streams, bays, etc. Specimens may be collected by sweeping swamps and stream banks.
Distribution: Garrett County, 4 females, Deep Creek Lake; Harford County, 1 male, Churchville; Kent County, 1 male, Chestertown, recorded by T. Hartman; Prince Georges County, 1 yg. female, College Park, E. B.; Queen Annes County, 1 female, Church Hill.

Tetragnatha straminea Emerton
Original Description: Trans. Conn. Acad. Sci., 1884, Vol. 6, p. 335, pl. 39, figs. 15, 17, 20, and 21.
Available Description: N. Y. State Mus. Bull., 1928, No. 278, p. 136, pl. 4, figs. 39-54.
Ecology: Same as that of T. seneca Seeley.
Distribution: Dorchester County, 2 males, Finchville; Frederick County, 1 female, Seneca, W. J.; Garrett County, 1 female, Deep Creek Lake; Harford County, 1 male, Churchville; Montgomery County, 1 female, Redland; Prince Georges County, 2 females, College Park, E. B.; Somerset County, 1 yg. female, Dividing Creek Swamp.

Genus Theridiosoma Cambridge

Theridiosoma radiosa McCook
Original Description: Proc. Acad. Nat. Sci. Phila., 1881, Vol. 33, p. 163, pl. 27, figs. 8-9. (Epeira)
Available Description: Trans. Conn. Acad. Sci., 1884, Vol. 6, p. 320, pl. 38, figs. 1, 2, 3, and 4. (Microepeira)
Ecology: The vertical or angled webs of this species are

found on stream banks, shaded cliffs and in entrances of caves through which streams flow. The spiders rest on the hubs of the webs or on nearby ledges.
Distribution: Allegany County, sev. spms., Murley's Branch Cave; Frederick County, 1 female, Lewistown; Garrett County, 1 male, Swallow Falls; Worcester County, 1 female, Snow Hill.

Genus Verrucosa McCook

Verrucosa arenata Walckenaer
Original Description: Ins. Apt., 1837, Vol. 2, p. 133. (Epeira)
Available Description: Amer. Spid., 1894, Vol. 3, p. 200.
Ecology: The large vertical webs of this species are built from three to seven feet off the ground in deep and shaded woodland.
Distribution: Frederick County, 1 female, Smithsburg, W. J.; Kent County, 1 female, Chestertown, I. R.; Montgomery County, 1 female, Rockville; Wicomico County, 1 yg. female, Salisbury, W. J.

Genus Wixia Cambridge

Wixia extypa Walckenaer
Original Description: Ins. Apt., 1837, Vol. 2, p. 129. (Epeira)
Available Description: Trans. Conn. Acad. Nat. Sci., 1884, Vol. 6, p. 315, pl. 37, fig. 11, 12, and 13. (Epeira infumata)
Ecology: All specimens of this species have been taken by sweeping or beating brush and trees. The webs have never been seen by the author.
Distribution: Garrett County, 1 yg. male, Deep Creek Lake; Howard County, 1 female, Skaggsville, L. P. D.; Prince Georges County, 1 yg. female, College Park, E. B.; Wicomico County, 1 yg. female, Salisbury, W. J.

Family Thomisidae

Genus Coriarachne Thorell

Coriarachne versicolor Keyserling
Original Description: Die Spinn. Amer., 1880, p. 53, pl. 1, fig. 27.
Available Description: Trans. Conn. Acad. Sci., 1892, Vol. 8, p. 367, pl. 29, fig. 27.
Ecology: These spiders are flattened and are found in crevices of bark, under bark and in cracks and crevices of houses. The color pattern blends well with the colors of bark and wood making the spiders difficult to see and capture.
Distribution: Caroline County, 1 female, Ridgely; L. P. D. and G. V.; Frederick County, 1 yg. female, Weaverton; Montgomery County, 2 yg. males, Silver Spring; Prince Georges County, 1 male, Riverdale, K. E. M.

Genus Ebo Keyserling

Ebo latithorax Keyserling
Original Description: Verh. zool-bot. Ges. Wein, 1883, p. 678.
Available Description: Trans. Conn. Acad. Sci., 1892, Vol. 8, p. 377, pl. 32, fig. 4.
Ecology: All specimens of this species have been collected by sifting moderately dry leaves or sweeping forest herbage.
Distribution: Prince Georges County, 2 yg. females, Lanham.

Genus Misumena Latreille

Misumena calycina Linneaus
Original Description: Systema Naturae, 1758, Vol. 1, p. 620. (Aranea)
Available Description: Trans. Conn. Acad. Sci., 1892, Vol. 8, p. 368. (Misumena vatia)
Ecology: This spider hides in flower heads waiting in ambush for prey. Specimens may be taken by sweeping goldenrod, asters and other flowers.
Distribution: Frederick County, 2 females, Smithsburg, W. J.; Garrett County, 1 female, Deep Creek Lake; Harford County, 1 yg. female, Churchville; Prince Georges County, 1 female, College Park; Wicomico County, 2 yg. females, Salisbury, W. J.

Genus Misumenoides Cambridge

Misumenoides aleatorius Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, p. 444, pl. 23, fig. 2. (Thomisus)
Available Description: Trans. Conn. Acad. Sci., 1892, Vol. 8, p. 369. (Misumena)
Ecology: The same as that of M. calycina L.
Distribution: Anne Arundel County, 1 male, Parole; Charles County, 1 yg. female, La Plata; Dorchester County, 1 female, Finchville; Garrett County, 3 females and 1 male, Deep Creek Lake; Harford County, 1 yg. male, Churchville; Howard County, 1 male, Savage; Kent County, 1 male, Chestertown.

Genus Misumenops Cambridge

Misumenops asperatus Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 447, pl. 23, fig. 7. (Thomisus)
Available Description: Trans. Conn. Acad. Sci., 1892, Vol. 8, p. 370, pl. 30, fig. 8. (Misumena)
Ecology: These spiders may be taken in the summer by sweeping goldenrod, etc, in open fields. Females may be collected under loose bark in late fall.
Distribution: Anne Arundel County, 1 female, Bay Ridge; Caroline County, 1 female, Ridgely, L. P. D. and G. V.; Harford County, 1 female, Churchville; Montgomery County, 2 females, Silver Spring; Prince Georges County, 1 male, College Park, H. O. W.; Queen Annes County, 1 male, Wye

Mills; Washington County, 1 female and 1 male, Cavetown, W. J.

Misumenops celer Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 446, pl. 23, fig. 5. (Thomisus)
Available Description: Bull. Amer. Mus. Nat. Hist., 1939, Vol. 76, p. 322, figs. 30, 31, 50, 51 and 56.
Ecology: Same as for M. asperatus Hentz
Distribution: Baltimore County, 1 male, Sparrows Point, I. S.; Calvert County, 1 male and 2 females, Bertha; Charles County, 1 male, La Plata; Frederick County, 1 male, Thurmont; Garrett County, 1 female, Deep Creek Lake; Prince Georges County, 1 male, College Park; Wicomico County, 1 male, Salisbury.

Misumenops oblongus Keyserling
Original Description: Die Spinn. Amer., 1880, p. 79, pl. 2, fig. 41. (Misumena)
Available Description: Bull. Amer. Mus. Nat. Hist., 1939, Vol. 76, p. 319, figs. 44, 45, 62 and 63.
Ecology: Same as for M. asperatus Hentz.
Distribution: Anne Arundel County, 1 male, Bay Ridge; Baltimore City, 1 male, I. S.; Baltimore County, 1 male, Towson; Calvert County, 1 female, Solomon's Island, R. A. L.; Dorchester County, 1 male, Sharpstown; Garrett County, 1 female, Deep Creek Lake; Montgomery County, 1 male, Great Falls; Wicomico County, 2 females, Salisbury, W. J.

Genus Ozyptila Simon

Ozyptila bryantae Gertsch
Original Description: Bull. Amer. Mus. Nat. Hist., 1939, Vol. 76, p. 348, fig. 108-109.
Available Description: Ibid.
Ecology: The author has not collected this species.
Distribution: Baltimore City, 1 male, recorded by W. J. Gertsch.

Ozyptila monroensis Keyserling
Original Description: Verh. zool.-bot. Ges. Wien., 1883, pl. 33, p. 671, pl. 21, fig. 19. (Oxyptila)
Available Description: Bull. Amer. Mus. Nat. Hist., 1939, Vol. 76, p. 346, figs. 110, 111 and 131.
Ecology: The author has not collected this species.
Distribution: Baltimore City, 1 male, recorded by W. J. Gertsch.

Genus Philodromus Walckenaer

Philodromus exilis Banks
Original Description: Proc. Acad. Nat. Sci., Phila., 1892, p. 63.
Available Description: Trans. Conn. Acad. Sci., 1892, Vol.

8, p. 375, pl. 31, fig. 5. (P. bidentatus)
Ecology: Two specimens of the species were collected in woodland by Dr. Walter Jeffers.
Distribution: Prince Georges County, 1 male, Berwyn, W. J.

Philodromus imbecillus Keyserling
Original Description: Die Spinn. Amer., 1880, Vol. 1, p. 224.
Available Description: Trans. Conn. Acad. Sci., 1892, Vol. 8, p. 374, pl. 31, fig. 4. (P. lineatus)
Ecology: One female of this species was taken sweeping low bushes in Maryland.
Distribution: Dorchester County, 1 female, Sharpstown.

Philodromus inaequipes Banks
Original Description: Can. Ent., 1900, p. 99.
Available Description: Bull. Mus. Comp. Zool., 1933, Vol. 74, No. 6, pl. 2, fig. 21, pl. 3, fig. 33.
Ecology: Two specimens of this species were taken in Maryland by sweeping bushes.
Distribution: Cecil County, 1 female, Northeast; Prince Georges County, 1 female, Riverdale.

Philodromus laticeps Keyserling
Original Description: Die Spinn. Amer., 1880, Vol. 1, p. 215.
Available Description: Ibid.
Ecology: All specimens of the species were collected from wasps nests.
Distribution: Prince Georges County, 8 females, Berwyn, W. J.; Wicomico County, 2 females, Salisbury, W. J.

Philodromus keyserlingi Marx
Original Description: Proc. U. S. Nat. Mus., 1890, Vol. 12, p. 559.
Available Description: Ibid.
Ecology: One specimen of this species was found on the side of a house; all others were taken from wasps nests.
Distribution: Harford County, 1 female, Churchville; Wicomico County, 2 females, Salisbury, W. J.

Philodromus marxi Keyserling
Original Description: Verh. zool.-bot. Ges. Wien, 1883, p. 677.
Available Description: Trans. Conn. Acad. Sci., 1892, Vol. 8, p. 374, pl. 31, fig. 3. (P. ornatus)
Ecology: These spiders are found running across foliage of low bushes and herbaceous plants in moist situations. They may be collected by sweeping.
Distribution: Anne Arundel County, 2 females, Bay Ridge; Caroline County, 1 female and 1 male, American Corners; Prince Georges County, sev. spms., Bowie; Worcester County, 1 female, Snow Hill.

Philodromus pernix Blackwall
Original Description: Ann. Mag. Nat. Hist., 1846, Vol. 17, p. 36.
Available Description: Trans. Conn. Acad. Sci., 1892, Vol. 8, p. 372, pl. 31, fig. 1. (P. vulgaris)
Ecology: This species is found on fence posts, barns and houses. Later in the fall they may be taken under boards on the ground.
Distribution: Caroline County, 1 female, Ridgely, L. P. D. and G. V.; Montgomery County, 1 female, Woodside, J. H. F.; Prince Georges County, 1 female, Bowie; Wicomico County, 2 females, Salisbury, W. J.

Philodromus robustus Emerton
Original Description: Trans. Conn. Acad. Sci., 1893, Vol. 8, pl. 32, fig. 1.
Available Description: Ibid.
Ecology: One male of this species was collected by beating trees.
Distribution: Caroline County, 1 male, Ridgely, L. P. D. and G. V.

Philodromus rufus Walckenaer
Original Description: Faune. France Aran., 1925, p. 91.
Available Description: Trans. Conn. Acad. Sci., 1892, Vol. 8, p. 373, pl. 31, fig. 2. (P. pictus)
Ecology: Specimens of this species have been collected in a greenhouse, on a tree and in wasps nests.
Distribution: Garrett County, 1 female, Deep Creek Lake; Prince Georges County, 7 females, Berwyn, W. J.

Genus Synema Simon

Synema parvula Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 447, pl. 23, fig. 8. (Thomisus)
Available Description: Spiders U. S. (reprint), 1875, p. 80, pl. 10, fig. 8. (Thomisus)
Ecology: This species has been collected in Maryland by sweeping low herbs and grasses, and by sifting moderately dry leaves.
Distribution: Anne Arundel County, 1 male and 1 yg. female, Annapolis; Prince Georges County, 19 spms., Berwyn, E. B.; Somerset County, 1 female, Princess Anne.

Genus Thanatus Koch

Thanatus lycosoides Emerton
Original Description: Trans. Conn. Acad. Sci., 1892, Vol. 8, p. 379.
Available Description: Ibid.
Ecology: All specimens of this species have been collected from the ground in dry open woodland or fields or by sweeping the same situations.

Distribution: Allegany County, 1 female, Cumberland; Frederick County, 1 female, Sugar Loaf Mountain; Garrett County, 1 female, Deep Creek Lake; Prince Georges County, 2 males and 1 female, Lanham; Somerset County, 1 male, Princess Anne.

Genus Tibellus Simon

Tibellus maritimus Menge
Original Description: Preus. Spinn. 1874, p. 398, pl. 67, fig. 225 (not female.) (Thanatus)
Available Description: Occas. Pap. Bost. Soc. Nat. Hist., 1875, Vol. 2, p. 81, pl. 20, fig. 11. (Thomisus)
Ecology: All specimens of this species were taken by sweeping low fields and marshes or swamps.
Distribution: Anne Arundel County, 2 females, Bay Ridge; Prince Georges County, 1 male, College Park, H. O. W.; Somerset County, 1 female, Princess Anne.

Tibellus oblongus Walckenaer
Original Description: Faune Francaise, 1802, Vol. 2, p. 228. (Aranea)
Available Description: Trans. Conn. Acad. Sci., 1892, Vol. 8, p. 378.
Ecology: Same as that of T. maritimus Menge.
Distribution: Garrett County, 3 females and 1 male, Deep Creek Lake; Prince Georges County, 1 female, Lanham; Saint Marys County, 4 spms., Point Lookout.

Genus Tmarus Simon

Tmarus angulatus Walckenaer
Original Description: Ins. Apt., 1837, Vol. 1, p. 537. (Thomisus)
Available Description: Bull. Amer. Mus. Nat. Hist., 1939, Vol. 76, p. 305, figs. 11, 21, 22 and 25.
Ecology: This species runs about on the twigs and leaves of trees and bushes. It appears much like a flower or leaf bud when at rest. It may be taken by beating or sweeping trees and bushes.
Distribution: Caroline County, 1 female, Ridgely, L. P. D. and G. V.; Prince Georges County, 1 yg. female, Lanham; Somerset County, 1 yg. male, Dividing Creek Swamp; Wicomico County, 1 female, Salisbury, W. J.

Tmarus rubromaculatus Keyserling
Original Description: Die Spinn. Amer., 1880, Vol. 1, p. 158, pl. 3, fig. 86.
Available Description: Bull. Amer. Mus. Nat. Hist., 1939, Vol. 76, p. 307, figs. 17, 18, and 24.
Ecology: One male of this species was collected sweeping low bushes.
Distribution: Wicomico County, 1 male, Salisbury.

Genus Xysticus Koch

Xysticus banksi Bryant
Original Description: Psyche, 1930, Vol. 37, p. 138, figs. 11, 12 and 14.
Available Description: Bull. Amer. Mus. Nat. Hist., 1939, Vol. 76, p. 388, figs. 216, 217 and 229.
Ecology: One female of this species was taken while sweeping in an orchard.
Distribution Harford County, 1 female, Churchville.

Xysticus bicuspis Keyserling
Original Description: Verh. zool.-bot. Ges. Wien, 1887, Vol. 37, p. 478, pl. 6, fig. 38.
Available Description: Bull. Amer. Mus. Nat. Hist., 1939, Vol. 76, p. 377, figs. 152, 153 and 189.
Ecology: Two males of this species have been collected by sweeping grass.
Distribution: Prince Georges County, 1 male, College Park, K. E. M.; Washington County, 1 female, Hagerstown, recorded by Hyslop.

Xysticus discursons Keyserling
Original Description: Die Spinn. Amer., 1880, Vol. 1, p. 20, pl. 1, fig. 7.
Available Description: Bull. Amer. Mus. Nat. Hist., 1939, Vol. 76, p. 364, figs. 150, 151, and 168.
Ecology: One male was found on the ground in the state.
Distribution: Prince Georges County, 1 male, Lanham, E. E. and R. Rhine.

Xysticus elegans Keyserling
Original Description: Die Spinn. Amer., 1880, Vol. 1, p. 31, pl. 1, fig. 14.
Available Description: Bull. Amer. Mus. Nat. Hist., 1937, Vol. 76, p. 372, figs. 156, 157 and 192.
Ecology: Two females have been taken in Maryland, one from a low bush and one on the ground.
Distribution: Baltimore County, 1 female, Catonsville, G. V.; Prince Georges County, 1 female, College Park.

Xysticus ferox Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 445, pl. 23, fig. 3. (Thomisus)
Available Description: Bull. Amer. Mus. Nat. Hist., 1939, Vol. 76, p. 384, figs. 212, 213, 225 and 233.
Ecology: This species is common on low plants in fields in the summer and is also found on the ground under leaves and boards in the early fall.
Distribution: Allegany County, 1 female, Cumberland; Anne Arundel County, 1 male, Galesville, H. O. W.; Dorchester County, 1 female, Vienna, L. P. D.; Harford County, 1 female, Churchville; Montgomery County, 2 males, Rockville; Prince Georges County, 1 female, Berwyn, W. J.; Somerset County, 1

female, Princess Anne; Worcester County, 1 male, Berlin, L. P. D.

Xysticus fraternus Banks
Original Description: Jour. N. Y. Ent. Soc., 1892, Vol. 3, p. 90.
Available Description: Bull. Amer. Mus. Nat. Hist., 1939, Vol. 76, p. 384, figs. 214, 215 and 224.
Ecology: The author has never collected this species.
Distribution: Frederick County, 1 female, South Mountain, recorded by Hyslop.

Xysticus funestus Keyserling
Original Description: Die Spinn. Amer., 1880, Vol. 1, p. 10, pl. 1, fig. 2.
Available Description: Bull. Amer. Nat. Hist., 1939, Vol. 76, p. 367, figs. 162, 163 and 175.
Ecology: This species has been found on the ground, but has been taken most frequently in Maryland by sweeping low fields.
Distribution: Caroline County, 1 female; Harford County, 1 female, Churchville; Prince Georges County, 1 male, College Park, K. E. M.; Wicomico County, 4 males and 3 females, Salisbury, W. J.

Xysticus gulosus Keyserling
Original Description: Die Spinn. Amer., 1880, Vol. 1, p. 43, pl. 1, fig. 21.
Available Description: Bull. Amer. Mus. Nat. Hist., 1939, Vol. 76, p. 353, figs. 140, 141 and 165.
Ecology: This species has been taken only by sweeping fields.
Distribution: Garrett County, 1 male, Deep Creek Lake; Montgomery County, 1 male, Silver Spring, E. B. H.; Prince Georges County, 1 female, College Park, E. E.; Saint Marys County, 1 male, Rison, K. E. M.

Xysticus luctans Koch
Original Description: Die Arachniden, 1845, Vol. 12, p. 63, pl. 311, fig. 998. (Thomisus)
Available Description: Bull. Amer. Mus. Nat. Hist., 1939, Vol. 76, p. 369, figs. 160, 161 and 196.
Ecology: The author has not collected this species.
Distribution: Montgomery County, 1 female, recorded by Dietz.

Xysticus ontariensis Emerton
Original Description: Can. Ent. 1919, Vol. 51, p. 108, fig. 16.
Available Description: Bull. Amer. Mus. Nat. Hist., 1939, Vol. 76, p. 355, fig. 164.
Ecology: One female was found on dirt by Dr. Jeffers.
Distribution: Montgomery County, 1 female, recorded by Dietz; Prince Georges County, 1 female, Berwyn, W. J.

Xysticus punctatus Keyserling
Original Description: Die Spinn. Amer., 1880, Vol. 1, p. 30, pl. 1, fig. 13.
Available Description: Bull. Amer. Mus. Nat. Hist., 1939, Vol. 76, p. 393, figs. 236, 237 and 265.
Ecology: All specimens collected in Maryland were taken from wasps nests.
Distribution: Prince Georges County, 2 females, Berwyn, W. J.; Wicomico County, 1 male, Salisbury, W. J.

Xysticus triguttatus Keyserling
Original Description: Die Spinn. Amer., 1880, Vol. 1, p. 12, pl. 1, figs. 3 and 6.
Available Description: Bull. Amer. Mus. Nat. Hist., 1939, Vol. 362, figs. 169, 178 and 179.
Ecology: All specimens taken in the state were collected sweeping goldenrod etc. in open fields.
Distribution: Anne Arundel County, 1 female, Gibson Island; Baltimore County, 2 males, Towson; Calvert County, 1 male, Solomon's Island; Frederick County, 1 male, Darnestown, W. E. B.; Garrett County, 1 male, Deep Creek Lake; Montgomery County, 1 female and 2 males, Rockville; Prince Georges County, 2 females and 1 male, College Park; Wicomico County, 1 female, Salisbury, W. J.

Family Gnaphosidae

Genus Callilepis Westring

Callilepis imbecilla Keyserling
Original Description: Verh. zool.-bot. Ges. Wien, 1887, Vol. 37, p. 427, fig. 15. (Pythonissa)
Available Description: Trans. Amer. Ent. Soc., 1896, Vol. 23, p. 60.
Ecology: This species is found under boards and stones on the ground.
Distribution: Calvert County, 1 male, Chesapeake Beach, L. P. D.; Garrett County, 1 female, Deep Creek Lake.

Genus Drassodes Westring

Drassodes robinsoni Chamberlin
Original Description: Ann. Ent. Soc. Amer., 1919, Vol. 12, p. 110, pl. 5. (Zelotes)
Available Description: Ibid.
Ecology: One female of this species was found under a log.
Distribution: Prince Georges County, 1 female, Berwyn.

Genus Drassyllus Chamberlin

Drassyllus aprilinus Banks
Original Description: Jour. N. Y. Ent. Soc., 1909, Vol. 12, p. 110, pl. 5. (Zelotes)

Available Description: Ibid.
Ecology: All specimens of this species taken in Maryland were found under logs or sifted from moderately dry leaves.
Distribution: Caroline County, 2 females, Goldsboro; Kent County, 1 male, Galena; Montgomery County, type 1 ♂., Chevy Chase, N. Banks; Worcester County, 1 female, Ocean City, L. P. D.

Drassyllus depressus Emerton
Original Description: Trans. Conn. Acad. Sci., 1909, Vol. 8, p. 173, pl. 3, fig. 8. (Prosthesima)
Available Description: Ibid.
Ecology: This species may be found under boards and stones on the ground and occasionally in houses.
Distribution: Garrett County, 1 female, Deep Creek Lake; Montgomery County, 1 male, Woodside, J. H. F.; Prince Georges County, 1 male, College Park.

Drassyllus femoralis Banks
Original Description: Proc. Cal. Acad. Sci., 1904, Ser. 3, Vol. 3, p. 336, pl. 38, fig. 1. (Zelotes)
Available Description: Ibid.
Ecology: Only two specimens were taken and put in the author's collection, one from Maryland and one from Washington, D. C. Both were taken in buildings.
Distribution: Prince Georges County, 1 female, College Park, R. B.; One female was collected in Washington, D. C. by K. A. Dorsey.

Drassyllus frigidus Banks
Original Description: Proc. Acad. Nat. Sci., Phila., 1892, p. 17, pl. 1, fig. 56. (Prosthesima)
Available Description: Jour. N. Y. Ent. Soc., 1895, Vol. 3, p. 78.
Ecology: This species is found under boards and stones on the ground.
Distribution: Allegany County, 1 male, Dans Rock, H. E. M.; Cecil County, 1 male, Pleasant Hill; Prince Georges County, 1 male, College Park, J. O.; Worcester County, Pocomoke City.

Drassyllus rufulus Banks
Original Description: Proc. Phila. Acad. Nat. Sci., 1892, p. 17, pl. 1, fig. 55. (Prosthesima)
Available Description: Ann. N. Y. Acad. Sci., 1910, Vol. 19, p. 207, pl. 21, fig. 4.
Ecology: One female of this species was found under a board in the state.
Distribution: Prince Georges County, 1 female, College Park, E. E.

Drassyllus sporadicus New Species
Male--Total length 2.10 mms.; carapace length 1.40 mms.; carapace width .90 mms.; length of abdomen 1.80 mms.; width of abdomen 1.00 mms.

Carapace yellow narrowly seamed with black; eyes finely bordered reddish brown, anterior medians set on a black spot. Sternum and mouthparts yellow, sternum seamed with brown. Legs dusky yellow. Abdomen grey and unmarked except for large orange basal shield. Venter grey and marked with two thin parallel longitudinal lines. Spinnerets dusky yellow.

Structure typical; carapace flat and obovate in outline; abdomen broadly tubular in form. Both eye rows gently procurved; anterior laterals twice the diameter of the anterior medians, posterior medians oblique and slightly larger than the posterior laterals. Eyes of posterior row contiguous, anterior medians separated by their diameter and subcontiguous with the anterior laterals. Clypeus narrow, less than the diameter of the anterior lateral eyes. Anterior tibiae not spined below but with a basal spine above, anterior metatarsi with a pair of spines near the base below but not spined above. Tibial apophysis of male palpus bent away from face of palpus in the apical third of its length. Embolus comparatively long.

Type Locality--Parole, Maryland; male holotype collected under a board, June 9, 1942.

Genus Gnaphosa Latreille

Gnaphosa gigantea Keyserling
Original Description: Verh. zool.-bot. Ges. Wien, 1887, p. 424, fig. 3.
Available Description: Trans. Conn. Acad. Sci., 1889, pl. 4, fig. 4.
Ecology: Two specimens were found under stones on a beach.
Distribution: Garrett County, 1 female, Deep Creek Lake.

Gnaphosa sericata Koch
Original Description: Drassiden, 1866, p. 31, pl. 2, fig. 21. (Plythonissa)
Available Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 456, pl. 24, fig. 4. (Herpyllus bicolor)
Ecology: Not known to the author.
Distribution: Baltimore City, type loc., L. Koch.

Genus Haplodrassus Chamberlin

Haplodrassus signifer Koch
Original Description: Die Arachniden, 1839, Vol. 6, p. 31, pl. 188, fig. 452. (Drassus)
Available Description: Trans. Conn. Acad. Sci., 1889, Vol. 8, p. 15, pl. 4, fig. 8. (Drassus robustus)
Ecology: One female was found under a log in Maryland.
Distribution: Dorchester County, 1 female, Vienna, G. B.

Genus Herpyllus Hentz

Herpyllus vasifer Walckenaer
Original Description: Tabl. Aran., 1805, p. 46.
Available Description: Trans. Conn. Acad. Sci., 1889, Vol. 8, p. 173, pl. 3, fig. 7.

Ecology: This species may be found under boards and stones on the ground in the summer. They occasionally wander into houses. In the winter adult males and immature females may be found in silken nests under loose bark on dead trees. On one occasion the author found a live adult female in a capped cell of a mud dauber wasp.
Distribution: Allegany County, 2 males, Cumberland; Garrett County, 1 female, Deep Creek Lake, R. W. M.; Montgomery County, 1 female, Four Corners; Prince Georges County, 1 yg. female, College Park, E. N. C.

Genus Litopyllus Chamberlin

Litopyllus rupicolens Chamberlin
Original Description: Proc. Bil. Soc. Wash., 1922, Vol. 35, p. 155.
Available Description: Ibid.
Ecology: One female of this species was collected by sifting moist leaves.
Distribution: Prince Georges County, 1 female, College Park.

Genus Sergiolus Simon

Sergiolus variegatus Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 456, pl. 24, fig. 12. (Herpyllus)
Available Description: Trans. Conn. Acad. Sci., 1889, Vol. 8, p. 174, pl. 4, fig. 1. (Poecilochra)
Ecology: This species has been sifted from moderately dry leaves in Maryland.
Distribution: Allegany County, 1 yg. female, Cumberland; Kent County, 1 yg. female, Galena; Prince Georges County, 1 yg. female, College Park; Queen Annes County, 1 male, Matapeake.

Genus Zelotes Gistl

Zelotes subterraneus Koch
Original Description: Die Arachn., 1839, Vol. 6, p. 85, pl. 201, fig. 491, 492. (Melanophora)
Available Description: Can. Ent., 1920, Vol. 52, p. 193, fig. 18. (variety)
Ecology: All specimens taken in Maryland were collected over newly excavated ground.
Distribution: Prince Georges County, 1 male, Lanham.

Family Clubionidae

Genus Castianeira Keyserling

Castianeira cingulata Koch
Original Description: Die Arachn., 1842, Vol. 9, p. 22.
Available Description: Trans. Conn. Acad. Sci., 1890, Vol.

8, p. 5, pl. 3, fig. 3. (Goetrecha bivittata)
Ecology: All specimens of this species have been collected under stones, leaves and boards on the ground in moist to moderately dry conditions.
Distribution: Anne Arundel County, 1 yg. female, Gibson Island; Garrett County, 1 male, Deep Creek Lake; Prince Georges County, 1 female, Berwyn, W. J.

Castianeira descripta Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 457. (Herpyllus)
Available Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 7, pl. 3, fig. 5. (Geotrecha crocata)
Ecology: Same as that of C. cingulata Koch except that these spiders are occasionally found in buildings.
Distribution: Calvert County, 1 female, Solomon's Island, H. A. L.; Cecil County, 1 female, Colora; Garrett County, 1 female, Deep Creek Lake; Harford County, 1 female, Churchville; Prince Georges County, 1 male, College Park.

Castianeira longipalpis Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 6, p. 457. (Herpyllus)
Available Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 7, pl. 3, fig. 4. (Geotrecha pinnata)
Ecology: Same as that of C. cingulata Koch.
Distribution: Calvert County, 1 yg. female, Scientist's Cliffs; Prince Georges County, 1 female, Berwyn; Wicomico County, 4 males and 1 female, Salisbury, W. J.

Castianeira lineata Emerton
Original Description: Trans. Conn. Acad. Sci., 1909, Vol. 14, p. 216, pl. 10, fig. 5.
Available Description: Ibid.
Ecology: One female of this species was found on the ground by Dr. Walter Jeffers.
Distribution: Wicomico County, 1 female, Salisbury, W. J.

Castianeira sp.
Undescribed.
Ecology: One male found under board on ground.
Distribution: Harford County, 1 male, Churchville.

Genus Chiracanthium Koch

Ciracanthrum inclusum Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 451.
Available Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, pl. 5, fig. 12. (C. viride)
Ecology: This spider has been taken in Maryland by sweeping grasses in low moist fields.
Distribution: Anne Arundel County, 1 female, Galesville, H. O. W.; Calvert County, 1 male, Scientist's Cliffs; Prince

Georges County, 1 female, College Park, P. K.

Genus Clubiona Latreille

Clubiona abboti Koch
Original Description: Die Arachn., 1867, p. 303.
Available Description: Trans. Conn. Acad. Sci., Vol. 8, p. 18, pl. 5, fig. 6.
Ecology: This spider has been collected in various places in Maryland. It has been taken by sweeping grasses, beating trees and bushes, sifting leaves and under stones and boards. Adult females may be found in silken tubes in curled leaves.
Distribution: Allegany County, 1 yg. female, Dans.Rock; Anne Arundel County, 1 female, Bay Ridge; Cecil County, 1 male, Elkton; Garrett County, 1 female, Deep Creek Lake; Harford County, 1 female, Churchville; Kent County, 1 male, Fairlee; Montgomery County, 1 female, Great Falls; Prince Georges County, 1 male and 1 female, College Park; Washington County, 2 females, Delamere, R. W. M.; Somerset County, 1 yg. female, Princess Anne.

Clubiona canadensis Emerton
Original Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 17, pl. 5, fig. 4.
Available Description: Ibid.
Ecology: One pair of this species was found under a board.
Distribution: Harford County, 1 male and 1 female, Churchville.

Clubiona minuta Emerton
Original Description: Trans. Conn. Acad. Sci., Vol. 8, p. 17, p. 5, fig. 11.
Available Description: Ibid.
Ecology: One male of this species was taken from a wasps nest.
Distribution: Prince Georges County, 1 male, Berwyn, W. J.

Clubiona obesa Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 450.
Available Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 16, pl. 5, fig. 1.
Ecology: Specimens have been taken at night on trees with the use of a spot light. One male was taken sifting leaves.
Distribution: Prince Georges County, 1 male, College Park.

Clubiona pallens Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 449.
Available Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 19, pl. 5, fig. 10.
Ecology: Specimens of this species were taken under boards and logs in the state.
Distribution: Harford County, 2 males and 2 females, Churchville; Prince Georges County, 1 male, College Park.

Clubiona riparia Koch
Original Description: Die Arachn., 1867, p. 294.
Available Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 19, pl. 5, fig. 9.
Ecology: Specimens have been taken by sweeping low fields and under boards.
Distribution: Garrett County, 2 females, Deep Creek Lake.

Clubiona tibialis Emerton
Original Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 16, pl. 5, fig. 3.
Available Description: Ibid.
Ecology: Specimens of this species were taken in Maryland by sweeping swamp grasses.
Distribution: Prince Georges County, 2 females, College Park.

Genus Marcellina Bryant

Marcellina piscatoria Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 450, pl. 23, fig. 15.
Available Description: Psyche, 1931, Vol. 38, p. 104, pl. 6, figs. 1-2.
Ecology: All specimens of this species were collected from trees at night with the use of a spotlight.
Distribution: Prince Georges County, 1 male, College Park.

Genus Meriola Banks

Meriola decepta Banks
Original Description: Jour. N. Y. Ent. Soc., 1895, p. 81.
Available Description: Ibid.
Ecology: All specimens of this species collected in the state were taken over newly plowed ground or on leaves of corn stalks standing in the field.
Distribution: Cecil County, 1 female, Elkton; Kent County, 1 female, Fairlee; Prince Georges County, 3 males, Lanham; Washington County, 1 female, Delamere, R. W. M.

Genus Micaria Westring

Micaria longipes Emerton
Original Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 3, pl. 2, fig. 1.
Available Description: Ibid.
Ecology: One male and one young female of this species were collected on the ground.
Distribution: Garrett County, 1 male and 1 yg. female, Deep Creek Lake.

Genus Phrurolithus Koch

Phrurolithus brittoni Gertsch

Original Description: Amer. Mus. Novit., 1941, No. 147, p. 14, figs. 34, 35 and 36.
Available Description: Ibid.
Ecology: One male of this species was collected under a log in the state.
Distribution: Garrett County, 1 male, Deep Creek Lake.

Phrurolithus sp.
Undescribed.
Ecology: One female was taken while sifting leaves in Maryland.
Distribution: Prince Georges County, 1 female, College Park.

Genus Phrurotimpus Chamberlin

Phrurotimpus kentuckyense Chamberlin and Gertsch
Original Description: Amer. Mus. Novit., 1940, No. 1123, p. 9, figs. 31 and 32.
Available Description: Ibid.
Ecology: Specimens of this species have been taken under logs and stones and by sifting leaves.
Distribution: Baltimore County, 1 female, Loch Raven; Cecil County, 1 female, Pleasant Hill; Garrett County, 1 female, Deep Creek Lake; Prince Georges County, 1 male, College Park, I. Schloss.

Phrurotimpus umbratilis Bishop and Crosby
Original Description: Anns. Ent. Soc. Amer., 1933, Vol. 26, p. 152.
Available Description: Ibid.
Ecology: This species has been taken once in Maryland by sweeping.
Distribution: Dorchester County, 1 female, Sharptown.

Phrurotimpus sp.
Undescribed.
Ecology: Same as for P. kentuckyense Chamberlin and Gertsch.
Distribution: Baltimore County, 1 female, Parkton; Harford County, 1 female, Churchville; Montgomery County, 1 female, Pennyfield; Prince Georges County, 1 female, Berwyn.

Genus Trachelas Koch

Trachelas tranquillus Hentz
Original Description: Jour. Bost. Soc. Hist., 1847, Vol. 5, p. 450.
Available Description: The Spider Book, Comstock, Revised 1940, p. 596, figs. 659 and 660.
Ecology: This species is found under boards, stones and occasionally in houses.
Distribution: Prince Georges County, 2 females, Berwyn, E. B.

Family Salticidae

Genus Agassa Simon

Agassa cyanea Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1846, Vol. 5, p. 365. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 590, pl. 49, fig. 12, pl. 51, fig. 9.
Ecology: This species may be collected by sweeping weeds in an open field.
Distribution: Anne Arundel County, 1 yg. female, Annapolis; Prince Georges County, 1 female, Marlboro; Somerset County, 1 yg. male, Princess Anne, K. E. M.

Genus Evarcha Simon

Evarcha hoyi Peckham
Original Description: Descr. Attidae U. S., 1883, p. 7.
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 557.
Ecology: This species has been collected in Maryland by sweeping fields in the western counties.
Distribution: Allegany County, 1 female, Cumberland, M. H. and H. E. M.; Garrett County, 1 female, Deep Creek Lake.

Genus Fuentes Peckham

Fuentes lineata Koch
Original Description: Die Arachn., 1848, Vol. 14, p. 77. (Maevia)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 492, pl. 39, fig. 9. (Onondaga)
Ecology: All specimens of this species were found on the ground or on and under logs and boards.
Distribution: Allegany County, 1 yg. female, Cumberland; Cecil County, 1 male, Elkton; Prince Georges County, 1 yg. female, College Park.

Genus Habrocestum Simon

Habrocestum pulex Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1846, Vol. 5, p. 361. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 361, pl. 42, fig. 11 and pl. 43, fig. 1.
Ecology: This species has been collected from logs and boards in open fields and lumbered woodland. It has also been taken in limited numbers by sweeping such situations. In the winter immature specimens have been found in silken nests under loose bark and stones.
Distribution: Allegany County, 1 male and 1 female, Cresaptown, H. E. M.; Calvert County, 1 male, Solomon's Island, R. A. L.; Frederick County, 1 female, Lewistown; Harford County, 1 female and 2 males, Churchville; Montgomery County,

1 female, Redland, R. W. M.; Prince Georges County, 1 female, College Park, I. S.; Somerset County, 1 female, Princess Anne; Washington County, 1 male, Keedysville; W. J.; Wicomico County, 1 yg. male and 1 female, Salisbury; Worcester County, 1 female, Snow Hill.

Genus Habronattus Cambridge

Habronattus coronatus Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1846, Vol. 5, p. 362.
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 545, pl. 45, fig. 3.
Ecology: This species has been taken in Maryland by sweeping weeds and grasses in open fields and occasionally in buildings in the summer.
Distribution: Calvert County, 1 male, Bertha; Montgomery County, 1 female, Silver Spring; Prince Georges County, 1 female, Berwyn, J. N. H.; Wicomico County, 1 male, Salisbury, W. J.

Pellenes viridipes Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1845, Vol. 5.
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 574, pl. 44, fig. 10 and pl. 45, fig. 8.
Ecology: One male of this species was taken on the bank of a stream by Mr. George Vogt.
Distribution: Prince Georges County, 1 male, College Park.

Genus Hentzia Marx

Hentzia mitrata Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1846, Vol. 5, p. 363. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 507, pl. 41, fig. 1, pl. 42, fig. 2. (Wala)
Ecology: These spiders are foliage loving and may be found on trees, bushes, weeds and grass. They may best be taken by sweeping and beating.
Distribution: Cecil County, 1 male, Fair Hill; Montgomery County, 1 female, Woodside, J. E. F.; Prince Georges County, 1 male, College Park, I. S.

Hentzia palmarum Hentz
Original Description: Jour. Bost. Acad. Nat. Hist., 1846, Vol. 5, p. 366. (Epiblemum)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 507, pl. 42, fig. 1. (Wala)
Ecology: Same as that of H. mitrata Hentz.
Distribution: Caroline County, 1 yg. female, Ridgely, L. P. D. and G. V.; Calvert County, 2 males, Solomon's Island, R. A. L.; Charles County, 1 yg. female, La Plata; Prince Georges County, 1 male, Berwyn, W. J.; Talbot County, 1 female, Wye Mills.

Genus Hyctia Simon

Hyctia bina Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1846, Vol. 5. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 489, pl. 39, fig. 3.
Ecology: These spiders may be taken by sweeping low herbs and grasses near water, especially lakes, bays, etc.
Distribution: Prince Georges County, 1 female, Berwyn, W. J.

Hyctia pikei Peckham
Original Description: Trans. Wis. Acad. Sci., 1888, Vol. 7, p. 79.
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 488, pl. 39, fig. 7 and pl. 40, fig. 8.
Ecology: Same as that of H. bina Hentz.
Distribution: Anne Arundel County, 1 male and 1 female, Bay Ridge, N. H. and R. W. M.; Prince Georges County, 1 yg. female, College Park.

Genus Icius Simon

Icius elegans Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1846, Vol. 6, p. 353. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 498, pl. 41, fig. 1.
Ecology: This species has been collected in Maryland by beating low bushes in dry open fields and thickets.
Distribution: Anne Arundel County, 1 female, Bay Ridge; Calvert County, 2 males and 3 females, Lusby; Caroline County, 1 male, American Corners; Cecil County, 3 males, North East; Garrett County, 1 female, Deep Creek Lake; Prince Georges County, 1 male, College Park; Wicomico County, 2 females and 2 males, Salisbury.

Icius similis Banks
Original Description: Can. Ent., 1895, p. 100.
Available Description: Trans. Wis. Acad. Sci., Vol. 16, p. 498, pl. 41, fig. 2.
Ecology: One female of this species was captured by C. Barr while sweeping low swamp herbage.
Distribution: Prince Georges County, 1 female, College Park, C. Barr.

Genus Lyssomanes Hentz

Lyssomanes viridis Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1845, Vol. 5, p. 198. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 595.
Ecology: The author has taken young specimens of this species

by sweeping swamp grasses.
Distribution: Somerset County, 1 yg. female, Princess Anne.

Genus Maevia Koch

Maevia vittata Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1846, Vol. 5, p. 360. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 452, pl. 49, fig. 7 and pl. 51, fig. 8.
Ecology: This species has been taken in the state both by sifting leaves and by sweeping herbage and brush.
Distribution: Allegany County, sev. spms., Cumberland; Anne Arundel County, 1 male, Bay Ridge; Baltimore City, 1 male, L. H.; Caroline County, 1 yg. male, Goldsboro; Calvert County, 1 male and 1 yg. female, Lusby; Harford County, 1 male, Churchville; Somerset County, 1 female, Princess Anne.

Genus Marpissa Koch

Marpissa undata DeGeer
Original Description: Mem. Hist. Ins., 1778, Vol. 7, p. 320, p. 39, fig. 1 and pl. 40, fig. 1. (Aranea)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 354.
Ecology: This species is found on trees and logs where its colors blend in with the surrounding bark. In the winter it is found in flattened silken nests in cracks of trees and boards.
Distribution: Caroline County, 1 yg. female, L. P. D. and G. V.; Calvert County, 1 female, Lusby; Frederick County, 1 male, Sugar Loaf Mountain; Prince Georges County, 2 males, College Park.

Genus Metacyrba Cambridge

Metacyrba taeniola Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1846, Vol. 5, p. 353. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 486, pl. 39, fig. 5, pl. 40, fig. 4.
Ecology: This species has been found on trees and stumps, under boards and in buildings in Maryland.
Distribution: Calvert County, 1 male, Solomon's Island, R. A. L.; Prince Georges County, 1 female, College Park.

Genus Metaphidippus Cambridge

Metaphidippus capitatus Peckham
Original Description: Trans. Wis. Acad. Sci., 1888, Vol. 7, p. 40. (Dendryphantes)
Available Description: Ibid.
Ecology: This species is common on weeds, scrub pines and other plants in dry open fields. It may be collected by sweeping these plants. Both the light and dark female forms

occur here.
Distribution: Allegany County, 1 female, Cumberland; Anne Arundel County, 2 males, Annapolis; Frederick County, 1 yg. female, Thurmont; Garrett County, 1 yg. male, Deep Creek Lake; Prince Georges County, 2 males, College Park; Saint Marys County, 1 male, Great Mills; Washington County, 1 female, Cavetown, W. J.; Wicomico County, 1 female, Salisbury.

Metaphidippus castaneus Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1846, Vol. 5, p. 353. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 472, pl. 36, fig. 3.
Ecology: One female of this species was found on the ground.
Distribution: Prince Georges County, 1 female, Lanham, J. O.

Metaphidippus militaris Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1845, Vol. 5, p. 201. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 460, pl. 37, fig. 1.
Ecology: Much the same as for M. capitatus Peckham except that this species is more abundant over swampy fields.
Distribution: Caroline County, 1 male and 3 females, Ridgely, L. P. D.; Calvert County, 1 yg. female, Solomon's Island; Cecil County, 1 female, Rising Sun, W. E. B.; Harford County, 1 male, Churchville; Garrett County, 1 female, Deep Creek Lake; Prince Georges County, 1 male and 1 female, College Park; Washington County, 3 males and 1 female, Smithsburg, W. J.; Wicomico County, 1 male and 4 females, Salisbury, W. J.; Worcester County, 1 female, Snow Hill.

Metaphidippus ornatus Banks
Original Description: Proc. Acad. Nat. Sci. Phila., 1892, p. 75. (Dendryphantes)
Available Description: Ibid.
Ecology: Same as for M. capitatus Peckham.
Distribution: Anne Arundel County, 2 females and 1 male, Bay Ridge, R. W. M.; Calvert County, 1 male and 1 female, Bertha; Cecil County, 1 male, Fair Hill; Dorchester County, 1 male, Sharptown; Garrett County, 3 females, Deep Creek Lake; Howard County, 1 female, Savage; Montgomery County, 1 female, Silver Spring, E. B. H.; Prince Georges County, 1 male and 1 female, College Park; Queen Annes County, 3 males, Wye Mills; Saint Marys County, 2 males, Great Mills, Washington County, 2 males, Cavetown, W. J.; Wicomico County, 1 male and 1 female, Salisbury; Worcester County, 1 female, Snow Hill.

Metaphidippus virginis Chamberlin
Original Description: Bull. Mus. Comp. Zool., 1925, Vol. 62, p. 233. (Dendryphantes)
Available Description: Ibid.
Ecology: Same as that of M. capitatus Peckham. The author has not been able to distinguish the female so only males are

recorded.
Distribution: Allegany County, 1 male, Cumberland; Prince Georges County, 1 male, College Park.

Genus Myrmarachne MacLeay

Myrmarachne hentzi Banks
Original Description: Proc. Acad. Nat. Sci. Phila., 1913, p. 188.
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 371. (M. albocinctus)
Ecology: All specimens of this species were taken by sweeping grasses and herbaceous plants in open woodland.
Distribution: Anne Arundel County, 1 female, Bay Ridge, R.W.M.; Calvert County, 1 female, Bertha.

Genus Neon Simon

Neon nelli Peckham
Original Description: Trans. Wis. Acad. Sci., 1888, Vol. 7, p. 88.
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 588, pl. 50, fig. 5.
Ecology: This species may be collected under stones or by sifting moderately dry leaves.
Distribution: Prince Georges County, 1 male, College Park.

Genus Parnaenus Peckham

Parnaenus chrysis Walckenaer
Original Description: Ins. Apt., 1837, Vol. 1, p. 454. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 430.
Ecology: These large spiders are found on bushes and trees. They may occasionally be taken by sweeping, but never in numbers.
Distribution: Cecil County, 1 male, Colora; Harford County, 1 male, Churchville; Montgomery County, 1 female, Pennyfield; Prince Georges County, 3 females and 2 males, Berwyn, W. J.

Genus Peckhamia Simon

Peckhamia picata Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1846, Vol. 5, p. 370.
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 369, pl. 51, fig. 2.
Ecology: This species has been collected by sweeping grasses and sifting leaves in Maryland.
Distribution: Kent County, 1 yg. female, Galena; Prince Georges County, 1 male, Berwyn; Somerset County, 1 yg. male, Princess Anne.

Genus Phidippus Koch

Phidippus audax Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1845, Vol. 5, p. 199. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 389, pl. 29, fig. 2.
Ecology: This is the most common jumping spider in Maryland. It may be found in the summer in and on buildings, on stacked lumber and on weeds and grasses in the open fields. In the winter it builds silken nests under loose bark and under boards and stones. Unlike M. undata DeGeer it seldom builds in small crevices and cracks due to the fact that its body is much thicker than that of undata. The author has found as many as fifteen nests of this species to the square foot under the loose bark of dead pines.
Distribution: Allegany County, 1 female, Cumberland; Baltimore City, 1 male, I. S.; Caroline County, 1 female, Goldsboro; Calvert County, 1 female, Solomon's Island, W. Hard and J. Cronin; Cecil County, 1 female, Elkton; Harford County, 1 female, J. Umbarger; Kent County, 1 female and 1 male, Fairlee; Prince Georges County, 1 female, College Park; Washington County, 1 female, Smithsburg, H. S. McConnell; Wicomico County, 1 female, Salisbury, W. J.

Phidippus clarus Keyserling
Original Description Verh. zool.-bot. Ges. Wien, 1884, Vol. 6, p. 497.
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 398, pl. 30, fig. 1.
Ecology: This spider is found on trees, bushes and weeds in fields, orchards, etc. It may be taken in numbers by sweeping.
Distribution: Anne Arundel County, 1 female, Beverly Beach; Calvert County, 1 yg. male, North Beach; Garrett County, 3 males, Deep Creek Lake; Harford County, 1 male, Churchville; Prince Georges County, 1 yg. male, P, Knight; Saint Marys County, 1 female, Great Mills; Washington County, 1 female, Smithsburg, H. S. McConnell.

Phidippus insignarius Koch
Original Description: Die Arachn., 1846, Vol. 13, p. 150.
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 412, pl. 30, fig. 3.
Ecology: Only two males of this species have been taken in Maryland; both were found in woodland on dry leaves.
Distribution: Montgomery County, 1 male, Great Falls; Prince Georges County, 1 male, Berwyn, W. J.

Phidippus insolens Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1845, Vol. 5, p. 200. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 400, pl. 30, fig. 2.

Ecology: Same as that of P. clarus Keyserling.
Distribution: Baltimore City, 1 female, I. S.; Caroline County, 2 females, Ridgely, L. P. D.; Garrett County, 2 females, Deep Creek Lake, M. H. and K. E. M.; Prince Georges County, 1 female, Berwyn, J. N. H.; Worcester County, 1 female, Berlin, L. P. D.

Phidippus McCookii Peckham
Original Description: Descr. Attidae U. S., 1883, p. 16. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 396, pl. 29, fig. 4.
Ecology: This species is found on bushes and trees in open woodland and shaded fields.
Distribution: Baltimore County, 1 female, Catonsville, G. V.; Montgomery County, 1 female, R. W. M.; Prince Georges County, 1 male, College Park, G. B.

Phidippus mystaceus Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1846, Vol. 5, p. 355. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 435, pl. 35, fig. 1.
Ecology: The ecology of this species is not known to the author as all specimens were collected from wasps nests except one male taken in an automobile.
Distribution: Prince Georges County, 1 male, College Park, E. G. M.; Wicomico County, 1 male and 2 females, Salisbury, W. J.

Phidippus putnami Peckham
Original Description: Descr. Attidae U. S., 1883, p. 1. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 417, pl. 33, fig. 3, pl. 34, fig. 3.
Ecology: Same as that of P. clarus Keyserling.
Distribution: Cecil County, 3 males and 1 female, Colora; Harford County, 1 male and 1 female, Churchville; Prince Georges County, 6 females, Berwyn, W. J.

Phidippus variegatus Lucas
Original Description: Ann. Soc. Ent. France, 1883, p. 476. (Salticus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 390, pl. 29, fig. 1.
Ecology: This species has been found associated with P. audax Hentz on the sides of buildings.
Distribution: Prince Georges County, 1 female, College Park.

Phidippus whitmanii Peckham
Original Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 394, pl. 29, fig. 2.
Available Description: Ibid.
Ecology: One young male found under a stone on a wooded hillside has been referred to this species.

Distribution: Allegany County, 1 yg. male, Rocky Gap.

Genus Salticus Latreille

Salticus scenicus Clerck
Original Description: Svenska. Spindlar, 1757, p. 117. (Araneus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 477, pl. 42, fig. 8.
Ecology: This species is found on and in buildings. It builds silken retreats in crevices and cracks.
Distribution: Allegany County, 1 yg. female, Westernport; Calvert County, 3 females, Solomon's Island, R. A. L.; Garrett County, 2 males, Deep Creek Lake; Prince Georges County, 1 female, College Park, G. V.

Genus Sassacus Peckham

Sassacus papenhoei Peckham
Original Description: Occ. Pat. Nat. Hist. Soc. Wis., 1895, Vol. 2, No. 3, p. 177.
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 592, pl. 49, fig. 11.
Ecology: Only males of this interesting species have been taken in Maryland. They were collected by sweeping hot dry open fields.
Distribution: Calvert County, 1 male, Bertha; Montgomery County, 1 male, Silver Spring; Prince Georges County, 1 male, Riverdale.

Genus Sidusa Peckham

Sidusa borealis Banks
Original Description: Jour. N. Y. Ent. Soc., 1904, Vol. 12, p. 116.
Available Description: Ibid.
Ecology: This species has been found in one locality in Maryland in, on and around greenhouses.
Distribution: Prince Georges County, 2 males and 2 females, College Park.

Genus Sitticus Simon

Sitticus palustris Peckham
Original Description: Descr. Attidae U. S., 1883, p. 25. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 519, pl. 43, fig. 3, pl. 44, fig. 4. (Sittacus)
Ecology: Several specimens of this species were collected by sweeping an open field.
Distribution: Garrett County, 3 males and 1 female, Deep Creek Lake.

Genus Synemosyna Hentz

Synemosyna formica Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1846, Vol. 5, p. 368.
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 366, pl. 50, fig. 1.
Ecology: This species runs about over low bushes and trees searching for prey. It may be collected by sweeping foliage and is easily overlooked in the net due to its ant-like appearance.
Distribution: Garrett County, 1 male, Swallow Falls; Prince Georges County, 2 males and 2 females, College Park; Somerset County, 4 females, Dividing Creek Swamp.

Genus Thiodina Simon

Thiodina puerpera Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1846, Vol. 5, p. 360. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 449, pl. 35, fig. 8.
Ecology: This species is found on grasses and weeds in low swampy or marshy fields.
Distribution: Anne Arundel County, 1 male, Bay Ridge, R. W. M.; Baltimore City, 1 male, I. S.; Caroline County, 6 males, Denton; Prince Georges County, 1 female, College Park.

Thiodina sylvana Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1846, Vol. 5, p. 364. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 449, pl. 35, fig. 9.
Ecology: Same as that of T. puerpera Hentz.
Distribution: Dorchester County, 1 male, Sharptown; Harford County, 1 female, Churchville; Prince Georges County, 1 male, Berwyn, W. J.; Somerset County, 1 yg. male, Princess Anne; Worcester County, 1 male, Snow Hill.

Genus Zygoballus Peckham

Zygoballus bettini Peckham
Original Description: Trans. Wis. Acad. Sci., 1888, Vol. 7, p. 89.
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 579, pl. 50, fig. 7, pl. 51, fig. 10.
Ecology: These spiders may be collected by sweeping grasses and weeds in open fields.
Distribution: Anne Arundel County, 1 female, Bay Ridge; Calvert County, 1 female, Lusby; Montgomery County, 1 female, Silver Spring; Prince Georges County, 1 male and 2 females, College Park; Somerset County, 1 male, Princess Anne.

Zygoballus nervosus Peckham
Original Description: Trans. Wis. Acad. Sci., 1888, Vol. 7, p. 56. (Eris)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol.

16, p. 580, pl. 50, fig. 8, pl. 51, fig. 12.
Ecology: Same as that of Z. bettini Peckham.
Distribution: Anne Arundel County, 1 female, Bay Ridge, R. W. M.; Prince Georges County, 1 female, College Park, W. J.; Saint Marys County, 1 male, Point Lookout; Washington County, 1 male, Delamere, R. W. M.; Worcester County, 1 female, Snow Hill.

Zygoballus sexpunctatus Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1845, Vol. 5, p. 202. (Attus)
Available Description: Trans. Wis. Acad. Sci., 1909, Vol. 16, p. 583, pl. 51, fig. 11.
Ecology: Same as that of Z. bettini Peckham.
Distribution: Anne Arundel County, 1 yg. male, Bay Ridge; Caroline County, 1 yg. male, American Corners; Cecil County, 1 male, Fair Hill; Montgomery County, 1 female, Silver Spring; Prince Georges County, 2 males, Berwyn, E. B.; Somerset County, 1 female, Princess Anne; Talbot County, 1 yg. male, Wye Mills.

Family Dysderidae

Genus Dysdera Latreille

Dysdera crocata Koch
Original Description: Die Arachn., 1839, Vol. 5, p. 81, figs. 392-394.
Available Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 36, pl. 8, fig. 2.
Ecology: These brilliant red and yellow spiders have been found only under logs, boards and stones in Maryland. The bright colors are visible through the white silk of the nests.
Distribution: Calvert County, 1 female, Solomon's Island, R. A. L.; Kent County, 1 male, Chestertown, J. A. Ditman; Prince Georges County, 1 male, College Park.

Family Segestriidae

Genus Ariadne Audoin

Ariadne bicolor Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1842, Vol. 4, p. 225. (Pylarus)
Available Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 37, pl. 8, fig. 3.
Ecology: These spiders live in silken tubes that extend down into holes and cracks in stones, boards, logs, etc. They must, because of this, be collected individually.
Distribution: Allegany County, 1 female, Cresaptown, H. E. M.; Caroline County, 1 yg. female, Churchville; Howard County, 1 yg. female, Glenelg; Montgomery County, 1 female, Four Corners; Prince Georges County, 1 female, Bowie.

Family Oonopidae

Genus Orchestina Simon

Orchestina saltitans Banks
Original Description: Ent. News, 1894, p. 300.
Available Description: Ibid.
Ecology: This small species is found in warm dry buildings.
Distribution: Prince Georges County, 1 female, College Park.

Family Hahniidae

Genus Hahnia Koch

Hahnia cinerea Emerton
Original Description: Trans. Conn. Acad. Sci., 1894, Vol. 8, p. 33, pl. 7, figs. 9-9 b.
Available Description: Amer. Mus. Novit., 1934, No. 712, p. 3, figs. 1, 2, 3, 4, 19, 20 and 21.
Ecology: This species may be sifted from sphagnum moss or moist leaves.
Distribution: Allegany County, 1 male, Cumberland; Caroline County, 1 male, Sudlersville; Garrett County, 1 male, Deep Creek Lake; Prince Georges County, 1 female, Branchville, K. E. M.; Washington County, 1 female, Clearspring, R. W. M.

Hahnia flaviceps Emerton
Original Description: Bull. Amer. Mus. Nat. Hist.., 1913, Vol. 32, p. 257, pl. 58, figs. 6-6 d.
Available Description: Amer. Mus. Novit., 1934, No. 712, p. 11, figs. 24, 25, and 26.
Ecology: Three females of this species were sifted from sphagnum moss.
Distribution: Prince Georges County, 3 females, Branchville, K. E. M.

Genus Neoantistea Gertsch

Neoantistea agilis Keyserling
Original Description: Verh. zool-bot. Ges. Wien, 1887, Vol. 37, p. 465, pl. 6, fig. 29. (Hahnia)
Available Description: Amer. Mus. Novit., 1934, No. 712, p. 19, figs. 29 and 41.
Ecology: This species has been taken in Maryland under stones and by sifting sphagnum moss and moist leaves.
Distribution: Allegany County, 2 males and 1 female, Dans Rock; Prince Georges County, 5 females and 1 male, College Park.

Neoantistea barrowsi Gertsch
Original Description: Amer. Mus. Novit., 1934, No. 712, p, 29, figs. 36-37.
Available Description: Ibid.

Ecology: This species has been found on the ground and under boards on the ground.
Distribution: Anne Arundel County, 1 female, Gibson Island; Prince Georges County, 1 male, Beaver Dam County Club. (Landover)

Family Anyphaenidae

Genus Anyphaena Sundevall

Anyphaena celer Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 452. (Gayenna)
Available Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 22, pl. 6, fig. 2.
Ecology: This species has been collected in Maryland by sweeping grasses, herbage and bushes.
Distribution: Anne Arundel County, 1 male, Annapolis; Baltimore City, 3 females; Prince Georges County, 1 male, Berwyn, E. B.

Anyphaena fragilis Banks
Original Description: Can. Ent., 1897, p. 194.
Available Description: Ibid.
Ecology: Two females of this species have been taken from wasps nests by Dr. Walter Jeffers.
Distribution: Prince Georges County, 1 female, Berwyn, W. J.; Wicomico County, 1 female, Salisbury, W. J.

Anyphaena fraterna Banks
Original Description: Trans. Amer. Ent. Soc., 1896, Vol. 23, p. 63.
Available Description: Ibid.
Ecology: This species has been collected on tree trunks at night with the aid of a spot light. It has also been taken beating small trees.
Distribution: Howard County, 1 male, Skaggsville, J. D.; Prince Georges County, 1 female, College Park.

Anyphaena pectorosa Koch
Original Description: Die Arachn., 1867, p. 198. (Gayenna)
Available Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 23, pl. 6, fig. 3.
Ecology: This species has been taken by sweeping herbage and beating bushes in the state.
Distribution: Anne Arundel County, 1 female, Bay Ridge, R. W. M.; Calvert County, 1 female, Lusby; Montgomery County, 1 female, Redland; Prince Georges County, 1 male, Berwyn; Wicomico County, 1 female, Salisbury, W. J.

Genus Anyphaenella Bryant

Anyphaenella albens Hentz

Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 454.
Available Description: Ibid.
Ecology: One male of this species was taken while beating brush.
Distribution: Prince Georges County, 1 male, College Park.

Anyphaenella saltabunda Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 453. (Gayenna)
Available Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 23, pl. 6, fig. 4.
Ecology: This species may be collected by sweeping and beating herbage and brush.
Distribution: Anne Arundel County, 1 male, Bay Ridge; Baltimore County, 1 female, Saint James Corners; Caroline County, 1 female, American Corners; Prince Georges County, 1 male, College Park; Worcester County, 1 female, Snow Hill.

Genus Aysha Keyserling

Aysha gracilis Hentz
Original Description: Jour. Bost. Soc. Nat. Hist., 1847, Vol. 5, p. 451. (Anyphaena)
Available Description: Trans. Conn. Acad. Sci., 1890, Vol. 8, p. 22, pl. 6, fig. 1.
Ecology: This species has been taken by sifting leaves, beating and sweeping bushes and weeds, and occasionally on and in buildings.
Distribution: Allegany County, 1 female, Cumberland; Anne Arundel County, 2 yg. female, Bay Ridge; Calvert County, 1 male, Bertha; Caroline County, 1 female, Ridgely, L. P. D. and G. V.; Prince Georges County, 1 female, College Park; Somerset County, 1 female, Princess Anne; Wicomico County, 2 females, Salisbury, W. J.

Part II Descriptions of the Common Spiders With Ecological Notes and Explanatory Plates

INTRODUCTION

From the naturalist's point of view the State of Maryland, although comparatively small, is one of the most interesting of the United States. Its location on the Atlantic seaboard is such that it must be included among those states within whose borders animals and plants of northern latitudes are found mingled with animals and plants of southern latitudes. It extends from the Atlantic coast on the east to the Alleghany mountains on the west. The Chesapeake Bay almost completely separates the eastern part from the western part. These geographic features divide Maryland into ecological units, ranging through seashore, semi-desert, swamp, marsh, plain and rolling land to mountain ecology which make Maryland an ideal state for the study of natural history.

Many naturalists have taken advantage of the great variation of environmental conditions that occur here. The natural history of Maryland, due to the efforts of these workers, is becoming better and better known. However, one group of animals, the spiders, have been studied principally by visiting naturalists, and then only for short periods of time. Three years ago, noting the lack of local information on these animals, the author began to collect, study, classify and list the species occurring within the state. Although several thousand specimens have been collected and studied since that time, these data are not considered adequate for a monograph on the spiders of Maryland. Perhaps after several years of

additional collecting and study such a paper may be realized. It is hoped that the information given on these pages will interest others in the collection and classification of spiders, and thereby relieve the author of the full responsibility of compiling such a monographic paper.

101485

GENERAL EXTERNAL ANATOMY

Introduction

All animals belonging to the class Arachnida resemble each other in having two body regions, the cephalothorax,* (the anterior region) and the abdomen, (the posterior region), four pairs of legs, and in having combination grasping and sucking organs, the chelicerae. The true spiders may be distinguished from the other arachnids of the order Araneae by the presence of a single pair of book-lungs, by the diaxial or transverse movement of the fangs of the chelicerae, and by a lack of dorsal tergites except in one exotic family.

The Cephalothorax

Like the abdomen, the cephalothorax is unsegmented, although in many cases the presence of grooves or furrows separate what is known as the head from the thorax. The eyes and mouth parts are located on the head, while the legs are attached to the thorax. The eyes are commonly six or eight in number and may be arranged in two, three or four rows. There are two types of eyes: the so-called nocturnal eyes which are often pearly white, and the diurnal eyes which are dark in color. The color of the eyes is not, however, an index to the nocturnal or diurnal habit of the spider. The mouth parts are composed of the chelicerae which contain the fangs, the rostrum which is located between and under the chelicerae, the epipharnyx, a plate on the ventral surface of the rostrum, the pedipalps which are made up of the endites and the palpi, the

* See appended glossary

mouth, and the labium, a single unsegmented flap at the base of the endites.

In male spiders the last segment of the palpi is modified into an organ for the transfer of seminal fluid to the female during copulation. This organ is known commonly as the palpal bulb and varies greatly in different species. The generalized male palpus consists of a modification of the tarsal segment of the palpus into an organ which is divided into a basal division or standard, a median division or bulb, and an apical division at the end of which is located the ejaculatory duct. In most spiders the apical division is drawn out into an elongated protuberance known as the embolus through which passes the ejaculatory duct. Many modifications and additions to this generalized type of palpus are found, but the basic structure remains the same.

All four pairs of legs are attached to the latero-ventral surface of the thorax and each is composed of seven segments; the coxa, the trochanter, the femur, the patella, the tibia, the metatarsus and the tarsus. At the apical end of the tarsus are the claws which may be two or three in number. The claws may be entire or smooth, or may have many small teeth on the ventral surface.

The Abdomen

Although varying greatly in size and shape the abdomen is nothing more than a reproductive and digestive sac attached to the cephalothorax by a narrow stalk or pedicel. The dorsum of the abdomen may be smooth, covered with horny

or warty protuberances, or covered with a single hardened shield. On the ventral surface at the posterior end are the six silk spinning organs or spinnerets. They may have one to four segments and may be arranged in one to three rows. Near the anterior ventral surface of the abdomen, and located in front of the transverse epigastric furrow are the paired book-lungs. Between the book lungs, in front of and on the epigastric furrow, is the epigynum or the female external reproductive organ. The epigynum is a more or less heavily sclerotized area of the cuticula on which are located one or two openings leading to the spermatheca. Many specific variations of this organ occur. For this reason, the epigynum is of great importance in the identification of female spiders. In some cases the openings of the epigynum are simple with no specialization, while in others a median elevation or guide of varying shape and size is present. Among the more specialized spiders lateral plates or alae, and a median scape or ovipositor occur.

The single tracheal spiracle is usually located just in front of the spinnerets, but in some cases may be half way between the spinnerets and the epigastric furrow or near the epigastric furrow. Several families of spiders possess two spiracles and one has four. Only one of these families, the Segestriidae, is included in this paper.

Specialized Organs

Although they are not present on all spiders, it is felt that structures peculiar to certain families should be dis-

cussed here. These structures are the scopula, tenent hairs, stridulating organs, accessory claws, calamistrum, cribellum and colulus. The scopula is the term applied to a brush of hairs on the inner edge of the endites of the palpi in many spiders. It is also applied to the tenent hairs on the lower surface of the tarsus and metatarsus of the legs of several species. Tenent hairs are truncate and are found at the terminal ends of the tarsi of certain spiders, and in the leg scopulae of others. Several species possess the so-called stridulating organs by which they produce sounds. These organs are composed of a series of ridges known as a file and a striking surface. In sheet-web weavers the file is on the lateral edge of the chelicerae and the femur of the leg is the striking surface. Several species of comb-footed spiders have the file on the cephalothorax and a striking organ on the abdomen. Some spiders have curved spines at the end of the tarsi of the legs that are called accessory claws. The calamistrum is a single or double series of curved spines located on the upper surface of the metatarsi of the fourth legs of several species. Spiders possessing a calamistrum also possess a cribellum which is a more or less oval-shaped sieve-like structure just in front of the spinnerets. The calamistrum and cribellum are spinning organs used by spiders that spin hackled bands. The bolulus is a long, pointed structure just in front of the spinnerets on most of the spiders that do not possess a cribellum.

BIOLOGY

The development of a spider from egg to adult is very similar to that of an insect that undergoes gradual or incomplete metamorphosis. In general, the young spider resembles the adult. Certain changes such as a shift in proportion of body regions to appendages, and in some cases a change in color pattern occur in several species. The only structural difference between the young and the adult is the possession of fully developed external reproductive organs by the adult. This difference does not become evident until after the final moult to the mature stage when the swollen palpus of the young male becomes the complex palpal organ, and faint ridges or grooves on the abdomen of the young female become the epigynum.

After maturing, the male searches for a female with which to mate. On finding an unfertile female the courtship begins. In some groups such as the jumping spiders courting consists of a dance wherein the male displays ornamentation in the form of spines, plates, tufts of hairs, or odd color patterns. Males of other spiders such as the comb-footed spiders or the orb-weavers court by vibrating the webs of the females with rapid body movements, and by stroking the females with the forelegs. After courtship and acceptance, the male fertilizes the female by applying either or both of the two previously charged palpal organs to the external opening of the female sex organs and injecting the sperm. The palpal organs are charged, at least in some species, by

collecting the seminal fluid from a "sperm-web" on which it is emitted. During the courtship the male must use caution or the female may capture and eat him. The same is true if he is not agile after the mating act. If not eaten at the time of mating, the male finishes out his life courting and mating with other females and usually dies early.

Shortly after mating, the female begins to lay her eggs. The eggs are placed in a case characteristic of the particular family, genus, or species. Most of the egg cases of the comb-footed spiders and the orb-weavers are suspended from the web or a nearby twig, wall, etc. In the funnel-web weavers and the Gnaphosids the eggs cases are placed under loose bark or stones. Other speeies carry their egg cases, the Pholcids and nursery-web weavers in their chelicerae, and the wolf spiders attached to the spinnerets. The shape of the egg case varies from the almost spherical case of the garden spiders, through the flat circular case of the garden spiders, through the flat circular case of the Gnaphosids, to the irregular case of the funnel-web weavers.

The incubation period of the eggs of most species is very short. After hatching, the spiderlings may emerge from the case or remain there till the next season. The young of many species are cannibalistic, and feed voraciously on one another in the egg case and after emergence. Usually after one or two moults the spiderlings disperse and take up independent lives. As all spiders are carnivorous the food consists mainly of insects, other spiders and related animals.

The manner of capturing food varies with the species. Some spiders such as several species of crab spiders lie in flower heads or on leaves and ambush their prey. Others like the wolf spiders, hunt prey by foraging. A great majority of spiders, however, build a trap, the web, and wait upon it for the prey to blunder into the snare. These spiders are called sedentary spiders. A few species borrow the webs of other species or live on the web with the builder capturing small prey overlooked by the builder. These are the so-called commensal spiders. After capturing the food, the juices are sucked from it and the carcass is discarded.

As the silk of the spider is important in many of its life processes, the types of silk and uses of it should be pointed out. Almost all spiders spin a simple thread that is used as a drag line, as the foundation of orb-webs, in building irregular webs, in building nests and in lowering themselves from elevated positions. All of the orb-weavers spin a viscid thread with which they build the spiral line of the web. The viscid thread is composed of a simple thread on which small globules of sticky liquid are unequally spaced. Spiders possessing a cribellum and calamistrum spin a flat thread known as a hackled band that is used in building their webs. In many species the silk of the egg sac varies from the other silk by being of a coarser nature.

The type of web built varies greatly in the different families and genera, and sometimes even with the species. Some spiders build an irregular net, others build a sheet-web,

others a funnel-like web and still others an orb-web. Certain spiders build webs quite characteristic of the species. Several examples are the webs of the triangle spiders that appear to be sectors of orb-webs, the webs of the bowl and doily spiders, that are composed of a sheet-web and an irregular web and the webs of the labyrinth spider that are composed of an orb-web and an irregular web. Some of the orb-weavers and many other spiders such as the clubionids, some of the crab spiders and some of the jumping spiders build retreats or nests in curled leaves, flower heads, cracks or holes in walls and various other places.

In the capture of prey, most spiders make use of a venom that is injected through the fangs from glands in the chelicerae and cephalothorax. This poison although generally feared is not necessarily injurious to man. The writer has been bitten only twice while collecting thousands of specimens. Both bites were due to anxiety over the large size of the specimen, but neither bite left any ill effects that would not have been left by a pin prick. The fear of the venom of spiders is unfounded in most cases, as no known spider in the north is poisonous to humans. In Maryland and other southern states one spider, the black widow, is considered poisonous. Care should be taken in collecting and working with this spider. See <u>Latrodectus mactans</u> Fabricius under the section on taxonomy.

COLLECTION AND PRESERVATION

Spiders are found in a wide variety of places, and offer an opportunity for year around collecting. Many may be found under logs, stones, boards, paper and other materials on the ground. Others are found among and under leaves, moss and straw. Some are found under loose bark of logs and dead standing trees. Foliage loving forms are found on the leaves of herbs, bushes and trees. There are several common species that inhabit the dwelling and buildings of man. A few spiders are found in very typical and local situations. Two examples are the cave spiders and the semi-aquatic spiders. All web building species can, of course, be found on or near their webs during the active season.

The most interesting method of collecting is to capture single specimens by searching them out and studying their webs and habits. Other methods, however, will in some cases prove much more fruitful, if not as interesting. In open fields the use of an insect net to sweep the foliage and flowers will produce a great number of species. The use of a heavier and stronger net to sweep across bushes and small trees is also productive. For forms that live high in trees a piece of strong canvas may be laid under the trees and the trees above it jarred to bring down the spiders. A sifting box having wooden or canvas sides with quarter inch screening in the bottom is indispensable for the sifting of small spiders out of leaves, moss and straw onto a piece of canvas or

sheeting. A small water color brush, wet with alcohol or water is helpful in capturing the spiders on the sifting cloth.

Specimens may also be obtained by rearing them from the eggs. Most spiders can easily be sustained in wide mouth jars covered with cheese cloth. They will feed readily on house flies, vinegar gnats and cockroaches. In laboratory cages of the type mentioned above many female spiders will not only build webs, but also build their egg cases and deposit eggs. If humidity is maintained at a normal level these eggs will hatch and the young may be studied and reared. Some of the spiders that lend themselves readily to laboratory rearing are the house spider, the black and orange garden spider, the long-bellied callar spider and the black widow spider.

After a specimen has been captured it may be dropped immediately into a preserving liquid composed of 98 parts of 70 to 90 percent ethyl alcohol plus 2 parts of glycerin, or it may be placed in a dry vial for further study before preservation. The latter method will greatly reduce the number of necessary field notes as specimens in most cases will live an hour or longer in corked vials, but the former method will reduce the number of vials that the collector must carry while sweeping, beating or sifting.

Each specimen or vial of specimens should be properly labeled in the field or immediately upon returning to the laboratory. Memory is, at best, a poor method of labeling. The data placed on the label, should be printed with pencil

or waterproof ink to prevent fading or smearing. It will, of course, vary slightly with the collector, but minimum data should include the date, the locality or nearest post office, the environs or method and place of collection and the name of the collector. A sample of the type of label used by the author is given below.

Sept. 10, 1942

Sifting Sphagnum Moss

Beltsville, Md. J. Doe

Vials containing preserved specimens should be well filled with preservative to prevent washing around and breaking of fragile specimens. In some cases a bit of cotton placed in the vial will also greatly reduce breakage. Material that has been studied and identified can be maintained over a long period of time with a minimum of effort by placing the vials in large jars and filling the jars with the alcohol-glycerin mixture. This will reduce the possibility of the specimens drying out and becoming destroyed as the large jars do not evaporate as rapidly.

The webs of certain species occur in a single plane and lend themselves readily to collection. They may be collected and preserved by first spraying them with a very dilute solution of shellac and then pressing a pane of window glass against the web. It may then be trimmed from the edges of the pane and permanently mounted between the original pane and a

second pane by bracing the two a short distance apart and sealing the edges. Portions of webs may be mounted on small pieces of glass for microscopic study by modifications of this method.

TAXONOMY

The families of spiders included in this paper have been arranged according to the most recent system proposed by Alexander Petrunkevitch. For ease of handling and reference the genera and species are arranged in alphabetical order.

Species selected for listing and description here are not necessarily the most common spiders of the state, but are rather a representative group chosen from the better known families and genera of spiders that occur in Maryland. The descriptions of the species are short due to the scope of this paper. It is believed, however, that the use of illustrations in conjunction with the descriptions will prove adequate for the identification of the listed species. Lack of space necessitates the omission of many locality records. The county records given represent the first collection of the species within the boundaries of the county. Unless it is otherwise designated the collection was made by the author.

The following key to the families and all of the keys to the genera have been so constructed that they will be of use in identifying to the genus many species not included here. In using them, however, one must remember that several families and many genera have been omitted from this paper due to their uncommon or rare occurrence in Maryland.

KEY TO THE FAMILIES OF THE ARANEAE

1. Chelicerae fused at base.....2
1. Chelicerae not fused at base.....4
2. Anterior tibiae and metatarsi armed with a row of alternating long and short spines.....Mimetidae
2. Anterior tibiae and metatarsi not armed as in Mimetidae..3
3. Usually six eyes, labium longer than wide, tarsi short.....Scytodidae
3. Usually eight eyes, labium wider than long, tarsi long.....Pholcidae
4. Two tracheal spiracles near epigastric furrow...Segestriidae
4. One tracheal spiracle.....5
5. Cribellum and calamistrum present.....6
5. Cribellum and calamistrum absent.....8
6. Eyes all dark in color.....Uloboridae
6. Eyes pearly white, or at most only two dark eyes.....7
7. All eyes pearly white, medium to large spiders..Amaurobiidae
7. Anterior median eyes dark, small spiders.....Dictynidae
8. Tarsi of the legs bearing three claws.....9
8. Tarsi of the legs bearing two claws.....18
9. Fourth tarsi having spurious claws or a ventral row of serrate bristles.....10
9. Fourth tarsi lacking spurious claws, serrate bristles when present never in a ventral row.....14
10. Anterior tibiae and metatarsi armed with a row of alter-

nating long and short spines.....Mimetidae

10. Anterior tibiae and metatarsi not armed as in Mimetidae.....11

11. Fourth tarsi with a ventral row of serrate bristles.....Theridiidae

11. Fourth tarsi without a ventral row of serrate bristles..12

12. Eyes homogeneous, all dark or all light.....Argiopidae

12. Eyes heterogeneous, some dark and some light.....13

13. Palpus of female without terminal claw, palpus of male with tibial apophysis.....Micryphantidae

13. Palpus of female with terminal claw, palpus of male without tibial apophysis.....Linyphiidae

14. Spinnerets arranged in a single transverse row.....Hahniidae

14. Spinnerets not arranged as in Hahniidae.....15

15. Trochanters not notched.....Agelenidae

15. Trochanters notched, at least the posterior pair.....16

16. Posterior trochanters deeply notched.....Oxyopidae

16. All trochanters deeply notched.....17

17. Median claw with two or three teeth.....Pisauridae

17. Median claw with one or no teeth.....Lycosidae

18. Eyes heterogeneous.....Gnaphosidae

18. Eyes homogeneous.....19

19. Legs laterigrade, crab-like.....Thomisidae

19. Legs not laterigrade.....20

20. Eyes in three or four rows.....Salticidae

20. Eyes in two rows.....21

21. Posterior spiracle near spinnerets.....Clubionidae

21. Posterior spiracle far from spinnerets...Anyphaenidae

FAMILY SCYTODIDAE (THE SCYTODIDS)

This family includes the six-eyed spiders in which there is only one tracheal spiracle. The eyes are pearly white, the chelicerae are fused at the base and there is no suture between the labium and sternum. Some authors refer to this family as the Sicariidae. One species of the genus Scytodes occurs commonly in Maryland.

Genus Scytodes

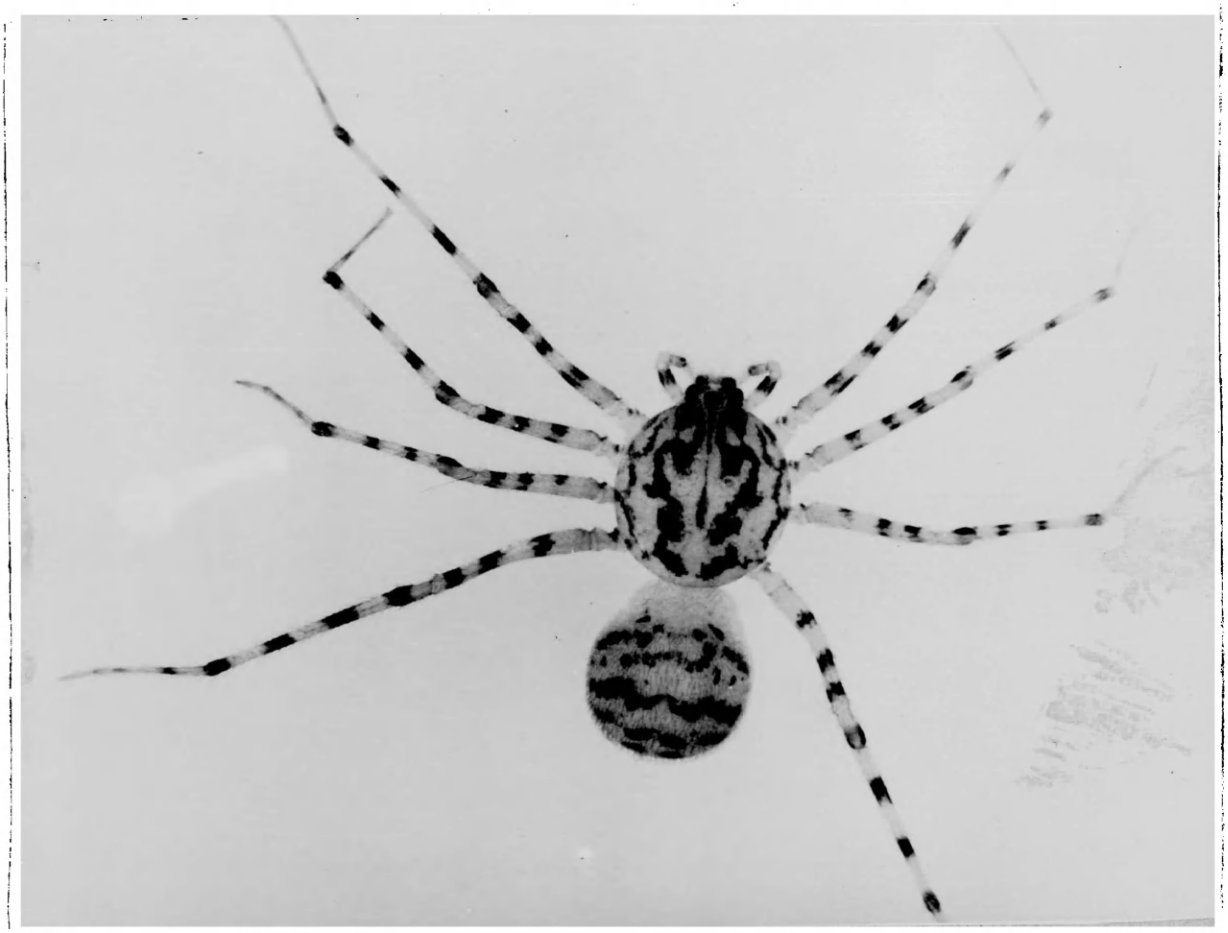
Spiders of this genus have six eyes, the anterior row is strongly recurved. The cephalothorax is high and rounded posteriorly, sloping forward to a very narrow clypeus. Most of these spiders are of small or medium size, and are sub-tropical or tropical. They are often pale, marked with brown, black or grey. The following is the only species collected in the state.

Scytodes thoracica Latreille (Plate I)

The female is about one fourth of an inch long, and is colored light yellow to white, with paired dark spots and bands on the cephalothorax and abdomen. The abdomen is sub-globular in form. Males are slightly smaller than females and are similarly colored. The palpal organ is very long and simple in structure.

These spiders are usually found in cellars, closets and attics, but may, in the summer months, be found under stones and boards out of doors. They move very slowly and are easily collected. The author has never seen the web. The common names of spitting spider and dust spider are applied to this

PLATE I



Scytodes thoracica Latreille--female

species.

MARYLAND DISTRIBUTION

Anne Arundel County--1 yg. female, Gibson Island, E. Enzor.
Baltimore City--1 male and 1 female, L. Handen.
Prince Georges County--Several females, College Park, E. G. Meyer.

FAMILY PHOLCIDAE (THE PHOLCIDS)

Spiders of this family have extremely long legs, six or eight eyes and the tarsi of the legs have three claws. The eyes are separated into two or three, more or less distinct groups. When present, the anterior median eyes are dark; the others are pearly white. The endites are strongly convergent, and the chelicerae are furnished with short tooth-like spurs opposing the fang. These spiders build loose tangled webs, usually in dark places. The following genus contains the most common species.

Genus Pholcus

In this genus the abdomen is elongate and eight eyes are present. The median eyes form an ocular quadrangle that is very narrow in front due to the small size and close proximity of the anterior medians. The spiders of this genus vary greatly in size. A single common species is found in Maryland.

Pholcus phalangioides Fuesslin

The legs of the female are very long and the body varies from one fourth to one third of an inch in length. There are two dark spots on each side of the median furrow of the cephalothorax which otherwise is light in color. The elongate abdomen varies in color from a light brown to a light grey. Sometimes

there is a light lance-shaped mark on the base of the abdomen. Males resemble the females in color and size. The palpal organ is large, spherical and complicated.

These spiders build large tangled webs in the dark corners of closets and cellars. In summer months they may be found in barns, milk sheds and etc. When disturbed the spider will vibrate the web by rapid movements of the body. The females carry the egg masses in their chelicerae. The common name long-bodied cellar spider is applied to this species.

MARYLAND DISTRIBUTION

Allegany County--Several young females, Westernport.
Harford County--Several females, Churchville.
Prince Georges County--4 males, College Park, O. Reynolds.

FAMILY MIMETIDAE (THE MIMETIDS)

These spiders are eight eyed and bear three claws on the tarsi of the legs. They may be easily distinguished from all other spiders by the armature of the first two pairs of legs. The tibiae and metatarsi of these legs have a series of long spines widely spaced with a series of short spines between the long spines. Spiders of this family are slow moving, build no distinct web and are found on low bushes on the ground and under leaves and stones. Mimetus is the most common genus.

Genus Mimetus

The eight eyes, arranged in two rows, are placed very near the front of the head in this genus, causing the clypeus to be very narrow; the posterior legs are very short. These

spiders are of medium to small size. They are known as the cannibal spiders. Several species are found in Maryland; the following is the most common.

Mimetus puritanus Chamberlin (Plate IX, fig. 1.)

There is a dark forward projecting double forked band on the middle of the light cephalothorax. The angular abdomen is light colored with a series of dark spots and undulating lines on the posterior part. Both sexes are about one fourth of an inch long. The female is characterized by a light-bordered oval spot at the apical end of the epigynum while the palpal organ of the male can be distinguished by two sub-apical spines on the margin of the cymbium.

These spiders may be found on bushes and fences, in the mouths of caves and sometimes in barns and tool sheds. They build no webs.

MARYLAND DISTRIBUTION

Charles County--1 female, La Plata, W. Jeffers.
Harford County--1 female, Churchville.
Prince Georges County--1 female, Berwyn, J. N. Hamlet.

FAMILY ULOBORIDAE (THE ULOBORIDS)

This family contains those spiders that possess eight eyes of subequal size, a calamistrum and cribellum and three claws on the tarsi of the legs. The eyes are all dark in color and occur in two rows, the lateral eyes of each side being more widely separated than the four median eyes. These spiders are usually small in size and build an orb-web containing a hackled band. Spiders of the genera Uloborus and

and Hyptiotes are frequently observed in the state.

Key to the Two Genera of Uloboridae

1. Cephalothorax more or less oval in shape....Uloborus

1. Cephalothorax not oval, more or less truncate.....Hyptiotes

Genus Uloborus

The spiders of this genus spin a complete orb-web in which the spiral line is a hackled band. The position and size of the eight eyes and the clothing of hairs vary greatly in arrangement and nature in the different species. The legs are thin and the fourth tarsi bear a ventral row of short heavy spines. One species is found commonly in certain localities of the state.

Uloborus americanus Walckenaer (Plate IX, fig. 2.)

This species varies greatly in color and markings, the predominate colors being brown and white. The female is about one fifth of an inch long, and the male is less than half as large as the female. A pair of humps is borne on the dorsal surface of the abdomen, which is widest and highest about one third of its length from the base. A brush of dark hairs is borne at the distal end of the anterior tarsi.

In Maryland these spiders are most often found in cool, moist woods or on shaded walls and cliffs. The webs are small, only six to eight inches in diameter and often contain a stabilimentum at the hub. Young specimens may be collected by sifting leaves in the late fall and winter. The striking tarsal brushes have caused this species to become known as the feather-

legged spider.

MARYLAND DISTRIBUTION

Dorchester County--1 female, American Corners.
Montgomery County--3 females, Great Falls.
Prince Georges County--2 males, College Park, E. Beardsley.
Somerset County--1 male, Dividing Creek Swamp.

Genus Hyptiotes

The posterior lateral eyes in this genus are as far or farther apart than the width of the thorax. These spiders have short, stout legs, and build a web that is a sector of an orb-web. The following species is common in the eastern states.

Hyptiotes cavatus Hentz

The female is about one sixth of an inch long; the male is only one half as large. They are a grey or brownish color, and have a more or less globular shape. Light colored hairs clothe the cephalothorax and abdomen. There are four pairs of small humps on the dorsal surface of the abdomen, out of which grow several stiff hairs. These humps are not as prominent in the males.

They build small triangular webs, stretched between the dead twigs of pines, hemlocks, and other evergreens, which vary from six to eighteen inches in length, and from four to twelve inches in width. The spiders hide by resting lengthwise along the twigs with their abdomens appearing much like dried buds. The form of the web prompted the common name, triangle spider.

MARYLAND DISTRIBUTION

Anne Arundel County--2 males, Annapolis.

Baltimore County--3 females, Loch Raven.
Cecil County--1 young male, Elkton.
Garrett County--Several males and females, Deep Creek Lake.
Prince Georges County--2 females and 1 male, Skaggsville, L. P. Ditman.

FAMILY DICTYNIDAE (THE DICTYNIDS)

This family includes the largest number of species possessing a cribellum and calamistrum. These spiders have six or more commonly eight eyes arranged in two rows. The anterior medians are dark. All of the other eyes are pearly white. The chelicerae are robust and furnished with a lateral condyle. The tarsi of the legs bear three claws. Tactile hairs are present on the tarsi and metatarsi of all genera except the genus Dictyna, where they are present only on the tarsi. This genus contains the more common species.

Genus Dictyna

In this genus the clypeus is wider than the diameter of the anterior eyes. The anterior row of eyes is straight. The hind coxae are separated by an extension of the sternum, and the endites are fairly long and converge at the tips. These spiders are all of small or medium size. Of the several species occurring in the state the following two are the most common.

Dictyna foliaceae Hentz (Plate IX, fig. 4.)

This species is slightly larger than D. frondea and more variable in color. The head is light yellow with the rest of the cephalothorax darkening from light brown dorsally to dark brown on the sides. There is a great variation in the size and shape of the light colored band or folium on the dorsum of the elongate, red brown abdomen. The chelicerae are long and

not as robust as those of the following species. Females can be distinguished by the epigynal figure. Males can be identified by the tibia of the palpus, which is twice as long as wide, and bears a short bifid spur near the base.

The webs of this species are built in curled leaves of low bushes and herbs. The spider rests on the surface of the web and builds no retreat.

MARYLAND DISTRIBUTION

Anne Arundel County--3 females, Bay Ridge, R. W. Muma.
Baltimore County--4 females, Loch Raven.
Cecil County--1 female, Elkton.
Dorchester County--1 female, American Corners.
Garrett County--1 male, Deep Creek Lake.
Howard County--1 female, Galesville, H. O. Webster.
Montgomery County--1 female, Redland.
Prince Georges County--2 males, College Park.
Somerset County--1 female, Dividing Creek Swamp.

Dictyna frondea Emerton (Plate IX, fig. 13.)

These spiders are about one eighth of an inch in length and are dark red brown in color. There is a light, more or less regular, longitudinal band on the middle of the dorsum of the oblong abdomen. The light longitudinal band in the middle of the cephalothorax is less distinct than it is in D. foliaceae Hentz. Females may be distinguisned by the appearance of the figured epigynum. Males have a short bifid apophysis on the base of the tibia of the palpus, and the palpus is more than twice as long as wide.

Webs of this species are found on low grasses and bushes. Females are often found in the retreat or funnel which is located near the center of the web. The zig-zag hackled band is the most prominent part of the web, as the plain threads

are almost invisible.

MARYLAND DISTRIBUTION

Anne Arundel County--1 male, Bay Ridge, R. W. M.
Garrett County--1 male, Deep Creek Lake.
Prince Georges County--1 female, College Park.
Washington County--1 female, Sideling Hill, R. W. M.

FAMILY MICRYPHANTIDAE (THE DWARF SPIDERS)

Spiders of this family are very small and are not often seen by the casual observer. The tarsi of the legs bear three claws. Males have a tibial apophysis on the palpus which is very complex in most species. These spiders possess eight dissimilarly colored eyes arranged in two rows. In some of the males there is a cephalic pit on either side of the head, while in others the eyes are borne on lobes or projections of the head. These spiders spin delicate sheet webs usually on or near the ground.

Key to the Genera Micryphantidae, Males

1. Embolus of the spiral type.....2
1. Embolus not of spiral type.....3
2. Abdomen possessing a dorsal sclerite.....Ceraticelus
2. Abdomen soft, not possessing a dorsal sclerite.....Ceratinopsis
3. Chelicerae having a lateral row of teeth on the face.....Frigone
3. Chelicerae not having teeth on the face.....Scylaceus

Genus Ceraticelus

Female spiders of this genus may or may not have a hardened sclerite covering part or all of the dorsal surface of the abdomen. The eyes vary in arrangement in the different

species. The fang or claw of the chelicerae has a single curve. Most of the species of the genus are small in size, being approximately one half a millimeter in length. The abdomen is subovate in form. The following two species occur commonly in the state.

Ceraticelus creolus Chamberlin (Plate IX, figs. 5,6.)

The males and females of this species are approximately one and one half millimeters long with the females slightly smaller than the males. There is no dorsal shield on the dorsum of the abdomen of the female. Except for the abdomen which is pale yellow to white the body is orange with a dusky tinge. In some cases the legs are light yellow. Males are colored much like the females, but have an orange sclerite covering about one half of the dorsal surface of the abdomen, and have the head projected forward in a single rounded lobe. Males may be identified by the bifid lateral branch of the embolus. Females of this genus are difficult to separate, but may be distinguished by the epigynal figure.

This species is most often taken on low herbs, or moss over swampy land or in moist woods.

MARYLAND DISTRIBUTION

Cecil County--2 females, Elkton.
Garrett County--1 female, Deep Creek Lake.
Prince Georges County--2 females and 1 male, College Park.
Somerset County--1 male, Princess Anne.

Ceraticelus emertoni Cambridge (Plate IX, figs. 7,8.)

Spiders of this species are very similar in size and color to the preceding species. In this species, however, the forward projection of the head of the male is blackish

around the eyes, and the lateral arm of the embolus of the palpi is not bifid. A comparison of the epigynal figures of the two females will distinguish them. Females of this species also have a dark area around the eyes and tend to be slightly larger.

In winter these spiders are found under leaves in moist woods; in the summer they are found on low plants.

MARYLAND DISTRIBUTION

Allegany County--1 female, Dans Rock.
Anne Arundel County--1 female, Gibson Island.
Garrett County--1 male, Deep Creek Lake.
Harford County--1 male, Churchville.
Prince Georges County--1 female, College Park, E. Beardsley.

Genus Ceratinopsis

These spiders do not have a dorsal abdominal plate. The abdomen is elongate. The eight eyes are arranged in two rows, the posterior row either straight or slightly procurved. Common species of this genus are from one to two millimeters long. Two species occur in Maryland; the following is the more common.

Ceratinopsis purpurescens Keyserling (Plate IX, figs. 12,13.)

Males are approximately one and eight tenths millimeters long. A black spot over the eye region and one over the posterior end of the elongate abdomen cause the central orange parts to appear more brilliant. The females are colored similarly to the males, but are slightly larger. In this species the embolus is heavy and evenly curved and the epigynum has a broad median plate rounded behind.

These spiders are found on low bushes in summer and in dry or medium dry leaves in the winter.

MARYLAND DISTRIBUTION

Calvert County--1 female, Lusby.
Caroline County--2 males and 2 females, Ridgely, L. P. Ditman and G. B. Vogt.
Montgomery County--1 female, Great Falls.
Prince Georges County--3 females, Riverdale.

Genus Erigone

The patella of the palpus of the males of this genus is armed ventrally with a projecting process. There is a slight variation in the arrangement of eyes in the different species; the posterior eye row is usually straight. Typical species are two to two and one half millimeters in length. One species is common in Maryland.

Erigone autumnalis Emerton (Plate IX, fig. 9.)

In this species the row of teeth on the chelicerae of the males is reduced to two or three minute teeth on the lateral margin. The cephalothorax varies from orange to reddish orange and the ovate abdomen is a yellowish grey. There is a large projection on the trochanter of the palpus of the male, a minute tooth at the base on the ventral surface of the femur, and the patellar process is slightly curved. Females are the same size as males, but are slightly darker in color and the median tubercle of the epigynum is very minute.

In summer this species is common on grasses and weeds in open fields. They may be found late in the fall in tufts of grasses near streams or ballooning through the air on a strand of silk. This species is known as the ballooning spider.

MARYLAND DISTRIBUTION

Allegany County--2 males, Cumberland, M. H. and H. E. Muma.
Prince Georges County--3 males and 2 females, College Park.

Genus Scylaceus

These spiders have the eyes arranged in two rows, the anterior eye row being slightly procurved. The embolus is not of the spiral type, but has a long tail piece. These spiders vary in length from one to one half millimeters. Maryland has one species of this genus.

Scylaceus pallidus Emerton (Plate IX, figs. 10,11.)

Both sexes are approximately one millimeter long and are identically colored having the cephalothorax a dusky orange yellow and the oval abdomen light grey with a network of lighter spots and lines. The tibial process of the palpus of the male is notched and very slender apically. On the epigynum the ducts show through the integument plainly and the median lobe is broad behind.

These spiders may be collected under leaves in moist woods in winter. They may also be taken under boards and stones.

MARYLAND DISTRIBUTION

Allegany County--1 male and 1 female, Cumberland.
Prince Georges County--6 females and 5 males, College Park.

FAMILY AMAUROBIIDAE (THE AMAUROBIIDS)

The amaurobiids include those spiders having a cribellum and calamistrum, and all eight eyes arranged in two rows. All of the eyes are light in color. The legs possess strong spines on the tarsi which bear three claws. The cribellum is divided, and the calamistrum consists of one or two rows of curved setae. Spiders of this family spin irregular webs

composed of plain threads and a hackled band. A retreat in the middle of the web gives it a regular, more or less funnel-like appearance. The genus Amaurobius contains the common Maryland species.

Genus Amaurobius

In this genus the calamistrum is composed of a double row of curved spines, and the cribellum is divided longitudinally. The eyes are arranged in two rows, and the sternum is not prolonged between the posterior coxae. The spiders are of medium size. The following species is common in the Western counties of the state.

Amaurobius bennetti Blackwall (Plate IX, figs. 14,15.)

This spider is one of the largest of the genus, males being one third of an inch long, and females almost one half an inch long. They are dusky brown marked with lighter bands. The cephalothorax is dark over the eye area becoming lighter posteriorly; dark radiating lines run from the median furrow toward the lateral edges of the cephalothorax. Two oblong white spots run one third of the distance back from the anterior end of the oblong abdomen; There are several light chevrons across the posterior end. This typical marking varies in different specimens, and is almost lacking in some.

The median lobe of the epigynum is limited posteriorly by the lateral lobes. There is a long thin lateral spur on the tibial apophysis of the male palpus.

In the western part of the state this species is common under stones, in the cracks of cliffs and walls and under the

loose bark of rotting logs.

MARYLAND DISTRIBUTION

Allegany County--2 females, Dans Rock.
Garrett County--2 females, Deep Creek Lake, M. H. and K. E. Muma.

FAMILY AGELENIDAE (THE FUNNEL-WEB WEAVERS)

Spiders belonging to this family spin the so-called webs which are composed of a sheet-like web that is furnished with a funnel-like tubular retreat. They are sedentary, waiting in the web for prey. These spiders are three-clawed and usually eight-eyed. The hind spinnerets are very long. The eyes are in two rows and may be either nocturnal or diurnal, although usually only the anterior median eyes are pearly white. Members of this family vary greatly in size, some measuring an inch or more in length, while others are only one quarter of an inch long. The following key separates the more common genera.

Key to the Genera of Agelenidae

1. Labium longer than wide.....2
1. Labium as wide as or wider than long.....*Cicurina*
2. Posterior eye row strongly procurved.....*Agelenopsis*
2. Posterior eye row not strongly procurved.....3
3. Lower margin of furrow of chelicerae armed with three teeth.....*Coras*
3. Lower margin of furrow of chelicerae armed with four to six teeth.....*Tegenaria*

Genus Agelenopsis

The posterior spinnerets of these spiders have the apical segment much longer than the basal segment and projecting beyond the end of the sub-ovate abdomen. The eyes are in two rows; the anterior median eyes are the largest and the posterior eye row is procurved. These spiders are all of medium or large size and the species are colored similarly. The external reproductives are used to separate the different species. The common name grass spiders has been applied to this genus. Several species occur in Maryland. The following two are the most common.

Agelenopsis emertoni Chamberlin and Ivie (Plate II, Plate IX, figs. 16,17.)

Color pattern typical (see A. Pennsylvanica) except that dark bands on the cephalothorax are usually faded. The dark V on the venter of the cephalothorax is not black at the apex, and is often lacking. The dark area on the venter of the abdomen is not deeply colored. The pattern on the abdomen is often faded.

There is a variation of size from seven to fifteen millimeters in this species. The anterior margin of the opening of the epigynum is slightly bilobed, and the embolus is large, coiled once around the face of the palpus and has a blunt tip.

The web is typical and is found in most of the places where funnel webs are usually built.

MARYLAND DISTRIBUTION

Allegany County--1 female, Rocky Gap.
Anne Arundel County--2 females, Parole.
Prince Georges County--1 female and 1 male, College Park.

PLATE II

Acelenopsis emertoni Chamberlin and Ivie--female

Agelenopsis pennsylvanica Koch (Plate IX, figs. 18, 19.)

The color pattern of this species is typical of the genus which consists of brown, grey and yellow colors. There are two wide, dark longitudinal lines running down the middle of the dorsum of the cephalothorax which is margined with a dark line. The legs are annulate or spotted with dark colors, and the grey abdomen has a dorsal, longitudinal brown band which is striped with grey and bordered with light grey or yellow. There is, on the venter of the cephalothorax a dark V which is black at the apex, and a broad band on the venter of the abdomen that is very dark.

This species is very variable in size averaging about eleven millimeters in length. The opening of the epigynum is a smooth oval, and the embolus of the male palpus is short, twisted or spiraled once and pointed.

The webs of this species are typical of the funnel-web weavers and are found in a wide variety of places. The common name grey speckled funnel-web weaver is applied to this species.

MARYLAND DISTRIBUTION

Baltimore City--1 female, I. Schloss.
Carroll County--1 male, 1 female, Westminster, R. Vincent.
Garrett County--1 female, Deep Creek Lake.
Prince Georges County--1 male and 4 females, Berwyn, E. Beardsley.
Washington County--1 female, Hagerstown, Chamberlin and Ivie.

Genus Cicurina

Spiders included in this genus are all of small size; they are less than one quarter of an inch long. Markings, when present, tend to be pale. The labium is as wide or

wider than long, and the eyes, which are arranged in two rows, vary in size in the different species. Of the several species occurring in Maryland the following is the most common.

Cicurina arcuata Keyserling (Plate IX, fig. 20.)

This species averages about five and one half millimeters in length, but varies quite widely. The cephalothorax is yellowish brown to brown, the legs are darker in color and darkened at the tips and the ovate abdomen is light grey marked heavily with dark grey spots and a series of dark chevrons on the posterior end of the dorsal surface. The labyrinth-like twisting of the ducts of the epigynum can be plainly seen beneath the integument, and the tibial process of the male palpus is well developed and elongate.

These spiders and their small funnel-webs may be found during the winter and summer under stones, boards and logs on the ground.

MARYLAND DISTRIBUTION

Allegany County--4 males and 1 female, Rocky Gap.
Garrett County--1 male, Deep Creek Lake.
Prince Georges County--Record, College Park, Chamberlin and Ivie.

Genus Coras

The lower margin of the furrow of the chelicerae is armed with three teeth in this genus. The posterior median eyes are larger than the anterior laterals, and the clypeus is barely wider than the anterior eyes. These spiders are of medium to large size. The following species is common in the state.

Coras medicinalis Hentz (Plate X, fig. 1.)

Lateral furrows meeting at the median furrow separate the strongly convex head from the thorax in this species. The lateral condyles of the robust chelicerae are very evident. There are darker grey radiating lines on the light yellow cephalothorax that form two longitudinal lines, and the light grey abdomen is heavily marked with dark grey forming irregular light chevrons on the posterior half. The legs are short and robust, and the abdomen is oval in outline. A notch on the anterior margin of the median lobe of the epigynum identifies the females, while ventral processes on the patella and tibia of the palpus distinguish the male. Spiders of this species are about one half an inch long.

The flat funnel-webs of this species may be found beside logs, or stones on the ground under which the spiders may be found in retreats.

MARYLAND DISTRIBUTION

Garrett County--1 female and 1 male, Deep Creek Lake.
Harford County--1 female, Churchville.
Montgomery County--1 female, Silver Spring.
Prince Georges County--1 female, College Park, E. Beardsley.
Somerset County--1 female, Princess Anne. W. Barb.

Genus Tegenaria

The anterior median eyes are as large as, or smaller than the lateral eyes, and the clypeus is wider than the anterior eyes. Four to six teeth are borne on the lower margin of the furrow of the chelicerae. The chelicerae are not as convex as in the genus Coras. A single common species is found in Maryland.

Tegenaria derhami Scopoli (Plate X, fig. 2.)

Females of this species are almost one half an inch long, while males are smaller and more slender. The light yellowish brown cephalothorax is marked with two grey longitudinal lines and the pale grey abdomen is marked with a large number of light grey spots that form an irregular median band and a series of lateral bands on the sides. These spiders appear very much like a species of Coras, but the legs are longer and not as stout. The lateral lobes of the epigynum are pointed behind, and there are two short, blunt lateral processes on the tibia of the male palpus.

Funnel-webs of this species may be found in little used corners of basements or in abandoned buildings with retreats extending into cracks or holes in the walls.

MARYLAND DISTRIBUTION

Allegany County--2 females, Rocky Gap, H. E. Muma.
Harford County--1 female and 1 male, Churchville.
Prince Georges County--1 female, College Park, W. Jeffers.

FAMILY PISAURIDAE (THE NURSERY-WEB WEAVERS)

Spiders of this family possess eight eyes arranged in two rows. They are characterized by the presence of a semicircular and bordered notch on the apical margin of the trochanters of the legs. The tarsi bear three claws, the median claw with one or no teeth. These spiders are medium to large in size. They are called nursery-web weavers because they build a tangled enclosed web in which the spiderlings remain for some time while the female stands on guard. The genera Pisaurina and Dolomedes contain species common in Maryland.

Key to the Genera of Pisauridae

1. Lower margin of the furrow of the chelicerae with four teeth.....Dolomedes

1. Lower margin of the furrow of the chelicerae with three teeth.....Pisaurina

Genus Dolomedes

Due to their habit of diving into the water for prey or when disturbed, these spiders are called the giant fishing spiders. The eyes are arranged in two rows of four each; the anterior row usually is slightly recurved. The clypeus is as wide or wider than the median ocular quadrangle. Of the six species occurring in Maryland the following two are common.

Dolomedes scriptus Hentz (Plate IX, figs. 3,4.)

This species is one of the largest of Maryland's common spiders, the females averaging twenty millimeters in length with the males slightly smaller. In the females the dark brown cephalothorax is marked with two yellowish submarginal lines and a narrow median line of the same color. Two curved light lines start on the median sides of the dorsal lateral eyes and meet with the median line at two wedge-shaped dark spots just in front of the median furrow. The broad, ovate abdomen is brown marked anteriorly with a median light area, and posteriorly with a series of light W-shaped areas. The areas between the W's are dark brown or black. The legs are more or less annulate. Males are marked similarly to the females except that the legs are not annulate. The epigynum is longer than wide with the median lobe narrow. The tibial

apophysis of the male palpus has three apical spines, two large and one small.

These spiders are found near streams resting on stones, logs or trees, and are commonly known as the northern dolomedes. In winter young specimens may be found under loose bark.

MARYLAND DISTRIBUTION

Garrett County--1 female, Deep Creek Lake, H. H. Muma.
Montgomery County--Record, Cabin John, S. C. Bishop.
Prince Georges County--2 males and 1 female, Berwyn, W. Jeffers.

Dolomedes sexpunctatus Hentz (Plate X, figs. 5,6.)

Females of this species are slightly smaller than those of the preceding species, but males are much smaller being only one half as large as the females. Both the abdomen and the cephalothorax are greenish grey marked with white bands and spots. The legs are also colored greenish grey. On the cephalothorax there are two narrow sub-marginal lines of white, a narrow median line running back to the median furrow and two inward curving lines just behind the posterior eye row. The elongate abdomen is marked dorsally with a median white stripe and is bordered by white stripes. Five or six pairs of white spots run down the middle of the posterior half of the abdomen. Males are marked much like the females.

These spiders hide in grass and moss at the edges of lakes and streams, running across the water and diving under when disturbed. This species is known as the six-dotted dolomedes.

MARYLAND DISTRIBUTION

Baltimore City--1 young female, I. Raabe.
Harford County--1 female, 1 male, Churchville.
Kent County--1 young female, Chestertown, I. Raabe.
Prince Georges County--2 young females, Berwyn, W. Jeffers.

Genus Pisaurina

The eyes are arranged in two rows, and the anterior row is usually procurved. In these spiders the abdomen is twice as long as broad, and there are three teeth on the lower margin of the furrow of the chelicerae. One species is common in the state.

Pisaurina mira Walckenaer (Plate X, fig. 7.)

Both the abdomen and the cephalothorax of the female have a ground color of light brown or yellow marked with dark brown. The dark marking on the cephalothorax is a broad median band tapering behind. On the abdomen the broad median band is notched posteriorly where white spots are found. Males resemble the females. Some of the markings are indistinct on dark specimens. These spiders average fourteen millimeters in length, males and females approximately the same size. The epigynum is longer than wide with the lateral lobes meeting behind but not in front. The external tibial apophysis of the male is truncated.

This species is found near water or in moist situations. The nursery-webs of this species are the most complete of the family and are often seen at the tops of weeds near streams.

MARYLAND DISTRIBUTION

Anne Arundel County--1 young male, Parole.
Allegany County--1 female, Cumberland, E. V. Muma.
Montgomery County--Record, Forest Glen, G. C. Bishop.
Prince Georges County--1 female, College Park.

FAMILY LYCOSIDAE (THE WOLF SPIDERS)

In the Lycosidae the trochanters are notched as in the Pisauridae. The eyes are arranged in three rows, the first row composed of four small eyes, the second and third composed of two large eyes each. These spiders possess three claws on the tarsi of the legs, the median claw bearing two or three teeth. The abdomen of the spiders of this family is roughly oval in outline. Wolf spiders acquired their common name because of the fact that they hunt their prey. Most of the spiders build no definite web, although some of them dig burrows that they line with silk. The common genera may be separated by the following key.

Key to the Genera of Lycosidae

1. Cephalothorax with a dark V shaped mark placed with the apex pointing posteriorly.....Pirata
1. Cephalothorax not marked as in Pirata.....2
2. No true stout spine above at base on fourth tibia.....Arctosa
2. A stout spine above at base on fourth tibia.....3
3. Labium wider than long.....Pardosa
3. Labium longer than wide.....4
4. Cross piece of epigynum divided at ends, embolus of palpus of male elbowed.....Schizocosa
4. Cross piece of epigynum undivided, embolus of palpus of male evenly curved.....Lycosa

Genus Arctosa

This genus is characterized by three teeth on the lower

margin of the furrow of the chelicerae, and the absence of a true spine at the base on the dorsal surface of the fourth tibia. The anterior row of eyes is straight or weakly curved. These spiders vary greatly in size. The following species is common in the state.

Arctosa funerea Hentz (Plate X, fig. 8.)

The females of this species are about one quarter of an inch long, but the males are somewhat smaller. There are no markings on the black, hairless cephalothorax, but there is a light yellow median lanceolate spot on the dark abdomen that is broken into bars posteriorly. Only the femora of the first two pairs of legs are black; the rest of the segments are pale.

These spiders are common under boards, stones and rubbish in the late summer.

MARYLAND DISTRIBUTION

Baltimore City--1 male, I. Schloss.
Calvert County--1 young male, Solomons Island, R. A. Littleford.
Harford County--1 male, Churchville.
Prince Georges County--1 male and 1 female, Berwyn, W. Jeffers.

Genus Lycosa

The anterior row of eyes is not strongly procurved; and there is a stout, true spine dorsally on the base of the fourth tibia. This genus may be distinguished from Pardosa by the proportions of the labium. Three teeth are present on the lower margin of the furrow of the chelicerae. These spiders are of large or moderate size. The following are the most common species.

Lycosa helluo Walckenaer (Plate III, Plate X, fig. 10.)

The females of this species are almost an inch long. The males are about one half as long as the females but have longer legs. Both sexes are marked alike having a base color of light, greenish yellow or brown. On the cephalothorax the median longitudinal stripe is yellow and line-like between the eyes broadening slightly on the thorax. Marginal lines are also present. There is a dark lance-shaped stripe on the basal half of the abdomen, and a series of chevrons on the posterior half. The guide of the epigynum is not broadened greatly in front and narrows slightly behind. The tarsus of the male palpus is as long or longer than the palpal organ.

Females are often found in shallow nests under boards or stones in fields and woods. Males are found under the same conditions but not in nests.

MARYLAND DISTRIBUTION

Allegany County--1 female, Cumberland.
Baltimore County--1 female, Avalon, I. Schloss.
Caroline County--1 female, Goldsboro.
Cecil County--1 female, Elkton.
Garrett County--1 female, Deep Creek Lake.
Harford County--1 female, Churchville.
Howard County--1 female, Ellicott City.
Montgomery County--1 female, Bethesda.
Prince Georges County--1 female, Berwyn, E. Beardsley.
Somerset County--1 female, Princess Anne.
Worcester County--1 male, Pocomoke City.

Lycosa nigruarata Montgomery (Plate X, fig. 9.)

Specimens of this species average between one half and three quarters of an inch in length. There is a wide, light brown median stripe on the cephalothorax tapering posteriorly and notched slightly at the median furrow. The brown abdomen

PLATE III

Lycosa helluo Walckenaer--male

is marked with a greyish brown basal lanceolate band. On the extreme base of the abdomen are two dark spots clothed with long, dark brown hairs. The median lobe of the epigynum is broad and truncate behind. Males are similar to females; there is a barbed process at the base of the palpal organ.

These spiders are found under leaves and logs in woods in late fall and early spring.

MARYLAND DISTRIBUTION

Anne Arundel County--2 females and 1 male, Gibson Island.
Charles County--1 female, Waldorf.
Garrett County--3 males, Deep Creek Lake, H. E. and K. E. Muma.
Prince Georges County--1 female, Berwyn, W. Jeffers.

Lycosa rabida Walckenaer (Plate X, fig. 11.)

The adult female of this strikingly colored spider is about one inch long while the male is only half that length. Three light longitudinal marks on the thorax and two on the abdomen stand out against the dark greyish brown base color. About one third of the distance back from the base of the abdomen the light marks are notched on the inside. From there to the end of the abdomen light chevrons or spots are found on well marked specimens. The epigynal figure and palpus identify the species. This species is placed in the genus Schizocosa by some authors.

Logs, lumber or stones in open fields are the favorite haunts of this species. It is commonly known as the striped wolf spider.

MARYLAND DISTRIBUTION

Anne Arundel County--1 female, Galesville, H. O. Webster

Baltimore County--1 female, North Point, I. Raabe.
Cecil County--1 young female, Elkton.
Garrett County--1 male, Deep Creek Lake.
Harford County--2 females, Churchville.
Montgomery County--1 female, Silver Spring, E. Brechbill Hitz.
Prince Georges County--1 female, W. Jeffers.

Genus Pardosa

These spiders are closely allied with those of the preceding genus, but the labium is wider than long, and the face is subquadrate. The anterior row of eyes is straight or slightly procurved. The spiders of this genus are of small or medium size, and very active. Due to the proportionately long legs these spiders are known as the thin-legged wolf spiders. One species occurs commonly in the state.

Pardosa milvina Hentz (Plate X, fig. 12.)

This species is about one fourth of an inch long and is typically marked. The light band on the dark cephalothorax starts as wide as the posterior eye row, is deeply notched midway between the eyes and the median furrow and is deeply notched behind the furrow. There is also a sub-marginal band on the cephalothorax. There is a light lanceolate mark on the base of the abdomen behind which a series of light bars runs to the end of the abdomen. The epigynum is characterized by an indistinct median lobe and extensions of the lateral margins. A clothing of black hairs on the palpus of the males is characteristic.

These spiders are most often found in damp or swampy open fields. They run very rapidly when disturbed.

MARYLAND DISTRIBUTION

Allegany County--1 female, Dans Rock, H. E. Muma.

Baltimore County--1 female, Towson.
Calvert County--2 females, Scientist's Cliff.
Carroll County--1 female, Westminster, R. Vincent.
Cecil County--2 females, Colora.
Charles County--8 females, 2 males, La Plata.
Frederick County--1 female, Lewistown.
Garrett County--2 females, 3 males, Deep Creek Lake.
Harford County--2 females, Churchville.
Montgomery County--1 female, Silver Spring.
Prince Georges County--2 males, Berwyn, W. Jeffers.
Somerset County--1 male, Princess Anne.
Talbot County--1 female, Matapeake.
Worcester County--1 male, Pocomoke City.

Genus Pirata

The peculiar forked or V-shaped mark on the heads of these spiders distinguish them from all other lycosid genera. The lack of apical spines on the ventral surface of the tibiae of the first legs, and the lack of median guides on the epigyna of the females are other distinguishing characters. The anterior eye row is straight or lightly procurved. Most species of this genus are of small size, and are semi-aquatic. The following species are common.

Pirata insularis Emerton (Plate X, fig. 13.)

Adult females of this species are about one fourth of an inch long; the males are much smaller. There is the usual reddish yellow forked band on the cephalothorax. The sides of the carapace are brown, crossed by radiating lines of black. The abdomen is blackish above with a yellow lanceolate median basal stripe and light chevrons behind. The epigynal openings are on two widely separated lobes.

These spiders are found in swamps or near streams and can run rapidly across water when disturbed.

MARYLAND DISTRIBUTION

Cecil County--2 females, Elkton.
Harford County--2 females, Churchville.
Montgomery County--3 females, Great Falls.
Prince Georges County--1 female, Branchville.

Pirata minutus Emerton (Plate X, fig. 14.)

This is a very small species; both sexes are only one eighth of an inch in length. The cephalothorax has the usual reddish yellow forked stripe on a dark brown base. There is also a light marginal stripe. The abdomen may or may not have a basal stripe in addition to the light chevrons on the posterior half. The epigynum is characteristic.

In Maryland this species is most often found under stones on fresh water beaches, or under logs and stones in swampy fields.

MARYLAND DISTRIBUTION

Cecil County--2 females, Pleasant Hill.
Garrett County--3 females, Deep Creek Lake, K. E. Muma.
Harford County--1 female, Churchville.
Prince Georges County--1 female, College Park, K. E. Muma.

Genus Schizocosa

Like Pardosa, this genus is closely allied with Lycosa from which it may be distinguished by a division of the lateral lobes of the median guide of the epigynum, and a horn-like process on the terminal apophysis of the palpal bulb of the male. These spiders are medium to small in size. Of the four species occurring in the state, the following is common.

Schizocosa crassipes Walckenaer (Plate X, fig. 15.)

The light median band widens gradually from behind to the eyes as is typical for the genus, and the typical broad light band is present on the abdomen. These spiders are

about one third of an inch or more in length. The median guide of the epigynum is wider at the base than at the apex. Males have the first tibiae clothed with dense hair and the other segments annulate.

These spiders are found under logs, stones and boards or sometimes under trash in fields and near houses.

MARYLAND DISTRIBUTION

Anne Arundel County--4 females, Parole.
Baltimore County--1 female, Loch Raven.
Cecil County--1 male, Pleasant Hill.
Charles County--1 female, Indian Head, I. Schloss.
Garrett County--6 females, Deep Creek Lake.
Harford County--5 females, Churchville.
Prince Georges County--1 male, Berwyn, W. Jeffers.

FAMILY OXYOPIDAE (THE LYNX SPIDERS)

These spiders possess long legs with three tarsal claws. The trochanters are notched, but not as deeply as in the Lycosidae and Pisauridae. They possess eight dark eyes that are unequal in size, the anterior medians being very small. The eyes are arranged in two rows, although the first row is so strongly recurved and the posterior so procurved that they seem to be in four rows of two each. The name lynx spiders was applied to this group because some of the species run rapidly over foliage in search of prey. They are also known as the sharp-eyed spiders. The genus Oxyopes contains a common species.

Genus Oxyopes

In this genus the lower margin of the furrow of the chelicerae is armed with one tooth. The posterior eye row is so strongly procurved that the anterior lateral eyes are as near

the posterior lateral eyes as the latter are from the posterior median eyes. These spiders are of moderate size, one species being very common in Maryland.

Oxyopes salticus Hentz (Plate X, fig. 16.)

Females of this species are about one third of an inch in length. The cephalothorax is light yellow marked with several dark longitudinal bands running posteriorly from the posterior eyes. There are two dark vertical lines on the clypeus. The dark markings on the light abdomen are variable but usually consist of a lanceolate basal band and a series of lateral and posterior bands. The abdomen is ovate and pointed behind. Males are slightly smaller than females, have black palpi and an irridescent abdomen. The apex of the epigynum is pointed, and the outer angle of the male palpus is acute.

These spiders are found most often running rapidly over foliage in open fields. They jump about very actively in a sweeping net, often capturing prey before attempting to escape.

MARYLAND DISTRIBUTION

Allegany County--Several specimens, Cresaptown.
Anne Arundel County--2 males, Bay Ridge, R. W. Muma.
Calvert County--1 female, North Beach.
Frederick County--1 male and 1 female, Thurmont.
Montgomery County--Several specimens, Silver Spring.
Prince Georges County--Several specimens, College Park.
Saint Marys County--1 female, Great Mills.
Somerset County--2 males, Princess Anne.
Washington County--1 male, Keedysville, W. Jeffers.
Wicomico County--1 male, Salisbury, W. Jeffers.

FAMILY THERIDIIDAE (THE COMB-FOOTED SPIDERS)

These spiders are sedentary, hanging upside down in their tangled webs waiting for prey. They possess eight eyes arranged in two rows, curved so that the lateral eyes of the two rows are often contiguous. Three claws are borne on the tarsi of the legs. A row of strong curved serrate hairs forming a comb on the tarsi of the fourth legs separates this family from the other eight-eyed, three-clawed families. Members of this family are found in buildings, on foliage, under stones, and in a wide variety of other places. The following key distinguishes the more common genera.

Key to the Genera of the Theridiidae

1. Lateral eyes of anterior and posterior rows widely separate.....*Latrodectus*
1. Lateral eyes of anterior and posterior rows contiguous or nearly so.....2
2. Posterior median eyes separated by three time the diameter of one.....*Spintharus*
2. Posterior median eyes separated by two times the diameter of one, or less.....3
3. Cephalothorax with a transverse furrow.....*Conopistha*
3. Cephalothorax without a transverse furrow.....4
4. Anterior median eyes much larger than anterior lateral eyes.....*Steatoda*
4. Anterior median eyes as large or smaller than anterior lateral eyes.....5
5. Abdomen dark brown with two spots across the

middle.....Asagena

5. Abdomen not marked as in Asagena.....6

6. Labium long and pointed.....Teutana

6. Labium short and transverse.....7

7. Abdomen oval, rounded or greatly arched.....Theridion

7. Abdomen wider than long with a hump in the middle on each side.....Theridula

Genus Asagena

In this genus the lateral eyes of each row are slightly separated, and the clypeus is wider than the eye area. Only one species of this genus is found in the United States, and it is common in Maryland.

Asagena americana Emerton

This species has a deep mahogany red abdomen marked just behind the middle with two irregular white spots. Sometimes these spots are indistinct or absent. The outline of the abdomen is rectangular with rounded corners. The cephalothorax is a dusky yellowish brown. Males and females are about the same size measuring one sixth to one fifth of an inch in length. The males have stridulating organs.

These spiders are found under stones and boards, and are occasionally taken sifting leaves and moss. They are sometimes taken in numbers by the blue mud dauber wasp which provisions its nest with spiders.

MARYLAND DISTRIBUTION

Garrett County--Several specimens, Deep Creek Lake.
Prince Georges County--1 female, Branchville.
Washington County--1 young female, Clearspring, R. W. Muma.
Wicomico County--Several specimens, Salisbury, W. Jeffers.

Genus Conopistha

These spiders are all small, and are commensal by nature, being found most often in the webs of other spiders. They are characterized by a transverse furrow on the cephalothorax, and a triangular abdomen that is somewhat prolonged above the spinnerets. One small species is common in the state.

Conopistha trigona Hentz (Plate X, fig. 17.)

Females of this species are about one eighth of an inch long. The males are slightly smaller. These spiders have a triangular abdomen which extends high above the spinnerets and is bilobed on the females. Males have two horns on the anterior end of the cephalothorax with the eyes at the base of the posterior horn. The angles of the abdomen of the male are less acute.

These interesting spiders are most often found in the webs of larger spiders such as the labyrinth spider where they feed on the small prey overlooked by the web builder. The writer has taken these spiders along with the egg sacs of other species without being aware of the small guest.

MARYLAND DISTRIBUTION

Anne Arundel County--2 young males, Annapolis.
Garrett County--1 female, Swallow Falls.
Prince Georges County--1 male, College Park, K. E. Muma.
Somerset County--2 young females, Dividing Creek.
Wicomico County--1 female, Salisbury, W. Jeffers.

Genus Latrodectus

The lateral eyes of each side are widely separated in this genus, and the abdomen is more or less globose. These spiders are the largest of the theridiids. They often build a retreat

to one side of the web in which the spider rests. One common species occurs in the state.

Latrodectus mactans Fabricius

The two sexes differ greatly in size, females averaging one half an inch and males one quarter of an inch in length. Females usually have globular deep black abdomens while the males are red bordered with yellow. A characteristic hour glass on the ventral surface of the abdomen of both the male and the female is the least variable marking. Young females are marked much like the males, and may retain vestiges of these markings in the adult stage. The legs of the female are black, but the legs of the male are banded.

These spiders are found in a variety of places ranging from dark corners in little used buildings to rubbish piles. This species has been variously known by the common names, black widow spider, hour glass spider and shoe button spider.

In the past the venomous bite of this spider has been the subject of much controversy. The venom is albumenous and is a strong neurotoxin, the symptoms of which are abdominal rigidity, severe local pains and profuse perspiration. Although few positive records are available it is almost certain that the bite causes a very small number of deaths.

The following records include only single collections, although the spider has been observed in most of the counties of the state. It appears to be more common east of the mountainous counties.

MARYLAND DISTRIBUTION

Anne Arundel County--1 young female, Bay Ridge.
Caroline County--1 female, Goldsboro.
Carroll County--1 male and 1 female, Westminster, R. Vincent.
Calvert County--1 female, Lusby.
Charles County--2 young males and 2 females, La Plata.
Frederick County--1 male, Frederick.
Garrett County--5 females, Deep Creek Lake.
Prince Georges County--2 young females, College Park.
Somerset County--1 young female, Princess Anne.
Talbot County--1 female, Matapeake.

Genus Spintharus

The spiders of this group are of small size and live on foliage. This genus is distinguished from other spiders of this family by the wide separation of the posterior median eyes, which are separated by three times the diameter of one eyes. A single species is found commonly in Maryland.

Spintharus flavidus Hentz (Plate X, fig. 18,19.)

The females of this species vary from one sixth to one fourth of an inch in length with the abdomen more or less triangular in outline. Males are about one eighth of an inch long and the abdomen is slender. The legs of the male are somewhat longer and more slender than those of the female. Abdominal markings vary greatly in both sexes. Usually there is a band of white enclosing the dorsum inside of which are found highly variable bands and spots of white, black red and yellow.

This species may be found on the lower sides of the leaves of trees and bushes in mid-summer. They are easily disturbed and may best be taken in numbers by beating.

MARYLAND DISTRIBUTION

Anne Arundel County--3 females and 1 male, Annapolis.
Charles County--2 females and 1 male, Fort Washington.
Garrett County--1 female, Salt Rock Creek.

Howard County--7 females, Skaggsville, L. P. Ditman.
Somerset County--2 females, Princess Anne.
Washington County--1 female, Town Hill.

Genus Steatoda

These spiders have the anterior median eyes much larger than the anterior laterals. The sternum is pointed posteriorly. Most of these spiders are of small to medium size. Maryland's single common species is described below.

Steatoda borealis Hentz (Plate X, fig. 20.)

The abdomen of this species is oval in outline and more or less depressed. There usually is a light basal semi-circular band and a light median band running back one third to one half of the length of the abdomen. Dark parts of the abdomen are a mahogany brown, and in old specimens markings may be indistinct and the abdomen shiny. Females measure one fifth of an inch in length with the males slightly smaller. The palpal organ of the male is strikingly large.

These spiders may be found under boards, stones and rubbish in the summer. They hibernate under loose bark in the winter. Typical theridiid webs are built by this species.

MARYLAND DISTRIBUTION

Allegany County--1 male, Cumberland.
Anne Arundel County--1 male, Gibson Island.
Carroll County--4 young females, Westminster, R. Vincent.
Garrett County--1 female, Deep Creek Lake.
Harford County--2 females, Churchville.
Howard County--1 male, Abell.
Montgomery County--1 female, Silver Spring.
Prince Georges County--2 males, Berwyn, W. Jeffers.

Genus Teutana

In the spiders of this genus the posterior median eyes

are as large as the anterior median eyes. The labium is more than half as long as the endites, and somewhat pointed at the tip. These spiders are of small or medium size. A common species is found in Maryland.

Teutana triangulosa Walckenaer (Plate XI, fig. 1.)

Females of this species are about one fourth of an inch long with males only one half that size. The cephalothorax usually is an orange brown marked with two lateral and one dorsal median series of light irregular triangles. In some specimens the bands are irregular or broken into a series of spots.

The tangled web of this species includes an irregular sheet. The webs and spiders may be found in buildings, particularly in basements or cellars and in greenhouses. Egg sacs are loose and thinly covered. The eggs are visible through the walls of the sac.

MARYLAND DISTRIBUTION

Allegany County--1 female, Cumberland.
Baltimore City--1 young female, L. Handen.
Montgomery County--1 female, Silver Spring, W. Jeffers.
Prince Georges County--1 male, College Park, K. E. Muma.

Genus Theridion

Spiders of this genus have the lateral eyes contiguous, the endites more than twice as long as the labium, and the lower margin of the furrow of the chelicerae furnished with one or no teeth. The abdomen is usually globular and high above the spinnerets. The size of these spiders varies from small to medium. Four common species of this large genus are given below.

Theridion differens Emerton (Plate XI, fig. 2.)

This species is very small, females measuring one eighth of an inch in length with males somewhat smaller. Females are light tan to dark brown with a bright longitudinal band composed of red, brown and white on the globular abdomen; an indistinct longitudinal band may also be present on the cephalothorax. Males are darker in color, the abdomen is more elongate, abdominal markings are less distinct and the band running longitudinally on the cephalothorax is less distinct. A cone-like terminal apophysis on the palpus distinguishes males, and the openings of the epigynum are separated by at least the diameter of one opening.

Webs are built on the foliage of low herbs and bushes and contain a small silken retreat. Specimens may be taken in numbers by sweeping.

MARYLAND DISTRIBUTION

Anne Arundel County--1 female, Annapolis.
Baltimore County--1 female, St. James Corner.
Calvert County--1 male, Scientist's Cliffs.
Caroline County--1 male, American Corners.
Garrett County--1 female, Deep Creek Lake.
Harford County--1 male, Churchville.
Howard County--1 female, Skaggsville, L. P. Ditman.
Montgomery County--1 male, Silver Spring.
Prince Georges County--1 male, Riverdale.
Wicomico County--1 male, Salisbury.

Theridion frondeum Hentz (Plate XI, fig. 3.)

Females of this species vary from one eighth to one fifth of an inch in length, with males as large as small females. The abdomen is globular in females and elongate in males. Markings are variable in this species; the ground color is light yellow. The thorax may have a wide black median longi-

tudinal band, a narrow band or a forked band. On the abdomen the most common marking consists of a double row of dorsal black spots surrounded by a chalky white blotch which may be broken into irregular lines or blotches or may cover the entire dorsum. The rows of black spots are bands in some specimens, while in others a wide black band covers most of the dorsal surface of the abdomen.

These spiders occur commonly on the foliage of weeds in low bushes in fields and open woodland. Often the females can be found with their white egg sacs in curled and folded leaves.

MARYLAND DISTRIBUTION

Anne Arundel County--1 female, Bay Ridge.
Cecil County--1 male and 2 females, Elkton.
Garrett County--2 females, Deep Creek Lake.
Harford County--1 female, Churchville.
Montgomery County--1 female, Redland.
Prince Georges County--3 females and 2 males, College Park.

Theridion spirale Emerton (Plate XI, fig. 4.)

This species is about the same size and color of T. differens Em. The principal difference is the presence of a more or less distinct median band on the cephalothorax that is as wide as the eye rows in front and tapers behind. There is also a tendency toward grey and brown colors in the abdominal band. In this species the openings of the epigynum are heavily sclerotized, less than or as widely separated as the diameter of one opening and the openings are usually connected by a sclerotized ridge. The great length of the coiled embolus of the palpal organ distinguishes the male.

These spiders live and are found under the same conditions

as T. differens Em.

MARYLAND DISTRIBUTION

Anne Arundel County--1 female, Annapolis.
Baltimore County--1 female, Loch Raven.
Caroline County--1 female, Denton.
Dorchester County--1 female, Sharptown.
Garrett County--1 female, Deep Creek Lake.
Prince Georges County--1 female, Berwyn, W. Jeffers.

Theridion tepidariorum Koch (Plate IV, Plate XI, figs. 5,6,)

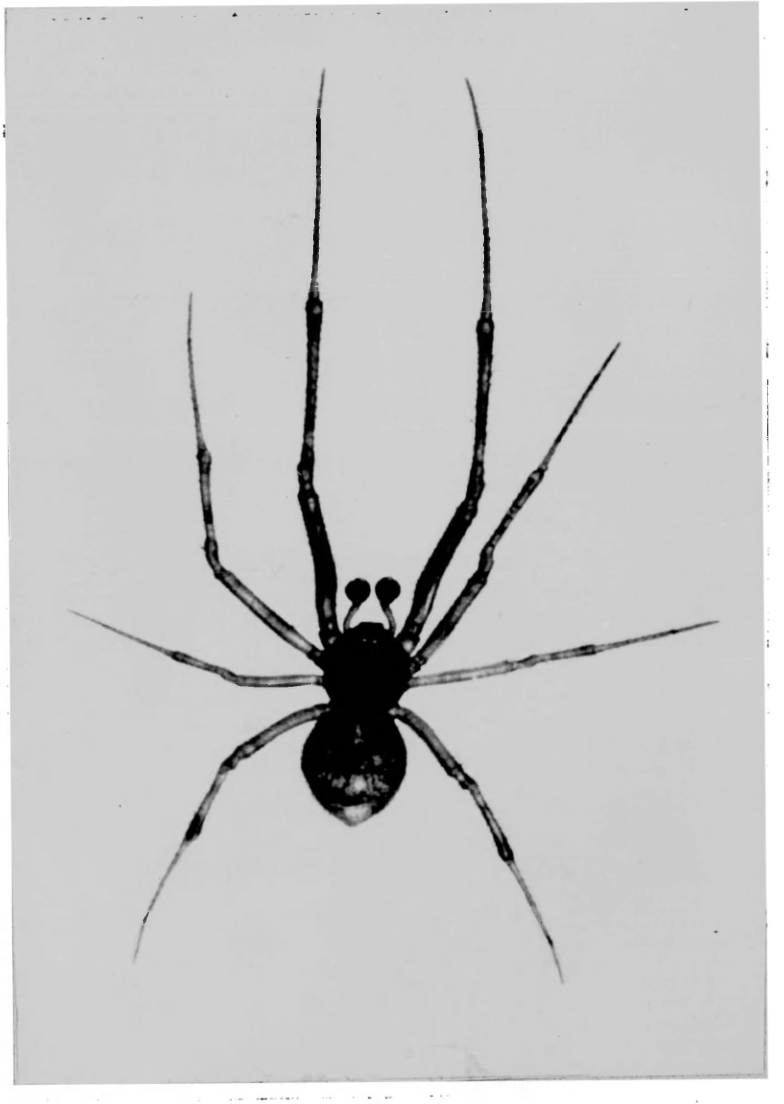
This species is variable in both size and color. Large females measure one quarter of an inch in length, but adult spiders may be much smaller; males are usually less than one fifth of an inch long. The color ranges from a grey white with black spots to black with some specimens being brownish. Irregular spots and lines cover the globular abdomen with a series of dark chevrons just above the spinnerets being the most constant marking. Doubtful specimens may be determined by the single opening of the epigynum from which two ducts lead into the abdomen, or by the large whorled terminal apophysis of the palpal organ of males.

This spider rightly deserved the common name, domestic spider and house spider, as it very often is found in the upper corners of the windows, the corners of the rooms, under furniture and behind the radiators in little used rooms. The web is loose, tangled and irregular. It is constructed of fairly coarse silk. The light tan teardrop-shaped egg cases are found in the web, and are very similar to the egg cases of the black widow except that they are smaller.

MARYLAND DISTRIBUTION

Allegany County--1 female, Westernport.

PLATE IV



Theridion tepidariorum Koch--male

Baltimore City--1 young female, L. Handen.
Calvert County--1 female, Solomon's Island, R. A. Littleford.
Garrett County--1 male, Deep Creek Lake, E. V. Muma.
Prince Georges County--Several specimens, College Park.
Talbot County--1 female, Kent Narrows.

Genus Theridula

In this genus the anterior row of eyes is procurved, and the abdomen is as wide or wider than long with humps on the sides. These spiders are very small, often one eighth of an inch or less in length. One common species is found in the state.

Theridula sphaerula Hentz

The length of the body of the female of this species varies from one tenth to one eighth of an inch. Males measure one twelfth of an inch. The abdomen is as high and much wider than long in adult female specimens. It is a yellowish dusky grey with black spots over the extreme lateral edges and a cloudy white irregular spot just behind the center of the dorsum. Males have a median wide, black longitudinal band on the cephalothorax, the abdomen is not greatly widened, and the markings are indistinct. Young specimens may have a reddish color.

This species has been collected in the state by sweeping foliage. The web has not been seen by the author.

MARYLAND DISTRIBUTION

Anne Arundel County--1 female, Bay Ridge, R. W. Muma.
Garrett County--1 male, Deep Creek Lake.
Harford County--1 male, Churchville.
Montgomery County--1 male and 1 female, Silver Spring.
Prince Georges County--2 females and 2 males, Berwyn, E. Beardsley.

FAMILY LINYPHIIDAE (THE SHEET-WEB WEAVERS)

Spiders belonging to this family are three-clawed, eight-eyed and sedentary. The eyes are arranged in two rows and are heterogeneous in color. There is no comb on the tarsi of the fourth legs and the chelicerae lack a lateral condyle. This family may be separated from the Micryphantidae by the fact that the females have claws on the distal ends of the palpi in most species, and the males do not have apophyses on the tibiae of the palpi. Although many species build their webs in inconspicuous places, several are conspicuously placed and almost always contain one or more sheets of silk, hence the common name. The following genera contain the more common species.

Key to the Genera of Linyphiidae

1. Posterior eyes near together.....2
1. Posterior eyes distant.....3
2. Metatarsi provided with one or more spines..Lephthyphantes
2. Metatarsi unarmed.....Bathyphantes
3. Epigynum having a single opening, male palpus has no process on patella.....Linyphia
3. Epigynum having two openings, male palpus has a process on patella.....4
4. Epigynum with a long triangular scape, patella of male palpus furnished with a long spur.....Pityohyphantes
4. Epigynum with no scape, patella of male palpus furnished with a short conical tooth.....Frontinella

Genus Bathyphantes

The extreme length of the median scape of the epigynum is characteristic of this genus. The metatarsi of the legs bear no true spines. The sternum is heart-shaped, and the median ocular area is as long as or shorter than wide. Most of the species are very small, and spin typical sheet-webs close to the ground. One species of this genus is common in Maryland.

Bathyphantes nigrinus Westring (Plate XI, fig. 7.)

Both sexes of this species measure about one tenth of an inch in length. The cephalothorax is a dusky yellow and the legs are similarly colored. Several pairs of light grey or white transverse bands are present on the otherwise dark grey to black elongate abdomen. The great length of the scape and parmula of the epigynum distinguish the females, while the males may be identified by the coiled embolus on the end of the palpal organ.

These spiders may be found under boards, stones and trash in the summer months. In the winter they may be sifted from leaves.

MARYLAND DISTRIBUTION

Allegany County--1 female, Dans Rock, H. E. Muma.
Cecil County--1 male, Northeast.
Prince Georges County--1 female, Berwyn, W. Jeffers.
Washington County--1 female, Delamere, R. W. Muma.

Genus Frontinella

There are two well separated openings on the epigyna of the females of this genus. With the exception of one species there is a short tooth on the patella of the palpus of the male. These spiders are of moderate size and resemble those

of the genus Linyphia. One species is very common in the state.

Frontinella communis Hentz (Plate XI, figs. 8,9.)

The length of this species varies. The females average one sixth of an inch while males average one eighth of an inch. The cephalothorax and legs are a dusky yellow color. There is a median dark band on the dorsum of the elongate abdomen which runs back almost to the spinnerets where it is broken by the dirty white basic color of the abdomen. On the sides of the abdomen are a series of vertical dark bands that become progressively thinner and shorter near the spinnerets. The markings are indistinct on the males which have a slight metallic sheen.

This species is the most common sheet-web weaver in the state. It derives its common name, the bowl and doily spider, from the fact that the web is composed of an almost flat sheet-web over which a bowl shaped sheet-web is placed. Above these two sheets is a maze of tangled threads. The spiders rest upside down on the lower side of the bowl of the web. The webs are commonly found on pines, cedars and other evergreen, but may be built in any shrub.

MARYLAND DISTRIBUTION

Allegany County--1 young female, Cumberland, M. H. and H. E. Muma.
Anne Arundel County--3 females, Annapolis.
Caroline County--1 young female, Goldsboro.
Frederick County--1 female, Keaverton.
Garrett County--1 young female, Deep Creek Lake.
Harford County--1 male, Churchville.
Montgomery County--1 male, Silver Spring.
Prince Georges County--3 females, Berwyn, W. Jeffers.
Queen Anne County--1 young female, Centerville.
Somerset County--3 females, Dividing Creek Swamp.

Genus Lepthyphantes

The metatarsi of the legs bear one spine, and the other segments of the legs bear more and longer spines than the spiders of the genus Bathyphantes. These spiders are small in size. The epigynum is short, heavy and folded under. One species occurs commonly in this state.

Lepthyphantes nebulosus Sundevall (Plate XI, fig. 10.)

This species is one of the larger of this genus, averaging one sixth of an inch in length. The males are slightly smaller than the females and have longer legs. There is a forked median dark band on the light yellow cephalothorax, and a dark band on each margin. The ovate abdomen is mottled yellow and white which is overlaid by dark, paired and connected spots on the anterior end and paired transverse bars on the posterior end. These markings may vary somewhat. The epigynum is folded under at the distal end and there is a blunt toothed process on the tibia of the male palpus.

The flat sheet-webs of this species are found under stones and boards beneath which the spider hangs. Specimens may also be taken sifting leaves and moss in the winter.

MARYLAND DISTRIBUTION

Allegany County--1 male, 4 females, Cumberland.
Prince Georges County--2 females, Branchville.
Washington County--1 male, Clearspring, R. W. Muma.

Genus Linyphia

These spiders have a dorsal folium on the abdomen. Males have a dorsal tooth on the face of the chelicerae near the clypeus; sometimes it is thin and inconspicuous. There is only one opening of the epigynum except in one uncommon

species. The patella of the male palpus does not bear a process. Spiders of this genus are of moderate size. Two species are common in Maryland.

Linyphia clathrata Sundevall (Plate XI, fig. 11.)

Females of this species measure about one-eighth of an inch in length with the males slightly smaller. The posterior median eyes are on black elongated spots. The remainder of the cephalothorax is dusky yellow. The light brown elongate abdomen is sprinkled with white spots. There usually is a median band composed of irregular W-shaped black bars, but the black markings may vary considerably. On the males the black markings may cover most of the abdomen except for a white spot on each side. The single opening of the epigynum is more or less oval in shape.

All specimens taken in Maryland were captured by sweeping fields of sifting leaves.

MARYLAND DISTRIBUTION

Allegany County--1 young female, Cresaptown, H. E. Muma.
Garrett County--1 young female, Deep Creek Lake.
Prince Georges County--1 young female, College Park, E. Beardsley.

Linyphia marginata Koch (Plate XI, fig. 12.)

This species resembles F. communis Hentz from which it may be distinguished by the presence of white lateral bands on the cephalothorax. The median abdominal band is often spotted, broken or scalloped by white. Both sexes are about one sixth of an inch long. Males often have the markings less distinct. Doubtful specimens may be distinguished by the absence of a patellar process on the male palpus, and the single opening of

the epigynum.

The web of this species is loose and tangled. In the center is a delicate, almost invisible domed sheet-web. The spider hangs on the lower surface of the dome, and pulls captured prey through it. Webs are built in dead bushes or evergreens. This spider is known commonly as the filmy dome spider.

MARYLAND DISTRIBUTION

Allegany County--1 female, Cumberland.
Charles County--1 male, Wide Water, W. Jeffers.
Frederick County--3 females and 1 male, Sugar Loaf Mountain.
Garrett County--1 young female, Swallow Falls.
Montgomery County--1 young female, Great Falls.
Prince Georges County--1 female, Berwyn, W. Jeffers.
Washington County--2 males, Town Hill.

Genus Pityohyphantes

Males of this genus agree with those of Linyphia in having a tooth on the face of the chelicerae, but differ in possessing long spurs on the patella of the palpus. There are two openings on the epigyna of the females. These spiders are of moderate size but are somewhat larger than other spiders of this family. One species occurs in Maryland.

Pityohyphantes phrygianus Koch (Plate XI, fig. 13,14.)

The abdomen, legs and cephalothorax are light yellow. There is a dark, forked median band and a lateral band on the cephalothorax. A dark brown herringbone stripe and a mottling of black are found on the oval-shaped abdomen. Both sexes average one fifth of an inch in length. The scape of the epigynum is similar to that of B. nigrinus but is shorter and broader. A long patellar spur on the palpus distinguishes

the male.

As the web of this species is a large flat netted web below a tangled network of threads, the common name, hammock spider, is appropriate. The webs contain either a curled leaf or a silken retreat, and are built on bushes, low trees, overhanging ledges, and dry stream banks.

MARYLAND DISTRIBUTION

Baltimore County--1 female, Avalon, L. Handen.
Garrett County--3 females, Deep Creek Lake.
Prince Georges County--2 females, College Park.

FAMILY ARGIOPIDAE (THE ORB-WEB WEAVERS)

Members of this family all spin orb-webs that are formed by a spiral line hung on radiating threads. These spiders usually have eight eyes, all of one color, and most of the species have a lateral condyle on the chelicerae. They lack the comb on the tarsi of the fourth legs as found in the Theridiidae. In Maryland this family contains a larger number of species than any other family. The more common species are found in the genera that may be separated by the following key.

Key to the Genera of the Argiopidae

1. Lateral condyle of the chelicerae wanting or rudimentary.....2
1. Lateral condyle of the chelicerae distinct.....5
2. Epigastric furrow procurved.....3
2. Epigastric furrow nearly straight.....4
3. Endites more or less convergent and dilated at the distal end.....Pachygnatha

3. Endites parallel, dilated at the distal end.....Tetragnatha

4. Eyes nearly equal in size.....Leucage

4. Eyes not equal in size.....5

5. Spinnerets not tubulated.....6

5. Spinnerets limited by a thick tube or ring.....Micrathaena

6. Posterior row of eyes strongly procurved.....Argiope

6. Posterior row of eyes little if any procurved.....7

7. Median furrow when longitudinal a narrow one not reaching cervical groove.....8

7. Median furrow longitudinal extending to cervical groove.....11

8. Abdomen furnished with radiating lateral projections.....Acanthepeira

8. Abdomen not shaped as in Acanthepeira.....9

9. Abdomen as high behind middle as at base and elliptical.....Singa

9. Abdomen highest at base and usually broadest near base.10

10. Metatarsus and tarsus of first legs longer than tibia and patella.....Metepeira

10. Metatarsus and tarsus of first legs not longer than tibia and patella.....Aranea

11. Tibia of third legs with a cluster of long cilia on anterior side near base.....Mangora

11. Tibia of third legs lacking cluster of cilia as in Mangora.....12

12. Abdomen marked with a double folium one enclosing the other.....Acacesia

12. Abdomen not marked as in Acacesia.....13

13. Epigynum with scape directed backward, patella of the pedipalp of the male with two apical spines....14

13. Epigynum with scape directed forward, patella of the pedipalp of the male with one apical spine.....Eustala

14. Lateral eyes of each side situated on a prominent tubercle.....Aranea

14. Lateral eyes of each side not situated on a prominent tubercle.....Neoscona

Genus Acacesia

Orb-weavers included in this genus have the posterior eye row strongly recurved, the posterior median eyes widely separated, and the anterior median eyes farther from the lateral eyes than the lateral eyes are from each other. The median furrow of the cephalothorax is longitudinal, and extends forward to the cervical groove. The legs are sparsely spines. These spiders are of moderate size. One species of this genus is widely distributed in the state.

Acacesia folifera Marx

The cephalothorax and legs are a dusky yellow that sometimes has a greyish or greenish tinge. There is a double folium on the grey or brown abdomen. The larger folium con-

sists of a deep reddish brown line bordered with yellow or white. It encloses the smaller similarly colored folium. The area inside of the double folium is darker than the rest of the dorsum. Females are about one quarter of an inch long. Males are slightly smaller. The color pattern distinguishes the species.

These spiders are found on the scrubby pines and oaks in woodland that has been lumbered or burnt. They are also occasionally seen in orchards and in gardens on weeds.

MARYLAND DISTRIBUTION

Cecil County--1 young female, Northeast.
Dorchester County--1 young female, Sharptown.
Garrett County--1 female, Deep Creek Lake.
Harford County--1 male, Churchville.
Montgomery County--1 female, Great Falls, K. E. Muma.
Somerset County--1 female, Princess Anne.
Washington County--1 female, Smithsburg, W. Jeffers.
Wicomico County--1 young female, Salisbury, W. Jeffers.

Genus Acanthepeira

In this genus the anterior row of eyes is strongly procurved, and the median eyes are twice as far from the margin of the clypeus as the lateral eyes are from the same. The lateral eyes of each side are hidden beneath projections. The abdomen is armed with short heavy radiating tubercles as well as a median tubercle. One medium sized species occurs in Maryland.

Acanthepeira stellata Walckenaer

This species varies from one quarter to one third of an inch in length. The abdomen is nearly as broad as long and has from eleven to thirteen lateral humps as well as a medium hump. There is a wide variation in the color pattern of the

abdomen which ranges from light grey to dark brown. On the cephalothorax a median light band as wide as the eye rows tapers posteriorly. A dark lateral band occurs on each side. In well-marked specimens this is a thin white line on the extreme lateral edges of the thorax.

The star-bellied spider is usually found in open fields on vines and weeds. Occasionally it rests on the hub of the web, but more often is found among the dead leaves or flowers of a supporting plant.

MARYLAND DISTRIBUTION

Allegany County--2 females, Cumberland, H. E. Muma.
Caroline County--1 young female, American Corners.
Dorchester County--2 females, Finchville.
Frederick County--1 young female, New Windsor.
Garrett County--1 male, Deep Creek Lake.
Howard County--3 young females, Savage.
Kent County--1 young male, Chestertown, I. Raabe.
Montgomery County--1 female, Silver Spring, E. Brechbill Hitz.
Prince Georges County--1 female, College Park, K. E. Muma.
Somerset County--3 young females, Dividing Creek Swamp.

Genus Argiope

The labium is broader than long, and the posterior eye row is strongly procurved. The anterior median eyes are closer to each other than to the anterior lateral eyes. Males of this genus are many times smaller than the large females. These spiders are commonly known as the garden spiders. Two familiar species of this genus are found here.

Argiope aurantia Lucas (Plate V)

Femlaes of this handsome orb-weaver are often an inch or more in length. Males are one quarter of an inch long. The abdomen of the female is black trimmed laterally with a row of bright yellow bars and stripes, while the thorax is covered

PLATE V

Argiope aurantia Lucas--female

with silver hairs. Young females have the legs banded instead of black like the adult, and the silver hairs of the thorax are sparse causing dark bands on the cephalothorax. Males have a yellowish brown cephalothorax and a brown median band on the abdomen bordered by an irregular zig-zag line.

The web of this species is built near the ground on weeds and bushes near streams, in open woodland and fields. There is a zig-zag stabilimentum in the web that prompted the common name, writing spider. This spider is also called the black and orange garden spider.

MARYLAND DISTRIBUTION

Baltimore County--1 male, Towson, W. Jeffers.
Cecil County--1 female, Elkton, S. Booth.
Charles County--1 female, Fort Washington.
Dorchester County--1 male, Sharptown.
Garrett County--1 male, Deep Creek Lake.
Howard County--1 male, Skaggsville, L. P. Ditman.
Prince Georges County--2 females, Berwyn, W. Jeffers.
Saint Marys County--1 male, Point Lookout.
Worcester County--1 female, Berwyn.

Argiope trifasciata Forskal

This species is almost as large as the preceding one. Females average four fifths of an inch in length, and males one fifth. The abdomen of the females of this species is covered with silvery hairs broken by many transverse lines. Often there are yellow longitudinal bands over the silver. In young females the silver or white hairs are discontinuous forming three longitudinal bands. The legs of the adult female are dark. Males have the cephalothorax and legs yellow and the abdomen white.

The web of this species is found in the same situations

as the preceding species and also contains a stabilimentum. This spider is called the banded garden spider, or less appropriately the three-lined garden spider.

MARYLAND DISTRIBUTION

Allegany County--1 female, Flintstone.
Charles County--1 young female, Waldorf.
Dorchester County--1 young female, Finchville.
Frederick County--2 females, Frederick.
Garrett County--1 male, Deep Creek Lake.
Howard County--1 male, Skaggsville, L. P. Ditman.
Kent County--1 young female, Chestertown, I. Raabe.
Saint Marys County--1 young male, Great Mills.
Somerset County--1 male, Dividing Creek Swamp.

Genus Aranea

Spiders of this genus vary a great deal in size, form and color. The median furrow of the cephalothorax is transverse and has projections on the ends that extend outward and backward. The clypeus is narrower than the median ocular area which is about as long as wide. Many of our more spectacular orb-weavers belong in this genus. The following species are common in the state.

Aranea foliata Fourcroy (Plate XI, fig. 15.)

Adult females of this species sometimes measure one half an inch in length, but many specimens are smaller. Males are slightly smaller than females. The cephalothorax is reddish brown, darker at the sides and has an indistinct dark band in the middle. A wide dark scalloped folium covers most of the light brown or grey abdomen. The legs are banded. This species may be separated from the other house araneas by the epigynal and palpal figures.

The foliate spider, as this species is commonly known,

builds its large orb webs around the windows and eaves of barns and houses. It is occasionally found indoors and may also build its web on bushes and trees near buildings.

MARYLAND DISTRIBUTION

Calvert County--3 females, Solomon's Island, R. A. Littleford.
Garrett County--2 females and 1 male, Deep Creek Lake.
Prince Georges County--1 female, Riverdale, K. E. Muma.

Aranea raji Scopoli (Plate XI, fig. 16.)

The females of this brightly colored species vary from one half to three quarters of an inch in length. There is a wide dark, scalloped folium on the dorsum of the abdomen which encloses several irregular yellow spots and bars. Near the anterior end of the folium is a more or less symmetrical spot that resembles a clover leaf. The spots inside the folium are sometimes large enough to almost obliterate it. Other spots of similar color occur on the sides of the abdomen. The legs are banded and the light yellow cephalothorax is marked with indistinct median and lateral bands. Males may be distinguished by many short conical spines beneath on the tibia of the second leg. Although somewhat variable the scape of the epigynum is long, narrow and appears to be segmented.

This spider is commonly known as the spectacled spider. It builds its large orb-web on tall bushes and low trees from four to eight feet from the ground. The spider is found in a curled-leaf retreat at one of the upper angles of the web.

MARYLAND DISTRIBUTION

Anne Arundel County--2 females, Annapolis.
Frederick County--3 females, Brunswick.
Garrett County--1 female and 1 male, Deep Creek Lake.
Prince Georges County--1 female, Berwyn, W. Jeffers.
Queen Anne County--2 females, Centerville.

Somerset County--1 female, Princess Anne.

Aranea thaddeus Hentz (Plate XI, fig. 17.)

The cephalothorax is yellowish brown and the legs are somewhat banded. The abdomen is rounded, varies from bright yellow to green and is bordered with a band or band of spots that vary from red brown to dark green. Females are about one quarter of an inch long. The author has seen but one male. It is slightly smaller than the female and similarly colored. Posteriorly, the epigynum is deeply scalloped, the scape is short.

This colorful spider is known as the lattice spider, due to the lattice-like appearance of the tubular retreat which is on a curled leaf at an upper angle of the web. The webs are built on low bushes and trees in moist fields and woodland.

MARYLAND DISTRIBUTION

Montgomery County--1 female, Four Corners.
Prince Georges County--1 female, Berwyn, W. Jeffers.
Queen Anne County--1 female, Centerville.
Wicomico County--1 male, Salisbury, W. Jeffers.

Genus Eustala

The eye arrangement is similar to that of the genus Acacesia, but there are more spines on the legs in these spiders. Probably the most distinguishing characters are the forward directed scape of the epigynum, and the triangular-shaped abdomen. Our common species varies greatly in size and color.

Eustala anastera Walckenaer (Plate XI, fig. 18.)

The abdomen of the female of this species is triangular in outline, and is as high or higher behind than in front.

Markings are variable. Some spiders have a distinct dark folium, others have an indistinct folium and still others have a dark median band. Males have the abdomen more rounded than females. The forward projecting conical epigynum is distinctive. Both sexes average a little less than one quarter of an inch in length.

Webs of this species are found in dry pine and deciduous woodland as well as on garden shrubs and vines. The spider may be found working in the web or on an adjacent twig.

MARYLAND DISTRIBUTION

Baltimore County--1 female, Gunpowder River, G. Kieffer.
Caroline County--1 young female, Ridgely, G. Vogt and L. P. Ditman.
Charles County--1 female, La Plata.
Dorchester County--1 female, Finchville.
Garrett County--1 female, Deep Creek Lake.
Howard County--1 female and 1 young male, Abell, W. Jeffers.
Prince Georges County--1 female, Berwyn, W. Jeffers.
Queen Annes County--1 female, Centerville.
Washington County--1 female, Smithsburg, W. Jeffers.
Worcester County--1 male, Snow Hill.

Genus Leucage

In these spiders the eyes are all nearly the same size. The first two pairs of legs are long and slender, and the posterior femora are armed with a double row of long, curved hairs. The abdomen is somewhat elongate with rounded ends, the anterior end projecting over the cephalothorax. One species of this genus occurs in Maryland.

Leucage venusta Walckenaer (Plate XI, fig. 19.)

Females average one quarter of an inch in length with the males somewhat smaller. The cephalothorax is light yellow marked with a median and lateral green stripe, while the tubular abdomen is mottled green and silver. Just above the

spinnerets are two red or orange spots; there is a similarly colored spot on the venter of the abdomen. Males are colored like the females, but have longer legs.

The web of this species contains many spiral lines. They are found in open woodland and near water. Some of the webs are provided with a loose theridiid type barrier at one side. The spiders are found most often resting on the hub of the web. The names beautiful leucage, and orchard spider have been applied to this species.

MARYLAND DISTRIBUTION

Anne Arundel County--1 female, Bay Ridge.
Calvert County--1 female, Scientist's Cliffs.
Montgomery County--4 females, Great Falls.
Prince Georges County--1 male, College Park, K. W. Numa.

Genus Mangora

These spiders have the anterior row of eyes recurved, the posterior row straight or recurved and the posterior median eyes larger than the laterals. The thorax is highly arched behind, and the longitudinal median furrow is deep and extends to the cervical groove. Most of the species are of small or medium size. Of the three species occurring in Maryland the following two are the most common.

Mangora gibberosa Hentz (Plate XI, fig. 20.)

The cephalothorax and legs are greenish yellow. There is a narrow median stripe extending from the eyes back to the median furrow. On either side of the median furrow the cephalothorax is highly arched. The abdomen is white, mottled with yellow and spotted and striped with black. The most distinct markings are confined to the posterior end and sides. There

are vertical stripes on the sides and three just above the spinnerets. Those just over the spinnerets are crossed by transverse bars and spots. Females average one fifth of an inch in length. Males are somewhat smaller.

The common name, hunch-backed spider, was applied to this species because of the swollen cephalothorax, and because the abdomen extends high over the cephalothorax. The comparatively large web is built on low bushes and weeds in open woodland and dry and moist meadowland.

MARYLAND DISTRIBUTION

Anne Arundel County--1 female, Churchville.
Baltimore County--1 female, Towson.
Calvert County--1 female and 1 male, Lusby.
Cecil County--1 male, Northeast.
Charles County--3 specimens, Waldorf.
Dorchester County--2 young females, Finchville.
Harford County--1 female, Churchville.
Kent County--4 specimens, Chestertown.
Prince Georges County--1 female and 1 male, College Park, I. Schloss.
Queen Annes County--1 female, Matapeake.
Somerset County--1 female, Princess Anne.
Wicomico County--1 female, Salisbury, W. Jeffers.

Mangora maculata Keyserling

This species is about the same size as the preceding species. It can be distinguished from that species by the markings. The dark spots and bands are reduced to several pairs of spots over the spinnerets that are often connected by brown transverse bands. Other than the difference mentioned above the color is the same as M. gibberosa Hentz.

Although this species is less common it is just as widely distributed. The web and spider is found under the same conditions as the above species.

MARYLAND DISTRIBUTION

Anne Arundel County--1 male, Bay Ridge.
Calvert County--1 male, North Beach.
Harford County--1 young male, Churchville.
Kent County--1 young female, Chestertown, I. Raabe.
Montgomery County--3 males and 1 young female, Great Falls.
Prince Georges County--2 females, Berwyn, W. Jeffers.
Somerset County--1 female, Princess Anne.

Genus Metepeira

In this genus the posterior median eyes are closer to each other than to the posterior lateral eyes. These spiders are medium sized. The epigynum has a recurved scape, the opening not heavily sclerotized, and the patella of the palpus of the male has several spines. The web of one very common species, which is widely distributed in the state, is a compound web composed of an orb-web beside a tangled irregu- web.

Metepeira labyrinthea Hentz (Plate XII, fig. 1.)

The females of this very common species average a little more than one quarter of an inch in length. Males are somewhat smaller with longer legs. The cephalothorax is dark brown with the head region light brown to yellow. There is a dark folium on the light brownish grey abdomen which has a median white band that appears like a double armed cross due to two transverse bands. The legs are banded.

This species, commonly known as the labyrinth spider, builds a composite web consisting of an orb-web along side of a tangled theridiid type web. The egg sacs are deposited in a chain near the leafen retreat beside the web. Webs are found in moist or dry pine and deciduous woodland.

MARYLAND DISTRIBUTION

Anne Arundel County--1 female, Annapolis.
Charles County--1 female, Fort Washington.
Frederick County--3 females, Smithsburg, W. Jeffers.
Garrett County--5 males, Deep Creek Lake.
Kent County--1 young female, Chestertown, I. Raabe.
Prince Georges County--1 female, Berwyn, W. Jeffers.
Queen Annes County--2 females, Centerville.
Somerset County--3 females, Dividing Creek Swamp.
Wicomico County--2 females, Salisbury, W. Jeffers.

Genus Micrathena

The abdomen of the spiders of this genus has a hard horny integument. There is a dark ring limiting the spinnerets. The cephalothorax is longer than wide, and the upper surface of the abdomen is flattened. These spiders vary somewhat in size and are adorned with lateral spines which prompted the common name spiny-bellied spiders. Two common species are found in Maryland.

Micrathena gracilis Walckenaer (Plate VI)

The abdomen of the female is raised high above the spinnerets and bears five pairs of spines, one anterior dorsal pair, one median lateral pair, two posterior dorsal pairs and one ventral lateral pair, with mottled white between the dark spines. The cephalothorax is brown with three dark stripes. Females average about two fifths of an inch in length. Males are much smaller, narrower and are spineless.

This species builds a rather large web near water or in moist woodland. The actual orb may be rather small, but the guy lines are long, often suspending the web between two trees.

MARYLAND DISTRIBUTION

PLATE VI

Micrathena gracilis Walckenaer--female

Anne Arundel County--1 female, Robert Crane Highway.
Charles County--1 female, Indian Head, I. Schloss.
Harford County--2 females, Churchville.
Montgomery County--1 female, Great Falls.
Prince Georges County--1 female, College Park, W. Jeffers.
Queen Annes County--1 female, Centerville.
Washington County--1 female, Smithsburg, W. Jeffers.

Micrathena reduviana Walckenaer

The female of this tick-like species is about one fifth of an inch long. There are only two pairs of small spines at the posterior end of the flattened abdomen. The markings consist of a dark median mark, often shaped like a flower pot and plant, and a posterior dark mark. Males are much smaller than females and are similarly marked.

Like M. gracilis Walck. the guy lines of the web are extremely long. These webs are almost always found in cool moist woodland. This species is commonly known as the mitred spider.

MARYLAND DISTRIBUTION

Anne Arundel County--2 females, Annapolis.
Calvert County--1 female, Solomon's Island, R. A. Littleford.
Frederick County--1 female, Sugar Loaf Mountain.
Harford County--1 female, Churchville.
Prince Georges County--Several specimens, Berwyn, W. Jeffers.
Queen Annes County--4 females, Centerville.
Somerset County--1 female, Dividing Creek Swamp.

Genus Neoscona

In Neoscona the median furrow of the cephalothorax is longitudinal, and the epigynum is of a characteristic spoon shape. The second legs of the males have a group or series of short heavy curved spines on the lower surface of the tibiae. Several species occur in Maryland. The following are common.

Neoscona arabesca Walckenaer (Plate XII, figs. 2,3.)

These spiders are one third of an inch long or less with the males slightly smaller than females. The yellowish brown cephalothorax is marked with two dark sub-marginal bands and a median band that often is slightly forked anteriorly. Abdominal markings consist of the usual light basal triangular mark and lateral spots, and a double series of angular dark spots on the posterior end. The markings may vary slightly and the base color of the abdomen varies from light yellow through red to brown. This species is very similar to *N. minima* Camb. from which it may be distinguished by the curved tibiae of the second legs of the males and the longer scape of the epigynum.

Webs of this species are found on low bushes and trees in woodland and tall weeds in open fields. It is occasionally found around buildings.

MARYLAND DISTRIBUTION

Anne Arundel County--1 female, Bay Ridge, R. W. Muma.
Baltimore County--1 female, Gun Powder River, G. Kieffer.
Carroll County--2 females, Westminster.
Charles County--1 male and 1 female, La Plata.
Garrett County--Several specimens, Deep Creek Lake, M. H. Muma and K. E. Muma.
Prince Georges County--1 female, Berwyn, E. Beardsley.
Somerset County--3 females, Dividing Creek Swamp.

Neoscona benjamina Walckenaer (Plate XII, figs. 4,5.)

This species is somewhat larger than the preceding species, the females averaging three fifths of an inch in length. The dark brown abdomen is bluntly triangular in outline, and the typical neosconid markings are indistinct. Males of this species are easily confused with males of the preceding species. It is found that the longer scape of the epigynum and the more promi-

nent lateral tubercles of the scape distinguish the females.

Webs of this species are found on and in houses, barns, etc. They are also occasionally found on bushes and trees near buildings. This spider is known by the common name domicile orb-weaver.

MARYLAND DISTRIBUTION

Baltimore City--1 female, G. Kieffer.
Frederick County--1 female, Brunswick.
Kent County--2 females, Chestertown, I. Raabe.
Prince Georges County--1 female, Berwyn, W. Jeffers.
Queen Annes County--2 females, Centerville.
Somerset County--2 females, Dividing Creek Swamp.
Washington County--1 female, Boonesboro, E. Brechbill Hitz.

Genus Pachygnatha

This genus belongs in the group of orb-weavers that have the lateral condyle of the chelicerae lacking or very small. The epigastric furrow is nearly straight, and the lateral eyes of both rows are approximate. These spiders may be distinguished from the allied genus Tetragnatha by the convergent endites. The heavy chelicerae prompted the name thick-jawed spiders. The following is our common species.

Pachygnatha tristriata Koch (Plate XII, fig. 6.)

Both sexes are a little less than one quarter of an inch in length. There are three dark longitudinal bands on the yellowish brown cephalothorax, one median and two lateral. The dark reddish folium covers most of the brownish oval abdomen. It is evenly curved and contains a light bordered lance-shaped area. Due to the simple epigynal opening, females are difficult to distinguish, but males are characterized by the fact that the bulb of the palpus is only half

as long as the tarsus.

All of the spiders in the author's collection have been collected under stones in open fields or sifted from leaves in swampy woodland.

MARYLAND DISTRIBUTION

Allegany County--1 male and 1 female, Dans Rock, H. E. Muma.
Anne Arundel County--1 female, Gibson Island.
Garrett County--1 female, Deep Creek Lake, K. E. Muma.
Prince Georges County--2 males and 1 female, Lanham, J. Oltman.

Genus Singa

The abdomen is elliptical in shape or slightly wider behind the middle in this spider. The posterior median eyes are closer to each other than to the posterior laterals. Most of the species are rather small with relatively short legs. One species is fairly common in the state.

Singa pratensis Emerton (Plate XII, fig. 7.)

Females are about one fifth of an inch long; males are a little smaller. The cephalothorax is a dusky yellow, and the ovate abdomen is similarly colored, striped with three longitudinal white bands. There is a black spot between the median eyes, and the abdomen is darker toward the spinnerets. The epigynum is small.

These spiders are most often collected by sweeping swampy open fields.

MARYLAND DISTRIBUTION

Allegany County--Several specimens, Cresaptown.
Caroline County--5 specimens, Denton.
Garrett County--6 specimens, Deep Creek Lake.
Somerset County--1 young female, Princess Anne.

Genus Tetragnatha

These spiders have an elongate abdomen, several times longer than wide. The endites are parallel, and the eye rows are usually straight or converge or diverge slightly. All of the spiders are of medium or large size. Due to the extreme length of the chelicerae of the males these spiders are called the long-jawed spiders. The following two species are common in Maryland.

Tetragnatha elongata Walckenaer (Plate XII, fig. 8.)

Females are one half an inch long or longer; males are more slender and often shorter. The abdomen is long and tubular, somewhat thickened near the base and is covered dorsally with a dark folium. The cephalothorax is dusky yellow. The chelicerae of the females are slightly shorter than the chelicerae of the males. They extend well in front of the cephalothorax in both sexes. The dorsal spur of the chelicerae of the male is bifid.

These spiders prefer stream banks where the webs are often found extending almost horizontally out over the water. This species is commonly known as the stilt-legged spider.

MARYLAND DISTRIBUTION

Baltimore County--1 young female, Gunpowder River, G. Kieffer.
Charles County--1 female, Indian Head, I. Schloss.
Montgomery County--1 female, Redland.
Prince Georges County--1 male, Bowie.
Worcester County--1 female, Snow Hill.

Tetragnatha laboriosa Hentz (Plate XII, fig. 9.)

Adult females of this species average about one third of an inch in length; males are slightly smaller. The tubular

abdomen is mottled with silver and the cephalothorax is light yellow. There are one or two pairs of black dots just above the spinnerets on the dorsum of the abdomen. The lateral eyes of each side are as far apart as the medians in both sexes. The tibia and patella of the male palpus are short and about the same length.

These spiders spin their webs in open fields among the tall grass. They may be taken in numbers by sweeping.

MARYLAND DISTRIBUTION

Anne Arundel County--1 male, Bay Ridge.
Baltimore City--2 females, L. Handen.
Caroline County--1 female, Denton.
Dorchester County--1 female, Sharptown.
Frederick County--2 females, New Windsor.
Garrett County--1 male and 1 female, Deep Creek Lake.
Montgomery County--1 male and 1 female, Redland.
Prince Georges County--1 male and 1 female, College Park.
Saint Marys County--1 male, Great Mills.

FAMILY THOMISIDAE (THE CRAB SPIDERS)

As the common name indicates most of these spiders have the legs spread crab-like around a short, flat, broad body. The eight eyes are all small, dark in color and arranged in two, usually recurved, rows. The tarsi of the legs are two-clawed. These spiders either hunt their prey or lie in ambush on bark, on the ground or on flowers or foliage. They build no distinct webs. The common genera may be separated by the following key.

Key to the Genera of Thomisidae

1. Clypeus angular or slanting.....Tmarus

1. Clypeus vertical.....2

2. Hairs of the body rod-shaped and erect; upper margin of the furrow of the chelicerae without teeth.....3

2. Hairs of the body plumose and prone; upper margin of the furrow of the chelicerae with one or two teeth.....Philodromus

3. Tubercles of the lateral eyes contiguous.....4

3. Tubercles of the lateral eyes separated.....6

4. First legs with few or no dorsal spines.....5

4. First legs with many spines.....Misumenops

5. Clypeus with a distinct white transverse carina.....Misumenoides

5. Clypeus without a distinct carina.....Misumena

6. Tarsal claws of first legs with 6 to 12 teeth.....Synema

6. Tarsal claws with less than 6 teeth.....7

7. Anterior eye-row nearly straight, cephalic sutures plain.....Coriarachne

7. Anterior eye-row recurved, cephalic sutures not plain.....Xysticus

Genus Coriarachne

The first eye row is straight or lightly recurved, and the second is moderately or strongly recurved. The tubercles of the lateral eyes are widely separated. There are four or five teeth on the claws of the tarsi of the first legs. In these spiders the cephalothorax is as broad or broader than long and flattened, the cephalic sutures are evident, and the clypeus is vertical. Most of these species are of

moderate size. One is common in the state.

Coriarachne versicolor Keyserling (Plate XII, fig. 10,11.)

These spiders are about one quarter of an inch long. The cephalothorax and abdomen are broad and very much flattened. There is a dark median spot on the cephalothorax and several lateral spots on the head and lateral margins. In many specimens the cephalothorax is a very dark brown. The light tan or yellow abdomen is heavily spotted and barred with black, dark grey or brown. Sometimes the spots are so large that the abdomen is almost black. Males may be identified by the long double-curved embolus; the epigynum of the female is typical.

Due to their very flat shape these spiders can move about under bark and in cracks in boards and logs. They usually are found in these places and are nearly invisible because of their color.

MARYLAND DISTRIBUTION

Caroline County--1 female, Ridgely, L. P. Ditman and G. Vogt.
Frederick County--1 young female, Weaverton.
Montgomery County--2 young males, Silver Spring.
Prince Georges County--1 female, Riverdale, K. E. Muma.

Genus Misumena

In this genus the tubercles of the lateral eyes are adjacent. There are few or no spines on the body and legs except for the tarsi and metatarsi of the first legs. The clypeus is vertical and moderately convex, and there are no ridges across the eye region. One moderate sized species of this genus occurs in Maryland.

Misumena calycina Linneaus (Plate XII, fig. 12.)

Large females may be almost one half of an inch long; males are much smaller averaging one sixth of an inch in length. This species changes color when it moves from flower to flower. On yellow flowers it is yellow, on others it is white. The abdomen of the female is marked basally with a lateral band of red on each side. There is also a red spot on the eye region. Males differ in markings by having a double row of median dark bars or spots on the abdomen. There is no ridge across the eye region of this species as in the following closely related species.

These spiders are found on goldenrod, asters and other flowers in open fields. The common name chameleon flower spider, comes from its ability to change color.

MARYLAND DISTRIBUTION

Garrett County--1 female, Deep Creek Lake.
Harford County--1 young female, Churchville.
Prince Georges County--1 female, College Park.
Queen Annes County--1 male, Wye Mills.
Saint Marys County--2 males, Waldorf.
Washington County--2 females, Smithsburg.

Genus Misumenoides

These spiders appear very much like those of the genus Misumena, from which they may be distinguished by the presence of ridges across the eye region. The lateral eyes are adjacent, the spines are confined mostly to the matatarsi and tarsi of the first legs, and the clypeus is convex. A common species of this genus is found in Maryland.

Misumenoides aleatorius Hentz (Plate XII, fig. 13.)

The males and females of this species are the same size as those of the preceding species. The females vary somewhat

in color, some specimens are white or yellow without markings, while other specimens have two brownish red longitudinal lines on the cephalothorax and two lateral bands and two median bands of the same color on the abdomen. Males have a green cephalothorax marked with two lateral brown stripes, and a bright yellow abdomen. This species may be easily distinguished by the transverse ridge or carina across the eye region.

This spider is known as the white or yellow flower spider and is found on goldenrod and other flowers in open field.

MARYLAND DISTRIBUTION

Anne Arundel County--1 male, Parole.
Charles County--1 young female, La Plata.
Dorchester County--1 female, Finchville.
Garrett County--3 females and 1 male, Deep Creek Lake.
Harford County--1 young male, Churchville.
Howard County--1 male, Savage.
Kent County--1 male, Chestertown.

Genus Misumenops

The cephalothorax and legs of these spiders are strongly spinose, and the clypeus is vertical. The anterior lateral eyes are larger than the anterior medians, and are placed on confluent tubercles. Spiders of this genus are of small to medium size. Several species are found in Maryland; one is widely distributed and common.

Misumenops asperatus Hentz (Plate XII, figs. 14,15.)

Females are one fourth of an inch long, but males are only half that size. The color is yellow or green marked with deep red or brown. There are two longitudinal brown

marks on the cephalothorax. On the basal half of the abdomen are a median brown band and two lateral bands. There is a double row of dark spots on the posterior half of the abdomen. Males are colored like the females and may be distinguished by the fact that the tip of the embolus is coiled over onto the lateral side of the cymbium.

This species, like the two preceding species, is found in open fields. Late in the fall, females may be found under loose bark and stones.

MARYLAND DISTRIBUTION

Anne Arundel County--1 female, Bay Ridge.
Caroline County--1 female, Ridgely, L. P. Ditman and G. Vogt.
Harford County--1 female, Churchville.
Montgomery County--2 males, Silver Spring.
Prince Georges County--1 male, College Park, H. O. Webster.
Queen Annes County--1 male, Wye Mills.
Washington County--1 female and 1 male, Cavetown, W. Jeffers.

Genus Philodromus

This genus may be separated from the other given in this paper by the presence of plumose prone setae on the body, and by a reduction in the number of teeth on the upper margin of the chelicerae from three to one or two. The anterior lateral eyes are nearer the anterior median eyes than the posterior median eyes. The legs are nearly equal in length. These spiders vary in size from small to medium and have an elliptical-shaped abdomen. Two species are widely distributed in the state.

Philodromus marxi Keyserling (Plate XII, fig. 16.)

Both sexes of this species are about one eighth of an inch long. The cephalothorax of the female is light yellow

centrally, and dark at the sides. Two lateral bars on the white abdomen have extensions that project toward the middle of the abdomen. Males are marked like females, but have such a purple metallic sheen that the markings are often indistinct.

This species, which may well be called the ornate crab spider, is found on foliage in open moist woods and fields.

MARYLAND DISTRIBUTION

Anne Arundel County--2 females, Bay Ridge.
Caroline County--1 female and 1 male, American Corners.
Prince Georges County--Several specimens, Bowie.
Worcester County--1 female, Snow Hill.

Philodromus pernix Blackwall (Plate XII, fig. 17.)

Females measure about one fourth to one third of an inch in length; males are slightly smaller with longer legs. The colors vary from grey to brown. The cephalothorax is light in the center and dark brown or grey on the sides. In the median light area is a white V-shaped mark with the apex pointing posteriorly. On the basal half of the abdomen is a dark median lanceolate spot and two lateral bands. The posterior half of the abdomen is marked with a double row of median dark spots. In the males the light median V-shaped mark is often obscure.

This species is common on fences, barns and houses. In the late fall they may be found under bark and boards.

MARYLAND DISTRIBUTION

Baltimore County--1 female, Magothy River, L. Hamden.
Caroline County--1 female, Ridgely, L. P. Ditman and G. Vogt.
Montgomery County--1 male, Silver Spring.
Prince Georges County--1 female, Bowie.

Genus Synema

This genus agrees with Coriarachne in the wide separation of the lateral eyes. There are six or more teeth on the tarsal claws of the first legs, and the cephalothorax is strongly arched. These spiders are all of small size. A single species occurs in Maryland.

Synema parvula Hentz

These spiders average about one eighth of an inch in length with the males slightly smaller than the females. The dusky yellow cephalothorax is unmarked. There is a red transverse band across the posterior half of the abdomen. The band is notched in the middle on the leading edge. The first two legs are colored similarly to the cephalothorax, the rest are pale. Males are colored like the females.

This species is found on foliage in moist woods and fields. They may often be taken in numbers in the fall by sweeping.

MARYLAND DISTRIBUTION

Anne Arundel County--1 male and 1 young female, Annapolis.
Prince Georges County--19 specimens, Berwyn, E. Beardsley.
Somerset County--1 young male, Princess Anne.

Genus Tmarus

These spiders may be distinguished from other crab spiders by the fact that the abdomen is high and pointed behind. The clypeus is oblique or horizontal. Members of this genus are of small to medium size and possess more or less protective colors. One moderate sized species occurs commonly in Maryland.

Tmarus angulatus Walckenaer

Females are one quarter of an inch long with males slightly smaller. The abdomen is light yellow with wide brownish-grey transverse bands, and there are brown radiating spots on the light thorax. The abdomen is wider behind than in front, longer than wide and has a blunt tubercle just above the spinnerets.

These spiders are found on the leaves and twigs of trees and bushes. The peculiar shape of the abdomen causes them to appear like a bud on the stump of a leaf petiole when they are at rest on a twig. When disturbed the spider makes no movement but clasps the twig tighter, using its mimicry as a protection. They may be collected by beating.

MARYLAND DISTRIBUTION

Caroline County--1 female, Ridgely, L. P. Ditman and G. Vogt.
Prince Georges County--1 young female, Lanham.
Somerset County--1 young male, Dividing Creek Swamp.
Wicomico County--1 female, Salisbury, W. Jeffers.

Genus Xysticus

The first row of eyes is moderately recurved, and the lateral eyes of the two rows are widely separated. In this genus the cephalic grooves are almost lacking. The abdomen is round in outline. A large number of these moderate sized spiders occur in Maryland. The following two are common.

Xysticus ferox Hentz (Plate XII, fig. 18.)

Females of this species average about one quarter of an inch in length; males are smaller, averaging about one fifth of an inch. Both sexes are similarly marked with the cephalothorax light yellow in the center and brown on the sides. In the median light area near the anterior end is a short dark

band, on each side of which are two dark spots. There are also three dark spots on the posterior end of the light area. The abdomen is brownish grey above and lighter on the sides. There are black or dark brown elongate spots on the abdomen. The most prominent are several transverse dark spots on the posterior half.

These spiders are found on plants in the woods and fields in the summer. In the winter the young may be sifted from dead leaves.

MARYLAND DISTRIBUTION

Allegany County--1 female, Cumberland.
Dorchester County--1 female, Vienna, L. P. Ditman.
Frederick County--1 female, Weaverton.
Harford County--1 female, Churchville.
Howard County--1 male, Galesville, H. O. Webster.
Montgomery County--2 males, Rockville.
Prince Georges County--1 female, Berwyn, W. Jeffers.
Somerset County--1 female, Princess Anne.
Worcester County--1 male, Berlin, L. P. Ditman.

Xysticus triguttatus Keyserling (Plate XII, fig. 19.)

The two sexes of this species vary in size and color. Females are about one fifth of an inch long and males about one sixth of an inch. The cephalothorax of the female is light tan marked by a pair of brown, more or less broken submarginal bands and a pair of marginal bands. On the posterior end of the thorax are three dark brown spots. From the median spot, two white bands run to the posterior lateral eyes on the white eye region. Males have the cephalothorax darker brown without white markings. The abdomen of the female is white, marked with pairs of small black spots, while that of the male is marked with two median basal bands and a series of

wide dark bands on the posterior half. The femora of the first two pairs of legs of the males are dark.

This species occurs commonly on flowers, in weeds and in open fields. They may be taken by sweeping.

MARYLAND DISTRIBUTION

Anne Arundel County--1 female, Gibson Island.
Baltimore County--2 males, Towson.
Calvert County--1 male, Solomon's Island.
Frederick County--1 male, Darnestown, W. F. Bickley.
Garrett County--1 male, Deep Creek Lake.
Montgomery County--1 female and 2 males, Rockville.
Prince Georges County--2 females and 1 male, College Park.

FAMILY GNAPHOSIDAE (THE GNAPHOSIDS)

The spiders of this family might well be called the fleet-footed spiders as they run very rapidly and erratically when disturbed. They possess eight heterogeneous eyes arranged in two rows. The tarsi of the legs bear two claws. They differ from the crab spiders in the arrangement of the legs, and from the following family by the wide separation of the fore spinnerets. These spiders have oblong abdomens that tend to be tubular. The genera Drassyllus, Herpyllus and Sergiolus contain Maryland's more common species, and may be distinguished by the following key.

Key to the Genera of Gnaphosidae

1. Upper margin of the chelicerae unarmed or with 1, 2 or 3 teeth.....2
1. Upper margin of the chelicerae with 4 to 6 teeth.....Drassyllus
2. Posterior row of eyes recurved.....Sergiolus

2. Posterior row of eyes procurved or straight...Herpyllus

Genus Drassyllus

These spiders have the lower margins of the furrow of the chelicerae armed with one to three teeth, and the upper margin armed with from four to six teeth. The posterior row of eyes is straight or lightly procurved and the medians are smaller than or subequal to the laterals. The fourth tibia may have a single dorsal spine or none. Of the species occurring in Maryland the following is the best known.

Drassyllus frigidus Banks (Plate XII, fig. 20; Plate XII, fig. 1.)

Both sexes of this species are the same size, averaging a little less than one fifth of an inch in length. The cephalothorax is brownish yellow with a narrow black marginal band. There are no markings on the black abdomen except two pale parallel lines on the venter. The females are easily distinguished by the epigynal figure, but the males are easily confused with other species of the genus.

These spiders are found under boards and stones, but often evade capture due to their small size and the rapidity with which they dart into nearby grasses or leaves.

MARYLAND DISTRIBUTION

Allegany County--1 male, Dans Rock, H. E. Muma.
Cecil County--1 male, Pleasant Hill.
Prince Georges County--1 male, College Park, J. Oltman.
Worcester County--1 female, Pocomoke City.

Genus Herpyllus

In this genus the eye rows are nearly straight, the eyes are not quite evenly spaced in the rows and the anterior

medians are the largest. The fourth tibia may bear a single dorsal spine or none. The spiders are of moderate size. Maryland has a single widely distributed species.

Herpyllus vasifer Walckenaer (Plate VII)

Females of this species are about one third of an inch long, and strikingly marked, while males are somewhat smaller and the markings are often obscure. The entire body is black with a white longitudinal mark on the cephalothorax and white markings on the abdomen resembling those on a surplice. The femora of the legs are black, but the other segments are pale.

This species is found under stones, boards and leaves on the ground under loose bark and occasionally in buildings. One specimen was found by the author in an abandoned and daubers nest. The common name, parson spider, has been applied to this species due to the abdominal markings.

MARYLAND DISTRIBUTION

Garrett County--1 male, Deep Creek Lake.
Montgomery County--1 female, Four Corners.
Prince Georges County--1 female, Berwyn, W. Jeffers.

Genus Sergiolus

The fourth tibia is armed dorsally with a single spine or none; the third tibia bears a dorsal spine. The lower margin of the furrow of the chelicerae is armed with a single tooth, and the posterior row of eyes is recurved. There is no distinct median furrow on the cephalothorax. These spiders are of moderate size. One striking species is found in Maryland.

Sergiolus variegatus Hentz

PLATE VII

Herpyllus vasifer Walckenaer--female

Females of this species are about one quarter of an inch long, and males are slightly smaller. The cephalothorax is bright reddish orange and is dusky over the eyes. The black abdomen is marked with three snowy white transverse bands and a white T-shaped mark on the forward edge of the second band.

Although it has no common name known to the author the vivid markings suggest the name "showy gnaphosid". These spiders are found under stones, logs, boards and leaves, and are swift runners.

MARYLAND DISTRIBUTION

Allegany County--1 young female, Cumberland.
Kent County--1 young female, Galena.
Prince Georges County--1 young female, College Park.
Queen Annes County--1 male, Matapeake.

FAMILY CLUBIONIDAE (THE CLUB-FOOTED SPIDERS)

These spiders have eight similar eyes arranged in two rows and two tarsal claws on the legs. The tarsi also bear tenant or club-shaped hairs at the apex. They differ from the Gnaphosidae in that the fore spinnerets are close together, or contiguous. The legs are not arranged crab-like. Members of this family live in tubular nests on leaves, in moss, under stones or under leaves on the ground. The following key separates the more common genera.

Key to the Genera of Clubionidae

1. Last segment of the posterior spinnerets conical, distinct.....2
1. Last segment of the posterior spinnerets flattened, rounded and indistinct.....3

2. Labium longer than broad, endites narrowed at middle.....Clubiona

2. Labium shorter or as long as broad, endites broader at middle.....Phrurotimpus

3. Endites flattened or subquadrate at apex.....Castianeira

3. Endites rounded at apex.....Meriola

Genus Castianeira

In this genus the apical segment of the spinnerets is short, flattened or rounded and indistinct. The endites are subquadrate at their apex. There are two teeth on the lower margin of the furrow of the chelicerae, and the posterior eye row is lightly procurved. The spiders are of medium size and very active. Of several species occurring in Maryland the following is the most common.

Castianeira descripta Hentz (Plate XIII, figs. 2,3.)

Both sexes of this species average about one third of an inch in length, but males are usually slightly smaller. The entire oblong body is black and unmarked in some specimens, but in other specimens there is a red blotch on the posterior end of the abdomen. A few specimens are marked with red at both ends of the abdomen. The femora of the legs are dark and the other segments pale.

These spiders are common under boards and stones in open woodland and pastures. The flat circular egg sacs are attached to the under sides of stones and have a pinkish metallic sheen.

MARYLAND DISTRIBUTION

Calvert County--1 female, Solomon's Island, R. A. Littleford.
Cecil County--1 female, Colora.
Garrett County--1 female, Deep Creek Lake.
Harford County--1 female, Churchville, J. Umbarger.
Prince Georges County--1 male, College Park.

Genus Clubiona

These spiders have the apical segment of the posterior spinnerets conical but distinct, and the labium longer than broad and over half as long as the endites. The posterior eye row is procurved, and the anterior median eyes are at most as large as the laterals. The legs are all approximately the same length. A single species of the group is common, and widely distributed in the state.

Clubiona abbotti Koch (Plate XIII, fig. 4.)

Females and males of this species are about one fifth of an inch long. The body is a light brownish yellow in color with the cephalothorax slightly darker than the abdomen. On the anterior half of the abdomen is a pinkish median stripe running back to a mottline of pink that often takes the form of a series of chevrons. The epigynal figure and tibial apophysis of the male palpus distinguish this species.

Specimens of this leaf-rolling spider can be obtained by sweeping and beating. They may be found under leaves and rubbish on the ground in the fall.

MARYLAND DISTRIBUTION

Allegany County--1 female, Dans Rock.
Anne Arundel County--1 female, Bay Ridge.
Cecil County--1 male, Elkton.
Garrett County--1 female, Deep Creek Lake.
Harford County--1 female, Churchville.
Kent County--1 male, Fairlee.
Montgomery County--1 female, Great Falls.
Prince Georges County--1 male, College Park.

Somerset County--1 young female, Princess Anne.
Washington County--2 females, Delamere, R. W. Muma.

Genus Meriola

The posterior row of eyes is straight, and the endites are founded at the apex. The apical segment of the posterior spinnerets is short, flattened, rounded and indistinct. These spiders are all of small size. One species is found in the state.

Meriola decepta Banks (Plate XIII, fig. 5.)

Males and females of this species are about the same size, measuring only one-sixth of an inch in length. The cephalothorax is a deep brownish red, and is unmarked. The pale grey abdomen is darker on the sides, and has a dark grey irregular median band running two thirds the length of the abdomen. The legs are weakly spined, and the first two pairs of legs are usually darker than the others.

In the late fall, specimens of this species may be found among weed clumps and under stones in fields. They may also be taken occasionally by sifting leaves near meadow land.

MARYLAND DISTRIBUTION

Cecil County--1 female, Elkton.
Prince Georges County--1 male, College Park.
Washington County--1 female, Delamere, R. W. Muma.

Genus Phrurotimpus

There are four or more pairs of ventral spines on the first tibiae, and the sternum is prolonged behind the posterior coxae. The posterior row of eyes is procurved, and the eye rows are of unequal length. The apical segment of the posterior spinnerets is conical, but distinct. A very small species

of this genus is found in Maryland.

Phrurotimpus kentuckyense Chamberlin and Gertsch (Plate XIII, fig. 6.)

Females are about one sixth of an inch long, and males are smaller. The light yellow thorax is margined with black, and has two brownish grey longitudinal bands running back from the eyes. There are a series of variable transverse dark bands on the light grey abdomen. Some specimens are distinctly marked, but others have an irridescent sheen that somewhat obscures the markings. The tibiae of the first legs are dark except at the distal ends.

These spiders are found under stones, logs and leaves, and are exceedingly rapid runners. They may be taken most easily by sifting in the early fall.

MARYLAND DISTRIBUTION

Baltimore County--1 female, Parkton.
Cecil County--1 female, Pleasant Hill.
Garrett County--1 female, Deep Creek Lake.
Prince Georges County--1 male, College Park, I. Schloss.

FAMILY SALTICIDAE (THE JUMPING SPIDERS)

The jumping spiders are characterized by their short heavy bodies, stout legs and peculiar hopping movements. The eight eyes are arranged in three rows with the anterior medians. In this family the males are often brightly colored or bear plates or tufts of hair on the legs and cephalothorax. These spiders are medium to small in size, and are common around buildings, on trees, fences, logs and herbage.

Maryland's common genera may be distinguished by the following key.

Key to the Genera of Salticidae

1. Pedicel of the abdomen visible from above. Ant-like spiders.....Synemosyna
1. Pedicel of the abdomen not visible from above. Not ant-like.....2
2. Lower margin of the furrow of the chelicerae with a compound tooth.....3
2. Lower margin of the furrow of the chelicerae with a single tooth or none.....5
3. Cephalothorax high and square above, eye region occupying most of the cephalothorax.....Zygoballus
3. Cephalothorax high or low but not square above, eye region occupying less than half of cephalothorax.....4
4. Tibia of first leg with four bulbous hairs below.....Thiodina
4. Tibia of first leg spined below but with no bulbous hairs.....Maevia
5. Third leg longer than fourth leg.....Habronattus
5. Fourth leg longer than third leg.....6
6. Second eye row plainly nearer first eye row.....7
6. Second eye row equidistant between first and third eye row or a little nearer the first row.....8
7. Tibia of first leg with four bulbous hairs below.....Thiodina
7. Tibia of first leg without bulbous hairs below.Phidippus

8. Eye region as wide or wider in front than behind.....9

8. Eye region wider behind than in front.....10

9. Cephalothorax low, large spiders at least 8 mm. long.....Marpissa

9. Cephalothorax high and convex, small spiders rarely over 5 mm. long.....Habrocestum

10. Second, third and fourth pair of legs white, without markings.....Hentzia

10. Second, third and fourth pair of legs not uniform white.....11

11. Body elongated and rounded, legs with lineate markings.....Icius

11. Body elongated, legs banded or with no markings.....Metaphidippus

Genus Metaphidippus

The eye region is wider than long, wider behind than in front and occupies less than one half of the cephalothorax. The second eye row is midway between the first eye row and the third. These spiders are all rather small, rarely over one quarter of an inch long, and are somewhat hairy. Maryland has two common and widely distributed species.

Metaphidippus capitatus Hentz (Plate XIII, fig. 7.)

Females average more than one fifth of an inch in length while males are somewhat smaller. Males are easier to distinguish as the body is light brown, marked with white bands. On the cephalothorax there are white bands curving back from below the dorsal eyes, and there are white hairs over the

first eye row. The abdomen is almost completely encircled by a white band that is notched on the inside. Females are light brown marked on the dorsal surface of the abdomen with two longitudinal rows of dark brown spots. The tube of the male palpus is crescent-shaped and is opposed by a short spur, and the epigynal figure is typical.

These spiders are common on scrub pine and other bushes all over the state. Specimens may be taken in numbers by sweeping.

MARYLAND DISTRIBUTION

Allegany County--1 female, Cumberland.
Anne Arundel County--2 males, Annapolis.
Garrett County--1 young male, Deep Creek Lake.
Prince Georges County--2 females, Riverdale.
Saint Marys County--1 male, Great Mills.
Somerset County--2 males, Princess Anne.
Washington County--1 female, Cavetown, W. J.
Wicomico County--1 female, Salisbury.

Metaphidippus marginatus Walckenaer (Plate XIII, fig. 8.)

This species is larger than the preceding species, males measuring one fourth of an inch, and females one third of an inch in length. Males are colored much like those of capitatus from which they may be distinguished by the lack of an opposing spur to the curved palpal tube. Females are usually brown with a white basal band and a series of white spots and dark brown bars on the dorsum of the abdomen. The epigynum is similar to that of capitatus but is distinct. Both sexes have a bronze metallic sheen while only the males of capitatus are so colored.

These spiders are found on weeds and other plants in open fields where they may be collected by sweeping.

MARYLAND DISTRIBUTION

Calvert County--1 young female, Solomon's Island.
Caroline County--2 males, Ridgely, L. P. Ditman.
Cecil County--1 female, Rising Sun, W. E. Bickley.
Garrett County--1 female, Deep Creek Lake.
Harford County--1 female, Churchville.
Prince Georges County--1 male and 1 female, Upper Marlboro.
Washington County--3 males and 1 female, Smithsburg, W. Jeffers.
Worcester County--1 female,Snow Hill.

Genus Habrocestum

These spiders have the cephalothorax high and convex, with the cephalic part sloping forward. The eye region is wider than long, wider in front than behind and occupies less than half of the cephalothorax. The second eye row is midway between the first and the third. The legs are not conspicuously fringed or enlarged and the posterior pairs are much longer than the anterior pairs. Species included in this genus are of small or medium size. Maryland has one common species.

Habrocestum pulex Hentz (Plate XIII, fig. 9.)

Large females of this species measure almost one fifth of an inch in length; males are somewhat smaller. Females are dark brownish grey with a light triangle just behind the dorsal eyes on the cephalothorax. There are many irregular white spots and lines and a broad wing-shaped transverse band on the abdomen. Males have the eye region dark brown and the rest of the cephalothorax light. On the dark abdomen there is a lance-shaped basal band, a wing-shaped transverse band and several chevrons behind, all outlined with white.

This species is common on, under and around logs, lumber and trunks of trees. They are very timid, jumping actively when disturbed.

MARYLAND DISTRIBUTION

Allegany County--1 male and 1 female, Cresaptown, H. E. Muma.
Calvert County--1 male, Solomon's Island, R. A. Littleford.
Frederick County--1 female, Lewistown.
Harford County--2 males and 1 female, Churchville.
Montgomery County--1 female, Redland, R. W. Muma.
Prince Georges County--1 female, College Park, I. Schloss.
Somerset County--1 female, Princess Anne.
Washington County--1 male, Keedysville, W. Jeffers.
Wicomico County--1 young male and 1 female, Salisbury.
Worcester County--1 female, Snow Hill.

Genus Hentzia

In this genus the cephalothorax is low, somewhat flattened and a little longer than wide. Males have the front legs much longer than the others, and the abdomen is long and slender in both sexes. The eye region is wider than long, wider in front than behind and occupies a little less than half of the cephalothorax. The eyes of the second row are about midway between the first and third rows. These spiders are of medium size. Of the two species occurring in Maryland one is widely distributed and common.

Hentzia palmarum Hentz

Both sexes of this species are a little over one fifth of an inch long. Males are colored a reddish brown, and have two white lateral bands over the cephalothorax and down the abdomen. Some males have the chelicerae almost horizontal. The abdomen of the female is pale and marked dorsally with a series of dark brown chevrons. There are no markings on the reddish brown cephalothorax, but the entire body is covered with grey and white hairs and scales.

These spiders are found on bushes and low trees in the summer. They jump from these heights when disturbed, and may

be seen descending by the drag line.

MARYLAND DISTRIBUTION

Calvert County--2 males, Solomon's Island, R. A. Littleford.
Caroline County--1 young female, Ridgely, L. P. Ditman and G. Vogt.
Charles County--1 young female, La Plata.
Prince Georges County--1 male, Berwyn, W. Jeffers.
Queen Annes County--1 female, Wye Mills.

Genus Icius

Irridescent scales and hairs often cover the bodies of these small spiders. Males often have enlargements or fringes of hairs on the head and first legs. The cephalothorax is low and a little longer than wide. The second eye row is nearer the first, or midway between the first and third. The eye region is wider than long, wider behind than in front, and occupies less than half of the cephalothorax. Usually the abdomen is long, slender and rounded. One species of this genus is common in Maryland.

Icius elegans Hentz (Plate XIII, figs. 10,11.)

Females of this species are about one fourth of an inch long; males average one fifth of an inch in length. The entire body of both sexes is covered with dark bronze green irridescent scales. There is a brush of black hairs on the tibiae of the first legs of the male. Males also have two converging ridges of hairs over the eye region. Both sexes have the cephalothorax margined with white, but only the females have a white basal band on the abdomen. The legs of both sexes are striped.

This species is found running over the foliage of scrub oaks and other brush in mid-summer. Specimens may be col-

lected by beating the brush.

MARYLAND DISTRIBUTION

Anne Arundel County--1 female, Bay Ridge.
Calvert County--2 males and 3 females, Lusby.
Caroline County--1 male, American Corners.
Cecil County--3 males, Northeast.
Garrett County--1 female, Deep Creek Lake.
Prince Georges County--1 male, College Park.
Wicomico County--2 females and 2 males, Salisbury.

Genus Maevia

The spiders of this genus are of moderate size with the legs except for the first pair which is slightly stout. There is a compound tooth on the lower margin of the furrow of the chelicerae. The cephalothorax is rather high with nearly vertical sides. The eye region which occupies less than half of the cephalothorax is slightly wider in front than behind, and the second eye row is midway between the first and third. In Maryland a single species is widely distributed.

Maevia vittata Hentz (Plate XIII, fig. 12.)

These spiders average one quarter of an inch in length with females slightly larger than the males. The cephalothorax of the female is light brown, marked with three longitudinal lines and a black bar connecting the front and sides of the ocular quadrangle. There are two longitudinal red bands connected behind by a series of chevrons on the abdomen of the females. Males have the eye region dark and the abdominal bands divided into spots. There is a dark variety of the male that is black and has three tufts of hair on the eye area, but it is rare.

In Maryland, these spiders have been collected only by

sifting leaves in the winter. They have been found on foliage in the summer in other states.

MARYLAND DISTRIBUTION

Allegany County--Several specimens, Cumberland.
Anne Arundel County--1 male, Bay Ridge.
Baltimore City--1 male, L. Handen.
Caroline County--1 young male, Goldsboro.
Calvert County--1 male and 1 young female, Lusby.
Harford County--1 male, Churchville.
Somerset County--1 female, Princess Anne.

Genus Marpissa

These spiders are large and flat with a wide abdomen. There is a single tooth on the lower margin of the furrow of the chelicerae. In this genus the eye region is wider than long with parallel sides, and occupies only about one third of the cephalothorax. The second eye row is midway between the first and third or a little nearer the first. Maryland's only species is common.

Marpissa undata De Geer

This species is rather large, averaging between one third and one half an inch in length. The flattened body is heavily covered with light grey hairs. Most of the cephalothorax is uniformly covered with grey hairs. A wide, light grey band of hairs, notched posteriorly, covers most of the dorsum of the abdomen. The rest of the body is brownish, grey, but the legs are greyish.

These spiders are common under loose bark and in cracks and crevices of trees, logs and lumber. They are often found on houses.

MARYLAND DISTRIBUTION

Caroline County--1 young female, Ridgely, L. P. Pitman and G. Vogt.
Calvert County--1 female, Lusby.
Frederick County--1 male, Sugar Loaf Mountain.
Prince Georges County--2 males, College Park.

Genus Habronattus

Spiders of this genus are very similar to those of the genus Habrocestum. The cephalothorax is high, convex and a little longer than wide, with the cephalic part sloping forward. The eye region is wider than long, usually wider behind than in front and occupies less than half of the cephalothorax. The second eye row is midway between the first and third, and the third and fourth legs are usually longer than the first and second. Females of the genus are difficult to distinguish, but enlargements or modifications of the first and third legs make separation of the males easy. One species is common in the state.

Habronattus coronatus Hentz (Plate XIII, fig. 13.)

Females are one fifth of an inch long and males measure approximately the same. The cephalothorax is greyish brown with an anterior marginal white line that rises toward the posterior lateral eyes and then diverges to the posterior margin. The abdomen of the males is brownish black marked with a white basal band, a transverse band at the middle and three spots over the spinnerets. Females are colored a light greyish brown, but the markings are obscure. Males may be distinguished by a bright red clypeus, two spatulate spines on the tibiae of the first legs, and modifications of the femora and patellae of the third legs.

These spiders are found on bushes, trees, logs and occasionally in houses. They are exceedingly shy and evade capture by short quick jumps.

MARYLAND DISTRIBUTION

Calvert County--1 male, Bertha.
Montgomery County--1 female, Silver Spring.
Prince Georges County--1 female, Berwyn, J. N. Hamlet.
Wicomico County--1 male, Salisbury, W. Jeffers.

Genus Phidippus

These spiders are medium to large, and hairy with the first legs usually heavily fringed with hairs. The cephalothorax is high and heavy, short and wide and widest at the median point. The eye region is wider than long, wider behind than in front, occupies less than half of the cephalothorax and the second eye row is much nearer to the first row than to the third. Several species of this genus occur in Maryland. The following two are common representatives of the black group and the red group.

Phidippus audax Hentz (Plate VIII)

The size of the females varies considerably with large females about one half an inch long. Males are slightly smaller. Markings consist of a white basal band, a central white spot and two pairs of transverse bands over the spinnerets of the black abdomen. There are white angular bands on the sides of the abdomen and most specimens have a pair of indistinct spots in front of the central dorsal spot. The markings are orange or light red on young specimens. The black cephalothorax is unmarked.

These spiders are common around buildings, trees and

PLATE VIII

Phidippus audax Hentz--female

lumber in summer, and may be found under bark and in cracks of buildings in winter. Young spiders hibernate in silk tubes in the latter places.

MARYLAND DISTRIBUTION

Allegany County--1 female, Cumberland
Baltimore City--1 male, I. Schloss.
Caroline County--1 female, Goldsboro.
Calvert County--1 female, Solomon's Island, W. Hard and G. Cronin.
Cecil County--1 female, Elkton.
Harford County--1 female, Churchville, J. Umbarger.
Kent County--1 female and 1 male, Fairlee.
Prince Georges County--1 female, College Park.
Washington County--1 female, Smithsburg, H. S. McConnell.

Phidippus clarus Keyserling (Plate XIII, fig. 14.)

This species is about the same size as the preceding one. Males have the cephalothorax black and the abdomen red with a dorsal, wide, central, longitudinal black band, notched by white spots, a basal white band and angular bands on the sides. In the female the cephalothorax and abdomen are brownish red with two longitudinal black bands broken by white spots on the abdomen, and a basal band and side bands similar to those of the male.

These spiders are found on foliage, in fields and are often found in numbers in orchards having a grass or clover mulch.

MARYLAND DISTRIBUTION

Anne Arundel County--1 female, Beverly Beach.
Calvert County--1 young male, North Beach.
Garrett County--8 young females and 1 male, Deep Creek Lake.
Harford County--1 male, Churchville.
Saint Marys County--1 female, Great Mills.
Prince Georges County--1 young male, College Park, P. Knight.
Washington County--1 female, Smithsburg, H. S. McConnell.

Genus Synemosyna

Spiders of this genus are the most common of all ant-like spiders. They also have the ant-like form. They are small elongate spiders with the cephalothorax low, twice as long as wide and tapering behind. The eye region is wider than long, a little wider behind than in front and occupies only one third of the cephalothorax. The eyes of the second row are a little nearer the first than the third. There are several teeth on the lower margin of the furrow of the chelicerae. A single widely distributed species occurs in Maryland.

Synemosyna formica Hentz

Spiders of this species are about one quarter of an inch long, and elongate. Adult specimens have the cephalothorax and anterior portion of the abdomen reddish brown, and the posterior end black. Several specimens with the posterior end striped have been found on the eastern shore of Maryland. The cephalothorax is sharply constricted just behind the dorsal eyes. The abdomen is also deeply constricted just behind the middle. The constrictions are light yellow.

These species live on plants where they run rapidly over the foliage. The front legs are often vibrated much like the antennae of ants. In the beating net, the smooth running gait of these spiders betrays the mimicry. Due to the ant-like appearance of the species, the author suggests the common name "ant spider".

MARYLAND DISTRIBUTION

Garrett County--1 male, Swallow Falls.
Prince Georges County--2 males and 2 females, College Park.
Somerset County--3 males and 1 female, Dividing Creek Swamp.

Genus Thiodina

The cephalothorax is high, rounded on the sides and widest behind the dorsal eyes. The second eye row is nearer the first than the third, and the eye region is wider than long, wider behind than in front, and occupies less than half of the cephalothorax. There are two pairs of characteristic bulbous hairs on the ventral surface of the tibiae of the first legs in both sexes. The number and type of teeth on the lower margin of the furrow of the chelicera are variable. Two species occur in the state; the following is common.

Thiodina sylvana Hentz (Plate XIII, fig. 15.)

Both sexes of this species are slightly less than one half an inch in length. Males have a dark reddish brown cephalothorax marked with a large white spot on the eye region, three short white lines under the dorsal eyes and two diverging longitudinal white lines on the thoracic part. The abdomen is light yellow to brown and marked with scattered black spots and two longitudinal white bands. The cephalothorax and abdomen of the female are yellow marked with black and white, the eyes are on black spots and the eye region is dusky. There are scattered black spots and three longitudinal white bands on the abdomen. Males are distinct, but females are easily confused with those of allied species.

These spiders are found on tall weeds and low bushes in fields and open woodland over swampy or low land.

MARYLAND DISTRIBUTION

Dorchester County--1 male, Sharptown.
Harford County--1 female, Churchville.

Prince Georges County--1 male, Berwyn, W. Jeffers.
Somerset County--1 young male, Princess Anne.
Worcester County--1 male, Snow Hill.

Genus Zygoballus

The eye region occupies more than half of the cephalothorax, is plainly wider behind than in front and is a little wider than long. The second eye row is nearer the first than the third. Just behind the dorsal eyes the thorax slopes sharply to the posterior margin. These spiders are all small in size, and usually have white scales on the cephalothorax and abdomen. Of the three species occurring in Maryland the following is the most common.

Zygoballus sexpunctatus Hentz

Males are very small, measuring only one eighth of an inch in length; females are one fifth of an inch or more long. On the dark brown cephalothorax of the male the most constant marking is a white spot just back of the dorsal eyes. Two transverse bands on the abdomen are broken into six spots. There is a metallic lustre in the males. The body of the female is bronze brown and marked with a white basal abdominal band and indistinct white chevrons over the spinnerets. The eyes are on black spots in some specimens.

These small spiders have been collected only by sweeping in open fields.

MARYLAND DISTRIBUTION

Anne Arundel County--1 young male, Bay Ridge.
Cecil County--1 male, Fair Hill.
Caroline County--1 young male, American Corners.
Montgomery County--1 female, Silver Spring.
Prince Georges County--1 male, College Park.
Queen Annes County--1 young male, Wye Mills.
Somerset County--1 female, Princess Anne.

FAMILY SEGESTRIIDAE (THE SEGESTRIIDS)

Spiders belonging to this family have six eyes arranged in three groups of two each and are placed in two rows. They possess two tracheal spiracles just below the lung books. The tarsi of the legs bear three claws, and the first three legs are projected forward. These spiders build long tubular webs running down into cracks in boards, or stones, and under bark. The genus Ariadna contains a single species common in Maryland.

Genus Ariadna

The spiders of this genus have more or less cylindrical, elongate bodies. One of the most distinguishing characteristics of the genus is the forward projection of the first three pairs of legs. The median eyes of the two eye rows form a straight line with the posterior laterals. These spiders are of medium size, the single species of the genus occurring widely in the state.

Ariadna bicolor Hentz

Spiders of this species are about one third of an inch long, although females may be larger. The author has never collected males. The abdomen is purplish brown with metallic reflections and the cephalothorax and legs are deep brown with a purple tinge. The entire body tends to be tubular.

These interesting spiders are found in long tubular webs in crevices of stone and wood. When disturbed they feign death for several seconds before attempting escape with amazing speed. The eggs are not encased in a sac, but are deposited in clumps in the tube.

MARYLAND DISTRIBUTION

Allegany County--1 female, Cresaptown, H. E. Muma.
Caroline County--1 young female, Ridgely, L. P. Ditman and G. Vogt.
Frederick County--1 young female, Beaverton.
Harford County--1 young female, Churchville.
Howard County--1 young female, Glenelg.
Montgomery County--1 female, Four Corners.
Prince Georges County--1 female, Bowie.

FAMILY HAHNIIDAE (THE HAHNIIDS)

This family includes a small group of spiders in which the six spinnerets are arranged in a single transverse row with the outside pair almost twice as long as the others. They possess eight eyes arranged in two rows, and the tracheal spiracle is far removed from the spinnerets. Spiders of the family are small in size, and are found under boards and stones or on small sheet-like webs near the ground. A common species of the genus Neoantistea is found in Maryland.

Genus Neoantistea

This genus may be distinguished from other genera of Hahniids by the fact that the tracheal spiracle is twice as far from the spinnerets as from the epigastric furrow. The eyes of the first row are subequal or the medians are larger than the laterals. These spiders are small; a common species is found in Maryland.

Neoantistea agilis Keyserling (Plate XIII, fig. 16.)

These spiders average about one eighth of an inch in length with the larger females approaching one sixth of an inch. The cephalothorax is reddish brown and the abdomen is light grey marked with dark grey spots and bands. Near the

middle of the abdomen are two pinkish spots behind which is a series of light colored incomplete chevrons. Males are marked similarly to females.

This species is found under boards, logs and stones in open fields and pastures. In the winter they may be taken occasionally by sifting leaves.

MARYLAND DISTRIBUTION

Allegany County--3 males and 1 female, Dans Rock.
Prince Georges County--3 females and 1 male, College Park.

FAMILY ANYPHAENIDAE (THE ANYPHAENIDS)

This family, formerly included in the Clubionidae, has the tracheal distantly removed from the spinnerets as in the Hahniidae. They may be separated from that family by the arrangement of the spinnerets in three rows of two each. They possess eight similar eyes in two rows, two claws on the tarsi of the legs and tenant hairs on the tarsi. The Anyphaenids live on the foliage of plants where they often build tubular nests. The more common Anyphaenid genera of the state may be separated by the following key.

Key to the Genera of Anyphaenidae

1. Posterior spiracle near genital groove; tibia of first legs normal, shorter than carapace.....Aysha
1. Posterior spiracle midway between spinnerets and genital groove; tibia of first legs longer than carapace.....Anyphaenella

Genus Anyphaenella

In this genus the posterior spiracle is midway between the

epigastric furrow and the spinnerets. The posterior eye row is lightly procurved, the anterior median eyes are smaller than the laterals and the first pair of legs are considerably longer than the others. A single species of these medium sized spiders is common in the state.

Anyphaenella saltabunda Hentz (Plate XIII, figs. 17,18.)

Females of this species are about one fifth of an inch long. The color of both the cephalothorax and the abdomen is pale yellow to white with young specimens often having a blue or green cast. There are two broken longitudinal bands of dark color on the cephalothorax and several series and rows of dark spots on the dorsum of the abdomen. The epigynum is simple and much wider than long. Males are colored like the females and may be distinguished by a large process on the long curved tibia of the palpus.

These spiders are found on the foliage of trees and bushes from which they may be taken by beating or sweeping. Due to their light color they may be easily overlooked in the net.

MARYLAND DISTRIBUTION

Anne Arundel County--1 male, Bay Ridge, R. W. Muma.
Baltimore County--1 female, St. James Corners.
Caroline County--1 female, American Corners.
Prince Georges County--1 male, College Park.
Worcester County--1 female, Snow Hill.

Genus Aysha

In this genus the tracheal spiracle is much nearer the epigastric furrow than the spinnerets. The eyes of the first row are subequal in size. These spiders are of moderate size. Maryland's single species is common.

Aysha gracilis Hentz (Plate XIII, figs. 19,20.)

These spiders are between one third and one half an inch in length. The body is colored yellow with the cephalothorax somewhat darker than the abdomen. Markings consist of two dark longitudinal bands on the thorax, two rows of grey spots on the dorsum of the abdomen and scattered grey spots on the sides of the abdomen. The epigynum is round and has a single opening, and the tibia of the male palpus is short and possesses a long undulating process.

This species may be found in a wide variety of places, but is a foliage loving spider, and is usually found on trees, bushes and other plants.

MARYLAND DISTRIBUTION

Allegany County--1 female, Cumberland.
Anne Arundel County--2 young females, Bay Ridge.
Caroline County--1 female, Ridgely, L. P. Ditman and G. Vogt.
Calvert County--1 male, Bertha.
Prince Georges County--1 female, College Park.
Somerset County--1 female, Princess Anne.

PLATE IX

Figure 1. *Mimetus puritanus*.....Epigynum of female

Figure 2. *Uloborus americanus*....Tibia of first leg of female

Figure 3. *Dictyna frondea*.....Epigynum of female

Figure 4. *Dictyna foliaceae*.....Epigynum of female

Figure 5. *Ceraticelus creolus*.....Epigynum of female

Figure 6. *Ceraticelus creolus*.....Male palpus ventral view

Figure 7. *Ceraticelus emertoni*.....Epigynum of female

Figure 8. *Ceraticelus emertoni*.....Male palpus ventral view

Figure 9. *Erigone autumnalis*.....Male palpus

Figure 10. *Scylaceus pallidus*.....Epigynum of female

Figure 11. *Scylaceus pallidus*.....Male palpus dorsal view

Figure 12. *Ceratinopsis purpurescens*.....Epigynum of female

Figure 13. *Ceratinopsis purpurescens*..Male palpus ventral view

Figure 14. *Amaurobius bennetti*.....Epigynum of female

Figure 15. *Amaurobius bennetti*.Tibial apophysis of male palpus

Figure 16. *Agelenopsis emertoni*.....Epigynum of female

Figure 17. *Agelenopsis emertoni*.....Male palpus ventral view

Figure 18. *Agelenopsis pennsylvanica*.....Epigynum of female

Figure 19. *Agelenopsis pennsylvanica*..Male palpus ventral view

Figure 20. *Cicurina arcuata*.....Epigynum of female

PLATE IX

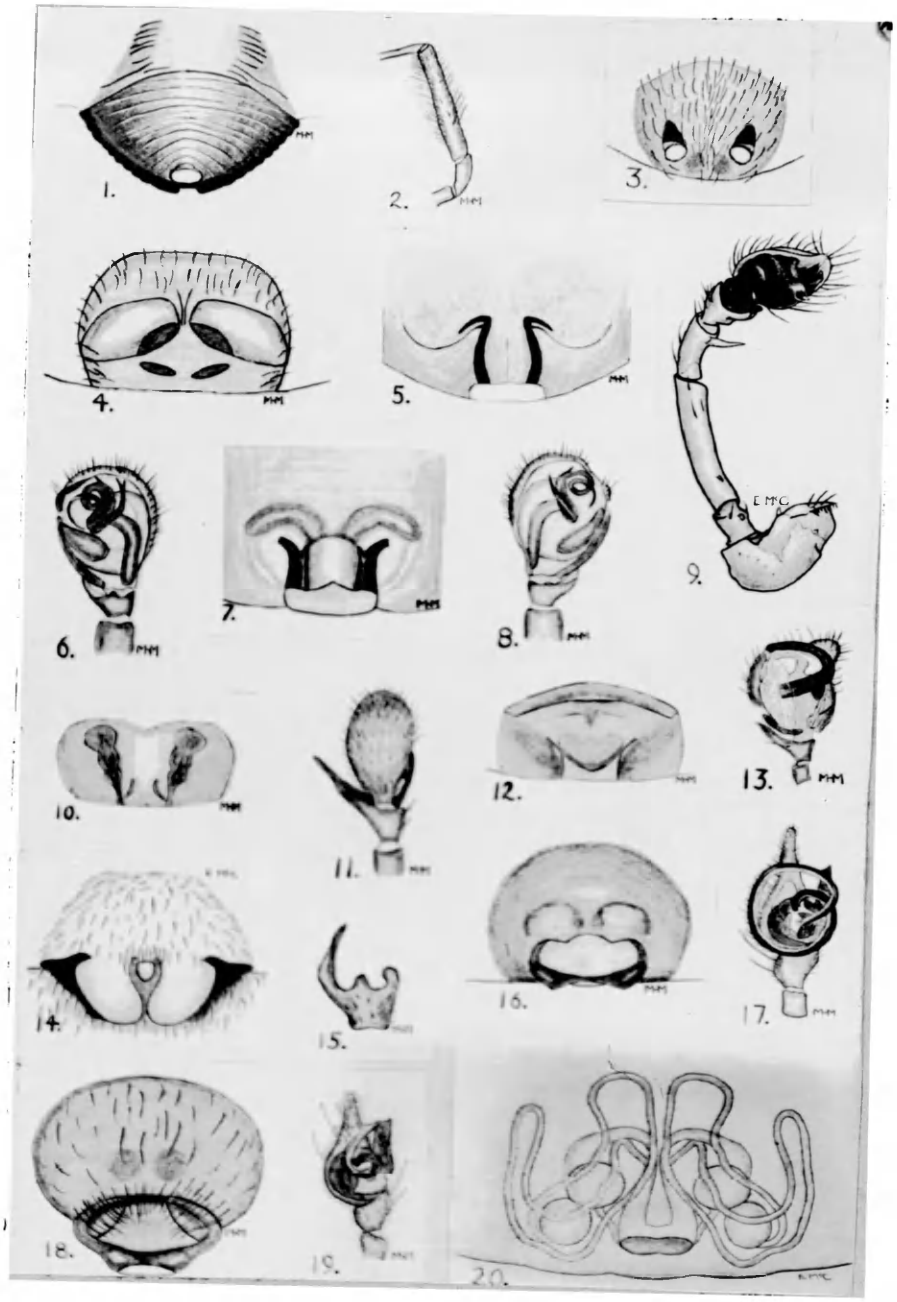


PLATE X

Figure 1. Coras medicinalis.....Epigynum of female

Figure 2. Tegenaria derhami.....Epigynum of female

Figure 3. Dolomedes scriptus.....Epigynum of female

Figure 4. Dolomedes scriptus.....Tibial apophysis of male palpus

Figure 5. Dolomedes sexpunctatus.....Epigynum of female

Figure 6. Dolomedes sexpunctatus.Tibial apophysis of male palpus

Figure 7. Pisaurina mira.....Epigynum of female

Figure 8. Arctosa funerea.....Male palpus ventral view

Figure 9. Lycosa nigraurata.....Epigynum of female

Figure 10. Lycosa helluo.....Epigynum of female

Figure 11. Lycosa rabida.....Epigynum of female

Figure 12. Pardosa milvina.....Epigynum of female

Figure 13. Pirata insularis.....Epigynum of female

Figure 14. Pirata minutus.....Epigynum of female

Figure 15. Schizocosa crassipes.....Epigynum of female

Figure 16. Oxyopes salticus.....Epigynum of female

Figure 17. Conopistha trigona.....Epigynum of female

Figure 18. Spintharus flavidus.....Epigynum of female

Figure 19. Spintharus flavidus.....Male palpus ventral view

Figure 20. Steatoda borealis.....Male palpus lateral view

PLATE X

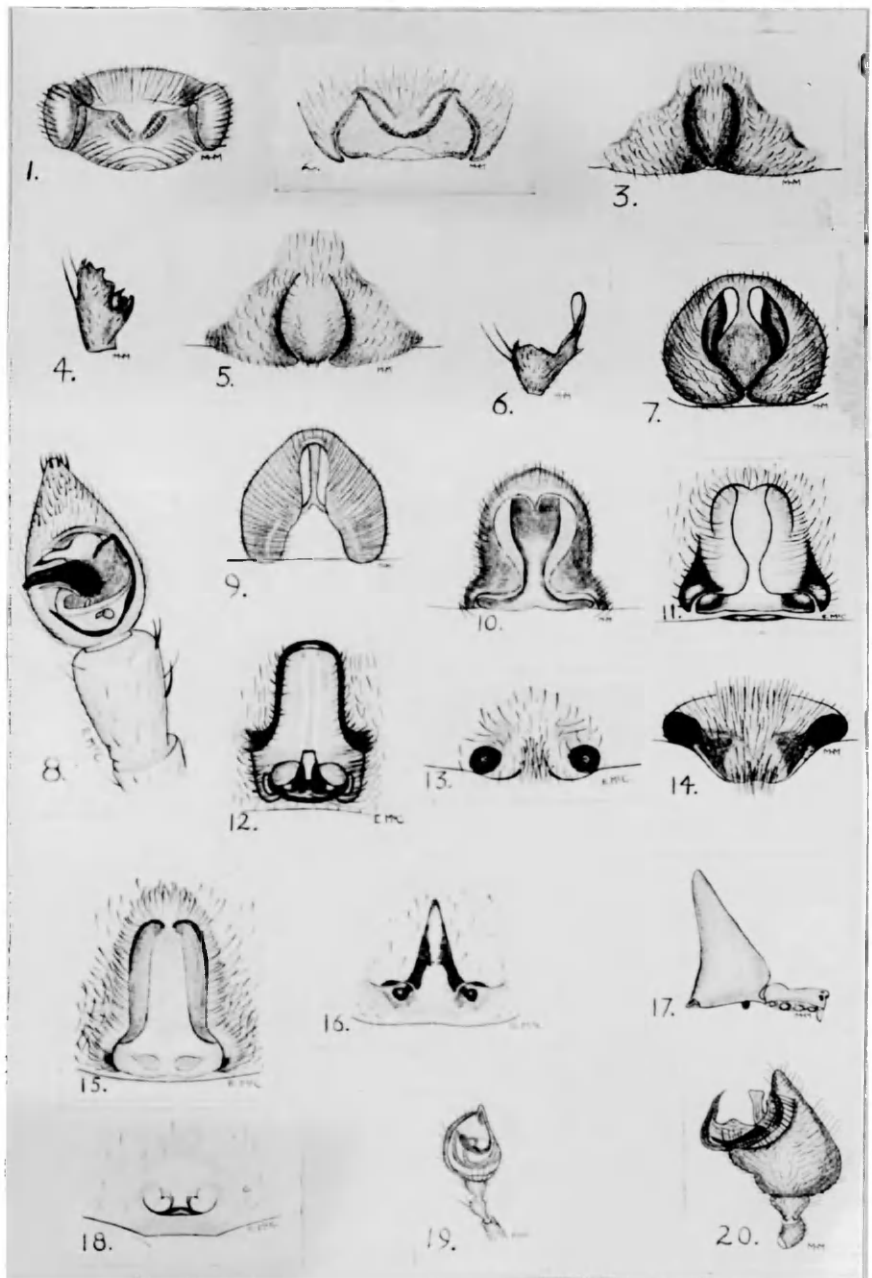


PLATE XI

Figure 1. Teutana triangulosa.....Male palpus ventral view

Figure 2. Theridion differens.....Epigynum of female

Figure 3. Theridion frondeum.....Epigynum of female

Figure 4. Theridion spirale.....Epigynum of female

Figure 5. Theridion tepidariorum.....Epigynum of female

Figure 6. Theridion tepidariorum.....Male palpus ventral view

Figure 7. Bathyphantes nigrinus.....Epigynum of female

Figure 8. Frontinella communis.....Epigynum of female

Figure 9. Frontinella communis.....Patellar apophysis of male

Figure 10. Lepthyphantes nebulosus.Epigynum of female, lateral view

Figure 11. Linyphia clathrata.....Epigynum of female ventral view

Figure 12. Linyphia marginata.....Epigynum of female

Figure 13. Pityohyphantes phrygianus.....Epigynum of female

Figure 14. Pityohyphantes phrygianus.....Patellar process of male

Figure 15. Aranea foliata.....Epigynum of female

Figure 16. Aranea raji.....Epigynum of female

Figure 17. Aranea thaddeus.....Epigynum of female

Figure 18. Eustala anastera.....Epigynum of female

Figure 19. Leucage venusta.....Femur of fourth leg of female

Figure 20. Mangora gibberosa.....Tibia of third leg of female

PLATE XI

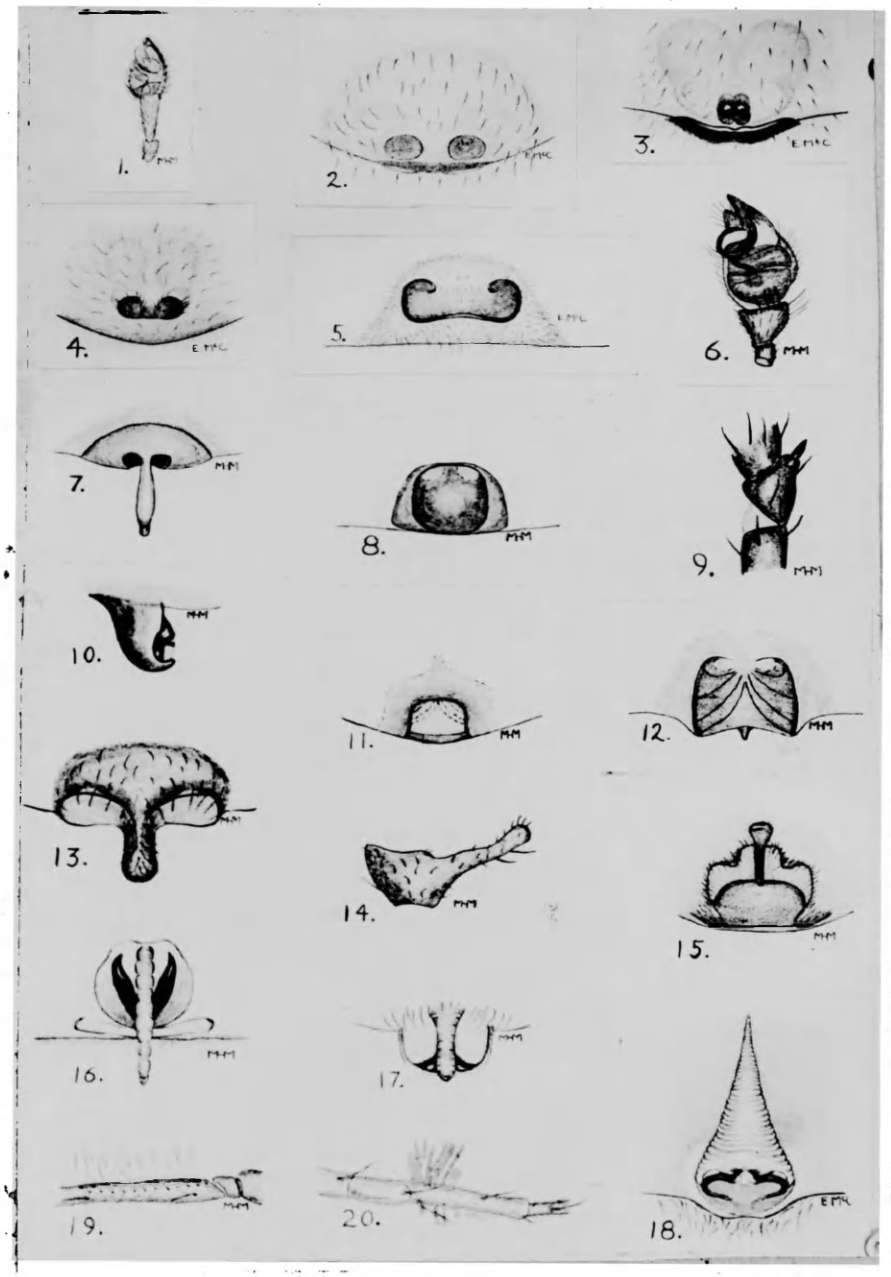


PLATE XII

Figure 1. Metepeira labyrinthea.....Epigynum of female

Figure 2. Neoscona arabesca.....Epigynum of female

Figure 3. Neoscona arabesca.....Tibia of second leg of male

Figure 4. Neoscona benjamina.....Tibia of second leg of male

Figure 5. Neoscona benjamina.....Epigynum of female

Figure 6. Pachygnatha tristriata.....Male palpus dorsal view

Figure 7. Singa pratensis.....Epigynum of female

Figure 8. Tetragnatha elongata.....Male palpus ventral view

Figure 9. Tetragnatha laboriosa.....Male palpus ventral view

Figure 10. Coriarachne versicolor.....Epigynum of female

Figure 11. Coriarachne versicolor.....Male palpus ventral view

Figure 12. Misumena calycina.....Epigynum of female

Figure 13. Misumenoides aleatorius...Eye region showing carina

Figure 14. Misumneops asperatus.....Epigynum of female

Figure 15. Misumenops asperatus.....Male palpus ventral view

Figure 16. Philadromus marxi.....Epigynum of female

Figure 17. Philadromus pernix.....Epigynum of female

Figure 18. Xysticus ferox.....Epigynum of female

Figure 19. Xysticus triguttatus.....Epigynum of female

Figure 20. Drassyllus frigidus.....Epigynum of female

PLATE XII

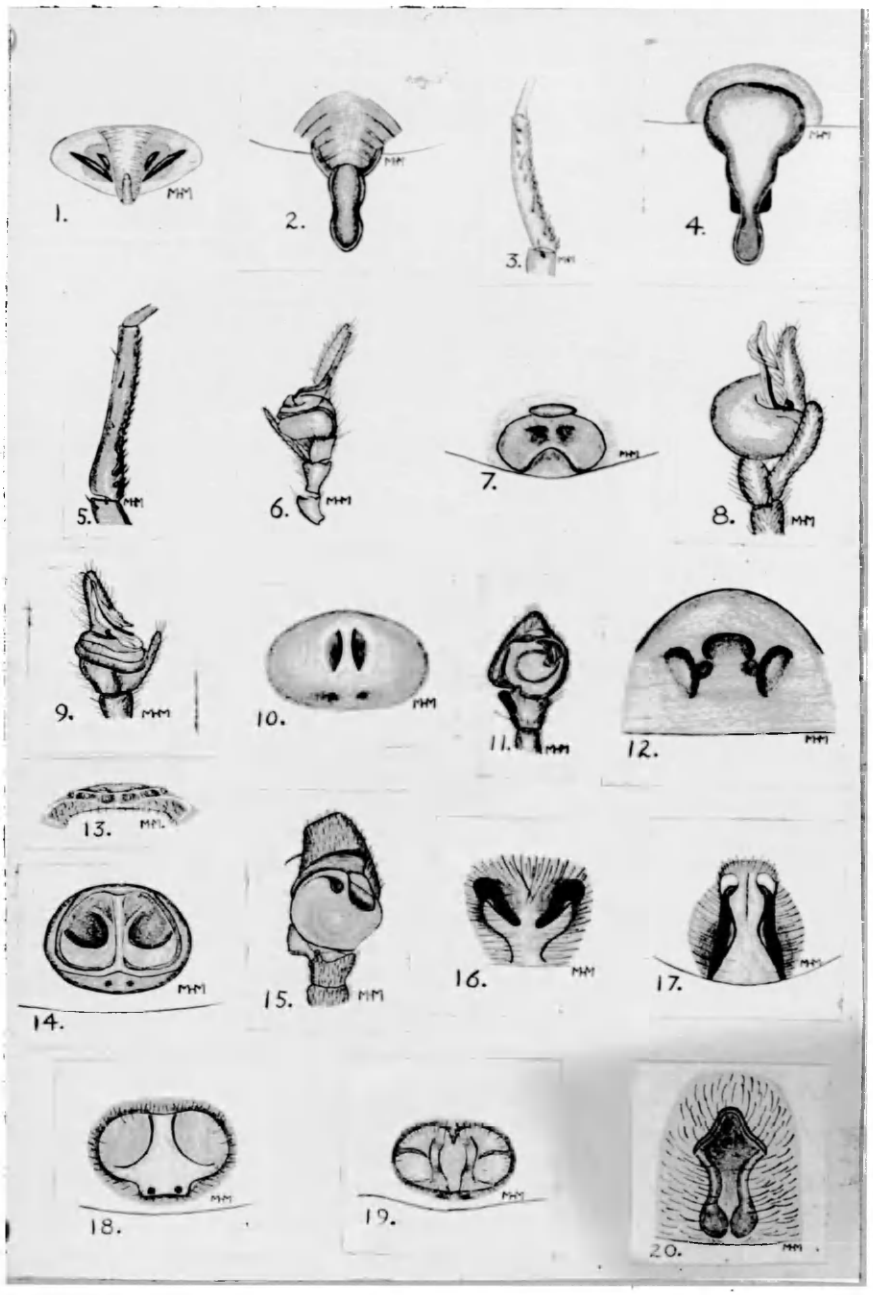


PLATE XIII

Figure 1. Drassyllus frigidus.....Male palpus ventral view

Figure 2. Castianiera descripta.....Epigynum of female

Figure 3. Castianiera descripta.....Male palpus ventral view

Figure 4. Clubiona abbotti.....Epigynum of female

Figure 5. Meriola decepta.....Epigynum of female

Figure 6. Phrurotimpus kentuckyense.....Epigynum of female

Figure 7. Metaphidippus capitatus.....Tube of male palpus

Figure 8. Metaphidippus marginatus.....Tube of male palpus

Figure 9. Habrocestum pulex.....Epigynum of female

Figure 10. Icius elegans.....Epigynum of female

Figure 11. Icius elegans.....Face view of male

Figure 12. Maevia vittata.....Epigynum of female

Figure 13. Habronattus coronatus.....Third leg of male

Figure 14. Phidippus clarus.....Tube of male palpus

Figure 15. Thiodina sylvana.....Tibia of first leg ventral view

Figure 16. Neoantista agilis.....Epigynum of female

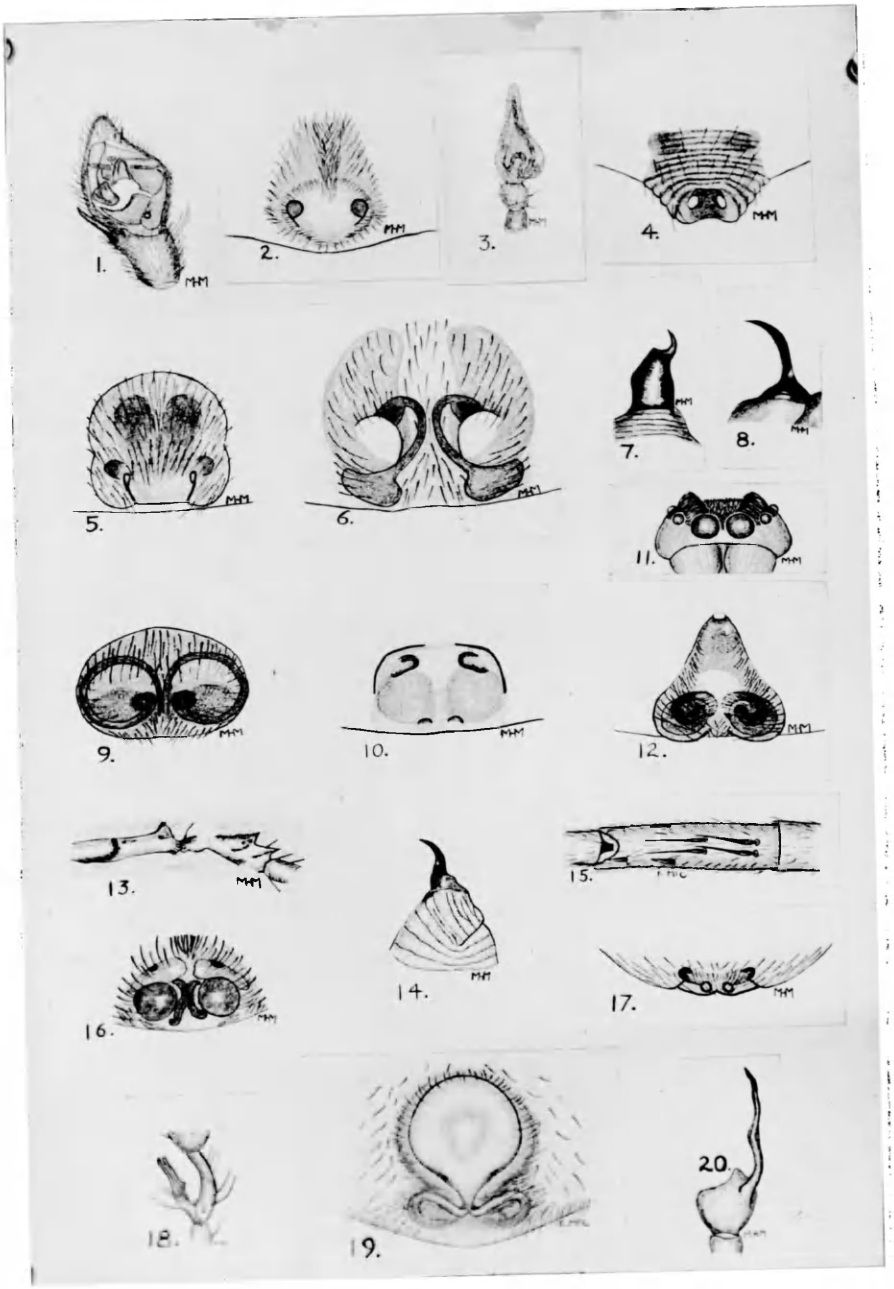
Figure 17. Anyphaenella saltabunda.....Epigynum of female

Figure 18. Anyphaenella saltabunda.Tibia male palpus dorsal view

Figure 19. Aysha gracilis.....Epigynum of female

Figure 20. Aysha gracilis.....Tibia male palpus ventral view

PLATE XIII



GLOSSARY

abdomen--the posterior segment of the body; in spiders it is unsegmented and exceedingly variable in form.

accessory claw--a thick curved spine occurring at tip of the tarsus of the leg; it is morphologically different from a true claw.

alae--the lateral plates of the guide of the epigynum.

anterior lateral eyes--the two outside eyes of the front row of eyes in spiders having the eyes in two rows.

apical--at the end as of leg, palpus etc.

apical division--the outer most or most distal of the three major divisions of the palpal organ of the male spider.

apophysis--an extension of the body wall at any margin of any segment of an appendage; also any extension of the integument of any organ.

basal division--the innermost or most proximal of the three major divisions of the palpal organ of the male spider.

book lung--one of two specialized organs of respiration found on the venter of the abdomen at the base; it is connected with the outside by a lung slit.

bulbous hair--a hair or seta which is somewhat swollen above the base then tapers to the end.

calamistrum--one or two rows of curved spines found on the upper margin of the metatarsus of the hind legs of some spiders.

carina--an elevated ridge or keel, not necessarily high or acute.

cephalic pit--a groove or hole found on each side of the eye region in some male spiders.

cephalic suture--a groove or furrow that separates the so-called head from the thorax in many spiders.

cephalothorax--the anterior part of the body of spiders; it bears the legs, eyes and mouthparts.

cervical groove--see cephalic suture.

chelicerae--the first pair of appendages on the head; they are composed of two segments, the large base and the fang or claw.

claw--a curved hook-like process; claws are found on the terminal segments of the legs and chelicerae.

clypeus--the space on the head of a spider between the eye region and the base of the chelicerae.

colulus--a slender pointed appendage found just in front of the spinnerets on certain spiders; it does not occur on spiders possessing a cribellum.

comb--a single row of serrate bristles found on the ventral surface of the tarsus of the fourth legs in the theridiids.

coxa--the proximal segment of the leg or palpus.

cribellum--a plate-like spinning organ found just in front of the spinnerets in some spiders; it is sieve-like in appearance and is usually divided transversely.

cymbium--that part of the tarsus of the palpus of the male that supports the more modified parts; it usually partly surrounds the more delicate parts.

distal--at or toward the free end of any appendage; that part of a segment farthest from the body.

diurnal eye--one that lacks a pearly lustre; it may be any other color.

dorsal eye--the posterior lateral eye of lycosids and salticids; it is usually as large or larger than the posterior median eye.

dorsum--in general the upper surface.

ejaculatory duct--the tube that passes through the embolus of the male palpus; the sperm are ejected through this duct.

embolus--the generally slender prolonged apical portion of the male palpus.

endite--the mesal lobe of any limb segment; the inner lobe of the basal segment of the palpus in spiders.

epigastric furrow--a transverse groove on the venter of the abdomen that separates the basal portion

from the remainder of the abdomen.

epigynum--the more or less complicated and sclerotized external reproductive organ of the female spider; it lies on the venter of the abdomen between the book lungs.

epipharnyx--a plate on the ventral surface of the rostrum.

eye area--the space occupied by the eyes.

eye region--see eye area.

fang--the claw-like distal segment of the chelicerae.

femur--the third segment from the proximal end of the leg and palpus.

file--the rasp-like serrations used for stridulation in some male spiders.

folium--a dark area on the dorsum of the abdomen of many spiders; it may contain stripes and spots and is usually enclosed by scalloped margins.

furrow of the chelicerae--a groove on the distal end on the basal segment of the chelicerae in which the fang lies when at rest.

guide of the epigynum--a longitudinal ridge-like elevation across the center of the epigynum.

hackled band--the flattened silken thread spun by spiders possessing a cribellum and calamistrum.

incomplete metamorphosis--the gradual development of some insects from the egg to the adult; there is no pupal stage and the young are known as nymphs.

keel--an elevated ridge or carina.

labium--the single flap-like sclerite on the ventral wall of the head; it is not analagous to the labium of an insect.

lateral condyle--a smooth prominence on the lateral face of the chelicerae in some spiders.

lateral furrow of the cephalothorax--a groove radiating laterally from the median furrow.

median division--the middle part of the male palpal bulb; it

contains the resevoir of the palpus.

median furrow of the cephalothorax--the central groove of the cephalothorax, it may be transverse or longitudinal.

median ocular quadrangle--the area enclosed by the four median eyes.

median scape of the epigynum--a posterior prolongation of the guide of the epigynum on some female spiders.

metatarsus--the second segment from the distal end of the leg.

neurotoxin--a poison that effects the nervous system.

nocturnal eye--an eye that has a pearly white lustre.

orb web--a web composed of several radiating threads, and a spiral line.

palpal bulb--the external reproductive organ of a male spider located on the palpus.

palpi--the second pair of appendages on the head; they are also known as the pedipalps.

patella--the fourth segment from the proximal end of the leg or palpus.

pedicel--the slender stalk connecting the cephalothorax and abdomen.

pedipalp--see palpae.

posterior lateral eyes--the two outside eyes of the hind row of eyes in spiders having the eyes in two rows.

posterior median eyes--the two inside eyes of the hind row of eyes in spiders having the eyes in two rows.

posterior spiracle--the opening of the trachea that is usually well behind the epigastric furrow near the spinnerets.

process--a prolongation of the surface of a margin, or of an appendage.

rostrum--the upper lip; a single lobe that may be analagous to the upper lip of an insect; it is between and above the chelicerae.

sclerite--any section of the body bounded by sutures; on the abdomen it is a hardened plate.

scopula--a small dense brush of hair.

seminal fluid--the liquid that acts as a carrier for the male sperm.

serrate bristle--a hair or bristle that is toothed along its sides.

spermatheca--the resevoir in the female that receives the sperm during coition.

sperm web--a delicate web spun by the male on which he ejects the seminal fluid before charging the palpi.

spinneret--one of the finger-like spinning organs at the posterior end of the abdomen; spinnerets are usually six in number but may be reduced to four or two.

spiracle line--the spiral part of an orb-web; it is viscid.

spurious claw--a curved seta usually found at the distal end of the tarsi of the legs of some spiders; it is not a true claw.

stabilimentum--a zig-zag ribbon across the hub of the webs or several orb weavers; it strengthens the web.

sternum--the entire ventral portion of any segment; the venter of the cephalothorax specifically in spiders.

stridulating organs--sound producing organs possesses by some male spiders; it consists of a file and a striking surface.

tail piece of embolus--a prolongation of the proximal end on the embolus; it is referred to specifically in the genera of the dwarf spiders.

tarsus--the distal segment of the palpus or the leg.

tenent hair--a club-like hair usually found in a group on the distal end of the tarsi of the legs of some spiders.

terminal claw--a claw at the distal end of the tarsus of the palpus of many female spiders.

thorax--the posterior part of the cephalothorax.

tibia--the fifth segment from the proximal end of the leg or palpus.

tibial apophysis--an apophysis on the tibia.

tracheal spiracle--an opening on the venter of the abdomen leading to the trachea.

trochanter--the second segment from the proximal end of the leg or palpus.

venter--the lower surface of any segment; specifically in spiders the lower surface of the abdomen.

BIBLIOGRAPHY

Comstock, J. H. Revised 1940 by W. J. Gertsch. The Spider Book. New York; Doubleday, Doran and Company, 1940. 729 pp.

Emerton, J. H. The Common Spiders of the United States. Boston: Ginn and Company, 1902. 225 pp.

Hentz, N. H. The Spiders of the United States. Boston: Boston Natural History Society, 1875. 171 pp.

McCook, H. C. American Spiders and their Spinning Work. 3 Vols. Philadelphia: The Author, 1889-1893. 1136 pp.

Peckham, G. W. and E. G. Revision of the Attidae of North America. Madison: The Democratic Printing Company, 1909. Vol. 16. Trans. Wis. Acad. Sci. pp. 355-646.

Petrunkevitch, Alexander. A Synonymic Index-Catalogue of Spiders of North, Central and South America with All Adjacent Islands, etc. New York: Bull. Amer. Mus. Nat. Hist. Vol. 29. 809 pp.