

Article XIII.—NEW AND RARE SPIDERS FROM WITHIN FIFTY
MILES OF NEW YORK CITY.

By J. H. EMERTON.

PLATE XLVIII.

The spiders north of New York City differ little from those well known from Massachusetts, Connecticut and western New York through the papers of J. H. Emerton and Nathan Banks; but Long Island and New Jersey include the northern limits of the range of many species which occur southward as far as Georgia and Florida. At Lakehurst, N. J., near the southern edge of the fifty mile circle, are the well known southern species *Oxyopes salticus* and *Epeira scutulata* and several little known southern species, *Scotolathys maculatus* Bks., *Icius sexmaculatus* Bks. and *Zelotes aprilinus* Bks. On Long Island several southern species have their present northern limits though, like several others, they may be expected at any time to spread across the sound into Connecticut. These are *Epeira verrucosa* Hentz, *Argyrodes cancellatum* Hentz, *Oxyopes salticus* Hentz and *Pellenes coronatus* Hentz. Among the new species, *Theridium pennsylvanicum* is common around Cold Spring Harbor, L. I., and has once been found across the sound at Sound Beach, near Stamford, Conn. *Pardosa atlantica* was first seen at Fire Island Beach, L. I., and later in large numbers in the sandy country at Lakehurst, N. J. It is closely related to the widely distributed *P. albopatella* and to *P. parvula* Bks. from Alabama. The new *Pellenes longimanus* is from Lakehurst, N. J., and one female has been found by Mr. Banks on Long Island. A *Dendryphantès* found abundant at Lakehurst occurs also in Rhode Island and near Boston, Mass., and appears to be a dark variety of the *D. flavipedes* Pkm. of Maine and New Hampshire. *Atypus niger* has been found once as far north as Cornwall, N. Y. It occurs often in Virginia and southward.

***Theridium pennsylvanicum* sp. nov.**

Plate XLVIII, Figs. 1-1d.

Length, 2.5 mm., pale with black and opaque white markings. The cephalothorax is pale yellow with three black stripes, the lateral stripes a little removed from the edges and wider in the males on the thoracic part. The abdomen has two white longitudinal lines converging at the ends and partly broken irregularly into spots.

At the sides of these longitudinal lines are short transverse white lines dividing the sides of the abdomen into three or four squarish areas. Along the white lines are a few small black spots of different sizes. The legs are pale, faintly ringed with brown at the ends of the joints. The palpal organ has the basal process small and, seen from the side, distinctly turned outward near the base of the tarsus. In this view the tube appears straight. Seen from the under side the basal appendage appears slender and curves inward and the tube appears sharply curved at the end.

Cold Spring Harbor, Long Island, Aug. 1 to 10. Sound Beach, near Stamford, Conn.

Lophocarenum littorale sp. nov.

Plate XLVIII, Figs. 2-2c.

Length, 1.5 mm. Cephalothorax brown, legs pale, abdomen gray without any markings. Resembles closely *L. latum* Em., Trans. Conn. Acad., 1882. It differs from *latum* in the shape of the head and position of the lateral pits which are farther forward than the lateral eyes, while in *latum* they are farther back. The upper middle eyes are also a little farther forward than in *latum* and the front of the head more nearly vertical. As in *latum* the sternum is wide, convex and rough. The male palpi are like those of *latum* with the tibia extending over the tarsus above and truncated on the edge.

In litter on sandy beach at Cold Spring Harbor, Long Island, N. Y., August.

Tmeticus acuminatus sp. nov.

Plate XLVIII, Fig. 3.

A little over 1 mm. long and pale and dull colored. It is related to *T. entomologicus* Em., Trans. Conn. Acad., 1911, and resembles that species in the shape of the head and arrangement of the eyes. The male palpus has the tibia elongated on the upper side and cut off square at the end, but on the inner corner a small process extends forward and slightly upward. The tarsal hook is small and cannot be satisfactorily seen in its natural condition.

Two males from Lakehurst, N. J., May 1, 1912.

Tmeticus digitatus sp. nov.

Plate XLVIII, Figs. 4, 4a.

Length, 2 mm. Legs pale, cephalothorax brown, abdomen dull gray. Mandibles long and narrowed at the tip without a front tooth and with the outer side roughened

by fine parallel ridges. The male palpi have the tibia moderately large with a long point extending over the tarsus. On the outer side is a shorter point extending forward and outward.

Cold Spring Harbor, N. Y., June 25.

***Scotolathys maculatus* Banks.**

Plate XLVIII, Figs. 5, 5a, 5b.

= *Dictyolathys maculatus* Bks., Proc. Phil. Acad. Nat. Sci., 1900.

Length, 1.5 mm.; resembles, except in color, *Scotolathys pallidus*. The legs and cephalothorax are pale dull yellow, the cephalothorax darker toward the sides. The abdomen is marked with transverse gray spots in pairs, much as in *Lathys foxii*. Along the sides are other gray spots, those nearest the hinder end extending underneath partly around the spinnerets, and in some individuals there is a gray spot under the middle of the abdomen. The males are of the same size as the females. The male palpi resemble closely those of *S. pallidus*. The tube of the palpal organ curves around the base of the tarsus to the upper side where the black point rests against the end of the tibia.

In the original description of *Dictyolathys maculatus*, Banks says that the front middle eyes can be indistinctly seen but I have not been able to find them in the Lakehurst specimens nor in the type specimen from Alabama. They all appear to have only six eyes in two groups as in *Scotolathys pallida*.

Lakehurst, N. J., May 1, 1912, under leaves. Alabama, Banks, Proc. Phil. Acad., 1900.

***Hahnia flaviceps* sp. nov.**

Plate XLVIII, Figs. 6-6d.

Length, 2 mm. Cephalothorax and legs pale yellow. Abdomen gray with pale markings in pairs, or the hinder pairs united into angular marks. The under side is pale with gray markings along the sides. Spinnerets in a transverse row as in *cinerea*. The male palpi have the tarsus much larger and wider than in *cinerea*. The process of the tibia is long and slender and tapers to a point and is roughened with short teeth over half its length. The process of the patella is forked and turned over at the end. The epigynum is more symmetrical than in *agilis*; there are two parallel tubes in the middle which appear to connect in front with two spiral spermathecae.

Male and female under leaves in company with several *H. cinerea* in a swamp near the railroad station at Farmingdale, N. J., May 3, 1912.

Pardosa atlantica sp. nov.

Plate XLVIII, Figs. 7-7a.

This species resembles closely *albatella* Em. The females of these two species cannot at present be distinguished from each other. The epigynum has the same form in both. It is also closely related to *P. parvula* Bks. from Florida, which is pale in color and has white hairs on the last three joints of the male palpus. The male of *atlantica* resembles *albatella* except in having white tibia and patella of the male palpus. The palpal organs of these three species are so much alike that they cannot be separated by them.

Fire Island Beach, Long Island, N. Y., and Lakehurst, N. J., in low sandy ground.

Castianeira aurata Banks (not Hentz), Nearctic Spiders, 1910.

Plate XLVIII, Figs. 8, 8a, 8b.

Length, 5 mm. Cephalothorax and legs bright orange color except leg 4, which is darker toward the end. The abdomen is orange brown in front, darker to almost black toward the end. There are two pairs of white spots almost united in the middle line, one pair a little behind the front end and the other near the middle of the abdomen. The cephalothorax is wider in the middle than half its length, and the head is narrowed to half the width of the middle of the thorax. The eyes occupy half the width of the front of the head, and are surrounded by black, which makes them appear larger and closer than they really are. The abdomen is widest two thirds its length from the front and is not constricted in the middle. The male differs little in size and color from the female. The male palpi have the tarsus and palpal organ long and tapering and the tibia with a blunt process on the under side. The figures of the palpi are from a specimen belonging to Mr. Banks.

Female from Staten Island, N. Y. Male from Falls Church, Va., in Mr. Banks's collection.

Pellenes longimanus sp. nov.

Plate XLVIII, Figs. 9-9c.

Male 6 mm. long. Cephalothorax with two white bands extending backward from a short distance behind the posterior eyes. Abdomen with a narrow white middle line and irregular lateral white bands spreading down the sides. Palpi white with a little brown on the tarsus. Legs pale at the base. Ends of femora and the rest of legs brown, the first pair much darker than the others. Third leg with patella and tibia thickened at the ends, otherwise not modified in form or marking. First leg longer than third. Abdomen, sternum, coxæ and femora pale underneath. As

far as can be judged from alcoholic specimens the dark parts of the cephalothorax and abdomen were dark brown like *P. peregrinus*, and the top of the head was covered with shining orange brown scales among which are short, stiff hairs; first legs and in less degree the second legs are covered with fine soft hairs as long as the diameter of the leg, but these legs have no tufts of hairs or other special ornaments. The tibia of the male palpus has a large hook on the outer side directed upward. The tarsus is wide at the base and a rounded corner projects on the outer side over the end of the tibial hook. The palpal organ is oval and swelled outward at the base and the tube is slender, with a slender supporting spine parallel with it.

A young female from the same locality is colored like the male except that there are traces of markings on the under side of the abdomen. The cephalothorax is a little narrower than in the male, the hairs on the head are shorter, and the first leg is marked like the others and shorter than the third. A mature female from Sea Cliff, Long Island, in Mr. Banks's collection, which may be of this species, has all the colors darker, the femora light brown, the sternum brown and the under side of the abdomen with three light gray lines.

Male and immature female from Lakehurst, N. J.

***Dendryphantès flavipèdes* Pkm.**

Plate XLVIII, Fig. 10.

Several spiders found at Lakehurst, N. J., are referred doubtfully to this species. The typical form from Maine, New Hampshire and Wisconsin has, at least in the males, the legs, palpi and the whole under surface pale or with only narrow longitudinal dark stripes on the legs. In the females there is usually some remnant of markings on the under side of the abdomen and of rings on the legs. In life the northern males are often entirely covered with yellow gray scales. In Massachusetts this spider varies from pale to black and white with the legs as darkly marked with rings as *capitatus*, and in Rhode Island and New Jersey all the specimens found are of the dark variety. The mandibles are usually pale but are sometimes dark across the middle or at the base. The three white spots extending back behind the eyes are very constant and may usually be seen even if the specimen is otherwise rubbed. The male palpi (Fig. 10) are very constant in form regardless of variations in size and markings.

***Atypus niger* Hentz.**

A male of this most northern representative of the Theraphosidæ was found May 30, 1913, at Cornwall on the Hudson, half way up Storm King

mountain, walking in a dusty road. Several hours' search in the neighborhood failed to find any others. Hentz, in 1842, Journ. Boston Soc. Nat. Hist., 1842, says: "A solitary individual (a male) was found on newly turned soil at Northampton, Mass." These are the most northern records for *Atypus*, which is common in Virginia and southward. Females and young live in silk tubes partly under ground and partly lying along the surface attached to plants and rubbish, so that they are not easily found. Mr. Nathan Banks writes that about 1894 he found several young *Atypus* in their tubes on the Palisades in New Jersey opposite the northern part of New York City.

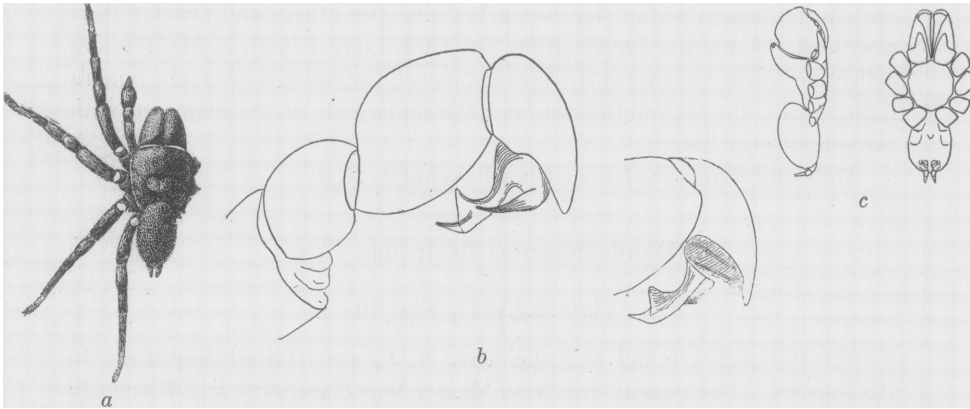
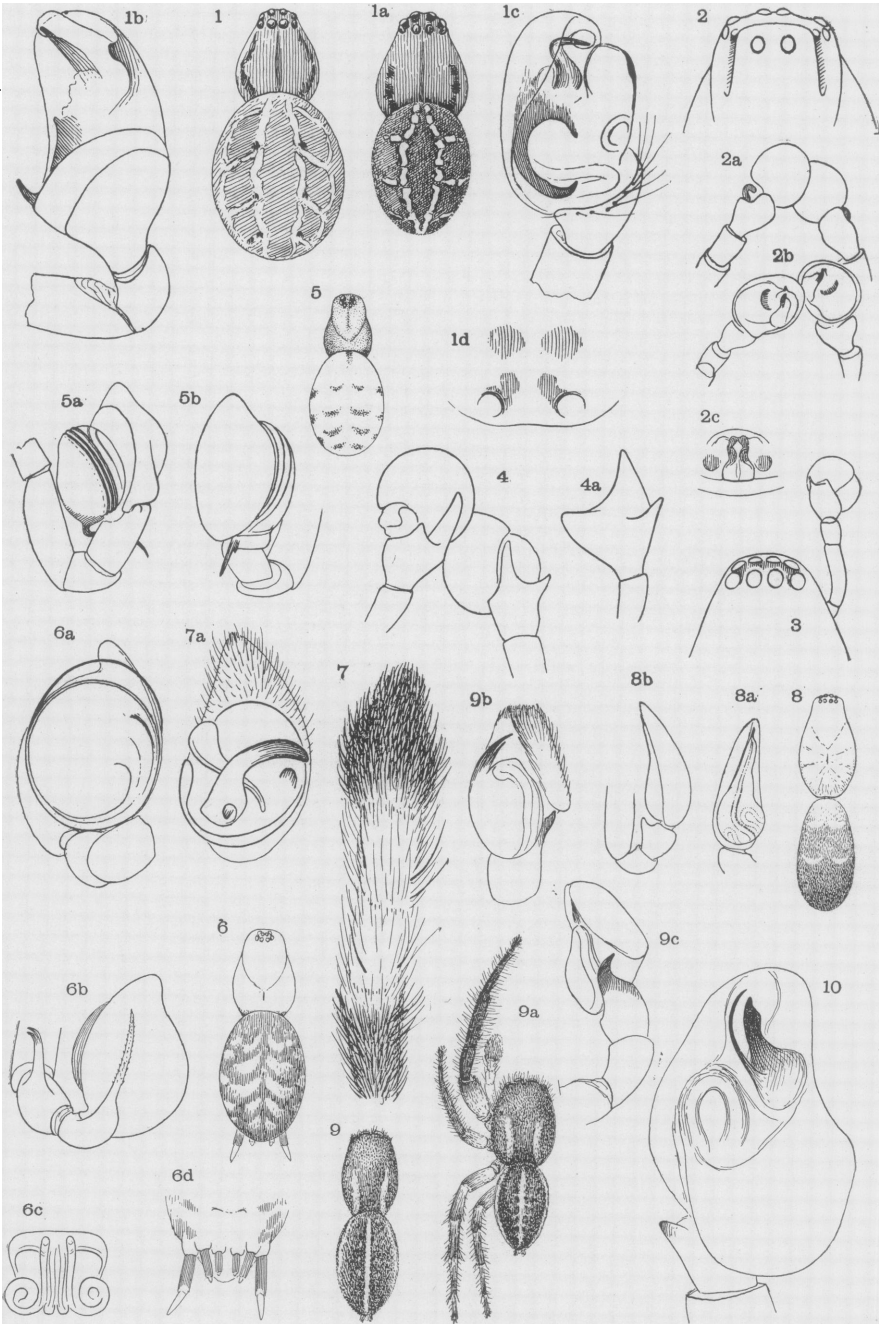


Fig. 1. *Atypus niger*. a, back of male; b, male palpi; c, ventral and side views.

EXPLANATION OF FIGURES, PLATE XLVIII.

1. *Theridium pennsylvanicum*, female, 1a, male, 1b, 1c, male palpus. 1d, epigynum.
2. *Lophocarenum littorale*, head of male from above. 2a, 2b, male palpi, 2c, epigynum.
3. *Tmeticus acuminatus*, head and palpus of male.
4. *Tmeticus digitatus*, male palpi from above, 4a, male palpus from outer side.
5. *Scotolathys maculatus*, female from above, 5a, 5b, male palpus.
6. *Hahnia flaviceps*, back of female, 6a, 6b, male palpus, 6c, epigynum, 6d, spinnerets.
7. *Pardosa atlantica*, palpus of male showing white patella and tibia, 7a, palpal organ.
8. *Castianeira aurata*, back of female, 8a, 8b, male palpus.
9. *Pellenes longimanus*, back of female, 9a, male, 9b, 9c, male palpus.
10. *Dendryphantus flavipedes*, palpal organ.



SPIDERS, FROM VICINITY OF NEW YORK CITY.

