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A PRELIMINARY LIST

OF THE

HEMIPTERA OF COLORADO

BY C. P. GILLETTE AND CARL F. BAKER

Approved by the Station Council,

ALSTON ELLIS, President.

AMERICAN STANDARD:
FORT COLLINS, COLORADO:
MAY, 1895.

FORT COLLINS, COLORADO

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INTRODUCTION.

Probably there is no state in the Union offering a richer field for the student of natural history than Colorado, whether it be in the line of mineralogy, paleontology, zoology, or botany. Its broad stretch of arid plains crossed by streams of living water, its high mountain ranges, broad plateaus, innumerable gulches and deep canons, all combine to give it a most exceptional topography with a consequent diversified fauna and flora.

The macro-lepidoptera of the state are very largely known, as a result of the extended collecting of Reakirt, Mead, Bruce, Snow and others. Lists of Coleoptera have been published from the collections of LeConte, Schwarz, Wickham, Snow and others. Lists of the Hymenoptera have been published by Cresson and Ashmead. But never before in any one publication has the attempt been made to list the Hemiptera of the state. Indeed, heretofore there have been no large collections of the Colorado species of this order to draw upon. During the past four years we have collected nearly all those previously known from the state and a very large number of additional forms. It has been our plan to make more than a simple record of the species known to occur in the state. With each species is given the bibliography of all published records of its occurrence in the state so far as known to us, also the name of the collector, locality, date of collection, and, wherever we have been able to ascertain it, the food-plant. Except in the case of Uhler, the authority for the determination of our specimens is given in the same line with the name. To avoid the repetition of the titles of papers, a numbered list of the papers referred to is given, the

author's name and the number of the paper only being given in the body of the list.

The determinations of specimens have been made by specialists in the different groups, the authors doing a large proportion of the systematic work on the Homoptera. It is hoped that this work will be found reasonably free from errors. In the preparation of the list we have been greatly aided by Mr. E. P. Van Duzee, who has made a large number of determinations for us, has made many helpful suggestions, and loaned us papers from his private library. We are under very special obligations to Dr. P. R. Uhler of Baltimore who has worked over our entire collection of Heteroptera and described the forty-seven new species and five new genera here published. Professor T. D. A. Cockerell of New Mexico, has determined nearly all our Coccidae and sent us many records of captures by himself, as well as valuable notes on species we had sent him for examination. The Membracidae have mostly been determined by Dr. Goding of Rutland, Illinois, and the Psyllidae by Dr. Riley. Professor Herbert Osborn of Iowa, also determined several species in the early part of the work. Mr. J. H. Cowen, a post graduate student, has done the work on the Aphididae, a large proportion of which he collected himself. Prof. W. A. Snow, of Kansas, has sent us a list of the Colorado Hemiptera in the Kansas University collection, which has added several species and many records to our list. Dr. Riley sent us a similar list from the United States National Museum.

It will be noticed that a great many species in the list, and especially of those that are new, are from mountainous localities where but little or no collecting had been previously done. All portions of the state still promise rich harvests to the collector, and especially those parts which have never yet been visited by "bug-net" and cyanide bottle. The list of new species here presented, although large, must be small compared with the forms yet unknown.

Work of a nature similar to this is being done in all orders. In view of this fact we most earnestly solicit correspondence from any quarter relative to the Colorado

insect fauna. Just at this time we especially desire notice of published records not given in this list, and data on correctly determined specimens in collections which have not been accessible to us. As the authors have undertaken a special study of the North American Jassidae, they would be pleased to examine specimens in that group from any portion of the country, and will give determinations for the privilege of retaining desiderata.

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ALTITUDES OF LOCALITIES MENTIONED IN THIS PAPER.

The altitudes given represent only average heights. Timber line is at about 12,000 feet in Southern and about 10,500 feet in Northern Colorado.

Aspen.....	8,000	Idaho Springs	7,400
Berthoud Pass.....	11,300	Lamar	4,000
Big Narrows of Poudre.....	6,000	La Veta	7,000
Boulder.....	5,300	Leadville	10,200
Cameron Pass	10,000	Livermore.....	6,000
Canon City	5,200	Manitou	6,300
Cheyenne Canon.....	6,200	Montrose	6,200
Colorado Springs.....	6,000	North Park	8,500
Denver	5,200	Ouray.....	8,000
Estes Park.....	8,600	Pueblo	4,600
Fort Collins.....	5,000	Rabbit Ears Pass.....	10,000
Four-mile Hill.....	7,000	Rist Canon.....	5,500
Garland	7,900	Rustic.....	7,000
Georgetown.....	8,700	Silverton	9,400
Glenwood Springs.....	7,800	South Park.....	7,200
Golden	5,700	Spring Canon.....	5,500
Gore Pass.....	10,000	Steamboat Springs.....	6,500
Grand Junction.....	6,000	Trinidad	5,900
Green Mountain Falls.....	8,700	Veta Pass	9,500
Horsetooth Gulch.....	5,600	West Cliff	7,800
Howe's Gulch.....	5,500		



A PRELIMINARY LIST OF THE HEMIPTERA OF COLORADO.

WITH DESCRIPTIONS OF NEW SPECIES, BY DR. P. R. UHLER,
J. H. COWEN, AND THE AUTHORS.

Homaemus grammicus Wolff.

Colorado Springs (Tucker.)

Homaemus aeneifrons Say.

Colo. (Uhler, 1 and 6). Swept from rank weeds near water courses. West of Denver occurred in swampy spots near South Platte River, and on the high watered table lands near foot-hills. Also beaten from bushes near Beaver Brook Gulch and in Clear Creek Canon (Uhler, 5).

Estes Park, Bailey (Snow). Manitou Park (Snow and Tucker).

Homaemus bijugis Uhl.

Colo. (Uhler, 1 and 6). Foot-hills, September (Carpenter—see Uhler, 6.) Near Denver (B. H. Smith—see Uhler, 6). Not uncommon in Denver, particularly on rank growing plants in damp situations (Uhler, 5). Willow Creek, Cusack Ranch, in midalpine of Custer County, August 21st, on timothy (Cockrell, 9 and 10).

Fort Collins, September 21st to October 15th; Horsetooth Mountain,* July 4th; Steamboat Springs, July 26th; Montrose, June 24th (Gillette), Fort Collins and adjoining foot-hills, May 13th to October 7th, on alfalfa, wheat, and various grasses (Baker).

Phimoderma torpida Walk.

Colo. (B. H. Smith—see Uhler, 6).

Eurygaster alternatus Say.

Hills of Colo., September (Carpenter—see Uhler, 6). Common in Colorado

*A mountain about ten miles south-west of Fort Collins. Collecting was done from 5,500 to 6,000 feet.

in September in the region of the foot-hills (Uhler, 5). Custer County, mid-alpine, and Summit County (Cockerell, 10).

Fort Collins, July 4th; North Park, July 20th; Steamboat Springs, July 26th (Gillette). Fort Collins, July 29th, on wheat; Steamboat Springs, July 14th (Baker).

Corimelaena albipennis Say.

Of this species Dr. Uhler says: "Prof. Gillette has most kindly sent to me the only specimen of this insect of which there is any record of capture since the time of Mr. Say. It is a species of prominent interest in many respects. In the first place, it is in an undeveloped stage of coloring, showing that oxydation of the outer integuments had not been completed when the insect was captured. It is also a female of unusually large size, in this section of the genus, and it is not in the first stage of exclusion from the skin of the nymph. The body is a little more bloated and consequently more convex above than in the fully dried insect. The contour is fringed all around with slender setae, as in *C. ciliata* Uhler. Its size is much less than that given by Mr. Say, but it agrees with his description in nearly every respect. The hemelytra are not 'white with a small rufous spot,' but white with a spot and tinge of black near the apex, such as occurs in the drying stage of *C. lateralis* Fab., a few hours after it has left the skin of the nymph. The 'small rufous spot' of Mr. Say suggests a more recently excluded condition of the species, in which the color beginning as white had oxydized to rufo-piceous on its way to the final piceous or black color of the fully matured insect. *C. unicolor* Pal. Beauv. becomes almost uniform castaneous, or rufo-castaneous, as it changes from the milky white of exclusion to the final black."

This specimen was first determined by Osborn, who recorded it as the first specimen found since Say's description (see Osborn, 1). Fort Collins, August 11th, on *Glycyrrhiza lepidota* (Baker).

Corimelaena anthracina Uhl.

Steamboat Springs, July 13th (Baker). Estes Park, July 12th (Gillette).

Corimelaena atra A. & S.

Colo. (Gillette—see Osborn, 1).

Rist Canon, April 16th (Gillette). Veta Pass, June 27th (E. A. Schwarz).

Corimelaena ciliata Uhler.

Foot-hills five miles west of Fort Collins, hibernating under stones, March 22d to April 12th (Gillette and Baker).

Corimelaena coerulescens Stal.

Colo. (Ridings, see Uhler, 6).

Corimelaena extensa Uhl.

Horsetooth Gulch,* May 18th (Gillette).

Corimelaena nitiduloides Wolff.

Above timber line in mountains. (Carpenter, see Uhler, 6). A few speci-

*A gulch about nine miles south-west of Fort Collins.

mens taken concealed among roots of Yucca and other plants growing on plains near foot-hills, during August, near Colorado Springs (Uhler, 5) Custer County, midalpine (Cockerell, 10).

Corimelaena lateralis Fab.

Fort Collins, June 4th; foot-hills five miles west of Fort Collins, May 18th to June 14th; Dolores, June 18th; Montrose, June 24th (Gillette). Steamboat Springs, July 26th (Gillette and Baker).

Corimelaena renormata Uhler n. sp.

"Form of *C. quadrisignata* Stal. Black, polished, ciliate all around but with longer and less blunt corium and no spots on the connexivum. Upper surface obsoletely rstrate-punctate, with the punctures scarcely visible upon the disk of pronotum and scutellum. Head wide, convex near base, roughly, unevenly, rather coarsely, punctate excepting on the base, the anterior margin bluntly obliquely rounded, with the edge reflexed, and the tip notched at end of tylus, the margin inferiorly has a series of coarse setigerous punctures; rostrum rufo-piceous, reaching to middle coxae; antennae long, fulvo-testaceous. Pronotum transverse, very moderately convex, with the lateral margins little oblique and very slightly curved next the anterior angle, the surface crossed before the middle by a grooved line, which is very distinct each side and is there surrounded by an area of very coarse punctures, the ciliae are set beneath the decurved edge in very coarse sunken punctures. Scutellum bluntly rounded, feebly curved, shorter than the abdomen, with a broad oblique, punctate impression each side above the middle of the corium. The corium about three-fourths as long as the scutellum, with the apical portion of medium width, tapering, and obliquely rounded at tip, with about four lines of coarse punctures, base of both corium and clavus, nearly covered by an ivory white, remotely punctate, spot. Venter highly polished, with transverse remote series of small punctures on most of the segments, the apical segment impunctate.

Length to tip of venter nearly 4 mm. Width of pronotum $2\frac{1}{4}$ mm. Only one specimen, a female, has come to my notice. It will most likely prove to be the fully colored stage of *C. albipennis* Say."

Rist Canon*, April 16th (Gillette).

Homaloporus congruus Uhl.

Denver (B. H. Smith—see Uhler, 5). Near foot-hills west of Denver, August (Uhler, 5).

Fort Collins, March 24th to April 24th (Baker). Foot-hills five miles west of Fort Collins, April 21st; Trinidad, May 14th (Gillette).

Cydnus obliquus Uhl.

West of Denver (Uhler, 5).

Amnestus spinifrons Say.

Colo. (Gillette—see Osborn, 1).

Trinidad, May 14th (Gillette).

Amnestus subferrugineus West.

Foot-hills five miles west of Fort Collins, March 15th to

*A canon eight miles north-west of Fort Collins.

April 21st, under stones (Baker).

Perillus confluens H. Sch.

Custer County, midalpine (Cockerell, 10).

Perillus splendidus Uhl.

Colo. (Gillette—see Osborn, 1).

Dolores, June 18th (Gillette).

Perillus exaptus Say.

Colo. (Uhler, 1 and 6). Ula, Custer County, midalpine, November 12th (Cockerell, 10).

Fort Collins, August 4th (Baker). Foot-hills five miles west of Fort Collins, March 15th; under stones (Gillette). Garland, June 29th (E. A. Schwarz).

Perillus claudus Say.

Colo. (Uhler, 1). Colo. (Riley—see Uhler, 6). Near Denver (B. H. Smith—see Uhler, 3). Near Colorado Springs (Uhler, 3). Colo. (Gillette—see Osborn, 1).

Fort Collins, April 10th to October 6th; foot-hills five miles west of Fort Collins, April 9th to August 1st (Baker and Gillette).

Mineus bioculatus Fab.

Colo. (Snow).

Zicrona cuprea Dall.

Southern Colo., June (Carpenter—see Uhler, 7).

Podisus acutissimus Stal.

Colo. (Uhler, 6).

Podisus bracteatus Fitch.

Det. Ashmead.

Colo. (Cockerell).

Podisus cynicus Say.

Colo. (Gillette—see Osborn, 1). Colo. (Snow—see Van Duzee, 5).

Spring Canon*, August 1st (Baker). Bailey (Snow).

Podisus gillettei Uhler n. sp.

"Nearly ovate, dull pale brownish made fuscous by the bronze-black clo-e punctures on the head, fore part and sides of pronotum, base of scutellum and base and end of corium. Head finely and closely punctate with black, the tylus with a broad groove on each side, lateral lobes broad, rounded off on the outside of tip, a little longer than the tylus. Antennae a little longer than the head and pronotum united, the basal joint very short, not reaching the tip of the head, greenish yellow, a little dusky at base and tip, the second joint about three times as long as the basal, testaceous, a little dusky above, the third scarcely more than half as long as the second, blackish, paler at base, the fourth

A canon eight miles south-west of Fort Collins.

and fifth blackish, both longer than the third, the fifth a little longer than the fourth. Rostrum pale testaceous, piceous at tip, reaching upon the middle coxae, the third joint very thick, a little longer than the fourth which is abruptly narrow. Pronotum more remotely punctate on the disk, with the lateral margins very oblique, thick, callous, broadly pale yellow, finely punctate and a little waved; the posterior margin feebly concave, and the humeral angles tumidly rounded. Pectoral areas remotely punctate with brown. Legs minutely punctate with brown, darker above and on tips of tibiae, tarsi piceous above, the nails also piceous. Scutellum long, minutely punctate, with an obsolete pale stripe on the middle, more conspicuous at tip, and with the usual pale callosity in the basal angles. Corium and clavus with bare spots continued on the costal area. Membrane bronze brown. Venter testaceous, remotely punctate with brown. Connexivum polished, testaceous, marked with black scallops inwardly. Ventral spine very short.

Length to end of venter 13.5 mm. Width of case of pronotum 9.5 mm. This species closely resembles a pale variety of *Jalla dumosi* Fabr. but the head is broader, basal joint of antennae longer, and there are ten longitudinal veins to the membrane. One specimen, a female, was captured in Colorado."

Rist Canon, April 10th (Gillette).

***Podisus modestus* Dall.**

Swept from bushes in Beaver Brook Gulch and Clear Creek Canon during early part of August (Uhler, 5).

Fort Collins, September 27th, on *Clematis ligusticifolia* (Gillette). May 20th to June 24th, and September 14th on *Solidago* (Baker).

***Podisus placidus* Uhl.**

Colo. (Gillette—see Osborn, 1).

Fort Collins, March 24th to May 4th (Gillette), and May 3d on box-elder (Baker).

***Podisus serieventris* Uhl.**

Spring Canon, August 1st (Baker).

***Podisus spinosus* Dall.**

Pueblo. Did not occur on the plains proper, but was swept from a bush in the bed of the river (Uhler, 5),

***Liotropis humeralis* Uhl.**

From bushes near Manitou (Uhler, 5). Colo. (Gillette—see Osborn, 1),

Montrose, June 24th (Gillette),

***Prionosoma podopoides* Uhl.**

Denver (B. H. Smith—see Uhler, 5 and 6). From bushes near Golden in August (Uhler, 5). Colo. (Gillette—see Osborn, 1). Pueblo (Uhler, 9).

Trinidad, May 14th (Gillette).

***Podops dubius* Pal Beauv.**

Colo. (Gillette—see Osborn, 1).

Fort Collins, April 6th (Gillette).

***Brochymena quadripustulata* Fab.**

Colo. (Uhler, 1).

***Brochymena annulata* Fab.**

Colo. (Uhler, 6). Colo. (Gillette—see Osborn, 1).

Fort Collins, June 16th, on willow; Rist Canon, April 9th; Manitou, September 28th, on oak (Gillette). Fort Collins, September 26th, on ash (Baker).

***Brochymena obscura* H. Schf.**

Pueblo, July (Wilkins—see Uhler, 7).

Canon City, August 31st (Gillette).

***Aelia americana* Dall.**

Steamboat Springs, July 14th (Baker). Veta Pass, June 24th (E. A. Schwarz).

***Neottiglossa undata* Say.**

Colo. (Uhler, 6). Clear Creek Canon, August (Uhler, 5).

***Neottiglossa melanocephala*.**

Fort Collins, May 27th, on currant (Baker).

***Cosmopepla carnifex* Fab.**

One specimen by sweeping weeds in region of Arkansas River, near Pueblo (Uhler, 5).

Fort Collins, July 2d, on *Mentha canadensis*, and September 27th; Howe's Gulch*, June 14th (Gillette). Steamboat Springs, July 15th (Baker).

***Cosmopepla conspicillaris* Dall.**

Hills and plains of Colo. September 19th and October 4th (Carpenter—see Uhler, 6). Colo. (Gillette—see Osborn, 1).

Fort Collins, July 2d, on *Mentha canadensis*; Howe's Gulch, June 14th (Gillette).

***Mormidea lugens* Fab.**

On weeds near Canon City (Uhler, 5).

***Euschistus fissilis* Uhl.**

Colo. (Uhler, 1 and 6). Southern Colorado, June—July (Carpenter—see Uhler, 7). Colo. (Gillette—see Osborn, 1).

Fort Collins, April 23d to October 24th; Rist Canon, May 14th, and Spring Canon, June 30th to July 12th; Montrose,

*A gulch six miles west of Fort Collins

June 24th (Gillette). Fort Collins, June 10th, at light; Boulder, September 4th (Baker).

Euschistus ictericus L.

Pleasant Valley, June 12th (Gillette.)

Euschistus impictiventris Stal.

Montrose, June 24th (Gillette).

Euschistus servus Say.

Near Arkansas River, August (Uhler, 5).

Euschistus tristigmus Say.

Colo. (Gillette—see Osborn, 1).

This was probably an erroneous determination.

Euschistus variolarius Pal. Beauv.

Colo. (Uhler, 1 and 6). Denver, August 18th (Uhler, 5). West Cliff, Custer County, May 23d, on *Thermopsis* (Cockerell, 10). Colo. (Gillette—see Osborn, 1).

Fort Collins, September 30th (Baker). Spring Canon (Gillette).

Coenus delius Say.

Colo. (Snow—see Van Duzee, 5).

Fort Collins, March 24th, and September 2d on *Solidago* (Baker). Estes Park, Bailey (Snow).

Hymenærcys aequalis Say.

Near West Cliff, Custer County, July 30th (Cockerell, 10).

Lioderma ligata Stal.

Fort Collins, June 27th to August 18th; Rist Canon, May 29th to July 19th (Baker and Gillette), Golden, April 30th (Gillette). Estes Park, August (E. D. Varney). Steamboat Springs, July 15th (Baker).

Lioderma viridicata Uhl.

Roaring Fork (Rothrock—see Uhler, 6).

Pentatoma congrua Uhl.

Foot-hills of Colorado, September (Carpenter—see Uhler, 6).

Steamboat Springs, July 12th (Baker). Denver (Riley).

Pentatoma faceta Say.

Colo. (Uhler, 1).

Pentatoma juniperina L.

Estes Park, July 11th; Rist Canon, July 30th (Gillette).

***Pentatoma sayi* Stal.**

Roaring Fork (Rothrock—see Uhler, 2). Foot-hills of Colorado, September (Carpenter—see Uhler, 6). Golden, August 6th (Uhler, 5).

Silverton (Nat. Mus. Coll).

***Pentatoma uhleri* Stal.**

Colo. (Uhler, 6).

***Carpocoris lynx* Fab.**

Fort Collins, June 20th to October; Estes Park, July 11th. Colorado Springs, August 1st (Gillette). Steamboat Springs, July 12th to 26th (Gillette and Baker).

***Trichopepla atricornis* Stal.**

North-east of Denver, August 18th (Uhler, 5).

***Trichopepla semivittata* Say.**

On weeds in vicinity of Arkansas River, August 10th (Uhler, 5).

***Peribalus limbolarius* Stal.**

Colo. (Uhler, 1 and 5) Nymphs moderately common on several kinds of Flowering plants August 6th and 8th, in Beaver Brook Gulch and Clear Creek Canon. A few days later imagos taken near Colorado Springs and at Manitou. August 11th taken sweeping plants in mouth of Arkansas Canon (Uhler, 5). Colo. (Gillette—see Osborn, 1).

Steamboat Springs July 12th (Baker). Bailey (Snow). Veta Pass, June 24th (E. A. Schwarz).

***Peribalus piceus* Stal.**

Rist Canon, July 30th (Gillette)

***Holcostethus abbreviatus* Uhl.**

Colo. (Uhler, 1). Beaver Brook Gulch, August 6th (Uhler, 5).

Fort Collins, June 5th to October 7th (Gillette and Baker). Steamboat Springs, July 26th (Gillette). Rist Canon (Baker).

***Thyanta custator* Fab.**

Colo. (Uhler, 6). Near Manitou, August 16th (Uhler, 3). Colo. (Gillette—see Osborn, 1).

Fort Collins, June 21st to October, (Baker and Gillette). Spring Canon, June 30th; Denver, July 20th; Lamar, May 7th (Gillette). Colorado Springs, Garden of the Gods (Tucker).

***Thyanta perditor* Fab.**

Colo. (Uhler, 6). Pueblo, August 10th (Uhler, 5). Colorado, common (Uhler, 8).

***Thyanta rugulosa* Say.**

Colo. (Uhler, 1). Colo. (B. H. Smith—see Uhler, 6). Southern Colorado, October (Uhler, 7). Moderately common in Clear Creek Canon and in Beaver Brook Gulch. Occurred on wild gooseberry, and several kinds of bushes near running streams (Uhler, 5).

Fort Collins, June 9th, in electric light globes (Gillette).

***Murgantia histrionica* Hahn.**

Colo. (Uhler, 1 and 6). Colo. (Uhler—see Packard, 2). Near Denver, in irrigated region, and also Golden, August 6; none found south of Denver (Uhler, 5). Golden, July 3d (Packard—see Uhler, 5).

***Banasa calva* Say.**

Larva in Clear Creek Canon, August 6th (Uhler, 5). Imagos near Blackhawk, July 2d (Packard—see Uhler, 5).

Fort Collins, September 30th; Ouray, June 22d (Gillette). Big Narrows of Poudre river, Larimer county, July 9th, on willow (Baker).

***Banasa dimidiata* Say.**

Estes Park (Snow—see VanDuzee, 5).

***Banasa sordida* Uhl.**

Glenwood Springs, August 24th (Gillette).

***Chariesterus antennator* Fab.**

Colo. (Uhler, 6). Manitou, August 13th, on a small oak tree (Uhler, 5). Colo. (Gillette—see Osborn, 1).

Horsetooth Gulch, May 18th (Gillette).

***Corynocoris distinctus* Dall.**

Colo. (Uhler, 1 and 6).

S. Colo. (Nat. Mus. Coll.).

***Archimerus calcarator* Fab.**

Colo. (Uhler, 1). Foot-hills (Carpenter—see Uhler, 6).

Boulder, September 4th (Baker).

***Leptoglossus corculus* Say.**

Colorado—as questionably cinctus (Gillette—see Osborn, 1).

Fort Collins, June 29th, and July 4th in flowers of *Yucca*; Pueblo, June 13th (Gillette). Boulder, September 4th; foot-hills 5 miles west of Fort Collins, August 1 (Baker).

***Chelinidea vittigera* Uhl.**

Colo. (Uhler, 6). Beneath a mass of prickly pears on hillside near Colorado

Springs, August 10th (Uhler, 5). Colo. (VanDuzee, 5).

Foot-hills, 5 miles west of Fort Collins, March 15th to May 19th, common under stones and about plants of *Opuntia*; Fort Collins, April 23d to May 16th (Baker and Gillette).

Margus inconspicuus H. Schf.

Colo. (Uhler, 1 and 6). Near Manitou, August 13th (Uhler, 5). Near Denver (B. H. Smith—see Uhler, 5). Southern Colorado, June 5th (Carpenter—see Uhler, 7).

Montrose, June 24th (Gillette).

Catorhintha guttula Fab.

Fort Collins, May 7th to October 28th (Baker and Gillette). Foot-hills 5 miles west of Fort Collins, June 4th to August 3d (Gillette).

Catorhintha mendica Stal.

Colo. (Uhler, 1 and 6). Golden, July 3d (Packard—see Uhler, 5). Southern Colorado, June 5th to July 5th (Carpenter—see Uhler, 7).

Colorado Springs (Tucker).

Ficana apicalis Dall.

Manitou, July 24th, on *Clematis ligusticifolia* (Gillette).

Anasa tristis De G.

Colo. (Uhler, 6). Taken beneath rubbish on a farm a few miles west of Denver, August 18th. Not common (Uhler, 5). Colorado Springs, July (Yarrow—see Uhler, 7). Southern Colorado, June (Carpenter—see Uhler, 7).

Known as a common and serious pest almost everywhere squashes are cultivated. Hibernates under boards, stones, and rubbish.

Tollius curtulus Stal.

Horsetooth Mountain, July 4th (Gillette).

Alydus eurinus Say.

Foot-hills of Colo. (Carpenter—see Uhler, 6). Manitou, July 15th (Packard—see Uhler, 5). Near Denver (B. H. Smith—see Uhler, 5). Ula, Custer county, July 30th; also high alpine; in Mesa county, at about 7,000 feet (Cockerell, 10).

Alydus quinquespinosus Say.

Foot-hills of Colo. (Carpenter—see Uhler, 6).

Fort Collins, September 30th; Boulder, September 4th (Baker).

***Alydus pluto* Uhler.**

Colo. (Uhler, 1). Foot-hills (Carpenter—see Uhler, 6). Near Denver (B. H. Smith—see Uhler, 6). West of Denver, August 9th (Uhler, 5). Colo. (Snow—see VanDuzee, 5).

Spring Canon, July 12th; Estes Park, July 12th (Gillette).

***Alydus conspersus* Mont.**

Colo. (Montandon, 1). Colo. (Montandon—see Osborn, 1).

***Protenor belfragei* Hagl.**

Colo. (Uhler, 1 and 6).

***Darmistus subvittatus* Stal.**

Fort Collins, June 25th (Baker). Foot hills five miles west of Fort Collins, March 12th to June 12th (Gillette).

***Dasycoris nigricornis* Stal.**

North-east Colorado (Riley).

***Dasycoris humilis* Uhler.**

Colo. (Uhler, 1 and 6). Near Golden, August 6th (Uhler, 5). Colorado Springs, July (Yarrow—see Uhler 7).

Fort Collins, April 26th; foot-hills 5 miles west of Fort Collins, April 16th to June 13th (Gillette).

***Scolopocerus secundarius* Uhler.**

Colo. (B. H. Smith—see Uhler, 6). Colo. (Gillette—see Osborn 1).

Foot-hills five miles west of Fort Collins, March 15th (Gillette). Fort Collins, May 20th (Baker).

***Neides muticus* Say.**

Colo. (Uhler, 1 and 6). Clear Creek Canon, entrance to Beaver Brook Gulch, August 7th, flying in bright sunlight (Uhler, 5).

Manitou, June 25th; Montrose, June 24th (Gillette). Foot-hills five miles west of Fort Collins, May 19th and 21st; Steamboat Springs, July 15th to 26th (Gillette and Baker). Fort Collins, March 18th (Baker).

***Jalysus spinosus* Say.**

Pueblo (Yarrow—see Uhler, 7). Not uncommon in the valley of the Arkansas east of Canon City, August 11th. Occurred in places slightly wooded, where wild grape vines abounded (Uhler, 5).

Colorado Springs (Tucker).

***Harmostes propinquus* Dist.**

Fort Collins, August 18th and 26th (Baker). Foot-hills five

miles west of Fort Collins, July 12th and 30th (Gillette).

***Harmostes serratus* Fab.**

Manitou, July 15th (Packard—see Uhler, 5).

***Harmostes reflexulus* Stal.**

Colo. (Uhler, 1). Foot-hills, July to September (Carpenter—see Uhler, 6). Sweeping weeds on hills west of Denver August 5th. Beyond Canon City, August 11th. Colorado Springs, August 16th (Uhler, 5). Near West Cliff, Custer County, end of July (Cockerell, 10).

Fort Collins, September 30th (Baker). Steamboat Springs, July 14th and 26th (Baker and Gillette). The Rustic, Larimer County, August 11th; Dolores, June 18th; Montrose, June 24th; Glenwood Springs, August 24th (Gillette). Aspen (W. W. Willard). Colorado Springs (Tucker).

***Harmostes reflexulus* Stal. var. *virescens* Dall.**

Howe's Gulch, June 14th; Dolores, June 17th (Gillette). All variations between this and the typical form occur commonly.

***Auteius impressicollis* Stal.**

Swept from bushes in the suburbs west of Denver, August 18th. Not common (Uhler, 5).

***Corizus hyalinus* Fab.**

Colo. (Uhler, 1). Foot-hills (Carpenter—see Uhler, 6). Pueblo, July (Yarrow—see Uhler, 7). Golden, July 3d, and on Arapahoe Peak, 11,000 to 12,000 feet, July 1st (Packard—see Uhler, 5). Widely distributed in Eastern Colorado. Lodges in flowers of various plants, and seems to be common on plains, foot-hills, and parks in the mountains. Less abundant in Clear Creek Canon, but found everywhere west of Denver, around Colorado Springs, and near Manitou. Lived singly in crowns of small flowers in Manitou Park. Common on weeds in Arkansas Valley, and near mouth of Canon of Arkansas, August 4th to 19th (Uhler, 5). Ula, Custer County, July 30th; also high alpine (Cockerell, 10).

Howe's Gulch, June 14th; Steamboat Springs, July 26th; Glenwood Springs, August 24th (Gillette). Fort Collins, May 18th to July 14th, on alfalfa, barley, *Sisymbrium canescens*, and *Oenothera biennis* (Baker). Colorado Springs, August (Tucker).

***Corizus lateralis* Say,**

Colo. (Uhler, 1 and 6). Swept from weeds on low hills near Colorado

Springs, August 18th (Uhler, 5).

Fort Collins, March 20th to August 25th, and September 27th on *Bigelovia* (Baker and Gillette). Foot-hills five miles west of Fort Collins, June 5th and 14th; Steamboat Springs, July 26th (Gillette).

Corizus nigristernum Sign.

Golden, July 3d (Packard—see Uhler, 5);

Rist Canon, June 13th (Gillette)

Corizus punctiventris Dall.

Colo. (Uhler, 1 and 6).

Fort Collins, September 30th (Baker). Steamboat Springs, July 14th and 26th (Baker and Gillette). The Rustic, Larimer County, August 11th; Estes Park, July 12th; North Park, July 20; Montrose, June 24th (Gillette).

Corizus validus Uhl.

Steamboat Springs, July 14th (Baker).

Leptocoris trivittatus Say.

Colorado, common (Uhler, 1). Colo. (Uhler, 6). Southern Colorado, July (Carpenter—see Uhler, 7). Canon City, August 11th, at roots of cacti and yuccas (Uhler, 5). Colo. (VanDuzee, 5).

Canon City, August 31st (Gillette). Very common in Fort Collins and vicinity. Hibernates in large numbers about buildings. Commonly called "brick-bugs" or "box-elder bugs," although not found commonly on box-elder.

Jadera haematoloma H. Schf.

Colo. (Uhler, 6).

Nysius angustatus Uhl.

Colo. (Uhler, 1). Above timber line in mountains of Colorado in June (Carpenter—see Uhler, 6). Pueblo, July (Yarrow and Wilkin—see Uhler, 7). Fort Garland, July (Hunt—see Uhler, 7). Golden, July 3d (Packard—see Uhler, 5). Very abundant on tall weeds in cultivated grounds, near Denver, at Golden, in Manitou Park, and near Canon City, August 6th to 18th (Uhler, 5) Colo. (Gillette—see Osborn, 1).

Estes Park, July 12th; Leadville, August 23d (Gillette). Fort Collins, July 29th; Steamboat Springs, July 15th, on *Solidago* (Baker). Colorado Springs, Bear Creek Canon (Tucker).

Nysius californicus Stal.

Colo. (Uhler, 1 and 6). Found sparingly on weeds in moist places, as well

on the plains as in canons and parks. Swept from flowers west of Denver, in Clear Creek Canon, near Manitou and Colorado Springs, and more abundantly near Canon City. On a low composite with pale whitish flower, Manitou Park, August 14th (Uhler, 5). Golden, July 3d (Packard—see Uhler, 5).

Nysius minutus Uhler n. sp.

"Grayish fulvo-testaceous, pubescent, punctate with black, narrow, with the outer margin of the hemelytra nearly straight. Head of medium length, comparatively acute, pale dull fulvous, closely punctate, except on the immediate base, the punctures of the sides especially black, a grooved line midway between the eye and tylus; throat black, covered with small punctures, sericeous pubescent, with a white line next the eyes; antennae fulvo-testaceous, the basal joint mostly black, reaching a little beyond the tip of tylus, second joint about one-third longer than the third and both piceous at tip, the fourth long blackish; rostrum reaching behind the middle coxae, blackish piceous, sometimes paler at base. Pronotum subquadrate, a little wider than long, coarsely punctate with black, especially on the sides of disk, the fulvous color of the middle of the head carried back as a line between the callosities, the callosities and adjoining sutures and a line each side of the convex posterior lobe black, the humeral callosities and a short line on the middle of the posterior border whitish, humeri nearly surrounded by black. Pectoral areas black, minutely sericeous pubescent, coarsely punctate anteriorly, with a series of large white spots, including the coxae, extending from behind the throat to the metapleura, the outer angle and posterior margin of the metapleura and collar next the throat whitish or white, legs dull fulvo-testaceous, the femora mostly black beneath. Scutellum fulvo-testaceous, coarsely punctate and with a black mark on each basal angle, the middle line black, including the blunt base of the middle carina, which becomes very slender on the depressed apex of the scutellum. Hemelytra whitish, minutely pubescent, obsoletely and minutely punctate, with the veins and inner and posterior margin interruptedly streaked with brown, the apex of the clavus with a brown dot; membrane long, whitish hyaline, with a few brown flecks near the middle and from thence outwards. Abdomen piceous or blackish, narrow, polished, closely covered with fine white pubescence. Length to tip of abdomen, male 3-3.5 mm. Width of pronotum, .75 mm.

This is a common species in many parts of the western states, from Dakota to Colorado, California and Texas. On the eastern side of the continent it inhabits Canada, New England, New York, New Jersey, Maryland, Virginia, and North Carolina."

Fort Collins, June 4th to October 15th, and September 27th on Bigelovia; Pleasant Valley, June 12th; The Rustic, Larimer County, August 11th; Estes Park, July 12th; Grand Junction, August 26th, on sugar beets; Colorado Springs, August 3d; Montrose, June 24th (Gillette). Steamboat Springs, July 14th; Fort Collins, July 29th, on sugar beets, and July 26th, very injuriously abundant on mustard (Baker).

Nysius thymi Wolff.

Estes Park, July 12th (Gillette).

Orsillus scolopax Say.

Fort Collins, August 11th, on Glycyrrhiza lepidota (Baker).

Ischnorhynchus didymus Zett.

Southern Colorado (Yarrow—see Uhler, 7). Denver and Canon City (Uhler,

5). Colo. (Gillette—see Osborn, 1).

Rist Canon, May 29th; Estes Park, July 12th; Montrose, June 24th; Manitou, June 25th to September 29th (Gillette). Fort Collins (Baker). Manitou Park, Cheyenne Canon (Tucker).

Cymus luridus Stal.

Swept from weeds near Arkansas river, east of Canon City, August 11th (Uhler, 5). Near West Cliff, Custer county, end of July (Cockerell, 10).

Cymodema tabida Spin.

Fort Collins, March 28th to April 26th under boards (Baker). Garland, June 18th (E. A. Schwarz).

Blissus leucopterus Say.

Pleasant Valley*, June 12th, a single specimen (Gillette). Dixon's Canon, February 28th, one specimen under a stone (Baker).

Ninyas pallens Stal.

Colo. (Riley).

Geocoris borealis Dall.

Fort Collins, March 24th, under board; Glenwood Springs, August 24th (Gillette).

Geocoris bullatus Say.

Pueblo (Yarrow—see Uhler, 7). Foot-hills, July (Carpenter—see Uhler, 6). Collected around the roots of weeds on foot-hills and plains west of Denver, August 18th. Very pale varieties of this species occur on light colored sand; those from canons and mountain altitudes are darker (Uhler, 5).

Geocoris decoratus Uhler.

Clear Creek Canon, August 3d, in warm, sunny spots on dark sand (Uhler, 5). Ula, Custer County, November 12th (Cockerell, 10).

Geocoris fuliginosus Say.

Denver, August 5th (Uhler, 5).

Geocoris griseus Dall.

Estes Park, July 10th (Gillette).

Geocoris limbatus Stal.

Steamboat Springs, July 26th (Gillette.)

Geocoris pallens Stal.

*Six miles north-west of Fort Collins.

Colorado Springs, August 3d; Lamar, May 7th; Glenwood Springs, August 24th; Dolores, June 18th (Gillette). Fort Collins, June 29th on sugar beet, and August 18th; foot-hills five miles west of Fort Collins, August 1st (Baker).

Geocoris piceus Stal.

Colo. (Uhler, 1 and 6).

Geocoris punctipes Say.

Colo. (Uhler, 6).

Oedancala dorsalis Say.

Valley of Arkansas near Canon City (Uhler, 5).

Crophius bohemani Stal.

Det. through Riley

Montrose, June 24th (Gillette.)

Crophius disconotus Say.

Foot-hills five miles west of Fort Collins, March 15th to August 1st, and May 12th abundant on *Pinus ponderosa* var. *scopulorum* (Gillette and Baker). Golden, April 30th (Gillette). Fort Collins, May 16th on alfalfa, May 31st on apple, and April 11th very abundant along a fence row, flying in the sunshine (Baker).

Ligyrocoris constrictus Say.

Southern Colorado June and July (Carpenter—see Uhler, 7).

Livermore, Larimer county, August 11th (Gillette).

Ligyrocoris sylvestris Linn.

Foot-hills (Carpenter—see Uhler 6). Near Manitou, August 15th (Uhler, 5). Colo. (Gillette—see Osborn, 1).

Fort Collins, August 18th (Baker). Steamboat Springs, July 15th and 26th (Baker and Gillette).

Myodocha serripes Oliv.

Valley of Arkansas river, east of Canon City, August 11 (Uhler, 5).

Heraeus insignis Uhler.

Colo. (Uhler, 1 and 6). Near Golden, at mouth of Clear Creek Canon, August 7 (Uhler, 5).

Pamera una Say.

Ouray, July 17th; Fort Collins, September 27th (Gillette),

Ptochiomera clavigera Uhler n.sp.

"Similar in form to *P. nodosa*, Say, but shorter and thicker, with a dull dark surface

and thicker clavate antennae. Color dark brown, closely and coarsely punctate with fuscous, pubescent. The head thick, abruptly contracted at tip clothed with bronze pubescence, closely punctate; the rostrum thick, brown, reaching between the anterior coxae; antennae piceous, pale pubescent, blackish on the two long and very thick clavate apical joints, the basal joint thick, scarcely longer than the tylus, the second much shorter, more slender, growing thicker towards the tip; the ocelli very large and prominent, coarsely and densely granulated. Pronotum thick, a little longer than wide, almost flat above; the anterior lobe nearly twice as long as the posterior one, the two separated each side by a deeply incised line; the lateral edge moderately oblique, reflexed, a very little curved; collum distinct, but rather turned up than ridged; the middle of posterior margin indented, the anterior margin as wide as the head to the middle of the eyes; the humeral angles callous, long triangular. Pleural pieces reddish brown, somewhat coarsely punctate. Coxae dull yellow; femora obscure yellow, pale fuscous on the middle; the tibia tinged with brown; tarsi more or less piceous. Scutellum reddish brown, punctate, the apex with a long thick carina. Hemelytra thick, opaque, coarsely punctate in somewhat longitudinal lines, bare parts of the surface dull fulvous, the costal border testaceous, interrupted by about four black spots; the broad apex almost truncated, sometimes marked with two or three yellow dots; the membrane brown, very small or absent. Abdomen dark dull or brown, closely punctate, spread with minute bronze pubescence; the connexivum wide, sharp edged, with a yellow dot on the apex, and sometimes with testaceous specks at the outer end of the sutures; anal segment of the male large and prominently convex, very dark brown.

Length to end of abdomen 2.5 mm. Width of pronotum .75 mm. Three or four specimens are in the Colorado Agricultural College collection. In my own cabinet may be seen specimens from New York, Texas, and the vicinity of Denver and Manitou. Colorado."

Fort Collins, April 6th (Baker). Poudre Canon*, March 16th to April 22nd (Gillette). The specimens taken were found under boards and stones. This is the species recorded from Colorado as *P. diffusus* Uhler (see Uhler, 1).

***Ptochiomera puberula* Stal.**

Denver, August 8th (Uhler, 5).

***Cnemodus mavortius* Say.**

Colorado, August (Riley).

***Trapezonatus nebulosus* Fall.**

Colo. (Uhler, 1 and 6). Southern Colorado, June, July (Carpenter—see Uhler, 7). Moderately common at Denver, also few from plants in Beaver Brook Gulch, August 6th (Uhler, 5). Custer county, mid-alpine (Cockerell, 10).

Fort Collins, February 19th to September 2d (Baker and Gillette). The Rustic, Larimer county, August 11th; Foot-hills seven miles north-west of Fort Collins, March 16th; Manitou, June 25th; Montrose, June 24th; Dolores, June 18th (Gillette). Steamboat Springs, July 14th (Baker). Colorado Springs, Manitou Park (Tucker).

***Emblethis arenarius* Linn.**

Colo., seems to be quite common (Uhler, 6). Quite common in eastern

*The canon of the Poudre river, 10 miles north-west of Fort Collins.

Colorado as well on plains and foot-hills as in mountains. Near Denver and also in Clear Creek Canon, August 6th (Uhler, 5). Summit of Arapahoe Peak, 13,000 feet, July 14th (Packard—see Uhler, 5). Custer county, midalpine (Cockerell, 10). Colo. (Gillette—see Osborn, 1).

Fort Collins, February 19th to April 16th; Spring Canon, March 12th (Gillette).

Peritrechus fraternus Uhl.

Ula, Custer county, November 12th (Cockerell, 10).

Rhyparochromus floralis Uhler n. sp.

"Long-elliptical, rusty fulvous, opaque, minutely sericeous pubescent. Head piceous paler or rufo-fulvous at tip, subconic, nodding, smooth, shorter than the pronotum, minutely scabrous, strongly convex above, with the throat pale rufo-fulvous; antennae stout, about as long as the pronotum and corium united, dull fulvous, pale pubescent, with the fourth joint and apex of the third blackish piceous, the basal joint extending a little beyond the tip of the head, second much longer, the third about one-half longer but a little shorter than the second, the fourth about equal to the second; rostrum reaching upon the middle coxae, slender, pale fulvous, with the apical joint black. Pronotum subquadrangular, a very little wider at base than at tip, fulvous or rufo-fulvous, dull testaceous and punctate with black on the basal one-third, the lateral margins a little reflexed, black, slightly convexed next the apical angle, the submargin ivory white, expanding posteriorly where it abuts against a tumid black humeral spot, the inner boundary of this stripe and the anterior submargin finely punctate with black, disk not distinctly punctate, behind this is a feebly raised whitish line. Scutellum very long and acute fulvous, transversely indented on the middle, finely punctate before the middle and coarsely punctate with black towards the tip, the middle line more or less black. Corium whitish testaceous, with about nine slender black oblique lines (including the clavus) which are mostly composed of impressed punctures, the costal border and a transverse spot upon a wide black area, which also covers the cuneus, dull white, exterior reflexed edge of costal border dark brown; membrane smoke brown, with a short white spot next the tip of cuneus, and a double fainter one at tip. Legs pale fulvous, pale on middle of tibiae and base of tarsi. apices of tibiae and tarsi piceous. Pectus dark rust brown, paler anteriorly, the segments on the posterior border and a spot above each of the coxae pale yellow. Venter dull black, bordered above with testaceous or fulvous.

Length to tip of venter, 6-6.5 mm. Width of pronotum, 1.75-2 mm. This seems to be a common species in Colorado, Montana, California, etc."

Abundant at Fort Collins, throughout the season, under stones, etc., usually in company with *Formica neoclara* Em. (Baker).

Rhyparochromus (Dorachosa) illuminatus Dist.

Dixon's Canon, February 28th, under a stone (Baker).

Eremocoris ferus Say.

Custer county, midalpine (Cockerell, 10). Colo. (Gillette—see Osborn, 1).

Dolores, June 16th (Gillette).

Eremocoris tropicus Dist.

Fort Collins, March 26th; foot-hills five miles west of Fort Collins, March 15th and 16th (Gillette).

***Peliopelta abbreviata* Uhl.**

Clear Creek Canon, August 6th (Uhler, 5).

***Melanocoryphus admirabilis* Uhl.**

Colo. (Uhler, 6). Ula., Custer Co., Nov. 12 (Cockerell, 10).

Rist Canon, May 29th; Montrose, June 24 (Gillette).

***Melanocoryphus bicrucis* Say.**

Colo. (Gillette—see Osborn, 1).

Horsetooth Gulch, May 18th; Dolores, June 16th; Montrose, June 24th (Gillette).

***Melanocoryphus facetus* Say.**

Foot-hills, July (Carpenter—see Uhler, 6). Swept from yuccas near Denver; most common near Colorado Springs, August 13th to 17th, and were generally in shelter beneath dried dung, chips, stones or about the roots of yuccas (Uhler, 5). In a meadow at Nathrop, Chaffee County, August 14th (Cockerell, 10) Colorado (Gillette—see Osborn, 1).

Fort Collins, June 9th, on alfalfa and in electric light globes; foot-hills five miles west of Fort Collins, February 28th to August 1st (Gillette and Baker). Trinidad, May 14th; Grand Junction, August 28th; Leadville, August 23d (Gillette). Denver, at light (R. C. Stephenson).

***Lygaeus admirabilis* Uhl.**

Colorado (Uhler, 1).

Pleasant Valley, June 12th; Fort Collins, June 10th (Gillette).

***Lygaeus circumcinctus* Stal.**

Colorado (Carpenter, 1).

***Lygaeus kalmii* Stal.**

Custer County, midalpine (Cockerell, 10).

***Lygaeus melanopleurus* Uhl.**

Foot-hills five miles west of Fort Collins, June 14th to September, 1st; North Park, July 20th (Gillette). Steamboat Springs, July 16th and 26th (Baker and Gillette).

***Lygaeus reclivatus* Say.**

Found at 14,000 feet in abundance on surface of snow. Found above timber belt from May to October, throughout an area of 20,000 square miles (Carpenter, 1). Colorado (Uhler, 6). Pueblo, July (Yarrow and Wilkin—see Uhler, 7). Boulder, June 27th; Arapahoe Peak, 10,000 to 12,000 feet, July 1st;

Manitou, July 15th; summit of Pike's Peak, 13,000 feet, July 14th; Garden of the Gods, July 13th; Gray's Peak, about 14,000 feet, July 7th (Packard—see Uhler, 5). Everywhere, Denver to Canon City, August 6th to 18th. Among roots of yuccas, near Colorado Springs and Manitou. Swept from weeds near bunches of *Asclepias* in mouth of Arkansas Valley. Dwells on *Asclepias* (Uhler, 5). Ula, Custer County, November 12th (Cockerell, 10). Fort Collins (Riley and Blount, see Cockerell 10). Colorado (VanDuzee, 5)

Montrose, June 24th (Gillette). Fort Collins, March 20th to April 20th (Gillette and Baker). Manitou Park (Snow). Colorado Springs (Tucker).

***Lygaeus turcicus* Fab.**

Lower end of Wet Mountain Valley, just in Fremont County (Cockerell, 10).

***Largus cinctus* H. Sch.**

Colorado—as *succinctus* (Gillette—see Osborn, 1).

Lamar, May 7th (Gillette). Cheyenne Canon (Tucker).

***Largus succinctus* Linn.**

Colorado (Uhler, 1). Southern Colorado (Uhler, 6)

***Brachytropis calcarata* Fall.**

Near water, in weedy places on outskirts of Denver, August 4th (Uhler, 5).

Steamboat Springs, July 12th on *Carex* (Baker).

***Megaloceroea debilis* Uhl.**

Berthoud Pass and other parts of Colorado (Uhler, 1). Colorado (Uhler, 5).

Fort Collins, June 4th to July 24th; Steamboat Springs, July 26th, and July 12th on *Carex* (Gillette and Baker).

***Megaloceroea rubicunda* Uhl.**

Colorado (Uhler, 1 and 6).

***Trigonotylus pulcher* Reut.**

Fort Collins, October 15th; Pleasant Valley, June 12th; Estes Park, July 12th; Lamar, May 7th; Trinidad, May 14th; (Gillette). Fort Collins, June 13th, on cottonwood sprouts, and July 29th (Baker).

***Trigonotylus ruficornis* Fall.**

Colorado (Uhler 1 and 6). On weeds and grass in damp situations near Denver, and also on hills near water a few miles west of Denver (Uhler, 5). Colorado (Gillette—see Osborn, 1).

The last record perhaps refers to *pulcher*.

***Miris affinis* Reut.**

Roaring Fork (Rothrock—see Uhler, 2). Hills, July (Carpenter—see Uhler,

6). Southern Colorado, July (Carpenter—see Uhler, 7). Yellow varieties on weeds near water, in suburbs of Denver. Green variety, marked with fuscous, from rank growing plants in Beaver Brook Gulch, August 6th (Uhler, 5). Ula, Custer County, July 30th (Cockerell, 10). Estes Park (Snow—see VanDuzee, 5).

Fort Collins, May 8th to October 7th and June 9th, on alfalfa and barley (Baker). Foot-hills five miles west of Fort Collins, May 11th to 19th; Manitou, June 25th (Gillette) Veta Pass, June 21st (E. A. Schwarz).

***Teratocoris discolor* Uhl.**

Garland, June 18th (E. A. Schwarz—see Uhler, 3).

***Teratocoris longicornis* Uhler n. sp.**

"Elongated, bright green, resembling a *Miris*. Head very slightly nodding, green, broad, the front tabulated above and bounded by deep sutures, black anteriorly along the depressed middle line and also each side, the vertex produced in an arch posteriorly, and with a black arc at base; tylus black, rostrum reaching midway between the middle and posterior coxae; mostly greenish-testaceous, piceous at tip; antennae long, the basal joint green, the other joints dull reddish, the basal one as long as the vertex and pronotum united, the second as long as the pronotum and clavus united, the third and fourth broken from the specimen. Pronotum trapezoidal, a little longer than wide, flat anteriorly, the sides gradually oblique, with the edge reflexed, a little constricted behind the line of the callosities and crossed there by a black band, the middle line unevenly impressed, black, connected behind with a broad black band across the base, which is obsoletely punctate and wrinkled, the submargin before the humeri tabulated and with the edge not reflexed, posterior margin very slightly sinuated. Sternum whitish along the middle. Legs green, the tibiae and the tarsi more or less yellow, with the nails and apex blackish. Scutellum black, with a large yellow spot near each basal angle. Hemelytra green, long elliptical, minutely rugulose and punctate, the costal border prominently reflexed; membrane long, dull whitish, faintly dusky at base, including the base of vein. Mesosternum, posterior coxae and middle and apex of venter, pale yellowish, the abdomen minutely pubescent.

Length to tip of abdomen 4.5 mm. To tip of membrane 5.5 mm. Width of pronotum 1.25 mm. This is a well marked species of which only a single male was sent to me from Colorado. The genital hook is placed on the left side, and is long, stout and moderately curved. In this specimen the base of the scutellum is broadly exposed. A series of both sexes is greatly desired for comparative study."

Steamboat Springs, July 12th on *Carex* (Baker).

***Leptoterna amoena* Uhl.**

Steamboat Springs, July 14th and 26th (Baker and Gillette). Estes Park, July 10th; North Park, July 20th; Colorado Springs, August 3d (Gillette).

***Resthenia atripennis* Reut.**

Foot-hills twelve miles west of Fort Collins, June 30th (Gillette).

***Resthenia bivittis* Stal.**

Steamboat Springs, July 26th; North Park, July 20th (Gillette).

***Resthenia confraterna* Uhl.**

Colorado (Uhler, 1 and 6). Beaver Brook, August 6th (Uhler, 5). Idaho Springs, July 6th (Packard—see Uhler, 5). Colorado (Gillette—see Osborn, 1).

***Resthenia insignis* Say.**

Colorado (Uhler, 1 and 6). Colorado, as *insignis* and as *rubrivittata* (Gillette—see Osborn, 1).

North Park, July 20th (Gillette). Steamboat Springs, July 15th; Rabbit Ears Pass, July 20th (Baker).

***Resthenia insitiva* Say.**

Colorado (Gillette—see Osborn, 1).

***Resthenia maculicollis* Reut.**

Foot-hills twelve miles west of Fort Collins, June 30th (Gillette).

***Oncerometopus nigriclavus* Reut.**

Colorado (Gillette—see Osborn, 1).

Dolores, June 18th; Estes Park, July 12th (Gillette). Steamboat Springs, July 13th (Baker). Colorado Springs (Tucker).

***Oncerometopus ruber* Reut.**

Foot-hills five miles west of Fort Collins, September 1st (Gillette).

***Lopidea confluens* Say.**

Estes Park (Snow). North-east Colorado (Riley).

***Lopidea marginata* Uhl.**

Colorado (Uhler, 8).

***Lopidea media* Say.**

Foot-hills and plains, September 19th and October 4th (Carpenter—see Uhler, 6). Plentiful at Denver, Golden, Colorado Springs, and in the valley of the Arkansas near Canon City, August 5th to 18th. Occured most frequently upon the wild rose bushes (Uhler, 5). August 12th at Cottonwood Creek, Pleasant Valley, Fremont County (Cockerell, 3). West Cliff, Custer County, July 31st on *Glycyrrhiza lepidota* (Cockerell, 10). Colorado (Gillette—see Osborn, 1).

***Lopidea nigridia* Uhler n. sp.**

"Thicker and more compact than *L. media* Say, mostly dull black, pubescent, narrowly margined with rufo-fulvous or rufous on the outer border of the corium, including most of the cuneus. Head a little thicker than typical, dull black, pubescent, with a yellow spot on each side of the vertex next the eye, continued slenderly downward, a red spot on each side of the tylus, and the cheeks and sides below also red, with black sutures, the

gula black and the tylus shining black, antennae black, moderately stout, the basal joint much longer than the head, the second joint as long as from base of pronotum to front of eye, the third gradually decreasing in thickness, about two-thirds the length of the second, the fourth more slender, acutely tapering, about one-third as long as the third joint; rostrum all black or black at base, rufo-piceous posteriorly, reaching to posterior coxae. Pronotum wide, moderately short, the anterior lobe almost flat, with the front border reflexed, thick, whitish, and sinuated in the middle, callosities large, diagonal, prominent, black, with the deep space between also black, the posterior lobe convexly elevated transversely, faintly rufous on a smoky ground color, wrinkled, the posterior margin a little sinuated, with the edge depressed and thin and the middle of the submargin distinctly indented; the lateral margin reflexed throughout, including the border of the humeri; pleura rufous, a little fuscous anteriorly and on the sternum. Middle and posterior pectus black. Legs shining black. Scutellum dull black, tumid, indented at base. Hemelytra brownish black, irregularly granulated, and hairy, especially upon the clavus, outer border of the corium red, the color becoming wider posteriorly and covering nearly the whole cuneus. Abdomen black, shining, minutely pubescent.

Length to end of abdomen 5 mm. Width of pronotum 1.75 mm. Numerous specimens of this insect are present in the collection of the Colorado Agricultural College. It inhabits also New Mexico and Arizona."

Estes Park, July 12th (Gillette). Steamboat Springs, July 16th on willow and *Delphinium occidentale* (Baker).

Lopidea obscura Uhl.

Steamboat Springs, July 26th; North Park, July 20th (Gillette). Steamboat Springs, July 12th to 16th, on willow *Delphinium occidentale*, and *Artemisia tridentata* (Baker).

Lomatopleura caesar Ruet.

Colorado (Gillette—see Osborn, 1).

Fort Collins, July 24th to August 11th on *Glycyrrhiza lepidota*, and September 27th on *Rhus trilobata* (Baker and Gillette). Foot-hills five miles west of Fort Collins, June 5th to 14th; Colorado Springs, August 3d (Gillette).

Hadronema militaris Uhl.

Colorado (Uhler, 1). Roaring Fork (Rothrock—see Uhler, 2). Hills, July to September (Carpenter—see Uhler, 6.) Clear Creek Canon, well up on the mountain side, August 6th (Uhler, 5). Blackhawk, July 2d (Packard—see Uhler, 5). Smith's Park, Custer County, August 6th; also high alpine (Cockerell, 10). Colorado (Gillette—see Osborn, 1). Colorado (VanDuzee, 5).

Fort Collins, June 4th; Rist Canon, June 12th to July 30th; Estes Park, July 9th; North Park, July 20th; Steamboat Springs, July 26th; Georgetown, July 19th; Colorado Springs, August 3d; Montrose, June 24th (Gillette). Estes Park (Snow). Colorado Springs (Tucker).

Hadronema picta Uhler n. sp.

"Form nearly the same as in *H. militaris*. Having the antennae a little shorter, with

the second and third joints nearly of equal length. Head dull black, hairy, short, and transverse above, the vertex transversely impressed, prominently elevated behind; face tumid y convex, marked with a yellow stipe on the middle and a line of the same color on the groove next the inner margin of the eyes; cheeks, throat and bucculae pale greenish yellow; rostrum stout, greenish, black on the two apical joints, reaching upon middle coxae; antennae short, thick, the second not quite as long as the width of the base of pronotum, the third a very little shorter and not much thinner. Pronotum transverse, red or orange, set with erect black hairs, the collum white, and the band including the callosities black; lateral margins sharp, but not very prominent, pleural and sternal areas pale greenish, with the sutures and the areas between the coxae black. Legs pale fulvous at base, the apex of femora, and the tibiae and tarsi black. Scutellum pale rufous or yellow with the base blackish. Corium pale yellowish, with a large long black spot running back to tip, clavus nearly or all black, cuneus pale yellowish, bordered inwardly with black, membrane blackish. Abdomen pale greenish, with the ovipositor, genitalia and some short slender lines on the sutures of the segments black.

Length to tip of abdomen 3.5–3.75 mm. Width of pronotum 1.12–1.25 mm. Specimens of both sexes were kindly sent to me by Prof. Snow and Prof. Gillette. The first were collected at Colorado Springs, in July, by Mr. E. S. Tucker. Damaged specimens, from alcohol, were obtained for me in Dakota, and I captured a weather-worn specimen west of Denver in the month of August."

***Hadronema princeps* Uhl.**

Fort Collins, June 4th; Rist Canon, June 13th to July 30th; Gore Pass, July 29th; North Park, July 20th (Gillette). Steamboat Springs, July 12th to 16th, on *Delphinium occidentale* and other low plants (Baker).

***Hadronema pulverulenta* Uhl.**

Colorado (Gillette—see Osborn, 1).

Fort Collins, May 6th, about roots of a rose bush (R. C. Stephenson). Soldier Canon, May 19th; Golden, April 30th (Gillette). Fort Collins, September 26th, on elm (Baker).

***Hadronema robusta* Uhl.**

Colorado (Cockerell—see Ashmead in litt.).

***Pachytropis nubilus* Uhl.**

Steamboat Springs, July 26th (Gillette).

***Phytocoris colon* Say.**

Colorado (Gillette—see Osborn, 1).

***Phytocoris interspersus* Uhler n. sp.**

"In form similar to *P. eximus* Reut., but larger, and almost flat on the hemelytra. Pale delicate green, mottled with very pale brown all over the hemelytra, which are almost hirsute and the hairs interspersed with dark bristles. Head of medium size, convex, smooth, pubescent in front and on the sides; the eyes brown, prominent, reniform, placed almost vertical; front feebly grooved to near the back line of the eyes; rostrum thick at base, reaching well behind the posterior legs, dusky at tip; the antennae longer than the body, whitish, set with long bristles, the second joint longer than from the front to the posterior coxae, less hairy than the basal joint, the third a little more slender, about two-thirds the length of the second, the fourth much shorter and equally slender, the basal joint of medium thickness, about as long as the fore femur. Pronotum smooth, much wider than long, obsoletely veined with fulvous, contracted before the middle, a

little bristly on the sides and anteriorly, the region of the callosities transversely sunken, lateral margins deflexed, thick, fringed with dark bristles, collum narrow, whitish. Legs long, pale yellowish green, the posterior femora mottled with pale brown, tibial spines long, blackish. Scutellum convexly prominent, bald, polished, with the tip bent down, two black dots just back of it, and the lateral edge a little reflexed. Clavus and corium indented, rugose, set with silvery and dark hairs, the lateral margins gently curved, the costal submargin interrupted with pale brown lines; the membrane very large, faintly smoky, minutely flecked with brown. Venter whitish green, pubescent, polished.

Length to end of abdomen 4 mm. To tip of membrane 6 mm. Width of pronotum 2 mm. Only one specimen of this neat insect is known to me. It is a female taken in Cheyenne Canon, Colorado Springs, July (Tucker); it is somewhat above the average size of the species in this genus, and it bears a general resemblance to some of the green types of the genus *Oncotylus*, which might cause it to be confused with some of them."

***Phytocoris pallidicornis* Reut**

Colorado (Riley).

***Neurocolpus nubilus* Say**

Near Denver, August 4th (Uhler, 5). Colorado (Snow—see VanDuzee, 5).

Colorado (Gillette—see Osborn, 1).

Colorado Springs, Garden of the Gods (Tucker).

***Neurocolpus inops* Say.**

On small plants in Beaver Brook Gulch, next to Clear Creek Canon, August 6th (Uhler, 5).

***Compsoecrocoris annulicornis* Reut**

Colorado (Snow—see VanDuzee, 5).

***Callodemus* Uhler n. gen.**

"Having the features of a greatly elongated *Calocoris*. Head vertical, wider than the cillum, having a short neck, the vertex transverse, front broad tumido-conical, with the eyes reniform, prominent, and placed below the level of the vertex, line between the front and tylus deeply cut, the tylus long, thick, subcylindric, prominently curved at base; superior cheeks quadrangular, wide, almost flat, placed a little obliquely, the base of antennae very thick, deep seated directly above the quadrangular cheeks, against the inferior third of the eyes, lower cheeks rhomboidal, placed nearly horizontal beneath the eye; bucculae narrow, short, not extending beyond the inner line of the eye; rostrum quite thick at base, the basal joint reaching upon the anterior coxae. Anterior border of prosternum with a narrow, double, curved fold, mesosternum tumidly elevated. Pronotum transverse, abruptly sloping in front, the front border very narrow, carrying a prominent collum which is but little wider than the base of the head. Scutellum widely exposed at base, deeply incised across the disk, the posterior division triangular and almost equilateral. Hemelytra long and narrow, the costal border almost straight, veins distinct, regular, membrane long and wide, the looped vein fusiform in contour, round at the outer end, slenderly acute at the inner end, the adjoining areole but little shorter. Abdomen almost flat above, widely curving behind the base, with the connexivum broadly reflexed."

***Callodemus laevis* Uhler n.sp.**

"Long-suboval, yellow tinged with green, bald, polished. Head highly polished, eyes dark brown, pale behind; rostrum pale testaceous, piceous on the apical joint, reaching to behind the posterior coxae: antennae filiform, very long, set with black stiff hairs, the basal joint thick, as long as from the front of the eye to the apex of the middle coxae, the second not quite as stout, longer than the corium, the other joints destroyed. Pronotum rapidly narrowing obliquely towards the front, the lateral margins sinuated, with the

humeri rounded, lobate, the posterior margin a little sinuated on the middle, and deeply excavated inwardly from the humeri, middle sometimes with two black dots. Scutellum long triangular, acute at tip, obsoletely punctate in parts near base, each side next the pronotum sometimes with a black spot. Clavus a little dusky, corium with a dusky large spot behind the middle which is triangularly forked on the posterior end, the surface remotely spread with minute silky pubescence; membrane dusky at base and apex, omitting the centre of the areoles, the veins pale yellow. Legs yellow, with the femoral and tibial spines darker; tip of tarsi and the nails piceous. Tergum black, excepting the sides and end which are greenish yellow. Venter light clear yellow.

Length to end of abdomen 8 mm. To tip of membrane 9 mm. Width of pronotum 2 mm. One specimen, a female, is in the collection from Colorado, and another from New Mexico."

Glenwood Springs, August 24th (Gillette).

***Calocoris palmeri* Uhl.**

Southern Colorado (Uhler, 6).

***Calocoris rapidus* Say.**

Colorado (Uhler, 1 and 6). Pueblo, August 10th (Uhler, 5). Pueblo, June (Yarrow—see Uhler, 7). Custer County, midalpine (Cockerell, 10).

Fort Collins, July 14th to August 11th; July 14th on alfalfa and *Oenothera biennis*; Steamboat Springs, July 14th, on *Solidago* and other low herbs (Baker). Rist Canon, July 14th; North Park, July 20th; Estes Park, July 12th; Steamboat Springs, July 26th (Gillette).

***Calocoris superbus* Uhl.**

West Cliff, Custer County, July 27th (Cockerell, 10). Colorado (Gillette—see Osborn, 1).

Fort Collins, June 23th to August 25th, and September 27th on *Senecio douglassi* (Baker and Gillette).

***Calocoris tinctus* Uhler n. sp.**

"Oblong-oval, olive brownish, moderately pubescent, mostly bald above. Head long nutant, contracted obliquely on the front, the vertex a little sunken, longitudinally incised, bounded behind by a prominent ivory white carina, the front most compressed next the line of the tylus, tylus smooth, dark brown; rostrum reaching behind the posterior coxae, pale rufo-piceous; antennae long and slender, as long as pronotum and corium united, pale dull fulvous, a little darker on the last two joints and tip of second joint, the second joint a little thicker than the following ones, as long as the head and pronotum united, the third and fourth filiform, together a little shorter than the second. Pronotum wider than long, trapezoidal, moderately convex, almost regularly punctate, with the collum, lateral and posterior margins almost straight, white, the submargin and callosities black, anterior angles a little rounded; pleural flaps deep, black, polished, coarsely remotely punctate and wrinkled, sternum blackish brown, the borders of pleural areas white. Legs brown, paler at base and on the trochanters, nails black. Scutellum moderately convex, brown, pale at tip, minutely wrinkled and obsoletely punctate. Clavus and corium covered with close shallow punctures, subcostal area with a broad and long pale almost hyaline stripe; membrane dusky, with a large whitish spot near the base, the veins dark; wings dusky. Venter purplish black, opaque, pale on the middle, fulvous on the last segment, all the incisures margined with white, and with a series of pale dots on the lateral submargin, pubescence hardly distinct.

Length to end of abdomen 6 mm. To tip of membrane 7 mm. Width of pronotum 2 mm.

Only one specimen, a female, was taken in Colorado. It is peculiar from the conical and compressed form of the clypeus, and the genital slit for the ovipositor extends back in a pale line to next base of venter. The male is a great desideratum."

Estes Park, July 15th, on Pinus (Gillette).

***Megacoelum fasciatum* Uhl.**

Near Manitou, August 13th (Uhler, 5). Manitou, July 16th (Packard—see Uhler, 5).

***Lygus annexus* Uhl.**

Colorado (Uhler, 1). Foot-hills (Carpenter—see Uhler, 6). Pueblo, July ('Wilkin—see Uhler, 7). Several var. in Beaver Brook Gulch. Pale varieties common near Denver on *Euphorbia marginata* (Uhler, 5). Denver, July 28th; Idaho Springs, July 6th (Packard—see Uhler, 5). Custer County, midalpine (Cockerell, 10).

Gore Pass, July 29th; Montrose. June 24th (Gillette). La Veta, July 4th (E. A. Schwarz).

***Lygus diffusus* Uhl.**

Custer County, high alpine (Cockerell, 10).

***Lygus guttatipes* Uhler n. sp.**

"Form of *L. prasinus* Reut., but having a narrower head, the femora on the sides and the tibial spines at base marked with black dots. Ovale, convex, dull pale green, in some specimens obsoletely tinged with brownish around the base of membrane, obsoletely scabrous and effaced punctate, set with silky stiff pubescence which is mixed with dark bristles on the sides of the pronotum. Head polished, strongly convex; eyes large, brown; antennae green, stout, the basal joint thick. a little brownish, somewhat longer than from the eye to tip of tylus, second joint growing gradually thicker towards the tip, much shorter than the base of pronotum; rostrum greenish, broadly black at tip, reaching upon the middle coxae. Pronotum transverse, convex, remotely pubescent, unevenly and finely punctate, lateral margins acute, slightly curved, the pleural piece beneath them short, sunken, having a few punctures on the middle. Legs green, the femora stout, marked with round, black spots; tibial spines black, and with a black dot at the base of each, apex of tibiae and of tarsi also black. Scutellum moderately convex, a little wrinkled. Corium and clavus obsoletely, rugose-punctate; cuneus with remote dusky pubescence, the tip sometimes minutely fuscous; membrane moderately long, pale greenish, with paler veins. Abdomen brighter green, minutely pubescent, the genital pieces blackish.

Length to end of abdomen, male 3.25, female 3.5 mm; to tip of membrane 4 mm. Width of pronotum 1.5 mm. Four specimens have been sent to me by Prof. Snow for examination. They were collected at Manitou, in August, by Mr. E. S. Tucker."

***Lygus invitus* Say.**

Steamboat Springs, July 16th (Baker).

***Lygus plagiatus* Uhler n. sp.**

"Robust, dull fulvo-griseus, or griseo-estaceous with fuscous obscure spots, opaque, pubescent. Head olivaceo-testaceous, polished, vertex incised on the middle, indented next the occipital carina, eyes brown, placed perpendicular, front convex, a little obsolete punctate, indistinctly marked with about four brown uneven stripes, cheeks and tylus brown below; rostrum flavo-testaceous, piceous at tip, reaching to the middle coxae, antennae short and moderately stout, the basal joint dark brown, the second joint a little longer than the pronotum, darker and a little thicker towards the tip, the third

and fourth dusky, more slender than the second and together about equal to it in length. Pronotum broad, very moderately convex, bald, with coarse uneven punctures separated by wrinkled spaces in somewhat transverse lines, color dull, sometimes marked with a pair of black spots on the middle, a larger black spot in each humeral angle, and some faint, short stripes of brown on the disk, the lateral margins reflexed, whitish, a little curved, anterior angles well rounded and converging towards the elevated, ivory white collum, posterior margin pale, a little sinuated; pleural flap coarsely punctate, blackish on the middle; sternum and coxae pale greenish-testaceous. Legs testaceous, anterior coxae and sternum black, the usual two brown bands near tip of femora, the tibiae dark at tip and with black spines, tip of tarsi and nails black. Scutellum with an oblong pale spot each side near base, and the apex also pale. Corium finely pubescent, flecked with pale dots, more finely and closely punctate than the pronotum, costa dull testaceous, piceous at tip, inner angle with a pale spot on each wing-cover, tip of the broad cuneus with a dark brown spot; membrane brown at the outer end of the areole. Venter pubescent, greenish testaceous, with a dark stripe each side, and some pale dots on the connexivum.

Length to end of venter 4.5-5 mm. To tip of membrane 5.5-6 mm. Width of pronotum 2-2.5 mm. One specimen, a male, is in the collection from Colorado, others were sent to me from Indiana, Nebraska, Washington, Mackenzie River region, province of Quebec, and Maine. It is allied to *L. pratensis* Linn., but it differs in form, length of antennae, and markings."

Manitou, April 17th (Gillette).

Lygus pratensis Linn.

Colorado (Uhler, 1). Above timber line (Carpenter—see Uhler, 6, and Packard, 2). Common in cultivated districts (Uhler—see Packard, 2). Colorado, common (Packard, 2). During August, around Denver, near Golden, near Colorado Springs, and near Cannon City (Uhler, 5). Golden, July 3d; Blackhawk, July 2d (Packard—see Uhler, 5). West Cliff, Custer County, July 27th; also high-alpine (Cockerell, 10).

Fort Collins and adjoining foot-hills April 6th to September 30th, very common on alfalfa, sugar beets, and many wild and cultivated plants (Baker and Gillette). Steamboat Springs, July 26th; Trinidad, May 14th; Georgetown, July 19th; Manitou, September 29th (Gillette). Aspen (W. W. Willard). Manitou Park and Colorado Springs (Tucker). La Veta, July 4th (E. A. Schwarz).

Lygus sallei Sign.

Steamboat Springs, July 15th (Baker). Manitou, July (Snow).

Neoborops Uhler n. gen.

"Aspect of *Neoborus*, but with the eyes vertical, more prominent, the vertex and base of front narrower, the lateral margins of pronotum not decurved, and the anterior border of prosternum collum-like, with the inner borders of the pleural flaps carried far inward and leaving only a narrow space for the posternum."

Neoborops vigilax Uhler n. sp.

"Bright fulvous or fulvo-testaceous, oblong-oval, scabrous and obsoletely, minutely punctate on most of the upper surface. Head nearly vertical, narrow between the very prominent brown eyes, with a broad yellow line on the middle which is bounded each side

by a slightly punctate, impressed line; the front a little convex, widening beneath; tylus long, of nearly uniform width throughout, curving a little at tip; rostrum reaching to behind middle coxae, wax yellow; antennae of medium length, pale wax yellow, the basal joint moderately thick, longer than the head, the second joint black at tip, tapering slender towards the base, about as long as the clavus, the third joint abruptly more slender, about half the length of the second, also black at tip, the fourth about equally slender, very short, black from beyond the base to the tip. Pronotum transverse, bluntly subtriangular, moderately convex, but steeply sloping anteriorly, punctate, polished, more or less distinctly marked with about four red stripes composed of spots; the humeri lobately rounded, marked with a black dot, the lateral margins callous, not reflexed, the posterior margin pale and slenderly reflexed; the collum prominent, deeply cut, abruptly narrower than the front of the prothorax; pleural flaps deep, subtriangular, spotted with red, white below, slightly wrinkled, and with a few punctures. Legs long, yellowish-testaceous, shaded with red, and with a broad brown band on the knee of middle and posterior femora and tibiae in common, tips of tarsi piceous. Scutellum yellow, marked with brown or rufous, or with a round spot on middle and a triangular one at base. Hemelytra testaceous, translucent, obsoletely punctate and wrinkled, marked with irregular, remote spots of brown or red, at base and apex of corium and with vestiges between these points, veins and sutures whitish, cuneus and membrane also with clouded brownish spots. Abdomen minutely pubescent, sprinkled with red, somewhat in stripes, leaving a linear space of yellow between, the outer submargin sometimes marked with brown spots in the suture, apical border of the last ventral ring yellow, the genital segment also yellow.

Length to end of abdomen 4 mm. To tip of membrane 5.5 mm. Width of pronotum 2 mm. I have examined two specimens from Colorado, and six of both sexes from Arizona. It seems to be common in Arizona and most of the specimens thus far seen have not been maturely colored."

Steamboat Springs, July 16th on willow (Baker).

Neoborus rubeculus Uhler n. sp.

"Oblong-oval, minutely pubescent, mostly yellowish or greenish-testaceous, marked with chestnut brown. Head normal, bald, polished grooved, between the eyes, the face nearly vertical, testaceous yellow, with a broad, curved, brown line on either side; tylus long, narrow, with a brown line on the middle; the cheeks yellow, smooth, the suture and a mark next the antennae rufous; rostrum rufo-testaceous, slender, reaching behind the middle coxae, piceous at base and tip; antennae stout, the basal joint much longer than the head, dark brown, the second joint about as long as the pronotum and scutellum united, a little thickening towards the tip, fulvous, dark at base and tip, the third and fourth much more slender, filiform, dark brown, conspicuously hairy, the third about one-half as long as the second, the fourth still shorter. Pronotum longer than normal, a little convex, strongly sinuated on the sides, the anterior width reaching to the middle of the eyes, with a sharply elevated ivory-white collum which corresponds to the space between the eyes; the surface transversely wrinkled, coarsely so and a little punctate on the posterior lobe, the region of the callosities dark, tumidly prominent, with the exterior submargin widely flattened, yellow, and the outer border strongly reflexed, punctate; the middle line yellow, each side, posteriorly, brown on a rufous ground, the posterior edge yellow; pleural flaps deep, triangular, brown and punctate above, yellow below; the sternum and pleural pieces clear yellow. The coxae and legs yellowish or greenish white, a little reddish on the posterior femora, the tarsi black at tip. Scutellum brown, feebly convex, pubescent, wrinkled, with a few remote punctures, the middle line and base yellow. Clavus coarsely wrinkled, dusky, paler exteriorly, pubescent, corium, closely wrinkled and punctate, testaceous for two-thirds of its length, red at the costal tip and angularly dark brown on the apical third, the inner border with a yellow line next base of cuneus, the cuneus yellow, margined exteriorly with red; the membrane dusky, paler at base exteriorly, the veins yellow, with the areole smoke brown. Exterior margin of venter with a line of brown spots which continue along the pleura to the stripe on the pleural flap; middle of venter yellowish-testaceous, the genital segment more or less marked with red and brown.

Length to end of abdomen 4.5 mm. To tip of membrane 6 mm. Width of pronotum 2 mm. This insect is quite variable in colors. The red is sometimes replaced by olive-

green or fuscous, and there is sometimes a broad black stripe along the whole submargin beneath. It inhabits Colorado, and is common in Northern Illinois, in June; it is also found in Michigan."

Steamboat Springs, July 16th on willow (Baker).

Poeciloseytus basalis Reut.

Sweeping weeds at Colorado Springs, near Fountain Creek, August 16th (Uhler, 5). Colorado (Uhler, 8).

Manitou Park (Snow). Colorado Springs (Tucker.)

Poeciloseytus diffusus Uhl.

North Park, July 20th; Estes Park, July 10th (Gillette). Steamboat Springs, July 12th to 26th, on Solidago and other low herbs (Baker and Gillette).

Poeciloseytus intermedius Uhl.

Steamboat Springs, July 13th to 26th (Baker and Gillette). Estes Park, July 12th (Gillette).

Poeciloseytus unifasciatus Fabr.

Smith's Park, Custer County, midalpine, August 6th (Cockerell, 10).

Steamboat Springs, July 12th (Baker) Veta Pass, July 1st (E. A. Schwarz).

Poecilocapsus goniphorus Say.

Fort Collins, June 23d to August 25th (Gillette).

Systratiotus americanus Reut.

Colorado (Gillette—see Osborn, 1).

Steamboat Springs. July 15th to 26th (Baker and Gillette).

Systratiotus venaticus Uhl.

Colorado (Uhler, 1 and 6).

Garland, June 19th (E. A. Schwarz).

Camptobrochis grandis Uhl.

Colorado (Snow—see VanDuzee, 5)

Camptobrochis nebulosus Uhl.

Colorado (Uhler, 6). Colorado (Gillette—see Osborn, 1).

Fort Collins, June 9th on alfalfa, May 3d and September 26th on box-elder; Big Narrows of Poudre River, Larimer County, July 9th on Bigelovia (Baker). Foot-hills five miles west of Fort Collins, April 10th to August 1st (Baker

and Gillette). Manitou, September 29th on Salix; Glenwood Springs, August 24th (Gillette).

***Camptobrochis robustus* Uhler n. sp.**

"Short and thick, dusky testaceous, strongly marked with fuscous and black, coarsely, and in part densely punctate. Head almost vertical, vertex short, transversely grooved, bordered with a broken fulvous line in front, the occipital carina high, fitting into the collum, ivory yellow; front bordered with pale dull yellow, polished, remotely minutely obsolete-punctate and wrinkled, closely freckled with black, the inner border of the eyes also pale dull yellow, the lower part of tylus and the bucculae yellow; rostrum pale at base, piceous at tip, reaching to the middle coxae; antennae long and slender, as long as the corium and cuneus united, mostly pale fuscous, the basal joint dull pale fulvous, obscured with fuscous, the second very long, a little stouter than the third and fourth, slightly thicker towards the tip, the third and fourth together a little longer than the second, the fourth much the shortest. Pronotum convex, coarsely, deeply, irregularly punctate in somewhat transverse wavy lines, with about four obscure stripes which widen posteriorly, the lateral margins a little curved, the humeral angles broadly rounded, the posterior margin feebly curved and sinuated, and the anterior margin contracted and bordered with a somewhat pale cellum, the callosities tumid, black, polished. Scutellum dark brown, closely and roughly wrinkled and unevenly punctate, convex, olive-fulvous at tip. Legs pale olive-brownish, the femora piceous, rough at a few points, having one or more yellowish dots near the tip, the tibiae spotted with dark brown, closely pale pubescent, with the spines, tip of tarsi and nails dark piceous. Clavus coarsely punctate and wrinkled, dark olivaceo-fuscous, corium a little paler, smoother, more finely punctate, almost bald, with the surface near the costa translucent, punctate with brown, the costal border dark brown, ending in a darker spot before the cuneus, the embolium broad and piceous black, the cuneus dark brown, bordered all around with pale testaceous; the membrane whitish, a little stained with brown at base and tip, and the veins mostly brown. Abdomen olivaceo-testaceous, finely pubescent, dusky at tip, with a line of black marks on the outer submargin, and a series of yellow dots on the connexivum.

Length to end of abdomen 5 mm. To tip of membrane 6 mm. Width of pronotum 2.5 mm. Three or four specimens have been brought to my notice. One specimen from Colorado is chiefly dark fulvous, others were mostly chestnut brown or nearly black. The pale stripe with black arrest at the end of costal area will go far towards quickly distinguishing this species."

North Park, July 20th (Gillette), and July 10th on *Artemisia tridentata* (Baker). Leadville, August 23d (Gillette). Cameron Pass, at 12,000 feet, on Salix (Baker).

***Orthops scutellatus* Uhler.**

From bushes in Clear Creek Canon, August 7th. Not rare (Uhler, 5). Colorado (Uhler, 8).

Steamboat Springs, July 15th to 26th (Baker and Gillette). North Park, July 20th; Dolores, June 18th (Gillette).

***Thyrrillus brachycerus* Uhl.**

Colorado (Uhler, 6). Near West Cliff, Custer County, end of July (Cockrell, 10).

Estes Park, July 10th (Gillette).

***Thyrrillus pacificus* Uhl.**

Weld County (Uhler, 1).

***Pamerocoris anthocoroides* Uhl.**

Near Denver (B. H. Smith—see Uhler, 5).

***Monalocoris filicis* L.**

Swept from a small fern which grows in damp places among the rocks high up in the mountains near Beaver Brook, adjoining Clear Creek Canon, August 6th (Uhler, 5).

***Eccritotarsus scabrosus* Uhler n. sp.**

"Compact, thick and short, somewhat resembling *E. vestitus* Dist., a little pubescent, the general color piceous-brown, with red head and legs, and nearly all of the upper surface roughly, and coarsely punctate. Head tumidly convex, with a callous ridge against the inner border of the eyes, and this continued along the border of the occiput; surface somewhat coarsely punctate, the front indented in the middle and grooved each side, a little obscured with brown; tylus a little more prominent than the front, placed almost vertical; the rostrum rufous, a little tinged with piceous; antennae blackish, short, stout, the basal joint shorter than the head, contracted at base, the second longest, growing thicker towards the tip, shorter than the pronotum, the third much more slender, about one-half as long as the second, the fourth much shorter. Pronotum strongly convex, a little longer than wide, steeply sloping towards the head; the anterior lobe abruptly contracted, separated by a transverse and curved series of indented points; surface tinged with rufous, coarsely, roughly punctate; lateral margins sinuated and steeply curved down; the posterior margin a little curved, feebly sinuated, bent down; pleural flaps very coarsely punctate. Legs stout, rufous, covered with pale pubescence. Scutellum small, tumid at tip, punctate basally. Hemelytra broad, thick, coarsely and roughly punctate, the cuneus long, depressed, curved on both sides, the membrane fuliginous, with a pale arc on the middle, the areoles rough and of thick texture. Sternum and venter somewhat rufous, the latter obsoletely punctate, highly polished, minutely pubescent.

Length to end of abdomen 2.5 mm. Width of pronotum 1.25 mm. Described from one specimen, a male, from Colorado "

Estes Park, July 10th (Gillette).

***Pycnoderes insignis* Reut.**

Steamboat Springs, July 26th (Gillette).

***Ilnacora chloris* Uhl.**

On the flowers of a slender pale composite, growing in Manitou Park, August 14th. Also near Colorado Springs, in the low grounds near Fountain Creek (Uhler, 5). West Cliff, Custer County, sweeping herbage, July 25th (Cockerell, 10).

Estes Park, July 10th; Dolores, June 18th; Steamboat Springs, July 26th (Gillette).

***Ilnacora divisa* Reut.**

Steamboat Springs, July 14th and 26th (Gillette and Baker).

***Ilnacora stallii* Reut.**

Steamboat Springs, July 16th (Baker).

Inacora viridis Uhler n. sp.

"Bright grass green, narrow, not highly polished. Head flat as usual, set with black stiff pubescence, with the vertex more or less broadly impressed before the sharp occipital carina; front prominently convex, wider than long, grooved each side near the eyes; tylus short, inferior, placed much below the lower end of the eyes; rostrum dull green, broad and compressed at base with the basal joint protracted upon the anterior coxae, the tip black, reaching to the middle coxae; antennae dusky greenish, long, growing slender towards the tip, the basal joint thick, black at base and apex, much longer than the head, the second joint very long, black at base and tip, about equal to the corium in length, the third darker, more slender, less than half as long as the second, the fourth about equally slender, also dark, much shorter than the third. Pronotum trapeziform, almost flat, very gently sloping, set with erect blackish pubescence anteriorly and on the sides; the anterior margin reaching to about the middle of the eyes, with the collum raised in the middle; the callosities large, transverse, separated by a deep excavation, the anterior angles broadly rounded; the lateral margins oblique, reflexed and sinuated posteriorly; the humeral angles a little protracted, forming lobes a little recurved with the tip cut obliquely, surface wrinkled, hardly punctate. Scutellum feebly convex, acute at tip, sometimes a little whitish at base. Legs long, the femora green, somewhat spotted with white; the tibiae dull yellowish, armed with black spines; tip of tarsi piceous. Hemelytra long and ample with the costal border very slightly curved; surface of clavus and corium flat, obsoletely scabrous; membrane smoke brown. Coxae and base of venter whitish.

Length to end of abdomen 4.5 mm. To tip of membrane 5.5 mm. Width of pronotum 1.33 mm. I have examined four specimens of both sexes, from Colorado. They approach *I. (Sthenarops) malina* Uhler, but differ in the absence of the indented black dots on the pronotum, and of the black markings of face, in less convex front, and in the color of the antennae and scutellum. The form is somewhat variable, as is also the length of the hemelytra."

Steamboat Springs, July 14th (Baker).

Sthenarus rubidus Uhler n. sp.

"Ovate, thick set, dark piceous, polished, covered above with silky yellow, caducous scales and fine pubescence. Head broad, feebly convex, a little fulvo-piceous around the borders and at base and tip, vertex with a feebly impressed line on the middle, occipital posterior ridge distinct; face polished, covered with yellowish prostrate scales; cheeks and inner underside of eyes pale yellowish; rostrum piceous, paler rufous at base, reaching to the posterior coxae; antennae, basal joint piceous, thick, scarcely as long as the width of the eye, second joint fulvous or piceous, thick, about as long as the pronotum, the third and fourth abruptly more slender, pale piceous, together scarcely longer than the second. Pronotum convex on the middle and strongly curving down anteriorly, dark piceous, or black, polished, covered with yellow scales and fine pubescence, nearly twice as wide as long, with the callous humeri subacute, the posterior margin sinuated, with the lateral margins curving down; the surface minutely wrinkled, and the pleural flaps triangular, sunken, densely covered with scales and the margins raised in relief. Anterior coxae and a spot at tip of mesopleural segment whitish; femora pale rufous, piceous on the middle, tibiae paler, the spines black and placed on black dots, tip of the tibiae and of the tarsi black. Scutellum unevenly wrinkled, piceous, rufous towards the tip, invested with the yellow scales. Hemelytra dark brown, fulvous at base, on the suture of clavus and on the embolium, apex of the costal border and the cuneus red; surface roughly, shallow punctate, covered with yellow scales and finely pubescent; membrane fuliginous, white along the border and around the looped vein. Venter fulvous brown, minutely pubescent and spread with bronze-yellow scales.

Length to tip of abdomen 2.75-3 mm. To tip of membrane 3-3.25 mm. Width of pronotum 1.25 mm. One specimen from Colorado Springs, taken in August by Mr. E. S. Tucker, is darker and less rufous than the others that I have examined; it has also more white at the base of membrane. Other specimens have been collected in Illinois by Mr. Bolter and Mr. Stromberg; at Lancaster, N. Y. in August by Mr. VanDuzee; in Cuba by Dr. Gundlach, in San Domingo by myself, as also in Texas and Florida. A form appearing to be a variety of this species is also found in Mexico."

Tinicephalus simplex Uhl.

Colorado (Uhler 1). Foot-hills, July (Carpenter—see Uhler. 6). Mountains west of Denver, July and August (Uhler, 5).

Garland, June 30th (E. A. Schwarz).

Pilophorus gracilis Uhler n. sp.

"Narrower than usual, dark piceous, or nearly black, the pronotum longer than wide, and the corium distended and almost hyaline at the tip. Head depressed subconical, the vertex transversely depressed, with a central carina running back to the thick carina bounding the occiput behind; face convex, piceous, polished, becoming fulvous below; tylus narrow, pale rufo-fulvous like the cheeks; rostrum dark honey-yellow, darker at tip, reaching upon the middle coxae; antennae moderately long and slender, the basal joint short, dull fulvous, the second a little longer than the pronotum, of the same color, but darker on the gradually thickening tip, the apical joints more slender, but not abruptly decreasing, the two united scarcely longer than the second. Pronotum highly polished, semi-cylindric, with the sides a little sinuated, almost of equal width throughout, dark piceous, minutely wrinkled on the disk and behind, with the humeral angles acute and the anterior ones rounded off. Scutellum depressed behind the middle, black, and minutely scabrous. Hemelytra long, dark brown, sometimes almost black, minutely pubescent, velvety, not banded, distinctly sinuated on the sides, the membrane a little dusky, with a dark brown spot near the base, the inner border of apex of corium with a curved callous line. Legs pale dull piceous, paler on the tibiae. Abdomen black, highly polished.

Length to end of abdomen 3.5 mm. Width of pronotum 1.25 mm. One specimen, a female, lacking the tarsal joints and two apical joints of the antennae, was sent to me from Colorado. It lives on *Pinus inops* in summer, June to September, in Maryland, Virginia, New Jersey; and is also found in Massachusetts. Maturely colored specimens do not have the reddish clypeus and cheeks observed in the specimens from Colorado."

Colorado Springs, August 3d (Gillette).

Globiceps angustata Uhler n. sp.

"Black, highly polished, delicate, slender. Head transverse above, convex, having a few remote punctures, the eyes large and prominent, much elevated above the line of the head, the face nearly vertical, with the front a little convexly prominent, the tylus moderately narrow; rostrum very stout at base, with the basal joint long, stout and blackish-piceous, the middle testaceous and the tip piceous; antennae long, slender, dull black, the basal joint longer than the head, testaceous at base, the second barely thicker at tip, nearly as long as the costa and cuneus united, the third a little more slender, about half as long as the second, the fourth broken off. Pronotum sub-campanulate, highly polished, about twice as long as the eye; the collum contracted, narrow; the callosities very large, tumid, with a groove between, which is partly occupied by a blunt carina that runs back to posterior lobe; posterior lobe wide, convex, transversely wrinkled, with the anterior slope high, the sides steep, oblique, and gently sinuated, the humeri a little turned up and acute. Scutellum high, almost flat above, with steeply sloping sides, acute at tip. Legs pale fulvous, whitish at base, the ends of tarsi piceous. Clavus dusky, corium whitish-yellow at base, dusky on the remaining two-thirds; the cuneus pale yellowish, dusky at tip; membrane long and wide, pale fuliginous, white at the extreme base, with the looped vein dark brown. Abdomen black, highly polished.

Length to end of abdomen 2.75 mm. To tip of membrane 4 mm. Width of pronotum .87 mm. Described from a single male specimen from Colorado. It is closely related to, if not the same species as one which I found in the Province of Quebec. The female is earnestly desired for study, to complete the description of this species. This insect might readily be mistaken for one of the small Chalcididae which have black bodies and yellow legs."

Steamboat Springs, July 12th (Baker).

Cyrtorrhinus marginatus Uhler n. sp.

"Long and narrow, black, moderately flat above, pale pubescent, bordered with green on the abdomen and corium. Head black, highly polished, much wider than the front of pronotum, indented and grooved in front of the carina of vertex, the carina sharp and high; face almost vertical, the tylus prominent; eyes large, brown, prominent, placed a little obliquely, the border of their inner side pale yellowish; tylus, bucculae, and rostrum greenish-testaceous, the latter reaching upon the middle coxae, blackish at tip; antennae moderately stout, as long as the head, pronotum and corium united, the basal joint much longer than the head and stouter than the second, the second joint as long as the clavus, the third more slender and about half as long as the second, the fourth still more slender and much shorter. Pronotum shining black, sometimes with a yellow line, the sides gradually contracting, rather strongly sinuated, the callosities large and prominent, the surface transversely wrinkled, convex posteriorly, longitudinally impressed near the humeri, the margin sometimes broadly yellow. Legs pale greenish, the tibiae dark at tip, the anterior pair with stout spines, tarsi piceous at tip. Scutellum black, moderately convex, transversely wrinkled, acute and pale at tip. Clavus dull black minutely pubescent, corium dull black as far as next to the cuneus, also pubescent, broadly margined with greenish yellow, the cuneus mostly yellowish, the surface of the hemelytra granulate throughout; membrane long, smoke brown, with the veins pale yellow at tip. Middle line of the sternum and disk of venter pale greenish-yellow, finely pubescent.

Length to tip of abdomen 4 mm. Width of pronotum 1.25 mm. Only males of this insect have been brought to my notice. Should the female prove to be of the inflated type, with the spherical head, this insect will have to be transferred to the genus *Globiceps* Flebr. This species is common in the province of Quebec, and it occurs as far north as Great Slave Lake, in British America."

Steamboat Springs, July 16th, on willow (Baker).

Diaphnidia Uhler n. gen.

"Near *Actorrhinus* Fab., elongate subelliptical, tender, opaque. Head gently sloping and curved anteriorly, the face almost vertical, a little longer than the width between the eyes; tylus projecting beyond the line of the face, curving beneath, the upper bounding line placed nearly on the level of the lower end of eyes; eyes prominent, sub-reniform, nearly vertical, with somewhat swollen neck behind their line; occiput with a carina sometimes arched in the middle, and with the surface flattened in front of it, cheeks diagonal, acutely narrowed at tip; gula almost horizontal, swollen at base; bucculae narrow and short, followed behind by a waved surface, basal joint of rostrum much shorter than the under side of head; antennae longer than the head, pronotum and corium united. Legs long. Pronotum trapeziform, with the lateral margins moderately oblique, the anterior margin forming a narrow, flat, sinuated collum; the transverse impressed line behind the callosities shallow. Hemelytra long and wide, contractingly curving towards the base, semi-diaphanous, with a sharply reflexed costal margin; cuneus large and long, with the outer border reflexed. Abdomen very narrow."

Diaphnidia debilis Uhler n. sp.

"Delicate green, or greenish-white, indistinctly and very minutely pubescent around the sides of head, pronotum and beneath. Head a little grooved on the middle line, and a little callous each side between the eyes; antennae yellowish, the basal joint much longer than the head, thicker than the second joint and contracted at base, the second of uniform thickness throughout, as long as the outer margin of the corium; rostrum yellowish, black at tip, reaching between the anterior coxae. Pronotum wider than long, almost flat on the disk, gently sloping, with the surface a little wrinkled, the lateral margins a little sinuated in front of the prominent humeri; the anterior submargin occupied by the transverse ridge of the almost contiguous callosities. Legs pale green, more yellow upon the tibiae, upon which the spines are dark, and the base and apex of the tarsi piceous. Clavus, corium and cuneus minutely, remotely and obsoletely scabrous. Abdomen silvery greenish.

Length to end of abdomen 3.33 mm. To tip of membrane 5.5 mm. Width of pronotum 1.5 mm. Two males from Colorado are the only specimens I have seen."

Steamboat Springs, July 14th (Baker). Later we also

received specimens (which were afterwards determined by Uhler) from Snow, taken by Tucker at Colorado Springs in July.

Diaphnidia pellucida Uhler n. sp.

"Elongate, very pale green, delicate, with minute whitish pubescence on the pronotum and hemelytra. Head short and small, with the eyes nearly globose, very prominent, very pale brownish; middle of vertex incised, the incision running back to an impressed line which extends across to the base of the eyes; base of head thick, curvedly contracting to base of occiput, surface next to inner line of eyes incised; front vertical, forming a rounded lobe as far as to below the middle of the eyes; tylus short, tapering and curving beneath, a very little more prominent than the front; rostrum pale green, slender, reaching behind the posterior coxae. Antennae long and slender, pale green or yellowish, the basal joint longer than the head, sometimes a little dusky at tip, the second joint cylindrical throughout, a little longer than the pronotum and scutellum united, third joint a little more slender and about two-thirds the length of the second, the fourth still more slender, very short, sometimes a little dusky. Pronotum nearly trapeziform, a little wider than long, gently sloping anteriorly; the lateral margins sinuated directly before the prominent humeri; surface a little uneven, the callosities distinct and with an indented space between them, the impressed line behind them deep and clearly defined, arrested by the thick carinate lateral edge which stops against the end of the callosities; the anterior angles rounded off, the anterior edge a little sinuated, callous, extending to about the middle of the eyes; posterior margin a little yellowish, hardly sinuated. Clavus and corium minutely scabrous, almost transparent, very ample as compared with the abdomen; cuneus long, bordered exteriorly with a thick green line; membrane very thin, whitish green, the vein deeper green. Legs greenish, the tibiae sometimes yellowish, dusky at tip; apex of the tarsi and the nails piceous.

"Length to end of abdomen 2.25-2.5 mm. To tip of membrane 3.5 mm. Width of pronotum 1.1-1.25 mm. Numerous specimens have been brought to my notice. The first of these I found near Montmorency, in the province of Quebec, others were obtained near Washington, D. C., by my friend Otto Heidemann, and a male specimen has been sent from Colorado. The specimen from Colorado has the callosities near together on their inner ends."

Fort Collins, September 26th on box-elder (Gillette).

Dacota hesperia Uhl.

Colorado (Uhler 1 and 6).

Diommatus angulatus Uhler n. sp.

"Long, almost parallel-sided, nearly flat above, black or dark smoke-brown, minutely pubescent, rather broader than *D. congrex* Uhl., with stouter and longer antennae. Head moderately convex, highly polished between and before the eyes, piceous anteriorly and upon the tylus, the latter becoming paler below; the occipital carina pale piceous, bounded in front by an arcuated, punctate impression; eyes large, prominent, dark brown; rostrum wax-yellow, piceous at tip, reaching to behind the middle coxae; antennae long and stout, longer and thicker in the male, black or dark brown, the basal joint a little longer than the head in the female, much longer in the male, the second joint a little thinner than the first, about as long as the corium, the third still more slender, about two-thirds the length of the second, the fourth thinner and much shorter. Pronotum a little wider than long, very slightly convex, with the lateral margin oblique; the surface finely pubescent, very gently sloping, the anterior lobe distinctly defined, with the callosities large, prominent, black; the collum indistinct; posterior lobe large, obsolete wrinkled and with a few faint punctures, the posterior margin feebly sinuated, with the humeral angles a little prominent and broadly rounded; the pleural flaps moderately short, grooved vertically. Scutellum small, black, convex, acute. Coxae and legs yellowish, a little dusky towards the knees, the tarsi more or less piceous. The clavus pale yellow; corium with a large, triangular, black spot on each wing-cover which covers most of the surface to next the base of cuneus, the cuneus yellowish, but dusky at tip. Abdomen black, polished, the base, disk, and a part of the apex of venter yellowish.

Length to end of abdomen 3-3.25 mm. To tip of wing-covers 4.5 mm. Width of pronotum 1.25 mm."

Fort Collins, June 24th; Montrose, June 24th (Gillette).

Diommatus congrex Uhl.

Steamboat Springs, July 16th, on willow (Baker).

Tuponia subnitida Uhler n. sp.

"Whitish-green, long oval, minutely pubescent, with the costal margin of the hemelytra very feebly curved. Head broad and very convex, pressed back upon the thorax, smooth, not punctate; front nearly vertical, highly polished; the tylus short, compressed, but little prominent, curved beneath; the rostrum pale fulvous, reaching over the middle coxae, with the tip piceous; antennae long and slender, the basal joint short, blackish, second joint green, dark at base and tip, not much thicker than the following joint, about as long as from the front of the eye to the base of pronotum, the third a little shorter and slightly more slender, the fourth scarcely more than one-third the length of the third, equally slender. Pronotum transverse, uneven, steep, very slightly convex, smooth, impunctate; with the callosities forming an arc, preceded by a semicircular area touching the front margin; the lateral margins very oblique, sharp-edged and deflexed; the posterior margin sinuated at the base of the scutellum; the humeral angles broad and rounded. Scutellum very moderately convex, the base uncovered, the disk a little wrinkled and the tip acute. Legs greenish-white, the knees, tibial spines, dots at intervals, and the tips of tarsi black. Corium and clavus greenish-white, very minutely scabrous, and remotely effaced-punctate; membrane a little dusky behind the middle to the tip. Abdomen pale green, minutely white pubescent.

Length to end of abdomen 2.5 mm. To tip of membrane 3 mm. Width of pronotum 1.12 mm. Described from two specimens from Colorado."

Steamboat Springs, July 12th (Baker).

Stiphrosoma atrata Uhl.

Fort Collins, July 14th on alfalfa; Steamboat Springs, July 12th on *Carex* and *Artemisia tridentata* (Baker).

Stiphrosoma croceipes Uhl.

Big Narrows of Poudre river, Larimer County, July 9th on *Bigelovia* (Baker).

Stiphrosoma robusta Uhler n. sp.

"Black, polished, shorter, thicker, and more compact than *S. stygica* Say, with a more convex front. Head thick, convex from the vertex to end of upper cheek, the vertex with a low carina behind against the pronotum, and marked with a shallow impression each side, front highly polished impunctate, tylus narrowing a little towards the tip, deep seated in the cheeks; rostrum stout, a little piceous, reaching to the middle coxae; antennae slender, black, about as long as the head, pronotum and scutellum united, the second joint nearly the same length as the clavus, a little thicker towards the tip, the third more slender, nearly two-thirds the length of the second, the fourth about one-half the length of the second. Pronotum pubescent on the sides, with the lateral margins oblique and more bent down than in *S. stygica*, the surface scabrous, obsoletely punctate and transversely wrinkled, the callosities large, convex placed diagonally, and separated by a wide depression, the disk convex posteriorly, with the humeri acutely prominent. Pleura a little wrinkled and with a few punctures. Scutellum short, scabrous, a little punctate. Legs with stiff spines on both femora and tibiae. Clavus coarsely, closely scabrous, and obsoletely punctate, the corium a little less coarsely scabrous, and punctate, but with these features almost obliterated behind the middle, the sides and margins pubescent; membrane moderately short, brown. Abdomen broad ovate, highly polished, scarcely punctate.

Length to end of abdomen 4 mm. Width of pronotum 1.75 mm. Described from two specimens, both females, sent to me from Colorado. It inhabits also Texas and New Mexico."

Steamboat Springs, July 26th (Gillette).

***Stiphrosoma stygica* Say.**

West Cliff, Custer County, July 2:th; Ula, July 30th (Cockerell, 10).

Steamboat Springs, July 26th (Gillette). Garland, June 30th (E. A. Schwarz).

***Halticus bractatus* Say.**

Manitou, July 24th; Colorado Springs, August 3d (Gillette).

***Labopidea chloriza* Uhl.**

Howe's Gulch, June 14th; North Park, July 20th (Gillette). Steamboat Springs, July 13th and 26th (Baker and Gillette). Aspen (W. W. Willard).

***Labops hesperius* Uhl.**

Colorado (Uhler, 1). Foot-hills and mountains, July and September (Carpenter—see Uhler, 6). From bushes growing among rocks on mountainside near Gray's Peak, August 6th (Uhler, 5).

Estes Park, July 12th (Gillette). Colorado, June, on pine (Riley). Veta Pass, July 1st (E. A. Schwarz).

***Dicyphus californicus* Stal.**

North Park, July 20th; Montrose, June 24th; Colorado Springs, August 3d; Manitou, September 29th on oak and Salix (Gillette). Steamboat Springs, July 16th and 26th (Baker and Gillette). Fort Collins. May 20th (Baker).

***Dicyphus californicus* Stal. var. *agilis* Uhl.**

Beaver Brook Gulch, August 7th (Uhler, 5).

Steamboat Springs, July 16th (Baker).

***Dicyphus vestitus* Uhler n. sp.**

"Resembling *D. famelicus* Uhler, but much less elongated, smaller, having nearly linear blackish antennae, with the apex of the second joint not thickened, and the colors darker, with a black head and mostly black scutellum. Head subglobose, a little fringed with pubescence, black, polished, with a pale spot on the vertex; rostrum dull testaceous, darker at tip, reaching to the middle coxae; antennae moderately stout, blackish, with the first joint pale towards the base, the second joint about as long as the pronotum, the third a little shorter, and not much thinner than the second, the fourth short, acutely tapering. Pronotum a little longer than wide, subcylindric anteriorly, with the sides sinuated and reflexed; the collum narrow and white; the surface highly polished, dark brown, with the middle broadly orange, which is replaced by dull white on the posterior segment; the humeri are sometimes also pale orange; callosities distinct, prominent, followed exteriorly by a swelling of the sides; posterior lobe wide, broadly sinuated behind. Base of scutellum wide, uncovered, black, the scutellum proper black with a yellow spot on each side at base. Coxae white, legs dull yellowish, with the tip of tarsi piceous. Clavus pale, with the suture dusky, corium long and narrow, obscure whitish, translucent, with a small brownish spot near the base, a dusky streak on the middle, a line of same color on the suture, and a double lobed spot of brown on the tip; cuneus white, bordered more or less with brown at tip; membrane

pale dusky, usually white in the areole and next the tip of the cuneus, also a little whitish next the posterior border. Posterior part of propleura, and upper part of mesopleura whitish. Abdomen fulvo-piceous, testaceous at tip.

Length to end of abdomen 3.3-25 mm. To tip of membrane 3.75-4 mm. Width of base of pronotum .75-1 mm. Described from two specimens, including both sexes, sent to me from Colorado. Mr. Coquillett also sent specimens from Los Angeles, and I have examined other specimens from Dakota and northern New York. It is variable as to the amount of yellow on the antennae, head and pronotum, and as to the brown clouding of the hemelytra."

Fort Collins, May 20th to June 4th (Baker and Gillette).
Montrose, June 24th (Gillette).

***Orectoderus amoenus* Uhl.**

Near Denver (B. H. Smith—see Uhler, 5). Colo. (Gillette—see Osborn, 1).

***Orectoderus longicollis* Uhler n. sp.**

"Piceous, opaque, elongate subfusiform, with the head broad subconical, as seen from above, the base abruptly contracted into a short neck, the prothorax campanulate, and the wing-covers widening behind the middle. Head very moderately convex above, much longer than wide, polished, piceous, rather minutely scabrous than punctate, the vertex moderately arched and obsoletely carinate in front, the neck shorter than the corresponding contraction of the pronotum, front broadly depressed each side near the middle of the eyes, upper cheeks placed superiorly; tylus narrow, moderately short, not separated above by a distinct suture, tip tapering; rostrum set much below the depressed gula, blackish-piceous, thick at the very base, slender from thence to tip; reaching behind the anterior coxae; eyes low, close-set against the side of the head; antennae of medium length, the basal joint rufo-piceous, shorter than the head, the second rufo-piceous, with the apical third moderately clavate, and dull blackish, as long as the middle line of the corium, third abruptly more slender, almost setaceous, testaceous, scarcely more than one-half the length of the second, the fourth much shorter, dusky, equally slender. Pronotum dull black, minutely granulated and wrinkled, the two lobes of nearly equal length, the callosities large, tumid, separated by a very shallow line, but connected with the swelling of the sides, the line separating the lobes is placed behind this swelling; posterior lobe wide at base, having sinuated sides, and with prominently tubercular humeri; side flaps steep, rounded, coarsely wrinkled. Legs dull fulvo-piceous, with the spines, tip of tibiae and apical portion of tarsi black. Scutellum smooth, dull black, with sinuated sides, and a little tumid at apex. Clavus ivory white, coarsely scabrous, with a piceous band at base which also runs diagonally upon the base of corium; corium also ivory white, less coarsely scabrous, crossed behind the middle with an obliquely bounded piceous spot which covers the entire end; cuneus piceous, with an ivory yellow acute diagonal spot on the basal portion; membrane dark brown at base, gradually paler to almost white posteriorly. Abdomen black, highly polished.

Length to end of abdomen 5 mm. Width of base of pronotum 1.5 mm. Only a single specimen, a male, has thus far been brought to my notice. The female is a desideratum requiring the attention of collectors."

Steamboat Springs, July 14th (Baker).

***Orectoderus obliquus* Uhl.**

Hills, June to September (Carpenter—see Uhler, 6). Estes Park (Snow—see VanDuzee, 5).

North Park, July 20th; Steamboat Springs, July 26th; Montrose, June 24th (Gillette). In mountains south-west of North Park, July 10th, on *Artemisia tridentata* (Baker).

Coquillettia insignis Uhl.

Steamboat Springs, July 13th and 26th (Baker and Gillette). Fort Collins, August 11th (Baker). North Park, July 20th; Dolores, June 16th; Howe's Gulch, June 14th (Gillette).

Orthotylus viridicatus Uhler n. sp.

"Oblong-ovate, grass green, opaque, minutely pubescent, pale green beneath. Head slightly convex, impunctate, broad between the eyes, the vertex transversely sulcate before the carina; the eyes brownish, moderately prominent, well rounded, placed nearly vertical; front convex, contracting below, the tylus narrow, prominent, separated above by a deep groove; rostrum stout, reaching to the middle coxae, pale green at base, black on apical third; antennae stout, the basal joint pale green, the second dusky, about equal to the clavus in length, the third and fourth joints dusky, more slender than the second, filiform, and together not as long as that joint. Pronotum wider than long, almost flat, with the lateral margins oblique, and the anterior angles a very little rounded, the callosities large and tumid, separated by a deep depression, the collum narrow, and confined to a narrow space of the anterior margin, the transverse impressed line behind the callosities slender, but distinct on the outer margin, behind it the margin of the posterior lobe is distinctly reflexed, the margin before this callous; posterior margin nearly straight, with the humeral angles oblique and a little curved; the pleural flap is deep and nearly triangular. Scutellum little longer than wide, feebly convex, faintly carinate at tip. Clavus faintly scabrous, with a few obsolete punctures next the coarse vein, corium minutely and obsoletely scabrous, the cuneus pale yellowish, smooth; membrane black, with the veins pale yellowish. Abdomen short, minutely pubescent.

Length to end of abdomen 3 mm. To tip of membrane 4 mm. Width of pronotum 1.25 mm. A few specimens of both sexes have been sent to me for examination. They have been mostly shriveled from immaturity at time of collecting. Three specimens are in the collection from Colorado. Others were obtained in the vicinity of Denver, and in New Mexico. The pale color of head, thorax, sides of corium and cuneus, is owing to fading of color after death of the insect."

North Park, July 20th; Dolores, June 18th; Trinidad, May 14th; Estes Park, July 10th (Gillette). Steamboat Springs, July 16th and 26th (Baker and Gillette).

Oncotylus guttulatus Uhl.

Colorado Springs, August 3d (Gillette).

Oncotylus longipennis Uhler n. sp.

"Elongated, sub-elliptical, pale greenish testaceous, with a long cuneate, dusky stripe on the middle of corium, polished, minutely pubescent. Head moderately convex, bald, highly polished, subconical, sometimes with a semicircle of blackish spots between the eyes; front yellowish, the tylus narrow, black; the vertex with a high carina in the male and a transverse groove before it; eyes brown, large, prominent, placed a little obliquely; bucculae pale; rostrum slender, obscure testaceous, piceous at tip, reaching to the middle coxae; antennae long, moderately slender, black, the basal joint longer than the head, the second as long as the clavus, the third a little more slender, about two-thirds the length of the second, the fourth of the same thickness, much less than half the length of the third. Pronotum subtrapezoidal, polished, obsoletely wrinkled behind, feebly convex, the sides rapidly narrowing towards the front, and a little sinuated, causing the humeral angles to appear prominent, callosities distinct, directly transverse, approximate, lateral edge decurved, the pleural flaps deep, subtriangular, black on the middle. Legs greenish-testaceous, the femora with a black band near tip, and the knees, spines, tip of tibiae, and tarsi blackish. Prosternum each side, and pleura also, with a black stripe which continues back to the posterior segment; the venter each side with a series of diagonal black streaks. Scutellum feebly convex obsoletely wrinkled, usually black at

tip and in each basal angle. Clavus dusky, with the outer vein pale, corium a little granulated translucent, with a dusky tapering spot on the middle, the veins pale, cuneus a little dusky on the inner border; membrane very long, dusky, with the veins pale yellow.

Length to end of abdomen 4 mm. To tip of membrane 6 mm. Width of pronotum 1.33 mm. Described from three specimens from Colorado. It is notable for the extreme length of the wing-covers."

Gore Pass, July 29th; Steamboat Springs, July 26th (Gillette). Rabbit Ears Pass, Routt County, July 20th; Steamboat Springs, July 14th (Baker).

Oncotylus repertus Uhler n. sp.

"Blunter than *O. sericatus* Uhler, clear bluish green, distinctly pubescent, moderately flat, with the costal margin more broadly curved than in the species cited, with the head, base of scutellum and outer border of corium almost white, yellowish when less fresh. Head broad, subconical, polished, closely white pubescent, vertex feebly convex, the carina low, a little curved back of the line of the eyes; grooved in front of the carina; eyes brown, of medium size, moderately prominent, placed nearly vertical; the front transverse, wrinkled, moderately convex, becoming a little narrower below, separated from the tylus by a deep incision, which crosses the entire face; tylus subconical, wide at base, curving beneath; rostrum greenish-white, piceous and acute at tip; the inferior cheeks very long and wide, incised, a little swollen, bucculae minute; antennae having the basal joint thick, shorter than the head, the second joint very long, much more slender, almost as long as the clavus the last two joints lost. Pronotum transverse, pubescent, the anterior border almost straight, a little callous and abruptly separated from the head, the surface very uneven, with the anterior angles rounded off, the callosities are oval, flat and far apart, the transverse impressed line sinuous, placed about one-third the way back; the sides diagonal, callous, and the pleural flaps subtriangular, narrow at tip, granular on the middle, a little hirsute; humeral angles with a small knob; posterior margin feebly sinuated in the middle, obliquely curved each side. Scutellum triangular, nearly equilateral, with the base exposed. Legs pale green, the tarsi yellow, piceous at tip, spines dark. Corium, clavus, and cuneus a little hairy, minutely and remotely granulated, the exterior margin strongly reflexed and bristly; cuneus a little longer than wide, pale exteriorly; membrane moderately short, smoke-blackish, whitish on the base and on the margins basally, the veins green. Venter with longer bristles posteriorly.

Length to end of abdomen 4 mm. To tip of membrane 5.25 mm. Width of pronotum scant 2 mm. Described from two specimens, both females, sent to me from Colorado. A variety of this species with hyaline membrane occurs near Los Angeles, California."

Steamboat Springs, July 12th on *Artemisia tridentata* (Baker). Foot-hills six miles west of Fort Collins, June 14th (Gillette).

Oncotylus sericatus Uhler n. sp.

"Similar to *Macrotylus vestitus* Uhler, but larger and with a less acute and wider head, the second joint of antennae much shorter and a little thicker; the color grass-green above, closely covered with stiff white pubescence, greenish-white beneath. Head closely pubescent, depressed across the vertex in front of the carinate line; the front a little convex; the tylus wide and almost vertical, distinctly pubescent, rostrum slender, reaching midway between the middle and anterior coxae, pale at base, piceous at tip; antennae moderately stout, prominently pubescent, the basal joint clear green, longer than the head, the second dull yellowish, but little longer than the distance from the tip of scutellum to apex of clavus, the third and fourth joints a little dusky, becoming gradually more slender, the fourth quite short. Pronotum very moderately convex, wider than long, finely wrinkled, in front almost as wide as the distance across the eyes, the humeral angles subacutely prominent, a very little rounded, with the outer border callous, white, and sinuated, the transverse impressed line placed just behind the callosities and not reaching the sides; the pleural flaps long triangular, with the apex a little

curved forwards. Scutellum small, moderately convex. Hemelytra very long, the costal margin gently curved, so as to be widest back of the middle, the surface of clavus, corium and cuneus, minutely and remotely granulated, with the exterior margin a little paler than the general surface; the membrane long, very faintly obscured, translucent, with the veins green. Legs pale green, with the nails, spines, and tip of tarsi piceous. Abdomen closely set with white pubescence.

Length to end of abdomen, 4 mm. To tip of membrane 6.5-7 mm. Width of pronotum 2 mm. Several specimens have been sent to me from Colorado, where the species appears to be rather common."

Steamboat Springs, July 12th on *Artemisia tridentata* (Baker). We have also received specimens (determined by Mr. Uhler) taken at Colorado Springs in July by E. S. Tucker.

***Macrocoleus coagulatus* Uhler.**

From wild gooseberry and other bushes in Clear Creek Canon. August 7th (Uhler 5). Colo. (Gillette—see Osborn, 1).

Manitou, September 29th, Lamar, May 7th; Foot-hills five miles west of Fort Collins, June 12th (Gillette). Fort Collins, July 4th to October 7th; mountains south-west of North Park, July 10th on *Artemisia tridentata* (Baker).

***Macrotylus affiguratus* Uhler n. sp.**

"Robust, grayish testaceous, finely pubescent, obscure fuliginous on most of the hemelytra. Head conico-triangular, pale fulvous in front, greenish on the vertex, with a diagonal black line each side converging anteriorly, from this a divaricating black line runs downward each side upon the cheeks below to the eye, cheeks and tylus black, polished; rostrum slender, piceous-black, reaching to the middle coxae; antennae stout, black, moderately short, tapering continuously to the tip, the second joint a little longer than the pronotum, the third a little shorter, the fourth very short, acute at tip. Pronotum broad, well rounded off towards the sides on the posterior lobe, the lateral margins oblique, gently curved, broadly pale, the surface greenish, uneven and wrinkled posteriorly, set with short black bristles at remote intervals, the anterior submargin flat, pale with the margin recurved, a little sinuated in the middle, the callosities prominent, surrounded with black and set in a blackish depression, behind the middle is an obscure arc of broken spots, humeri oblique, a little rounded at tip, the posterior margin very gently curving toward the humeri; the pleural flaps deep, sunken, black, excepting the margins, the flap of prosternum also black bordered with pale yellow; sternum and a long stripe on the outer border of pleura also black. Legs obscure yellowish, with flecks, the spines, knees, tip of tibiae and tarsi black. Scutellum greenish, widely exposed at base, with a few scattered points, a faint middle line and the sparse bristles black. Clavus dull pale greenish, minutely sparsely granulate and punctate, with but few indications of hairs, the corium more obscure, similarly granulate and bristly, with the costal margin and veins pale; the cuneus, its callous inner angle, and thickened short inner margin of the corium and the basal margin of the membrane pale yellowish; membrane short a little dusky, with the veins pale. Venter pale greenish, with the sutures, and border of the ovipositor black.

Length to end of abdomen 4.5 mm. Width of pronotum 1.75 mm. Described from one specimen, a female, sent to me from Colorado."

North Park, July 20th (Gillette). Steamboat Springs, July 12th, on *Delphinium occidentale* and other low herbs (Baker).

Macrotylus moerens Uhl.

Steamboat Springs, July 16th and 26th (Baker and Gillette). Spring Canon, June 30th; Estes Park, July 10th; North Park, July 20th; Manitou, June 25th (Gillette).

Macrotylus verticalis Uhl.

Montrose, June 24th (Gillette).

Bolteria picta Uhl.

North Park, July 20th; Leadville, August 23d (Gillette). On Grizzly Creek, in mountains south-west of North Park, July 10th, on *Artemisia tridentata*; Steamboat Springs, July 12th (Baker).

Episcopus ornatus Reut.

Colorado Springs, August 3d (Gillette).

Plagiognathus annulatus Uhler n. sp.

"Closely related to *P. arbustorum* F., but narrower and smaller, brownish-black, long-oval, polished, with pale yellow legs, having the femora streaked and the tibiae annulated or spotted with black. Head longer than wide, acute in front, convex, highly polished, faintly tinged with brown; vertex concurrently convex with the front; the occiput arched and with the edge obscure fulvous; tylus scarcely more prominent than the front, curved, highly polished; rostrum reaching to the middle coxae, yellow, with the basal joint black and the apex piceous; antennae of medium length, the basal joint black, scarcely longer than the head, the second yellow in the middle, or nearly all yellow but the base, a little longer than from the front of the eye to the base of pronotum, third and fourth more slender, yellow. Pronotum deep black, highly polished, growing much narrower anteriorly, minutely, irregularly and obsoletely rugose, more convex posteriorly; the callosities large, very slightly prominent, with an indented space between, and a wavy impressed line forming the boundary between them; the lateral margins oblique, barely sinuated with the edge a little keeled, deflexed; anterior angles a little rounded, callous; posterior margin gently arcuated; the humeri prominent, almost acute, with an impression bounding them inwardly. Scutellum feebly convex, a little unevenly rugulose, the tip acute and set off by a transverse series of punctures placed a little way back. Corium deep black, long, highly polished, obsoletely and irregularly rugose over most of the surface, with some punctures on the depressed borders; the clavus obsoletely and coarsely rugose, with series of shallow punctures on the sutures; base of cuneus marked by an obscurely pale sutural line; the outer angle of base of membrane marked by a triangular white spot, remainder of membrane fuliginous black. Legs pale yellow, the base of anterior coxae, the knees, rings and spines of tibiae and the tarsi black.

Length to end of abdomen 3.5 mm. To tip of membrane 4 mm. Width of pronotum 1 full mm. Described from one female specimen sent to me from Colorado. It inhabits also northern Illinois, Canada west, and New England."

Steamboat Springs, July 16th (Baker).

Plagiognathus fraternus Uhler n. sp.

"Larger and more flat above than *P. obscurus* Uhler, color black, minutely sericeous pubescent. Head triangular, a little longer than wide, acute at tip, with the sides a little sinuated; occipital carina indistinct, pale yellow, front convex, a little roughened on the middle; the tylus prominent, highly polished, comparatively narrow, a little curved; rostrum reaching upon the middle coxae, basal joint stout, a little longer than the throat, blackish-piceous, the middle joints fulvo-piceous, the apical joint blackish; antennae

black, dull testaceous beyond the base of the third joint, the basal joint shorter than the head, the second rod-shaped, scarcely as thick as the basal one, about as long as the face and pronotum united, the third much more slender, about two-thirds as long as the second, the fourth about equally slender, a little shorter. Pronotum wider than long, with the lateral margins oblique; the front margin with a pale collum, reaching to the middle of the eyes; middle surface behind the collum uneven and depressed between the large oblique callosities; lateral margins reflexed, slender, pale; the humeral angles subacute and pale; disk a little wrinkled, not distinctly punctate; pleural flaps polished, black, with the segment next behind marked with a large greenish spot. Coxae mostly greenish-white, femora flattened, testaceous, more or less piceous towards the tip, but always omitting the apex of the posterior pair; tibiae testaceous with black knees, spines and their bases; tip of tarsi piceous. Scutellum obsoletely scabrous, acute at tip. Clavus black, roughly wrinkled and a little punctate; corium pale testaceous, or ivory white, marked with a large, somewhat ovate, ragged spot from before the middle to next the tip; cuneus pale with a small black spot at tip; membrane dark fuliginous with a large, clear spot on the middle, veins testaceous. Abdomen black, polished, the base more or less greenish, and the incisions of the connexivum slenderly bordered with greenish.

Length to end of abdomen 4.5 mm. To tip of membrane 5 mm. Width of pronotum 1.5-1.75 mm. Described from three specimens, including both sexes, sent to me from Colorado. This species is more robust and less tender than *P. obscurus*. It also lacks the yellow marking of the scutellum, and has the callosities oblique, widely separated, and the collum yellow or greenish."

Steamboat Springs, July 12th, on *Solidago*, *Delphinium occidentale*, and other low herbs (Baker).

***Plagiognathus obscurus* Uhl.**

Colorado (Uhler, 1 and 6). West Cliff, Custer County, July 27th (Cockerell, 10).

Fort Collins, September 27th, on *Bigelovia* (Gillette).

***Plagiognathus politus* Uhler n. sp.**

"Black, narrow, oval, highly polished, the sides of hemelytra but little wider behind than anteriorly. Head short, acute at tip, including the eyes, but little wider than the front of pronotum, base with a pale yellow carina; front moderately convex: tylus wide, prominent; rostrum flavo-piceous, reaching upon the middle coxae; antennae long and slender, black, the basal joint thickest, the second as long as from the front of the eye to the base of the pronotum, the third more slender, about two-thirds the length of the second, pale piceous or yellowish, the fourth equally slender, of the same color as the third, and about one-half the length of the second. Pronotum a little wider than long, faintly wrinkled, with the transverse impression interrupted and faint on the middle continued to a sinus inward from the lateral margin; the lateral margins oblique, turned down, sharply defined, with the interior angles rounded; posterior margin gently curved; the humeral angles subacute. Scutellum convex, a little longer than wide, acute at tip. Femora piceous black, the anterior ones pale at tip, coxae, in part and tibiae testaceous, the spines and their bases black, tip of tarsi piceous. Clavus highly polished, remotely and coarsely punctate and wrinkled; corium more minutely scabrous and obsoletely punctate, very highly polished, the callous linear apex of the inner border testaceous; the membrane dusky brown with the vein pale yellowish. Abdomen black, highly polished, obsoletely scabrous.

Length to end of abdomen 3 mm. Width of pronotum 1.25 mm. Only one specimen, a female, was sent to me from Colorado. A variety with yellow face and a pale lunule at base of the cuneus was collected near Buffalo, N. Y., by Mr. VanDuzee. The type from Colorado has also a faint, very narrow, curved band at base of cuneus."

Fort Collins, July 24th (Baker).

***Atomoscelis seriatus* Reut.**

Fort Collins, September 27th, on *Bigelovia* (Gillette).

***Maurodactylus angulatus* Uhler n. sp.**

"Mostly pale obscure testaceous above and black beneath, long oval, minutely sericeous pubescent. Head nearly triangular, wider than long, dull black, irregularly testaceous at base, face almost vertical, minutely, sparsely pubescent, feebly convex, not apparently punctate, the occipital edge sharp, nearly straight, not carinate; the tylus narrow, almost acute at tip; rostrum yellow from base to middle, black from thence to tip, reaching to behind the middle coxae, the basal joint reaching to the end of the arched mucro, swollen at tip; the bucculae slender and pale yellow; antennae blackish, moderately stout, reaching as far as to the middle of the venter, the basal joint projecting little beyond the tip of the head, the second joint stout, of uniform thickness throughout, a little longer than the vertex and pronotum, the following joints shorter and more slender. Pronotum short, trapezoidal, transverse, a little polished, impunctate, minutely and remotely pubescent, pale greenish testaceous, almost flat, with an abbreviated black line crossing the line of the callosities, the anterior and posterior margins almost straight, the lateral margins a very little sinuated, the pleural flaps deep, obscure black, bordered with testaceous; pleural and sternal areas black, also partly margined with whitish. Legs including the coxae, greenish yellow, the middle of femora, the spines, and apex of tarsi black. Scutellum dull black, uncovered at base, and with a pale fulvous spot in each basal angle. Hemelytra obscure testaceous, minutely pubescent, placed almost flat, with the costal border a very little curved; clavus dusky towards the tip, corium with a double, long, dusky, widening spot running back to tip, cuneus with a dusky spot near tip; membrane long, pale dusky, darker in the basal cell. Venter polished, black, narrow, with the edges of the segments obscure whitish.

Legth to end of venter 3 mm. To tip of membrane 3.5 mm. Width of pronotum 1 mm. Only one specimen has thus far been brought to my notice. It is a male, and bears some resemblance to *Maurodactylus alutaceus* Fleber., of Europe."

Steamboat Springs, July 12th (Baker).

***Maurodactylus consors* Uhler n. sp.**

"Form narrow, almost parallel sided on the hemelytra, very slightly pubescent above, black, polished. Head triangular, wider than long, acute at tip; the occipital edge sharp, a little raised at the middle; the face moderately convex, not apparently punctate; eyes prominent, large, placed nearly vertical, set close to the pronotum, dark brown; the tylus prominent, curving beneath; rostrum fulvo-piceous, darker at base and tip, reaching upon the middle coxae; the bucculae pale, narrow; antennae black, long, with the two basal joints stout, the second as long as from the scutellum to inner angle of the corium, the third a little more slender, about three-fourths as long as the second, the fourth scarcely more slender than the third, hardly one-half the length of the third. Pronotum small, moderately convex, a little wider than long, minutely scabrous and a little wrinkled; the anterior lobe short, tumidly elevated, with the impressed line feebly defined; the lateral margins oblique, hardly sinuated; the anterior margin but very little wider than the space between the eyes, with the collum obsolete, and a slight indentation behind its middle; the forward slope of surface moderately steep; humeral angles wrinkled, a little callous and acute. Scutellum widely exposed at base, longer than wide, obsoletely and remotely scabrous, acute at tip. Femora broad, black, yellow at tip, the anterior and middle parts. tibia and the tarsi pale piceous, with the spines black. Clavus obsoletely scabrous; the corium a little more finely so; cuneus separated from the corium by a slender angular pale line; membrane dusky, iridescent, with the base next the cuneus and the looped vein pale. Venter black, short, polished.

Length to end of abdomen 3 mm. To tip of hemelytra 4.5 mm. Width of pronotum 1.25 mm. Only one specimen, a male with long, curved, acute genital hooks, has been sent to me from Colorado "

Leadville, August 23d (Gillette).

***Agalliasstes apiatus* Uhler n. sp.**

"Long-oval, polished, dark brown or black, minutely pubescent. Head short, moderately wide, highly polished, with an indented line on the middle, the vertex prominent, and a little triangular at base; front moderately convex, nearly vertical; tylus short,

narrow, prominent, black; rostrum slender, testaceous, piceous at tip, reaching to the posterior coxae; antennae dull black, of medium length, the second joint nearly as long as the line from the tip of scutellum to the apex of clavus, the third joint a little shorter and slightly more slender, tapering, the fourth scarcely more than one-third the length of the third, still more slender. Pronotum transverse, polished, minutely pubescent, with a few sparse punctures on a line in front of the low callosities, lateral margins short, oblique, with the edge a little turned down, the collum confined to the middle of the margin, and fading into the raised surface before reaching the line of the eyes; humeral angles prominent, almost acutely callous; the posterior margin almost straight. Scutellum short, almost flat, clothed with pale pubescence, the base usually exposed, sometimes disclosing the yellowish spot at each basal angle. Legs dull yellow, the posterior pair having the femora black, all the tibiae with black spines and dots at base of spines; tarsi piceous at tip. Hemelytra covered with short yellowish pubescence, the clavus wide smoky fuscous; corium with a large fuscous, wedge-shaped spot, closed on the middle, the outer and inner borders and base and tip dull testaceous; the cuneus dusky, bordered all around with dull testaceous; membrane dusky, with the veins, base and sometimes the outer border pale. Abdomen black, polished, with a large greenish spot near the base, and some greenish spots on the pleura.

Length to end of abdomen 2.25-2.5 mm. Width of pronotum 1-1.25 mm. This species inhabits both Colorado and Kansas. It is no doubt quite common, but hitherto only a few less mature specimens have been sent to me for examination. It closely resembles *A. apicalis* Uhler, of the Atlantic States, but is a more robust and clumsy style of insect."

Fort Collins, June 4th; Manitou, June 25th (Gillette).
Steamboat Springs, July 12th and 26th (Baker and Gillette).

***Agalliasstes associatus* Uhl.**

Colorado (Uhler, 6). Pueblo (Yarrow--see Uhler, 7). Various parts of Colorado (Uhler, 9).

Fort Collins, July 24th to August 18th; Steamboat Springs, July 12th (Baker). Horsetooth Gulch, May 18th; North Park, July 20th; Trinidad, May 14th; Montrose, June 24th; Glenwood Springs, August 24th (Gillette). Colorado Springs, July (Tucker).

***Agalliasstes decolor* Uhl.**

On Redstone Creek, twelve miles south-west of Fort Collins, August 1st (Baker).

***Agalliasstes fumidus* Uhler n. sp.**

"Oblong-oval, pale fusco-olivaceous, clouded with smoke brown. Head narrow, polished, almost vertical, black upon the clypeus and tylus, pale greenish above, vertex strongly convex; rostrum pale towards the base, slender, reaching to the middle coxae; antennae dusky testaceous, almost piceous at base, slender, about three-fourths the length of the body, the basal joint short, piceous black, the second fuscous, nearly as long as the head and pronotum united, pubescent, the third and fourth more slender, pale, much shorter than the second, eyes prominent, dark brown, placed diagonally. Pronotum trapezoidal, transverse, bald, polished, moderately convex, pale olivaceo-testaceous, not distinctly punctate, tinged with fuliginous each side anteriorly, the collum lower than the base of the head, a little curved, with a black callous curved transverse line behind its middle; lateral margins a little sinuated, slightly notched at the outer end of the transverse impressed line, the lateral margin acute and reflexed throughout, the humeral angles moderately prominent, pale; posterior margin a little curved. Exposed base of scutellum black in the middle, yellow on either side, the scutellum proper tumid in the middle, sunken and dark at base, pale on the acute apex. Legs smoky testaceous, dark

near the tip of upper side of femora, tibiae testaceous with black dots and spines, tarsi blackish; the coxae pale testaceous, the anterior pair with a black dot at base. Hemelytra pale dull testaceous, the clavus entirely and the corium with a large long diagonal spot reaching to the inner angle, two or three faint traces near the outer border, and the middle of the cuneus, smoke brown; membrane smoke brown, the tip, inner border and veins pale testaceous; a geminate pale short line occupies the point next the tip of the cuneus. Abdomen smooth, piceous black, pale pubescent, the venter with a pale greenish spot on the middle and another next the tip.

Length to end of abdomen 3.5 mm. To tip of membrane 4 mm. Width of pronotum 1.25 mm. A single specimen of the male was sent to me from Colorado."

Steamboat Springs, July 15th (Baker).

Agalliaestes signatus Uhler n. sp.

"Form closely resembling *A. associatus* Uhler, black, dull, minutely pubescent. Head short, acute, moderately convex, carinate on the occipital margin; the vertex with a yellow band between the eyes; summit of front indented; tylus prominent, bounded by deep incisions; bucculae and rostrum fulvo-testaceous, the latter reaching to the middle coxae, a little piceous at tip; antennae dull black, stout, tapering, the second joint shorter than the head and pronotum united, the third and fourth together shorter than the second, more slender and pale piceous. Pronotum transverse, feebly convex, pale pubescent, rough in the depressed space between the callosities and behind the anterior margin; middle of the anterior margin carinate; lateral margins oblique and curved down; posterior margin hardly sinuated, a little hollowed each side near the humeri. Scutellum short, subequilateral, apparently impunctate (damaged). Coxae and femora of the anterior and middle legs fulvo-testaceous, with the tibiae paler, and together with the posterior pair having black spines placed on black dots; posterior femora blackish; tips of tarsi piceous. Posterior margin of propleura pale, remainder dull black. Clavus dull fuscous, pale pubescent, scabrous; corium obsoletely scabrous, pale pubescent, brown, pale at base and along the costal border, with the inner suture a little paler than the adjoining surface; cuneus fuscous, with a pale band at base, and a small spot at tip; membrane dusky, with the veins pale testaceous. Abdomen black, polished, minutely pubescent.

Length to end of abdomen 2 mm. Width of pronotum .87 mm. The description is derived from a single male specimen sent to me from Colorado. The characters given will no doubt require modification when both sexes are sufficiently studied."

Manitou, June 25th (Gillette).

Agalliaestes simplex Uhl.

Steamboat Springs, July 14th (Baker).

Lyctocoris campestris Fab.

Fort Collins, March 2d, under a board (Baker).

Triphleps insidiosus Say.

Suburbs of Denver, August 5th. Doubtless introduced into the west with raspberries, blackberries, and other small fruit (Uhler, 5).

Fort Collins, May 27th to August 22d, and May 18th to June 12th on alfalfa (Gillette and Baker).

Anthocoris antevolens B. White.

Leadville, August 23d; Montrose, June 24th (Gillette).

Anthocoris musculus Say.

Above timber line (Carpenter—see Uhler, 6). On wing and on plants on

steep side of mountain in pine woods, Beaver Brook Gulch; also on Clematis, August 6th (Uhler, 5).

Fort Collins, March 24th to April 26th; foot-hills five miles west of Fort Collins, April 20th to August 1st; Cameron Pass at 12,000 feet, July 5th on Salix (Baker). Estes Park, July 12th; Manitou, September 29th, on willow; Dolores, June 1st; Montrose June 24th; Leadville, August 23d (Gillette).

Acanthia hirundinis L.

Dolores, June 18th, common in swallow's nests (Gillette).

Acanthia lectularia L.

West Cliff, Custer County, too frequent (Cockerell, 10).

Fort Collins and Denver (Gillette). Colorado Springs (Tucker).

Piesma cinerea Say.

West Cliff, Custer County, July 27th (Cockerell, 10). Colorado (Gillette—see Osborn, 1).

Fort Collins, March 23d to October 15th, May 7th to June 9th on alfalfa, and August 18th on black walnut (Baker). Manitou, June 25th; Montrose, June 24th; Dolores, June 18th (Gillette). Colorado Springs (Tucker).

Agrammodes Uhler n. gen.

"Form conico-ovoid, similar to a broad Agramma, but widely different in venation, and having the head formed nearly as in Piesma. Head much narrower than the pronotum and curving down in continuity therewith, the base wide, with the clypeus abruptly narrower, protracted forwards in two slender tapering lobes in advance of the stouter tylus; eyes large, round, seated close against the pronotum. Antennae short, clavate at tip, the basal joint stout, contracted at tip the second very short, moniliform, the third longest and most slender, the fourth shorter, contracted on the basal portion. Rostrum tapering, reaching behind the anterior coxae. Pronotum gently curved, somewhat flattened near the anterior angles and depressed behind them, the anterior submargin inflated into a crescentiform low hood which does not extend to the lateral angles; lateral margin sharp cut, a little diagonal; surface coarsely granulated. Scutellum minute, tumid. Legs short and thick. Hemelytra broad suboval, granulated, coriaceous throughout, with the veins very coarse and prominent; clavus formed of one short triangular areole, bounded exteriorly by a long and moderately narrow areole which is oblique at tip, and from this the inner vein runs back to near the tip and forms an arrest for the two discoidal veins which bound wide triangular areas, and curve inward as they approach this inner vein; the costal area wide, depressed, continued to end of wing-cover, crossed by a few irregular veins, the inner veins are continued across the area which forms a substitute for the membrane."

Agrammodes costatus Uhler n. sp.

"Dull pale greyish-brown, with the pronotal submargin and a large spot on the base of each wing-cover white. Head blackish-brown, unevenly scabrous and granulated, the clypeus prolonged, acute and cleft; antennae honey-yellow, the apical joint piceous

black; rostrum and throat rust-brown. Pronotum fuscous, coarsely granulated, narrower than the base of the wing-covers, and somewhat quadrangular in outline, the lateral margins a little reflexed, the posterior margin distinctly curved, anterior angles a little rounded, the anterior margin wider than the breadth across the eyes. Wing-covers pale greyish-yellow, with irregular patches of dark brown granules aggregated more particularly near the base and along the disk; the large pale spots at base angular and tinged with greenish; veins mostly dark brown, very prominent, the area on the apical border pale, crossed by the divaricating inner vein and the one next outside from it, the areoles are continued to near the apex, and the discoidal one is crossed by four oblique veins. Underside rust-brown, obscured by some darker patches, and set with a few small granules, the orifices of the stigmata placed in knobs.

Length to end of hemelytra 2 mm. Width of base of pronotum .75 mm. Only one specimen has been brought to my notice. It is a male sent to me from Colorado. This is the most remarkable form of the family Tingidae which has yet been placed within my reach for study. It is a synthetic type which unites in itself a structure of wing-covers closely related to *Oxycarenus*, of the family Lygaeidae, and on the other hand, the characteristic head of *Plesma* and the granular surface of *Agramma*. Taken in all its features it is the most peculiar form of Tingid which has yet been discovered in North America. The other sex is unknown to me and it might add further characteristics to the genus if once brought to notice."

Estes Park, July 12th (Gillette).

***Corythuca arcuata* Say.**

Colo. (Gillette—see Osborn, 1).

Fort Collins, July 29th (Baker). Foot-hills five miles west of Fort Collins, April 25th to August 1st (Gillette and Baker). Steamboat Springs, July 26th (Gillette).

***Corythuca ciliata* Say.**

Custer County, midalpine (Cockerell, 10).

Fort Collins, May 31st on alfalfa (Baker). Steamboat Springs, July 16th and 26th (Baker and Gillette). Montrose, June 24th (Gillette).

***Corythuca fuscigera* Stal.**

Fort Collins, July 2d in all stages on Cnicus; Steamboat Springs, July 15th (Baker). Colorado Springs, August 3d (Gillette).

***Gargaphia tiliae* Walsh.**

Rist Canon, May 29th (Gillette).

***Aradus acutus* Say.**

Colo. (Uhler, 6). Roaring Fork (Rothrock—see Uhler, 2).

Fort Collins, March 31st (Gillette).

***Aradus affinis* Kirb.**

Dolores, June 18th; Estes Park, July 9th (Gillette).

***Aradus americanus* Fab.**

Colo. (Carpenter, 1).

Rist Canon, May 29th (Gillette).

***Aradus debilis* Uhl.**

Colo. (Gillette—see Osborn, 1).

***Aradus obliquus* Uhl.**

Rist Canon, April 9th (Baker).

***Aradus rectus* Say.**

Colo. (Uhler, 1 and 6). From mountains near Beaver Brook Gulch, August 6th (Uhler, 5). Colo. (Gillette—see Osborn 1).

Fort Collins. August 19th; Steamboat Springs, July 26th; Montrose, June 24th; Dolores, June 18th (Gillette).

***Aradus tuberculifer* Kirb.**

Colo. (Uhler, 6). Far up Beaver Brook Gulch, August 6th (Uhler, 5). Near Idaho Springs, July 6th (Packard—see Uhler, 5).

***Phymata fasciata* Gray**

Colo. (Uhler, 1). Widely distributed over the west. Common around foot-hills and on plains wherever land is cultivated. Generally found on stems of Euphorbias and sun-flowers (Uhler, 5). Colo. (Uhler, 8).

Rist Canon, August 10th (C. E. Pennock). Foot-hills five miles west of Fort Collins, September 1st (Gillette). Boulder, September 4th (Baker). Colorado Springs (Tucker).

***Coriscus fesus* Linn.**

Colo. (Uhler, 6). Colorado Springs, June (Yarrow—see Uhler, 7). Southern Colorado June to July (Carpenter—see Uhler, 7). Widely distributed on plains and in mountains and foot-hills, especially in settled portions. In damp situations in Beaver Brook Gulch, Clear Creek Canon, in Denver and around it at the lower levels, in the region of Colorado Springs and Manitou, near Canon City, and in the valley of the Arkansas, it is quite common in August (Uhler, 5). Denver, June 27th (Packard—see Uhler, 5). Ula, Custer County, November 12th; West Cliff (Cockerell, 10). Colo. (Gillette—see Osborn, 1).

Fort Collins, September 27th, on *Bigelovia* and *Rhus trilobata*, and October 7th (Baker and Gillette). Colorado Springs, Green Mountain Falls (Tucker).

***Coriscus inscriptus* Kirb.**

Colo. (Uhler, 1). August 14th, Nathrop, Chaffee County (Cockerell, 3). West Cliff, Custer County, July 27th; also subalpine; also in Chaffee, Gunnison, and Pueblo Counties (Cockerell, 10).

***Coriscus kalmii* Reut.**

Fort Collins, April 7th to May 13th, September 14th on Solidago, and September 27th on Solidago and Carex (Baker and Gillette).

***Coriscus punctipes* Reut.**

Mesa County (Cockerell).

***Coriscus rufusculus* Reut.**

Fort Collins, May 27th to August 18th, June 9th on alfalfa, September 2d on Solidago, October 7th on grass; Steamboat Springs, July 12th on Carex (Baker). Colorado Springs, August 3d; Montrose, June 24th; Dolores, June 18th (Gillette).

***Coriscus sericans* Reut.**

Steamboat Springs, July 25th; Rabbit Ears Pass, Routt County, July 20th (Baker).

***Coriscus subcoleoptratus* Kirb.**

Colo. (Uhler, 1 and 6).

***Sinea diadema* Fab.**

Colo. (Uhler, 6). From weeds in suburbs of Denver, August 8th (Uhler, 5).

Foot-hills five miles west of Fort Collins, March 15th to August 11th (Gillette).

***Acholla multispinosa* DeG.**

Colo. (Uhler, 1).

Boulder, September 4th (Baker).

***Fitchia nigrovittata* Stal.**

Colo. (Uhler, 6). Colo. (Gillette—see Osborn, 1).

Common near Fort Collins, and in the adjoining foot-hills, during winter, under stones and boards (Baker and Gillette).

***Fitchia spinosula* Stal.**

Colo. (Uhler, 6).

***Repipta taurus* Fab.**

Southern Colorado (Riley).

***Milyas cinctus* Fab.**

Foot-hills, five miles west of Fort Collins, September 1st

(Gillette).

***Diplodus luridus* Stal.**

Colo. (Uhler, 1 and 6). Colorado Springs, August 10th (Uhler, 5). Manitou and Garden of the Gods, July 13th to 16th (Packard—see Uhler, 5).

Fort Collins, July 4th; foot-hills five miles west of Fort Collins, June 30th (Gillette).

***Diplodus socius* Uhl.**

Estes Park, July 16th (Gillette).

***Apiomerus flaviventris* H. Schf.**

Larva from a bush in Clear Creek Canon, near mouth of Beaver Brook Gulch, August 7th (Uhler, 5). Brown variety on foot-hills at mouth of Clear Creek Canon, July 3d, in Garden of the Gods, and at Manitou, July 13th to 15th (Packard—see Uhler, 5).

***Apiomerus pictipes* H. Schf.**

Foot-hills eight miles south-west of Fort Collins, June 30th to July 12th; Silverton, June 20th (Gillette).

***Apiomerus spissipes* Say.**

Colo. (Uhler, 1 and 6). Valley of Arkansas, near Canon City, August 11th (Uhler, 5). Colo. (Snow—see VanDuzee, 5).

***Apiomerus ventralis* Say.**

Colo. (Gillette—see Osborn, 1). Estes Park (Snow—see VanDuzee, 5).

Fort Collins, May 14th on alfalfa (Baker). Foot-hills five miles west of Fort Collins, March 12th to June 12th; Graymont, July 15th (Gillette).

***Pygolampis pectoralis* Say.**

Fort Collins, April 6th under a board in edge of field (Baker).

***Spilalonijs geniculatus* Stal.**

Pueblo (John Lansing).

***Hygrotrechus remigis* Say.**

Colo. (Uhler, 1). Mountains in July (Carpenter—see Uhler, 6). From water on plains of Southern Colorado, June to July (Carpenter—see Uhler, 7). On still water along margin of Sloan's Lake; very abundant on surface of irrigating canal proceeding from Canon of Arkansas, in August (Uhler, 5). Denver, July 10th; Boulder, June 20th; Manitou, July 15th (Packard—see Uhler, 5).

Near Fort Collins and in the adjoining foot-hills, common

throughout the summer, especially on water in ditches; during winter hibernates under stones, rubbish, etc. (Baker). Dolores, June 16th (Gillette).

***Limnotrechus marginatus* Say.**

On surface of puddles in western suburbs of Denver in August (Uhler, 5). Near Manitou, July 15th (Packard—see Uhler, 5). Common on Grape Creek, West Cliff, Custer County, May 25th (Cockerell, 10).

***Limnotrechus productus* Uhler n. sp.**

"Larger and somewhat more robust than *L. marginatus* Say. with long, somewhat flattened, anal processes of a yellow color forming the prolonged ends of the flat, broad connexivum, and is of the same color as the last three segments. Color of the upper surface dark brown with a tinge of fuscous on the pronotum. Head of medium length, fuscous, covered with silvery, scaly pubescence on the lower sides and beneath. The antennae short and stout, rusty brown, the second and third joints a little thicker and darker at tip, the second shorter than the apical, but longer than the third, the basal one a little longer than the superior line of head, the fourth a little shorter, dark in color and tapering towards the tip. Rostrum swollen at base, reaching a little behind the anterior coxae, with the tip black. Pronotum with the anterior lobe quadrangular and flat, a very little shorter than wide, the anterior border a little thickened and raised, the middle line behind this depressed and marked with a short, yellow stripe, the posterior lobe evenly rounded off, a little flattened, destitute of a carinate line, lateral margins narrowly yellow; underside all silvery white. Legs of medium length, pale rusty beneath, the posterior femora as long as from the base of posterior coxae to the end of venter. Veins of corium prominent, two of the oval medio-apical areoles pale. Sutures of connexivum pale, outer half of the connexivum of the last three ventral segments including most of the segments themselves and the cerci, yellow, the middle line of venter with four indented spots.

Length to end of anal segment 10 mm. Width of pronotum 2 mm. A single female was sent to me from Colorado."

Fort Collins, April 13th (Gillette).

***Limnopus rufoscutellatus* Latr.**

From stagnant water above the Rio Grande (Rothrock—see Uhler, 2). Mountains, July (Carpenter—see Uhler, 6). Seems to be common in Colorado, where it attains to full proportions, and puts on its clearest russet-brown coat (Uhler, 6). On surface of small ponds and puddles in depressions of plains west of Denver, August 8th and later (Uhler, 5). Denver, July 28th (Packard—see Uhler, 5).

***Hebrus concinnus* Uhl.**

Fort Collins, April 7th to October 15th (Baker).

***Hebrus sobrinus* Uhl.**

On margins of ponds west of Denver (Uhler, 5).

***Microvelia americana* Uhler n. sp.**

"Dark brown, velvety above, more or less powdered with plumbeous, body a little tapering behind the curved base of sides. Head short, triangular before the eyes, margined with silvery, prostrate pubescence from behind the eyes and along their inner border forward to the cheeks; the throat testaceous; middle line of head obsoletely callous-carinate; rostrum testaceous, piceous at base and tip, reaching to the posterior line of the anterior coxae; antennae slender, obscure testaceous, darker on the tip of the

first and second joints, the second joint shortest, the third and fourth much ~~more~~ slender, the fourth a little longer than the third. Pronotum triangular both before and behind the humeral angles, the anterior division very slightly sinuated on the sides, feebly notched at the end of the scutellum behind the anterior lobe; collum distinct, with an orange band on the middle; the surface rugulose and punctate behind this; the lateral and posterior margin orange, the tip a little rounded; the humeral angles moderately subacute, with the edge a little callous. Pleural pieces bordered with rufo-testaceous; the coxae, trochanters, border of sternum, and legs yellowish-testaceous, with the femora, tibiae and tarsi dusky or piceous above. Scutellum fuscous, almost completely concealed beneath the projecting pronotum. Hemelytra pale smoke-brown, narrower than the abdomen, with the veins darker, and a short streak at base of corium pale yellowish. Tergum rufous along the middle, blackish exterior to this; the connexivum both above and below, orange interrupted with black. The underside dull black with a tinge of plumbeous, a little sericeous, the posterior segments rufous on the middle, and the genital segment yellow.

Length to tip of venter 3 mm. Width of pronotum 1.25 mm. This is a common species in Maryland, and is also found in North Carolina. It has also been collected in Colorado, and in the vicinity of San Diego, California. In Maryland it occurs on the borders of small streams during summer, and is occasionally found full-winged in the month of June. The male is narrower and more wedge-shaped posteriorly than the female."

Foot-hills five miles west of Fort Collins, March 12th to April 21st (Gillette).

Macrovelia hornii Uhl.

Fort Collins, April 14th; Rist Canon, April 9th (Baker).

Salda coriacea Uhl.

Denver (B. H. Smith—see Uhler, 5).

Salda dispersa Uhl.

Comparatively abundant in various places west of Denver (Uhler, 9).

Salda humilis Say.

West Cliff, Custer County, July 31st (Cockerell, 10).

Salda interstitialis Say.

Roaring Fork (Rothrock—see Uhler, 2). Colorado (Uhler, 6). Ula, Custer County, November 12th (Cockerell, 10).

Fort Collins, August 27th; foot-hills five miles west of Fort Collins, March 12th to April 9th; Estes Park, July 12th (Gillette).

Salda pallipes Fab.

In western suburbs of Denver may be found in untold numbers on dark, damp, sandy and muddy soil, during August. Also near stream in Beaver Brook Gulch, and in Clear Creek Canon (Uhler, 5). Georgetown, July 8th, 9,500 feet (Packard—see Uhler, 5).

Colorado Springs, July (Tucker).

Galgulus oculatus Fab.

Colorado (Gillette—see Osborn, 1).

Boulder, September 4th; Fort Collins (Baker).

Ambrysus signoretii Stal.

Fort Collins, August 11th (Baker).

Zaitha micrantula Stal.

Fort Collins, August 27th (Gillette).

Belostoma americanum Leidy.

Occasional about electric lights at Fort Collins (Baker).

Belostoma annulipes H. Schf.

Pagosa, September 5th (Yarrow—see Uhler, 7).

Ranatra quadridentata Stal.

Fort Collins, August 27th (Gillette).

Notonecta insulata Kirb.

Mountains, July (Carpenter—see Uhler, 6). Quite common in several pools of water standing in hollows near bed of creek on outskirts of Denver, August 4th and 5th (Uhler, 5).

Fort Collins, August 27th (Gillette).

Notonecta mexicana A. and S.

Det. by Osborn.

Fort Collins (Gillette).

Notonecta undulata Say.

In several pools of water standing in hollows near bed of creek on outskirts of Denver, August 4th and 5th. Not so common as *N. insulata* (Uhler, 5). Larva, nymph and imago from Sloan's Lake, west of Denver, July 10th (Packard—see Uhler, 5).

Fort Collins, August 27th; foot-hills five miles west of Fort Collins, April 20th (Gillette).

Corisa calva Say.

Fort Collins, August 27th (Gillette).

Corisa expleta Uhler n. sp.

"Olivaceo-fuscous above, form of *C. alternata* Say. Head strongly and bluntly carinate above, the carina produced posteriorly on the base of the vertex; face moderately convex, a little peaked above in front of the blunt carina, marked with a line of punctures each side, a little hollowed beneath the eyes, and with a few shallow punctures there as well as towards the front; clypeus depressed, covered with long coarse, white bristles. Pronotum subcordate, wider than long, convex, obsoletely and minutely rastrated, with the transverse bands bounded in part by scratched lines, the black bands slender, bent anteriorly, about thirteen in number, the lateral margin and anterior angles broadly yellow, the middle behind the produced occiput marked with a short carina, the apex of posterior margin obliquely curved. Palae of female moderately slender, long, cultrate, strongly curved, subacute, with long bristles, the trochanter stout and moderately long, the coxae long, stout, compressed inwardly and growing wider towards the base. Clavus

finely rastrate, crossed by slender yellow lines, those of the case nearly straight, of the middle broken and irregular, of the posterior third waved; yellow lines of the corium very short, wavy or irregularly sigmoid, beginning at base in two widely separated series and continued towards tip in about five, partly broken series; marks of the membrane short, uneven, sigmoid or irregularly waved; the embolium (sic Fieber) is broad, whitish, marked at base with a streak, with an oblique stripe on the cross vein, a spot some distance before the tip and another at the tip, black. Beneath whitish yellow; tergum black, excepting the lateral border and tip, which are yellowish.

Length to end of abdomen 7-8 mm. Width of pronotum 2.25-2.75 mm. Two specimens, females, were sent to me from Colorado. A closely related species occurs in Texas and California, but my series of them is too imperfect to afford accurate deductions. The male is a desideratum."

Fort Collins, June 25th at light (Baker). Spring Canon, April 21st (Gillette).

Corisa inscripta Uhl.

Southern Colorado (Uhler, 8).

Corisa interrupta Say.

Sloan's Lake, west of Denver, August (Uhler, 5); same place in July (Packard—see Uhler, 5).

Corisa striata L.

Fort Collins, June 13th (Baker).

Corisa sutilis Uhl.

Mountains, July to September (Carpenter—see Uhler, 6), Sloan's Lake, west of Denver, August 5th (Uhler, 5). Common in the mountains of Colorado (Uhler, 9).

Corisa tumida Uhl.

Sloan's Lake west of Denver, July 10th (Packard—see Uhler, 5). Sloan's Lake, in August, and also in several pools of water on the low grounds of suburbs of Denver, August 5th and 8th (Uhler, 5).

— Colorado Springs, August (Tucker).

Cicada dorsata Say.

Colorado (Thomas—see Uhler, 6).

Cidada marginata Say.

Det. Baker.

Canon City, August 31st (Gillette).

Cicada tibicen L.

Mountains of Colorado (Uhler, 6).

Proarna valvata Uhl.

Canon City, July 3d (Riley).

Tibicen synodica Say.

Common in eastern Colorado (Thomas and B. H. Smith—see Uhler, 6). Near Canon City, August 11th (Uhler, 5). Southern Colorado, June to July

(Carpenter—see Uhler, 7). Denver and Boulder (Putnam, 4).

Fort Collins, June 21st (Baker), and July 5th (Gillette).
Manitou Park (Snow).

Tibicen rimosa Say.

Southern Colorado, June to July (Carpenter—see Uhler, 7). Near Denver (Thomas—see Uhler, 6). On Clear Creek at Floyd's Hill (Putnam, 4).

Spring Canon, July 4th (Gillette).

Tibicen cruentifera Uhl.

Colorado (Riley).

Platypedia putnami Uhl.

Clear Creek Canon (Uhler, 4). Near Clear Creek (Putnam—see Uhler, 5).
On Clear Creek, near Floyd's Hill (Putnam, 4).

Horsetooth Gulch, May 18th; Rist Canon, May 29th;
Howe's Gulch, June 14th (Gillette).

Melampsalta parvula Say.

Colorado (Snow).

Publilia modesta Uhl.

(*Publilia bicinctura* Godg. Ent. News, III, p. 200.

Colo. (Thomas—see Uhler, 6). Clear Creek Canon, August 6th; Colorado Springs and Manitou, August 17th, west of Denver, August 18th; Pueblo, August 10th (Uhler, 5). Cusack Ranch, Custer County, on *Gymnolomia multiflora* (Cockerell, 10). Fort Collins, June and August, on *Glycyrrhiza lepidota* (Gillette—see Goding, 2).

Foot-hills five miles west of Fort Collins, May 18th to September 1st (Gillette). Fort Collins, May 29th to October 7th on *Solidago*, *Glycyrrhiza lepidota*, alfalfa. *Helianthus*, *Iva xanthiifolia*, and *Artemisia*; Steamboat Springs, July 15th (Baker). Colorado Springs, August (Tucker).

Goding's *bicinctura* must be referred to this species. We have every gradation between the two, and also forms varying to a uniform deep chocolate. Furthermore, we have reared them in abundance together on the same food-plants from nymphs which were indistinguishable. Dr. Uhler, to whom we sent a complete series, corroborates the reference and states that he was previously acquainted with all the forms.

Ceresa bubalus Fab.

Det. Goding.

Near Pueblo (Yarrow—see Uhler, 7). Met with at every place affording

sufficient moisture for growth of willows. In Denver found on many weeds in low places as well as willows. Also found at Canon City and in Clear Creek Canon (Uhler, 5). Near Eagle River in August, and in other parts of Colorado, June to September (Carpenter—see Uhler, 6). Colorado (Riley—see Goding, 3).

Colorado Springs (Tucker). Glenwood Springs, August 24th; Canon City, August 31st; Fort Collins, September 27th on *Solidago spectabilis* and *Aster canescens*, September 31st female depositing eggs in apple twigs (Gillette). Fort Collins, July 24th on *Apocynum androsaemifolium*, August 4th on alfalfa, August 11th very abundant on *Glycyrrhiza lepidota* (Baker). Specimens of apple twigs with egg punctures have been received from several parts of the state, including Rocky Ford, Arvada and Windsor. From the last lot, which were placed in a breeding cage, there emerged on May 19th, numerous specimens of *Cosmocoma howardii* Ash. (determined by Ashmead). We have often found the imago infested with a minute red mite, *Eupalpus echinatus* Bks. (determined by Banks). Soft maple twigs in the vicinity of Fort Collins are also considerably infested with the eggs of this insect.

Ceresa turbida Godg.

Det. Goding.

Colorado (Gillette—see Goding, 3).

Steamboat Springs, July 26th; The Rustic, Larimer County, August 11th (Gillette).

Ceresa diceros Say.

Colorado Springs (Tucker).

Stictocephala festina Say.

Colorado (Riley—see Goding, 3).

Stictocephala franciscana Stal.

Steamboat Springs (Gillette—see Goding, 3).

Steamboat Springs, July 26th; Rist Canon, July 30th (Gillette).

Stictocephala gillettei Godg.

Det. Goding.

Colorado (Gillette—see Goding, 1 and 3). Trinidad, May 14th (Gillette—see Goding, 2).

Fort Collins, July 29th, on *Psoralea tenuiflora*; Four-mile

Hill eight miles south of Steamboat Springs, July 15th (Baker).

Stictocephala inermis Fab.

Det. Goding.

Steamboat Springs, July 26th (Gillette).

Stictocephala viridis Godg.

Det. Goding.

Rist Canon, May 29th (Gillette)

Thelia univittata Harr.

Det. Goding.

Routt Co. (Gillette—see Goding, 3).

Steamboat Springs, July 26th (Gillette).

Telamona monticola Fabr.

Colorado (Goding, 3).

Telamona pyramidata Uhl.

Det. Goding.

Southern Colorado, June to July (Carpenter—see Uhler, 7). Southern Colorado (Uhler—see Goding, 3). Colorado (Snow—see VanDuzee, 5).

Fort Collins, July 20th on cottonwood, and August 14th on Virginia Creeper (Baker). Colorado Springs, July 27th on cottonwood (Gillette).

Telamona querci Fitch.

Colorado (Carpenter—see Uhler, 6).

Telamona reclinata Fitch.

Det. Goding.

Colorado (Baker—see Goding, 3).

Fort Collins (Baker).

Heliria scalaris Fm.

Det. Goding.

Fort Collins, July 4th (Gillette—see Goding, 2). Colorado (Baker—see Goding, 3).

Fort Collins, July 5th (Baker). La Veta, July 4th (E. A. Schwarz).

Acutalis calva Say.

Colorado (Riley—see Goding, 3).

Cyrtolobus fenestratus Fitch.

Colorado (Thomas—see Uhler, 6). Manitou, on small oak trees, August 16th (Uhler, 5). Colorado (Uhler—see Goding, 3).

Cyrtolobus van Say.

Det. Goding.

Colorado (Gillette—see Goding, 3).

Manitou, June 25th; Montrose, June 24th (Gillette).

Steamboat Springs, July 12th (Baker). Garden of the Gods; Green Mountain Falls (Tucker).

Vanduzeea arquata Say.

Det. VanDuzee.

Colorado (Gillette—see Goding, 3).

Dixon's Canon, five miles west of Fort Collins, September 1st (Gillette).

Vanduzeea vestita Godg.

Colorado (Goding, 3).

Campylenchia curvata Fab.

Det. Goding.

Eagle River, August 29th (Carpenter—see Uhler, 6). Near Boulder, June 29th (Packard—see Uhler, 5). Denver, near Golden, near Colorado Springs, on small plants in low ground, and also in the valley of the Arkansas near Canon City in August (Uhler, 5). Colorado (Riley—see Goding, 3).

Steamboat Springs, July 26th; Rist Canon, August 8th; Dixon's Canon, September 1st; Estes Park, July 12th (Gillette). Fort Collins, August 11th on *Glycyrrhiza lepidota*, July 24th on *Psoralea tenuiflora* and *Apocynum androsaemifolium*; Steamboat Springs, July 15th (Baker). Colorado Springs (Tucker).

Scolops angustatus Uhl.

Det. Osborn.

The Rustic, Larimer County, August 11th (Gillette).

Scolops grossus Uhl.

Det. VanDuzee.

Fort Collins, July 24th to August 18th (Baker).

Scolops hesperius Uhl.

Southern Colorado (Thomas—see Uhler, 6). Denver (Smith—see Uhler, 6).

Scolops sulcipes Say

Det. Osborn.

On low ground, in suburbs of Denver, August 18th (Uhler, 5). Colorado (Uhler, 6).

Denver, July 21st (Gillette). Fort Collins, July 24th to August 18th (Baker). Colorado Springs (Tucker).

Cixius stigmatus Say.

Det. VanDuzee.

Colorado (Uhler, 6).

Lamar, May 7th (Gillette). Big Narrows of Poudre River, Larimer County, July 9th on *Bigelovia*; Steamboat Springs, July 14th (Baker). Colorado Springs (Tucker).

***Cixius vicarius* Walk.**

Swept from weeds in west Denver, August 5th (Uhler, 5).

***Ollarus franciscanus* Stal.**

Det. VanDuzee.

Montrose, June 24th (Gillette).

***Helicoptera floridæ* Walk.**

Det. VanDuzee.

Dolores, June 16th (Gillette).

***Pissonotus pallipes* VanD.**

Det. VanDuzee.

Fort Collins, August 25th (Gillette).

***Stenocranus dorsalis* Fitch.**

Det. Osborn.

Foot-hills five miles west of Fort Collins, April 25th; Fort Collins, September 27th on *Carex*; Dolores, June 18th (Gillette). Fort Collins, May 18th on alfalfa; Steamboat Springs, July 12th on *Carex* (Baker).

***Conomelus tricarinatus* Say.**

Det. VanDuzee.

Manitou, June 25th; Montrose, June 24th; Glenwood Springs, August 24th (Gillette). Steamboat Springs, July 14th (Baker).

***Myndus impunctatus* Fitch.**

Det. VanDuzee.

Montrose, June 24th (Gillette).

***Myndus* n. sp.**

Det. VanDuzee.

Manitou, July (Tucker) Mr. VanDuzee says, "Differs from all the species I know by the lunate pale area on the front."

***Delphacinus obesus* VanD.**

Det. VanDuzee

Fort Collins, May 8th (Gillette).

***Delphacinus zonatus* VanD.**

Det. VanDuzee.

Manitou, June 25th; Montrose, June 24th (Gillette).

***Delphacinus vittatus* VanD.**

Det. VanDuzee.

Dolores, June 18th (Gillette).

***Liburnia consimilis* VanD.**

Det. VanDuzee.

Lamar, May 7th; Dolores, June 18th (Gillette).

***Liburnia gillettei* Van D.**

Det. VanDuzee.

Lamar, May 7th; Dolores, June 18th; Estes Park, July 12th (Gillette).

Lamenia californica VanD.

Det. VanDuzee.

Montrose, June 24th (Gillette).

Tylana ustulata Uhl.

Colorado (Uhler, 6).

Bruchomorpha oculata Newm.

Det. VanDuzee.

Colorado (Uhler 6).

Steamboat Springs, July 26th (Gillette).

Bruchomorpha pallidipes Stal.

Swept from plants on plains near Colorado Springs, August 13th (Uhler, 5).

Colorado Springs, August (Tucker).

Stiroma inconspicua Uhl.

Moderately abundant on small bushes in Clear Creek Canon, August 6th (Uhler, 5).

Philaenus abjectus Uhl.

Colorado (Thomas—see Uhler, 6).

Philaenus lineatus L.

Det. VanDuzee.

In foot-hills near Golden, August 5th. Doubtless widely distributed through the mountain region of Colorado (Uhler, 5). Hills and high mountains (Carpenter—see Uhler, 6). Colorado (Thomas—see Uhler, 6).

North Park, July 20th; Gore Pass, July 29th; Steamboat Springs, July 26th; Estes Park, July 16th (Gillette). La Veta, July 4th (E. A. Schwarz).

Clastoptera binotata Uhl.

VanDuzee.

Steamboat Springs, July 26th; Leadville, August 23d (Gillette). Steamboat Springs, July 12th on *Artemisia tridentata* (Baker).

Clastoptera delicata Uhl.

Det. VanDuzee.

Near Colorado Springs, sweeping rank growths of plants in damp ground, August 16th (Uhler, 5). Colo. (Thomas and Smith—see Uhler, 6).

Steamboat Springs, July 26th (Gillette).

Clastoptera obtusa Say.

Det. Osborn.

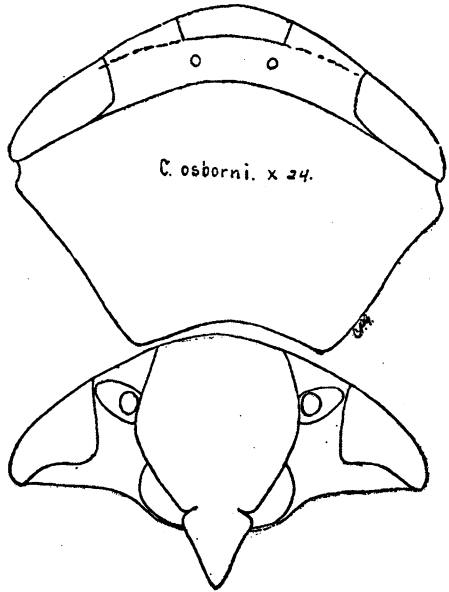
Beaver Creek, Larimer County, August (Gillette). Fort Collins, July 19th (R. C. Stephenson).

Clastoptera osborni n. sp.*

*All the illustrations are magnified 22 diameters unless otherwise marked.

Female: Face two-thirds wider than long, minutely, indistinctly sculptured; clypeus broad at base, gradually tapering to the pointed apex, one-fifth longer than broad, basal suture obsolete; lorae long, nearly as long and half as broad as clypeus; genae narrow, outer margin concave beneath eyes, convex below the lorae where they are very narrow, touching the clypeus at the broadest part; front but little longer than broad, superiorly very broadly and evenly rounded. Vertex very slightly transversely depressed, anterior margin carinately elevated, not longer at middle than at eyes. Pronotum transversely wrinkled, minutely scabrous, two distinct pits behind anterior margin near the median line, three-fourths wider than long, anterior curvature three-eighths of length. Scutellum finely and transversely wrinkled and minutely scabrous, longer than head and pronotum, twice longer than wide. Elytra with a fine, thickly set, golden pubescence, entirely finely, densely punctured. Color pale rufous throughout, tinged with olive green on pronotum and clavus, beneath more yellowish.

Length 5.5 mm. Described from two females. Large, but somewhat narrower across the hemelytra than is usual in this genus.



Manitou, July 24th on oak (Gillette). Cheyenne Canon, Colorado Springs, July (Tucker).

Lepyronia angulifera Uhl.

Det. VanDuzee.

Howe's Gulch, June 14th and September 1st (Gillette).

Lepyronia quadrangularis Say.

Det. VanDuzee.

Canon City, and the irrigated region west of Denver, August 6th to 17th (Uhler, 5). Colorado (VanDuzee, 6).

Fort Collins, September 27th on Solidago, Clematis ligusticifolia, and Carex (Gillette). Fort Collins, August 26th to September 14th, on Solidago (Baker).

Aphrophora permutata Uhl.

Colorado (Uhler, 6). Colorado (Snow—see VanDuzee, 5).

Manitou Park (Snow).

Pachyopsis laetus Uhl.

At Manitou and near Canon City, upon small bushes near water August 11th to 16th (Uhler, 5). Custer County, midalpine (Cockerell, 10). Colorado (Snow—see VanDuzee, 5). Colorado (VanDuzee, 4).

Pachyopsis robustus Uhl.

Det. VanDuzee.

Colorado (VanDuzee, 4).

Dolores, June 18th; Estes Park, July 10th; North Park, July 20th; Steamboat Springs, July 26th; Fort Collins, September 27th on *Bigelovia* (Gillette). Mountains southwest of North Park, on Grizzly Creek, July 10th on *Artemisia tridentata* (Baker).

Bythoscopus fenestratus Fitch.

Det. Osborn.

Estes Park, July 12th (Gillette).

Bythoscopus pruni Prov.

Det. Osborn.

Mountains of Colorado (VanDuzee, 4).

The Rustic, Larimer County, August 11th (Gillette).

Pediopsis bifasciata VanD.

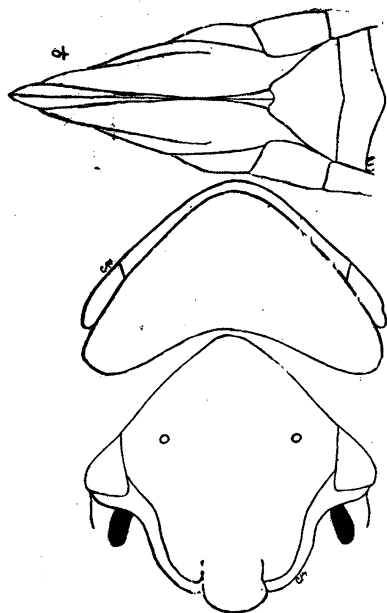
Steamboat Springs, July 15th on willow (Baker). Montrose. June 24th (Gillette).

Pediopsis erythrocephala n. sp.

Female: Large and robust. Face nearly as long as wide; clypeus short and broad, suddenly broadened and widely depressed before the rounded apex, sides parallel on basal two-thirds; front slightly constricted before antennae, rapidly narrowing towards clypeus. Clypeus, face, vertex, pronotum, and scutellum, feebly rugose. Vertex one-third longer at eyes than at middle, width between eyes nearly twenty times length at middle. Pronotum little more than twice wider than long, curvature nearly the entire length. Last ventral segment with hind margin distinctly notched. Head, pronotum, and scutellum dull red, concolorous. Elytra hyaline. Abdomen greenish. Eyes reddish brown. Legs greenish shading into reddish towards base. Propleura with a large black spot.

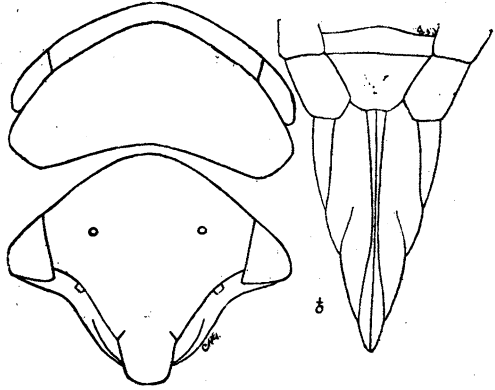
Length 6 mm. Described from two females.

Fort Collins, August 11th (Baker). Colorado Springs, August (Tucker).



Pediopsis fumipennis n. sp.

Female: Form of bifasciata. Face little more than one-sixth wider than long; clypeus short and broad, suddenly broadened and widely depressed before the rounded apex, sides nearly parallel on basal two-thirds, but slightly broadening towards base; front slightly constricted before antennae, rapidly narrowing towards clypeus. Front and vertex finely rugose, with scattered inconspicuous punctures. Vertex one-fifth longer at eyes than at middle, width between eyes nearly eleven times length at middle. Pronotum two and one-fourth times wider than long, curvature three-fourths of length, sculpturing like that of front but coarser. Scutellum finely rugose, basal angles shagreened. Last ventral segment with hind margin slightly emarginate. Head, pronotum, legs and venter green, or yellowish green. Elytra deep smoky brown, costal margin greenish. Propleura without a black spot. Valves of ovipositor yellow at base, green at tip.



Length 5.5 mm. Described from one female.

Steamboat Springs, July 15th (Baker).

Pediopsis sordida VanD.

Det. VanDuzee.

Colo. (VanDuzee, 4).

Estes Park, July 12th; North Park, July 20th; Steamboat Springs, July 26th; Gore Pass, July 29th (Gillette). Steamboat Springs, July 15th on willow (Baker).

Pediopsis viridis Fitch.

Canon City; Clear Creek Canon, on willow (Uhler, 5). Colorado (Uhler—see VanDuzee, 1). Colorado (VanDuzee, 4).

Dolores, June 18th (Gillette). Fort Collins, August 11th; Steamboat Springs, July 15th on willow (Baker). Colorado Springs, August (Tucker). Some slightly smaller, more yellowish specimens from Montrose, June 24th (Gillette), we had considered distinct, but aside from these differences there are no characters on which they can be separated.

Idiocerus alternatus Fitch.

Colorado (VanDuzee, 4). West Cliff, Custer County, July 31st; also high alpine (Cockerell, 10).

Spring Canon, May 11th; Horsetooth Gulch, April 21st to May 18th; Rist Canon, June 12th; Fort Collins, June 14th; Estes Park, July 12th; Steamboat Springs, July 26th; Lead-

ville, August 23d; Trinidad, May 14th; Montrose, June 24th (Gillette). Fort Collins, October 7th; Dixon's Canon, May 6th; Steamboat Springs, July 15th, on willow (Baker).

A common species everywhere. There seems to be considerable variation in the form of the last ventral segment in the female.

Idiocerus amoenus VanD.

Det. VanDuzee.

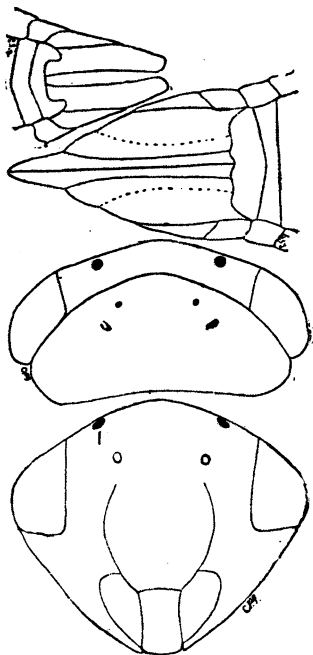
Colorado (VanDuzee, 4).

Horsetooth Mountain, July 4th; Steamboat Springs, July 26th; Montrose, June 24th (Gillette). On Red Stone Creek twelve miles south-west of Fort Collins, August 1st (Baker).

Idiocerus interruptus n. sp.

Female; Face about a ninth wider than long; clypeus one-half longer than broad, gradually broader towards the almost truncate apex, basal suture straight; lorae a little longer and almost as broad as the clypeus; genae rather narrow, the outer margins straight, attaining tip of clypeus, moderately broad below the lorae; front one-fourth longer than broad and nearly three times as long as the clypeus. Face, pronotum and scutellum finely shagreened. Vertex finely, transversely wrinkled, about one-fourth longer at the eyes than at the middle, distance between the eyes a little less than five and a half times the length at the middle. Pronotum a little more than twice as broad as long, and three and a half times the length of the vertex; the curvature a little more than two-thirds the length of the pronotum; transverse groove of scutellum angularly bent forward and obsolete at the center, appearing as two oblique lunate depressions. Last ventral segment with the hind margin shallowly notched and the posterior angles obliquely cut off. Color pale yellow marked with brown and black; face mottled above with brown; eyes brown. Vertex brown with a yellowish white line next the eyes, and a median longitudinal white line, and a small black spot on either side. Pronotum brown with a broad median longitudinal white band, anterior margin whitish with about four small blackish spots on either side; scutellum whitish with a large black spot just within the basal angles on either side; a median brown line between base and transverse groove, forked beyond and extending nearly to the tip; a small black spot on either side just before the ends of the transverse groove. Elytra whitish subhyaline, with an oblique brown band on the middle extending down and forward, veins brown interrupted with white, a large white spot on the middle of the clavus, with a smoky spot in front and another on the tip; all beneath unicolorous, legs slightly washed with rufous, propleura with a black spot. Length 5 mm.

Male: Differs from female as follows: Below deeper yellow, white lines next the compound eyes obsolete, other light marking on the vertex and pronotum yellowish, most of the dark markings darker; front margin of anterior coxae with a large black spot, and narrow black lines on the outer sides of all the tibiae; compound eyes jet black; black



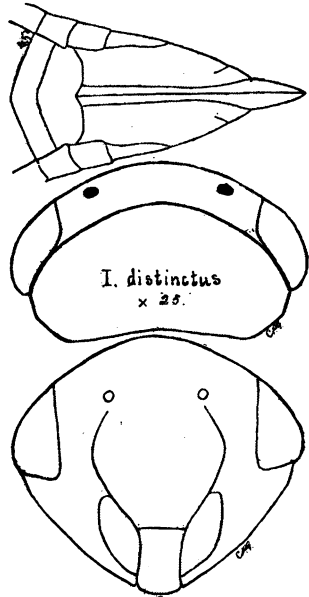
spots on propleura much larger. Length 4.75 mm.

Described from two females and one male.

***Idiocerus distinctus* n. sp. ***

Female: Form that of a small and slender alternatus. Face a little less than one-eighth wider than long; clypeus two-fifths longer than broad, broadest at base; lorae a little longer than clypeus, and two-thirds as broad; genae rather deeply depressed beneath the eyes, lateral margins nearly straight, attaining the tip of the clypeus and broad beneath the lorae. Front but little longer than broad, two times as long as the clypeus, rapidly narrowing below the antennae; face rather coarsely shagreened. Vertex finely transversely wrinkled, length at the middle the same as at the eyes, width between eyes a little less than five times the length at the middle, apex very broadly rounded. Pronotum two times as broad as long, three times as long as vertex, curvature little more than two-thirds of the length; slightly concave behind; disc finely transversely shagreened, transverse groove as in interruptus. Last ventral segment with the hind margin broadly rounded, notched at the center, posterior angles rounded. Color brown and white above, yellowish beneath. Face and vertex pale yellow washed with pale rufous. Vertex with small round black spots on crest. Pronotum pale brown with about eight or ten small pale bluish spots. Scutellum rufous, dark near the posterior angles, with two small spots on the disc, and the apex pale. Elytra white next to scutellum and at tip of clavus deep smoky; two or three lines on the nervures below tip of clavus, and nervures at tip of corium, blackish. Venter yellow. Legs pale yellow, concolorous.

Length 4.75 mm. Described from one female.

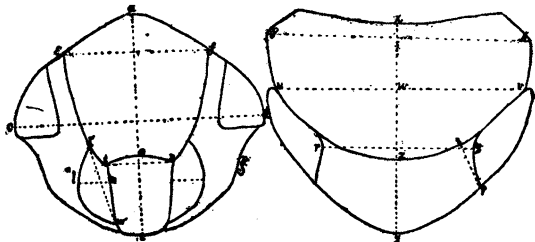


Steamboat Springs, July 15th on willow (Baker).

Fort Collins, September 26th on elm (Baker), and September on grass (Gillette).

Variety A. We have a single female, identical in all respects with this species except that it is strongly suffused

*The lines drawn on the accompanying figure indicate where the measurements which are given in these descriptions are made. For example, a-b would be the length and c-d the breadth of the face; a-o the length and e-f the breadth of the front, &c. The width of the clypeus is always taken at its base, and the width of the lorae where they are widest measured



at right angles to the median line of the front. By length of vertex at the eye, we mean the shortest distance across the vertex at this point. By curvature is meant the distance w-z. The width of the front is always given where it is greatest. In *Idiocerus* the length of the front is taken from base of clypeus to the ocelli.