

PROCEEDINGS
OF THE
WASHINGTON ACADEMY OF SCIENCES

VOL. IV., PP. 117-274.

[PLATES IX-XI.]

MAY 29, 1902.

PAPERS FROM THE HARRIMAN ALASKA
EXPEDITION.

XXVIII.

HYMENOPTERA.

BY WILLIAM HARRIS ASHMEAD.

ASSISTANT CURATOR, U. S. NATIONAL MUSEUM.

CONTENTS:

Introduction	117
Systematic account.	123
Heterophaga:	
I. Apoidea	123
II. Sphecoidea	131
III. Vespoidea	134
IV. Formicoidea	135
V. Proctotrypoidea	136
VI. Cynipoidea	141
VII. Chalcidoidea	143
VIII. Ichneumonoidea	148
Phytophaga:	
IX. Siricoidea	253
X. Tenthredinoidea	254

INTRODUCTION.

ALASKA has long been a *terra incognita* to the Hymenopterologist. Up to the year 1899, the date of the Harriman Expedition, less than 30 species of Hymenoptera were known from this vast territory.

In this paper 335 species are recorded, of which number 201 are regarded as new to science and are here first described.

Of the 10 superfamilies, into which the order is now divided, all are represented in Alaska and are distributed into 29 families and 183 genera. Two of these genera, *Dallatorrca* and *Hyposyntactus* are new, and of the remainder, thirty have not been previously reported from North America.

This sudden and great increase of our knowledge in this field, in so short a time, is due mainly to the Harriman Expedition and to its indefatigable collector, Professor Trevor Kincaid.

The distribution of some of the species taken is most interesting. Four species, namely, *Lissonotus ruficoxis* Schmiedsknecht, *Triclistus curvator* Fabricius, *Alysia manducator* Panzer and *Ichneutes reunitor* Nees, are European, and three of them have not before been reported from North America. The last two mentioned are, however, widely distributed over Europe from the Arctic to the Mediterranean, and will doubtless be found to occur in Asia also. *Alysia manducator* is parasitic upon dipterous larvæ (*Muscidæ*), while *Ichneutes reunitor* destroys the willow saw-flies (*Nematidæ*).

Two bumble bees, *Bombus pleuralis* Nylander and *B. melanopygus* Nylander are Asiatic occurring in Siberia. *Bombus moderatus* Cresson is also recorded from Bering Island off the coast of Asia. Others of the bees taken occur in British Columbia, Hudson Bay Territory and in some parts of the northwestern States, *i. e.*, Washington, Oregon, California and Utah; only a few extend their range into the mountains of New Mexico, Idaho, and Colorado. A similar distribution is observed in some of the Sphecoidea and Vespoidea.

The ant, *Myrmica levinodis* Nylander is found in Europe and in Asia—Turkestan and Siberia; and another species, *Lasius niger* Linné, is found in Europe, northern Africa, Japan and Asia.

In the Ichneumonoidea and the Tenthredinoidea, many of the known species have a wide distribution throughout the Boreal Zone, *i. e.*, British Columbia, Canada and the northern United States. Very few are found in the Austral region and these occur principally in the Transition Zone; while still fewer are

known from the Upper Austral Zone, all being common species with a wide distribution, namely, *Metacaelus laevis* Cr., *Ophion bilineatum* Say, *Enicospilus purgatus* Say, *Dolerus aprilis* Norton, etc.

The results of the collection in this order, made by the Harriman Expedition, are therefore most surprising considering that nearly all were taken in the coastal region, within the brief period of two months, between the first of June and the first of August. They fully demonstrate that this gold-bearing country is as rich in representatives of this order as any other similar region of boreal America; and they make it highly probable that when the interior of Alaska has been thoroughly exploited, a large majority of the species occurring in the Boreal Zone (British Columbia, Upper Canada and in the higher altitudes of the United States) will be found.

In this contribution towards the results of the Expedition I have also included, with the permission of Dr. C. Hart Merriam, editor of the papers of the expedition, all known Hymenoptera from Alaska and have incorporated all unstudied Alaskan material in the National Museum with the threefold object of (*a*) giving the results of the Harriman Expedition, (*b*) describing the new species in the National Museum, and (*c*) giving a complete list of Alaskan Hymenoptera, for the benefit of students and for the guidance of future expeditions, so that special efforts may be made to collect in families and genera not yet reported from Alaska.

I congratulate Mr. Harriman upon the splendid results obtained by his expedition and the National Museum in being made the depository of the rich collections made in the classes Insecta and Arachnida—the finest ever made in Alaska.

The arrangement of the families and genera is in accordance with the writer's views on the classification of these insects. All species not otherwise credited were received from the Harriman Expedition. It should also be noted that the specimens credited to the Fur Seal Commission, with few exceptions, were also collected by Professor Kincaid.

The following is a systematically arranged summary of the results:

TABULAR EXHIBIT SYSTEMATICALLY ARRANGED OF ALASKAN
HYMENOPTERA.

Superfamilies.	Families.	Genera.	Number of Species.			
			Old.	New.	Total.	
Apoidea	Bombidæ	Bombus	12	5	17	
	Psithyridæ	Psithyrus	1	1	2	
	Andrenidæ	Andrena	1	...	1	
Sphecoidea	Crabronidæ	Ectemnius	1	...	1	
		Clytochrysus	1	...	1	
		Thyreopus	1	...	1	
		Blepharipus	1	...	1	
	Pemphredonidæ	Dolichocrabro .....	...	1	1
		Passalæcus	1	...	1	
		Mimisa	1	...	1	
Vespoidea	Pompilidæ	Arachnophila	1	...	1	
		Vespa	2	...	2	
	Eumenidæ	Odynerus	1	...	1	
	Chrysididæ	Omalus	1	...	1	
Formicoidea	Myrmicidæ	Myrmica	3	...	3	
		Leptothorax	1	...	1	
	Formicidæ	Formica	1	...	1	
Proctotrypoidea.	Proctotrypidæ	Lasius	1	...	1	
		Proctotrypes .....	...	1	1
	Belytidæ	Zelotypa .....	...	3	3
		Aclista	1	...	1	
		Zagota	1	...	1	
	Cynipoidea	Diapriidæ	Spilomicrus	1	1
		Ceraphronidæ	Lygocerus	1	1
Figitidæ			Tetrarhapta	1	1
Chalcidoidea	Eucoela	Eucoela .....	...	1	1
		Alloxysta .....	...	1	1
	Torymidæ	Torymus	1	...	1	
	Miscogasteridæ	Terobia .....	...	1	1
	Pteromalidæ	Eutelus .....	...	1	1
Ichneumonoidea ...	Ichneumonidæ	Tetrastichus .....	...	2	2
		Elachistus .....	...	1	1
		Eulophus .....	...	1	1
		Automalus .....	...	1	1
		Stenichneumon .....	...	1	1
		Ichneumon	3	7	10	
		Melanichneumon .....	...	1	1
		Cratichneumon .....	...	5	5
		Probolus .....	...	1	1
		Platylabus	2	...	2	
		Centeterus .....	...	1	1
		Eriplatys .....	...	1	1
Xestophya .....	...	2	2		
Asynocrita	1	...	1			
Exolytus	1	11	12			
Atractodes .....	...	1	1		
Stibeutes	1	...	1			
Stiboscopus .....	...	6	6		
Bathymetis .....	...	11	11		
Plectocryptus .....	...	2	2		
Microcryptus .....	...	2	2		
Plesiognathus .....	...	1	1		
Hedyulus	2	...	...	
Bachia	1	...	...	

TABULAR EXHIBIT SYSTEMATICALLY ARRANGED OF ALASKAN
HYMENOPTERA.—*Continued.*

Superfamilies.	Families.	Genera.	Number of Species.		
			Old.	New.	Total.
Ichneumonoidea ...	Ichneumonidae	Spinolia .....	...	1	1
		Acrolyta .....	...	2	2
		Thestis .....	...	1	1
		Aclastus .....	...	1	1
		Habromma .....	...	1	1
		Algina.....	...	1	1
		Ænoplex .....	...	1	1
		Philonygus.....	...	2	2
		Ilapinastes.....	...	1	1
		Isochresta.....	...	1	1
		Thaumatotypus....	1	...	1
		Theroscopus .....	...	3	3
		Pezomachus.....	1	2	3
		Cryptoideus.....	...	1	1
		Himertosoma .....	...	1	1
		Lampronota.....	1	...	1
		Phytodietus .....	...	2	2
		Trevoria .....	...	1	1
		Lissonota	1	1	2
		Pimplopterus.....	...	2	2
		Harrimaniella .....	...	1	1
		Ecthrodoca	2	1	3
		Rhyssa .....	...	1	1
		Pimpla.....	...	1	1
		Epiurus .....	...	2	2
		Glypta.....	...	2	2
		Holcostizus	1	...	1
		Odontomerus.....	1	...	1
		Cubocephalus.....	...	3	3
		Xylonomus.....	1	...	1
		Spanoctecnus.....	...	1	1
		Dallatorrea .....	...	1	1
		Hypocryptus . ....	...	5	5
		Mesoleptus.....	...	1	1
		Microplectus.....	...	1	1
		Cteniscus	1	1	2
		Diaborus.....	...	2	2
		Erromenus .....	...	1	1
		Monoblastus .....	...	1	1
		Polyblastus .....	...	1	1
		Scorpiorus .....	...	2	2
		Trematopygus.....	...	1	1
		Cosmoconus	1	...	1
		Tryphon.....	...	1	1
		Tryphoctonus.....	...	1	1
		Sychnoportus .....	...	1	1
		Tlemon.....	...	1	1
		Polyterus .....	...	1	1
		Hyposyntactus....	...	1	1
		Calliphururus.....	...	10	10
		Gemophaga .....	...	1	1
		Mesoleius	2	...	2
		Bassus	1	...	1
		Promethes .....	...	1	1

Note: New genera in black face type.

TABULAR EXHIBIT SYSTEMATICALLY ARRANGED OF ALASKAN
HYMENOPTERA.—*Continued.*

Superfamilies.	Families.	Genera.	Number of Species.				
			Old.	New.	Total.		
Ichneumonoidea ...	Ichneumonidæ	Bioblapsis.....	...	1	1		
		Zootrepbes .....	...	1	1	
		Phthorina .....	...	1	1	
		Enizemon	1	...	1		
		Homotropus .....	...	2	2	
		Synoplus .....	...	2	2	
		Hypoleptus .....	...	2	2	
		Neuroteles ..	...	1	1	
		Deleter .....	...	2	2	
		Tapinops.....	1	...	1		
		Atmetus.....	1	...	1		
		Orthocentrus.....	...	1	1		
		Phænosemus.....	...	1	1		
		Stenomacrus.....	1	...	1		
		Camarotops .....	...	1	1	
		Triclistus	1	...	1		
		Metacælus	1	...	1		
		Ophion	1	...	1		
		Enicospelus	1	...	1		
		Atrometus .....	...	1	1	
		Campoplex.....	1	...	1		
		Zachresta .....	...	2	2	
		Phædroctonus.....	...	1	1		
		Olesicampa .....	...	1	1	
		Hypothereutes .....	...	1	1	
		Ischnoscopus .....	...	1	1	
		Limnerium.....	...	1	1		
		Ameloctonus.....	...	1	1		
		Paniscus.....	...	1	1		
		Mesochorus	1	2	3		
		Isurgus .....	...	1	1	
		Catastenus.....	1	1	2		
		Plectiscus.....	...	1	1		
		Alysiidæ.....	Alysia	1	...	1	
			Anarcha	1	1	
			Delocarpa.....	...	1	1	
			Rhizarcha	1	1	
			Gyrocampa.....	...	1	1	
		Braconidæ	Liposcia.....	...	1	1	
			Praon.....	...	1	1	
			Aphidius.....	...	4	4	
			Dyscoletes	1	1	
			Chelonus	1	...	1	
			Protapanteles	3	3	
			Apanteles.....	...	1	1	
			Microplitis.....	...	1	1	
			Ichneutes.....	1	2	3	
			Desmiostoma.....	...	1	1	
			Macrodyctium.....	...	1	1	
			Exothecus.....	...	1	1	
			Rhogas	1	1	
		Siricoidea.....	Siricidæ.....	1	...	1	
		Tenthredinoidea....	Lydidæ	Itycorsia.....	1	...	1
				Cephaleia.....	2	..	2

TABULAR EXHIBIT SYSTEMATICALLY ARRANGED OF ALASKAN
HYMENOPTERA.—*Continued.*

Superfamilies.	Families.	Genera.	Number of Species.			
			Old.	New.	Total.	
Tenthredinoidea ...	Lydidæ	Batroceros .....	...	1	1
		Selandriidæ	Fenusa.....	1	...	1
	Nematidæ	Erythraspides	1	...	1	
		Monophadnus	1	...	1	
		Paraselandria.....	1	...	1	
		Pæcilostomidea ...	1	...	1	
		Pachynematus.....	6	...	6	
		Nematus.....	2	...	2	
		Pristiphora.....	6	...	6	
		Euura	1	...	1	
		Pontania.....	8	...	8	
		Pteronus.....	3	...	3	
		Amauronematus...	1	...	1	
	Tenthredinidæ	Dolerus.....	4	...	4	
		Emphytus.....	1	...	1	
		Pachyprotasis.....	1	...	1	
		Macrophya.....	2	...	2	
		Tenthredo.....	3	...	13	
	Cimbicidæ	Allanthus.....	1	...	1	
		Cimbex.....	1	...	1	
		Trichiosoma.....	2	...	2	
	Total			134	201	335

Thus it appears that 10 superfamilies, 29 families, 183 genera (2 being new) and 335 species (201 being new) are now known from Alaska.

SYSTEMATIC ACCOUNT.

Suborder **HETEROPHAGA** Ashmead.

Superfamily I. **APOIDEA** Ashmead.

Family **BOMBIDÆ**.

Genus **Bombus** Latreille.

BOMBUS MODERATUS Cresson.

Bombus modestus CRESSON, Proc. Ent. Soc. Phil., II, p. 99, ♀ (nec *modestus* Smith), 1863.

Bombus moderatus CRESSON, Proc. Ent. Soc. Phil., II, p. 109, 1863.—CRESSON, Syn. Hym. North America, p. 308, 1887.—ASHMEAD, Fur Seals and Fur Seal Islands, IV, p. 336, 1899.

Bombus terricola var. *modestus* HANDLIRSCH, Ann. Hofmus. Wien, III, p. 234, 1888. DALLA TORRE, Cat. Hym., x, p. 558, 1896.

Type in collection of the American Entomological Society. From Kodiak, July 20. One female, six workers.

I cannot agree with Herr Handlirsch, of the Hofmuseum, Vienna, Austria, who has reduced this species to a variety of *B. terricola* Kirby, with which it is not even closely allied.

BOMBUS CALIFORNICUS Smith.

- Bombus californicus* SMITH, Cat. Hym. Brit. Mus., II, p. 400, ♀♂, 1854.—
 CRESSON, Proc. Ent. Soc. Phil., II, p. 97, ♂♀, 1863.—CRESSON, Trans.
 Am. Ent. Soc., VII, p. 230, 1879.—CRESSON, Syn. Hym. North America,
 p. 307, 1887.—HANDLIRSCH, Ann. Hofmus. Wien, III, p. 243, 1888.—
 DALLA TORRE, Cat. Hym., X, p. 513, 1896.
Bombus vosnesenski RADOSZKOWSKI, Bull. Soc. Nat. Moscou, XXXV, p. 589,
 T. 6, f. 2, 1863.
Bombus flavifrons SMITH, Lord's Naturalist in Vanc. Isl., II, p. 34, 1866.
Bombus columbicus DALLA TORRE, Cat. Hym. Wien. Ent. Zeitg., IX, p. 139,
 1890.

Type in British Museum. From Sitka (*teste* Handlirsch).

BOMBUS NEVADENSIS Cresson.

- Bombus pennsylvanicus* CRESSON, Proc. Ent. Soc. Phila., II, p. 94, ♂ (*nec* De
 Geer), 1863.
Bombus nevadensis CRESSON, Trans. Am. Ent. Soc., V, p. 102, ♀♂ 1874.—
 CRESSON, Rep. Geogr. & Geol. Surv. 100th merid., V, p. 728, Pl. 34, f.
 5, 1875.—CRESSON, Syn. Hym. North Am., p. 308, 1887.—HANDLIRSCH,
 Ann. Hofmus. Wien, III, p. 245, T. 10, f. 3, II, 1888.—DALLA TORRE,
 Cat. Hym., X, p. 538, 1896.

Type in collection of the American Entomological Society. From
 Alaska (U. S. Coast and Geodetic Survey), Nevada, Utah, Colorado.

BOMBUS PROXIMUS Cresson.

- Bombus proximus* CRESSON, Proc. Ent. Soc. Phila., II, p. 98, ♀, 1863.
Bombus howardii var. *proximus* CRESSON, Trans. Am. Ent. Soc., VII, p. 231,
 1879.—CRESSON, Syn. Hym. North Am., p. 308, 1887.
Bombus terricola var. *proximus* HANDLIRSCH, Ann. Hofmus. Wien, III, p.
 234, 1888.—DALLA TORRE, Cat. Hym., X, p. 559, 1896.

Type in collection of the American Entomological Society. From
 Alaska (U. S. Coast and Geodetic Survey).

BOMBUS NEGLECTULUS sp. nov.

Female.—Length 17 mm. Black and clothed with a black pubes-
 cence, except as follows: The anterior portion of the thorax above,
 and a small spot just in front of the tegulæ are clothed with a pale
 yellowish pubescence; the scutellum has two tufts of yellowish pubes-
 cence but mixed with black hairs on their inner margins, while the
 third dorsal abdominal segment at apex and *laterally*, and the fourth
 entirely are clothed with a fulvo-rufous pubescence.

The head is clothed with a black pubescence; the malar space is long, nearly one-half the length of the eyes; the second joint of the flagellum is much shorter than the first, or the third, and scarcely longer than thick; while the wings are blackish fuscous, the tegulæ piceous, impunctate.

Worker.—Length 13 mm. Agrees well with the female in color, except that the head has a tuft of yellowish hairs on the vertex and on the face, while the mesopleura are also yellowish. The fulvo-rufous pubescence on abdominal segments 3 and 4 is confined entirely to the lateral margins, the median portion of the segments being bare and shining, while the fifth segment also has a small tuft of fulvo-rufous hairs at its extreme lateral margins.

Male.—Unknown.

Type.—Cat. No. 5718, U. S. Nat. Museum. From Alaska (U. S. Coast and Geodetic Survey).

In the collection of the American Entomological Society is a single worker agreeing well with the female, except in its smaller size, and labelled *Bombus howardii* Cresson, Silver Lake, Utah, July 16.

This species comes evidently nearest to *B. medius* Cresson and *B. dubius* Cresson, but is easily separated from both by the difference in the color of the scutellum and abdomen, and by the longer malar space.

BOMBUS MCKAYI sp. nov.

Female.—Length 19 mm. Black, clothed with a black pubescence, the middle of the face below the antennæ, thorax above anteriorly, scutellum posteriorly and the third, fifth and sixth dorsal segments of abdomen clothed with a pale yellowish-white pubescence, the black pubescence of the second segment overlaps the base of the third and the black pubescence of the fourth segment overlaps the base of the fifth or the hairs are white at apex.

The head seen from in front, is a little longer than wide, the malar space being distinct, rather long, as long as the pedicel and first joint of the flagellum united; the forehead, between the ocelli and base of the antennæ is distinctly punctate; the ocelli are pale and arranged almost in a straight line; while the wings are fuscous with the tegulæ and the veins black. Legs black, with a small spot of hairs at apex of front and middle tibiæ before and behind, and the hind tibiæ before and behind fringed with fulvous hairs. The antennæ are broken off at tips but the joints of the flagellum remaining are as follows: The first joint is the longest, obconical, a little longer than the third or fourth, which are equal in length and a little longer than the second.

Type.—Cat. No. 5719, U. S. Nat. Museum. From Nushagak River (Chas. W. McKay). Received through U. S. Dept. Agric.

BOMBUS COUPERI Cresson.

Bombus couperi CRESSON, Proc. Acad. Nat. Sci. Phila., p. 185, ♀, 1878.—CRESSON, Syn. Hym. North Am., p. 307, 1887.—DALLA TORRE, Cat. Hym., x, p. 515, 1896.

Type in collection of the American Entomological Society. Popof Island, July 2, 4; Seldovia, July 7; Nushagak River (Chas. W. McKay). All sexes are represented.

BOMBUS OREGONENSIS Cresson.

Bombus oregonensis CRESSON, Proc. Acad. Nat. Sci. Phila., p. 185, ♂, 1878.—CRESSON, Syn. Hym. North Am., p. 308, 1887.—DALLA TORRE, Cat. Hym., x, p. 538, 1896.

Type in collection of the American Entomological Society. Fox Point, July 20; Kodiak, July 20; Juneau, July 25; Seldovia, July 26; Popof Island, July 4.

BOMBUS FRIGIDUS Smith.

Bombus frigidus SMITH, Cat. Hym. Brit. Mus., II, p. 399, ♀ ♂, 1854.—CRESSON, Proc. Ent. Soc. Phila., II, p. 100, ♀ ♀ ♂, 1863.—PROVANCHER, Add. Fn. du Can. Hym., p. 341.—DALLA TORRE, Cat. Hym., x, p. 521, 1896.

Bombus carriei GREENE, Ann. Lyc. Nat. Hist. New York, VII, p. 170, 1860.

Type in British Museum. From Kukak Bay, July 4.

This species is found in Arctic America, Hudson Bay Territory, throughout British Columbia to Vancouver Island and in some high altitudes in the United States—mountains of Colorado and New Mexico.

BOMBUS SITKENSIS Nylander.

Bombus sitkensis NYLANDER, Notis Saellsk. faun. et fl. Fenn. Förh., I [Adnot.], p. 235, ♀ ♂, 1848.—CRESSON, Proc. Ent. Soc. Phila., II, p. 102, ♀ ♀, 1863.—DALLA TORRE, Ber. naturw. mediz., Ver. Innsbr., XII, p. 11, ♂, 1882.—CRESSON, Syn. Hym. North Am., p. 309, 1887.—HANDLIRSCH, Ann. Hofmus. Wien, III, p. 232, 1888.—DALLA TORRE, Cat. Hym., x, p. 549, 1896.—ASHMEAD, Fur Seals and Fur Seal Islands IV, p. 336, 1899.

Bombus prunellæ COCKERELL, Ann. & Mag. Nat. Hist. (7), VI, p. 391, 1899.

Kukak Bay, July 4. Siberia: Bering Island (Dr. L. Stejneger); Copper Island (Barrett-Hamilton). New Mexico (T. D. A. Cockerell); White Mts.

BOMBUS NEARTICUS Handlirsch.

Bombus nearticus HANDLIRSCH, Ann. Hofmus. Wien., III, p. 243, ♀ ♀ ♂, 1888.

Type in Hofmuseum, Vienna. From Juneau, July 25; Wrangell (H. F. Wickham). Occurs also in Canada, Idaho and California.

BOMBUS GELIDUS Cresson.

Bombus gelidus CRESSON, Proc. Acad. Nat. Sci. Phila., p. 184, ♀, 1878.

Bombus melanopygus HANDLIRSCH (*nec* Nylander), Ann. Hofmus. Wien, III, p. 231, 1888.—DALLA TORRE, Cat. Hym., X, p. 533, 1896.

Bombus kincaidii COCKERELL, Ann. & Mag. Nat. Hist. (7), II, p. 324, ♀ ♀ ♂, 1898.

Type in collection of the American Entomological Society.

From Aleutian Islands (Cresson); Pribilof Islands (Kincaid). Dr. Henry Skinner has kindly sent me the type of this species for examination, and Professor Cockerell's *B. kincaidii* proves to be identical with it.

BOMBUS POLARIS Curtis.

Bombus polaris CURTIS, Ross's 2d Voy., App., p. lxiii, ♀ ♂, 1831.—ERICHSON, Arch. f. Naturg., I, p. 288, 1836.—SMITH, Cat. Hym. Brit. Mus., II, p. 397, ♀, 1854.—CRESSON, Proc. Ent. Soc. Phila., II, p. 101, 1863.—MACLACHLAN, Journ. Linn. Soc. Zool., XIV, p. 106, 1877.—DALLA TORRE, Cat. Hym., X, p. 540, 1896.

Type in British Museum. From Kodiak, July 20; Seldovia, July 25.

BOMBUS PLEURALIS Nylander.

Bombus pleuralis NYLANDER, Notis. Saellsk faun. et fl. Fenn. Förh., I [Adnot.] p. 231, ♀ ♂, 1848.—CRESSON, Proc. Ent. Soc. Phila., II, p. 96, ♀ ♂, 1863.—DALLA TORRE, Cat. Hym., X, p. 540, 1896.

From Popof Island, July 8, 9, 11; Kodiak, July 20. Also found in Siberia.

BOMBUS SYLVICOLA Kirby.

Bombus sylvicola KIRBY, Faun. Bor.-Amer., IV p. 272, 1837.—CRESSON, Proc. Ent. Soc. Phila., II, p. 106, ♀, 1863.—CRESSON, Syn. Hym. North Am., p. 309, 1887.—DALLA TORRE, Cat. Hym., X, p. 548, 1896.

Bombus gelidus COCKERELL (*nec* CRESSON).

Type in British Museum. From Kukak Bay, July 4; Popof Island, July 9; Seldovia, July 21; Unalaska, August 27.

BOMBUS JXTUS Cresson.

Bombus jxtus CRESSON, Proc. Acad. Nat. Sci. Phila., p. 187, ♀, 1878.—CRESSON, Syn. Hym. North Am., p. 308, 1887.

Bombus flavifrons HANDLIRSCH (*nec* Cresson) Ann. Hofmus. Wien, III, p. 231, 1888.—DALLA TORRE, Cat. Hym., X, p. 520, 1891.

Bombus parvulus COCKERELL.

Type in collection of the American Entomological Society. From Kukak Bay, July 4; Matlakatla; Nushagak River (Chas. W. McKay); Wrangell (H. F. Wickham).

BOMBUS MELANOPYGUS Nylander.

- Bombus melanopyge* NYLANDER, Notis. Saellsk. faun. et fl. Fenn. Förh. 1 [Adnot.], p. 236, ♀, 1848.—CRESSON, Proc. Ent. Soc. Phila., 11, p. 103, 1863.—CRESSON, Syn. Hym. North Am., p. 308, 1887.
- Bombus menestriesii* RADOSKOWSKI, Bull. Soc. Natur. Moscou, xxxii, p. 843, ♂ ♀, Pl. 5, f. 6, 1859.
- Bombus melanopygus* HANDLIRSCH, Ann. Hofmus. Wien, III, p. 251, 1888.—DALLA TORRE, Cat. Hym., x, p. 533, 1896.
- Bombus lacustris* CRESSON, Proc. Ent. Soc. Phila., 11, p. 103, 1863.—CRESSON, Syn. Hym. North Am., p. 308, 1887.—PROVANCHER, Add. Fn. Hym., p. 340, 1888.
- ? *Bombus ternarius* var. *lacustris* HANDLIRSCH, Ann. Hofmus. Wien, III, p. 251, 1888.—DALLA TORRE, Cat. Hym., x, p. 533, 1896.

Type of *lacustris* Cresson, in collection of the American Entomological Society. From Berg Bay, June 10; Juneau, June 7, July 25; Kodiak, July 20; Seldovia, July 21; Wrangell (H. F. Wickham); Seward Peninsula (W. J. Peters); Sitka (Fur Seal Commission).

This species is also common in Vancouver Island, B. C.

The type of *Bombus lacustris* Cresson was submitted to me for examination, together with other of Cresson's types of bumble bees, by Dr. Henry Skinner, Curator of the American Entomological Society, and it is undoubtedly identical with the above species. What Handlirsch describes as *Bombus ternarius* var. *lacustris* is probably a different species.

BOMBUS ALASKENSIS sp. nov.

Female.—Length 17 mm. Resembles *B. melanopygus* Nylander, very closely and with the color of the pubescence almost identical, except that the scutellum is more grayish and the first and second dorsal abdominal segments are clothed with a yellowish pubescence, the third and fourth red or fulvo-rufous, the fifth and sixth black.

Worker.—Length 12 to 13 mm. Colored as in female and practically the same except in being much smaller.

Male.—Unknown.

Type.—Cat. No. 5720, U. S. Nat. Museum. From Sitka, June 16; Fox Point, July 20.

BOMBUS MIXTUOSUS, sp. nov.

Female.—Length 14 mm. Mesopleura and dorsal abdominal seg-

ments 1 and 2 clothed with a yellowish pubescence, that on the two basal segments is very sparse or interrupted medially; the last three abdominal segments with very sparse, pale yellowish hairs; thorax above medially and on the scutellum with a grayish pubescence, the anterior part of the thorax with yellow hairs well intermixed with black, very much as in *B. melanopygus* Nylander; dorsal abdominal segments 3 and 4 with a black pubescence but usually (though not invariably) interrupted by a narrow fringe of yellowish hairs extending from the apex of the second; ventral segments fringed with a sparse pale pubescence; face with a yellowish pubescence more or less mixed with black hairs; legs with a long yellowish hair fringe, that on the femora *beneath* is usually mixed more or less, with black hairs. Malar space a little longer than wide. First joint of flagellum a little longer than the third, the second hardly longer than thick and only about two-thirds the length of the third.

Worker.—Length (major) 12 mm.; (minor) 7.5 to 10 mm. Both colored as in female, except that the pubescence on the face in the worker minor is black or with only a few whitish hairs intermixed with the black.

Male.—Unknown.

Type.—Cat. No. 5721, U. S. Nat. Museum. From Popof Island, June 21; Yakutat, June 21; Virgin Bay, June 21; Fox Point, July 20.

BOMBUS DIMIDIATUS sp. nov.

Female.—Length 12 mm. Mesopleura, the anterior part of the thorax above, the apex of scutellum and the dorsal abdominal segments 1 and 2 clothed with a pale yellowish pubescence that on the pleura is nearly white, on the anterior part of the thorax and the scutellum mixed with black hairs on dorsal segments 1 and 2 interrupted by a bare space medially; otherwise, except some pale hairs on the middle of the face and the apical fringe on the ventral segments, the pubescence is black. Wings fuscous. Malar space about one-third the length of the eye. First joint of flagellum nearly as long as 2 and 3 united, the second shorter than the third, not longer than wide. Occasionally the black hairs on the apex of the third and fourth dorsal segments of abdomen are well mixed with fulvo-rufous hairs, having the appearance of two red lines across the black pubescence.

Worker.—Length 9 mm. Agrees in color with the female (or? worker major), except that the face is usually black or with only a small tuft of pale hairs between and extending below the insertion of the antennæ.

Male.—Unknown.

Type.—Cat. No. 5722, U. S. Nat. Museum. From Fox Point, July 28; Wrangell (H. F. Wickham).

The female described above may really be the worker major, for many of our bumble bees have two forms of workers—a worker *major* and a worker *minor*.

Family PSITHYRIDÆ.

Genus *Psithyrus* Lepeletier.

PSITHYRUS INSULARIS (Smith).

? *Bombus interruptus* GREENE, Ann. Lyc. Nat. Hist. New York, VII, p. 11, ♀, 1858.—GREENE, op. cit., VII, p. 193, 1860.

? *Bombus suckleyi* GREENE, Ann. Lyc. Nat. Hist. New York, VII, p. 173, ♂, 1860.

Apathus insularis SMITH, Journ. Ent., I, p. 155, ♀, 1861.—CRESSON, Proc. Ent. Soc. Phila., II, p. 113, ♀♂, 1863.—PROVANCHER, Add. Fn. du Can. Hym., p. 343, ♀♂, 1888.

Psithyrus insularis HANDLIRSCH, Ann. Hofmus. Wien, III, p. 248, 1888.

Psithyrus interruptus DALLA TORRE, Cat. Hym., X, p. 569, 1896.

Type in British Museum. From Berg Bay, June 10; Sitka, July 16; Juneau, July 25; Seldovia, July 7; and Nushagak River, July 27, 1881 (Chas. W. McKay).

PSITHYRUS KODIAKENSIS sp. nov.

(Pl. IX, fig. 1.)

Male.—Length 14 mm. The tegument of this species, except the disk of the mesonotum and the base of the scutellum where the pubescence is thin, and the first and second segments of the abdomen, which are brown, is entirely black. The head, except a tuft of ochraceous pubescence on the face below the insertion of the antennæ and on the vertex posteriorly, is clothed with a black pubescence; thorax above and at sides, dorsal abdominal segments 1 and 2, the venter and the legs clothed with a rather long ochraceous pubescence; dorsal abdominal segments 2 to 7 with a black pubescence and in striking contrast with the ochraceous pubescence of the basal segments.

The head seen from in front is much longer than wide, the malar space long, smooth and shining and fully as long as the pedicel and first two joints of the flagellum united; the clypeus, except anteriorly, is punctate; the labrum is feebly transversely impressed, sparsely punctate, except the lateral hind angles, which are polished and impunctate; the first joint of the flagellum is shorter than the third but longer than

the second, the latter being only about two-fifths the length of the third and the shortest joint, while the last joint is compressed and a little shorter than the third.

Type.—Cat. No. 5723, U. S. Nat. Museum. From Kodiak, July 20. Two specimens.

Family ANDRENIDÆ.

Genus *Andrena* Latreille.

ANDRENA FRIGIDA Smith.

Andrena frigida SMITH, Cat. Hym. Brit. Mus., 1, p. 115, ♀, 1853.—PROVANCHER, Nat. Can., XIII, p. 195, 1882.—PROVANCHER, Fn. ent. du Can. Hym., p. 795, 1883.—CRESSON, Syn. Hym. North Am., p. 293, 1887.—DALLA TORRE, Cat. Hym., x, p. 125, 1896.

Male.—Length 8 mm. Black, clothed with a long sparse whitish pubescence; tarsi with a dark rufo-piceous tinge beneath; mandibles long, decussate and with a prominent process beneath at base, head transverse wider than the thorax, viewed from above obtrapezoidal, the occiput rather broadly concave, the temple much broadened below and, as seen from the side, forming an acute angle with the base of the mandibles; malar space very short; face rather closely punctate, the vertex between the eyes and the lateral ocelli and towards the base of the antennæ longitudinally aciculate, the temples shining although faintly coriaceous; thorax above opaque, alutaceous, impunctate; metathorax finely coriaceous without vestige of carinæ. Wings hyaline, the stigma and veins brown, the tegulæ piceous. Abdomen long oval, a little longer than the head and thorax united, apparently smooth and shining, but with a strong lens exhibiting numerous microscopic transverse lineations, the first and second dorsal segments clothed with long whitish hairs, the hairs on the following segments sparser and confined more particularly to the lateral margins.

Type female in British Museum, *male* in U. S. Nat. Museum. From Muir Inlet, June 11; Sitka, June 16.

Superfamily II. **SPHECOIDEA** Ashmead.

Family CRABRONIDÆ.

Subfamily *CRABRONINÆ*.

Genus *Ectemnius* Dahlbom.

ECTEMNIUS PARVULUS (Packard).

Crabro parvulus PACKARD, Proc. Ent. Soc. Phila., VI, p. 108, ♀, 1867.—CRESSON, Syn. Hym. North Am., p. 285, 1887.—FOX, Trans. Am. Ent.

Soc., xxii, p. 142, ♀♂, 1895.—DALLA TORRE, Cat. Hym., VIII, p. 616, 1896.
Ectemnius parvulus ASHMEAD, Can. Ent., xxxi, p. 173, 1899.—KINCAID, Proc. Wash. Acad. Sci., II, p. 508, 1900.

From Seldovia, July 21. The species is also found in Washington, Oregon, Nevada, South Dakota and Colorado.

Genus *Clytochrysus* Morawitz.

CLYTOCHRYsus GRACILISSIMUS (Packard).

Crabro contiguus CRESSON, Proc. Ent. Soc. Phila., IV, p. 484, ♂ (*nec* ♀), 1865.
Crabro gracilissimus PACKARD, Proc. Ent. Soc. Phila., VI, p. 78, ♂, 1867.—CRESSON, Syn. Hym. North Am., p. 285, 1887.—FOX, Trans. Am., Ent. Soc., xxii, p. 144, ♀♂, 1895.—DALLA TORRE, Cat. Hym., VIII, p. 603, 1897.
Clytochrysus gracilissimus ASHMEAD, Can. Ent., xxxi, p. 174, 1899.—KINCAID, Proc. Wash. Acad. Sci., II, p. 508, 1900.

From Fox Point, July 28. Occurs also in Colorado.

Subfamily *THYREOPINÆ*.

Genus *Thyreopus* Latreille.

THYREOPUS VICINUS (Cresson).

Crabro vicinus CRESSON, Proc. Ent. Soc. Phila., IV, p. 479, ♀, 1865.—FOX, Trans. Am. Ent. Soc., xxii, p. 170, ♀♂, 1895.—DALLA TORRE, Cat. Hym., VIII, p. 636, 1897.
Crabro succinctus CRESSON, Proc. Ent. Soc. Phila., IV, p. 479, ♂, 1865.
Thyreopus succinctus CRESSON, Syn. Hym. North Am., p. 287, 1887.
Thyreopus vicinus ASHMEAD, Can. Ent., xxxi, p. 217, 1899.—KINCAID, Proc. Wash. Acad. Sci., II, p. 508, 1900.

Type in collection of the American Entomological Society. From Kukak Bay, July 4. Occurs also in Colorado.

Genus *Blepharipus* Lepeletier et Brullé.

BLEPHARIPUS ATER (Cresson).

Crabro ater CRESSON, Proc. Ent. Soc. Phila., IV, p. 477, ♀, 1865; Syn. Hym. North Am., p. 284, 1887.—FOX, Trans. Am. Ent. Soc., xxii, p. 197, ♀♂, 1895.—DALLA TORRE, Cat. Hym., VIII, p. 583, 1897.
Blepharipus ater PACKARD, Proc. Ent. Soc. Phila., VI, p. 374, 1867.—PROVANCHER, Nat. Can., XIII, p. 133, 1882.—PROVANCHER, Fn. ent. du Can. Hym., VIII, p. 667, 1883.—ASHMEAD, Can. Ent., xxxi, p. 217, 1899.—KINCAID, Proc. Wash. Acad. Sci., II, p. 508, 1900.

Type in collection of the American Entomological Society. From Seldovia, July 28. Occurs also in Canada and Colorado.

Genus **Dolichocrabro** Ashmead.**DOLICHOCRABRO WICKHAMI** sp. nov.

Male.—Length 6.5 to 7 mm. Form elongated and narrowed; black and shining; antennal tubercles, a line on front femora and the tarsi, except the last joint, rufo-piceous; tibial spurs whitish; clypeus anteriorly obtusely triangular and clothed with a dense silvery pubescence; flagellum with a fringe of short white hairs beneath; ocelli honey-yellow.

The head and thorax are delicately punctate; a grooved line extends forward from the front ocellus; supraorbital foveæ are indicated by scars above the eyes; the last joint of the antennæ is slightly arcuate and pointed at apex within; pronotum with a median groove or notch; mesonotum with a median longitudinal line on the anterior half and an abbreviated line on each side of it anteriorly; the mesopleural furrow, the furrows of the metathoracic enclosure and its middle furrow are crenate. Wings hyaline, the stigma and veins brown. Abdomen elongate, subcylindrical, about twice the length of the thorax, polished, but the second and third dorsal segments under a strong lens, show fine, close, delicate transverse aciculations.

Type.—Cat. No. 5742, U. S. Nat. Museum. From Wrangell (H. F. Wickham). Two specimens.

Family **PEMPHREDONIDÆ**.Genus **Passalæcus** Shuckard.**PASSALÆCUS CUSPIDATUS** Smith.

Passalæcus cuspidatus SMITH, Cat. Hym. Brit. Mus., iv, p. 427, ♀, 1856.—CRESSON, Syn. Hym. North Am., p. 283, 1883.—CRESSON, Syn. Hym. North Am., p. 283, 1887.—FOX, Trans. Am. Ent. Soc., xix, p. 321, 1892.—DALLA TORRE, Cat. Hym., viii, p. 368, 1897.—ASHMEAD, Can. Ent., xxxi, p. 223, 1899.

Type in British Museum. From Wrangell (H. F. Wickham). The species is also found in British Columbia (Hudson Bay Territory) and in Colorado.

Genus **Mimesa** Shuckard.**MIMESA PROPINQUA** Kincaid.

Mimesa propinqua KINCAID, Proc. Wash. Acad. Sci., ii, p. 508, ♂, 1900.

Type.—Cat. No. 5314, U. S. Nat. Museum. From Fox Point, July 28.

Proc. Wash. Acad. Sci., May, 1902.

Superfamily III. **VESPOIDEA** Ashmead.Family **POMPILIDÆ**.Subfamily *POMPILINÆ*.Genus **Arachnophila** Ashmead.¹**ARACHNOPHILA SEPTENTRIONALIS** Kincaid.

Arachnospila (err. imp.) *septentrionalis* KINCAID, Proc. Wash. Acad. Sci., II, p. 509, 1900.

Type.—Cat. No. 5313, U. S. Nat. Museum. From Kukak Bay.

Family **VESPIDÆ**.Subfamily *VESPINÆ*.Genus **Vespa** Linné.**VESPA MARGINATA** Kirby.

Vespa marginata KIRBY, Faun. Bor.-Amer., IV, p. 265, 1837.—KINCAID, Proc. Wash. Acad. Sci., II, p. 510, 1900.

Vespa arenaria SAUSSURE (*nec* Fabricius), Stettin. ent. Zeitg., XVIII, p. 116, ♀, 1857.—CRESSON, Syn. Hym. North Am., p. 290, 1887.—DALLA TORRE, Cat. Hym., IX, p. 137 (partim), 1894.

From Kukak Bay, July 3.

| **VESPA BOREALIS** Kirby.

Vespa borealis KIRBY, Faun. Bor.-Amer., IV, p. 264, 1837.—SAUSSURE, Etud. fam. Vesp., II, p. 140, 1853.—CRESSON, Syn. Hym. North Am., p. 290, * 1887.—KINCAID, Proc. Wash. Acad. Sci., II, p. 510, 1900.

From Sitka, June 15; Virgin Bay.

Family **EUMENIDÆ**.Genus **Odynerus** Latreille.**ODYNERUS ALBOPHALERATUS** Saussure.

Odynerus (Ancystrocerus) albophaleratus SAUSSURE, Étud. fam. Vesp., III, p. 217, ♀ ♂, 1856.—SAUSSURE, Smithsonian Miscell. Collect., XIV, p. 167, 1875.—PROVANCHER, Natur. Can., XIII, p. 140, 1882.—PROVANCHER., Fn. ent. du Can. Hym., p. 675, 1883.—CRESSON, Syn. Hym. North Am., p. 287, 1887.—KINCAID, Proc. Wash. Acad. Sci., II, p. 510, 1900.

From Kukak Bay, July 3; Seldovia, July 21; Fox Point, July 28.

¹ The type of this genus is *Pompilus divisus* Cresson.

Family **CHRYSIDIDÆ**.Genus **Omalus** Panzer.**OMALUS SINUOSUS** (Say).

Hedychrum sinuosum SAY, Contrib. Maclure Lyc. Phila., p. 82, 1828.—LECONTE, Ed. Say's Works, I, p. 384, 1859.

Hedychrum janus HALDEMAN, Proc. Acad. Nat. Sci. Phila., p. 53, 1844.

Elampus sinuosum NORTON, Trans. Am. Ent. Soc., VII, p. 234, 1879.

Elampus purpurascens PROVANCHER, Nat. Can., XII, p. 303, 1881.—PROVANCHER, Fn. ent. du Can. Hym., p. 582, 1883.

Omalus sinuosus AARON, Trans. Am. Ent. Soc., XII, p. 214, 1885.—CRESSON, Syn. Hym. North Am., p. 252, 1887.—PROVANCHER, Add. Fn. du Can. Hym., p. 219, 1887.

Elampus sinuosus MOCSARY, Monogr. Chrysid., p. 103, 1889.—DALLA TORRE, Cat. Hym., VI, p. 17, 1892.

From Fort Yukon (L. M. Turner).

Superfamily IV. **FORMICOIDEA** Ashmead.Family **MYRMICIDÆ**.Genus **Myrmica** Latreille.**MYRMICA LÆVINODIS** Nylander.

Myrmica lævinodis NYLANDER, Acta Soc. Sc. Fennic; III, p. 927, ♀ ♂, 1846, Tab. 18, f. 5, 31.—DALLA TORRE, Cat. Hym., VII, p. 110 (Full bibliography), 1893.

From Nushagak River (Chas. W. McKay). Occurs also in Siberia and various parts of the United States.

MYRMICA SABULETI LOBIFRONS Pergande.

Myrmica sabuleti var. *lobifrons* PERGANDE, Proc. Wash. Acad. Sci., II, p. 321, ♀, 1900.

Type.—Cat. No. 5279, U. S. Nat. Museum. From Alaska.

MYRMICA SULCINOIDES Emery.

Myrmica sulcinoides EMERY, Zool. Jahrb., XI, p. 313, ♀, 1898.—PERGANDE, Proc. Wash. Acad. Sci., II, p. 52, 1900.

From Sitka.

Genus **Leptothorax** Mayr.**LEPTOTHORAX YANKEE** Emery, var. **KINCAIDI** Pergande.

Leptothorax yankee var. *kincaidi* PERGANDE, Proc. Wash. Acad. Sci., II, p. 520, ♀ ♂, 1900.

Type.—Cat. No. 5278, U. S. Nat. Museum. From Metlakatla.

Family **FORMICIDÆ**.Genus **Formica** Linné.**FORMICA NEORUFIBARBIS** Emery.

Formica neorufibarbis EMERY, Zool. Jahrb., XII, p. 660, 1899.—PERGANDE, Proc. Wash. Acad. Sci., II, p. 519, ♀, 1900.

From Kodiak, Metlakatla and Sitka.

Genus **Lasius** Fabricius.**LASIUS NIGER SITKENSIS** Pergande.

Lasius niger var. *sitkensis* PERGANDE, Proc. Wash. Acad. Sci., II, p. 519, ♂, 1900.

Type.—Cat. No. 5277, U. S. Nat. Museum. From Sitka.

Superfamily V. **PROCTOTRYPOIDEA** Ashmead.Family **PROCTOTRYPIDÆ**.Genus **Proctotypes** Latreille.**PROCTOTRYPES NIGRIPES** sp. nov.

Male.—Length 4 mm. Polished black; legs brown-black, with the tarsi and articulations rufo-piceous; tegulæ pale honey-yellow. Wings hyaline, without any internal veins, the costal veins and the stigma brown. Mandibles rufous. Palpi dark brown. Antennæ entirely black, a little longer than the head and thorax united and clothed with a short, moderately dense whitish pubescence, the joints of the flagellum elongate, the first and last joints about equal and longer than the intermediate joints, the first joint being a little longer and thicker than the second, about five times as long as thick, the second and following joints gradually shortening to the penultimate.

The head is transverse about as wide as the thorax between the tegulæ, the ocelli pale. The thorax is smooth, impunctate, except the metathorax which is rugulose, with an abbreviated median carina and nearly twice as long as high. The petiole of the abdomen is a little longer than wide and striate, the rest of the abdomen, except at the extreme base where it joins the petiole, is smooth, shining and impunctate, the extreme base with several striæ.

Type.—Cat. No. 5517, U. S. Nat. Museum. From St. Paul Island (Fur Seal Commission), one male.

On account of its metathoracic and wing characteristics this new species will fall in a table of the North American species next to *P. texanus* Ashmead, from which it is readily separated by its larger size, structure of antennæ and color of the legs.

Family BELYTIDÆ.

Genus *Zelotypa* Förster.

Five species have already been characterized in this genus in our fauna, one from Texas, one from Florida, two from Virginia and one from Canada, known only in the male sex. It is somewhat surprising, therefore, to find no less than three additional species in the Alaskan material, two being represented in the female sex.

These new species may be tabulated as follows :

Males 3.
Females.

Apterous forms..... 2.

Winged forms.

Marginal cell fully (or a little more than) twice as long as the marginal vein.

Black, with scutellum, middle mesothoracic lobe and legs honey- or brownish-yellow*Z. scutellata*.

Body wholly black, the legs honey-yellow, but with the hind coxæ basally and the clavate part of the hind femora obfuscated or fuscous.

Z. borealis.

2. Black, the scutellum, the middle thoracic lobe, first two joints of antennæ and the legs honey- or brownish-yellow.....*Z. scutellata*.

3. Marginal cell and the marginal vein not short, about equal in length.

Black, scape and pedicel brownish-yellow; first joint of the flagellum excised beneath for more than half its length; legs honey-yellow; hind coxæ basally, clavate part of hind femora and their tibiæ apically obfuscated....*Z. alaskensis*.

ZELOTYPA SCUTELLATA sp. nov.

Female.—Winged form. Length 2 to 2.2 mm. Head, thorax, except the middle mesothoracic lobe, and the abdomen black, smooth and shining; the scutellum, the middle mesothoracic lobe, the first two joints of antennæ (sometimes the first five or six), and the legs, brownish-yellow or honey-yellow. Wings hyaline, the veins brown, the tegulæ pale yellowish. The antennæ are not quite the length of the body, 15-jointed; the scape is as long as the pedicel and first two joints of flagellum united and slightly curved but not especially thick;

the first joint of the flagellum is the longest, about one-half longer than the second, the following to the fifth shortening, the fifth oblong, joints 6 to 12 submoniliform, very slightly longer than thick, the last joint fusiform, as long as the fourth. The metathorax is bounded by an elevated carina posteriorly and traversed by five longitudinal carinae (a median and two on each side of it). The wing venation is normal, the marginal cell being fully twice as long as the marginal vein, the stigmal vein, or first branch of the radius, being straight, perpendicular and about two-thirds the length of the marginal vein. The abdomen, with its petiole, is very little longer than the head and thorax united, the petiole being rather thick, longitudinally furrowed and not quite $2\frac{1}{2}$ times as long as thick; the body of the abdomen is ovate, pointed at apex, highly polished and impunctate, except some striae at its base where it joins the petiole, the first segment occupying most of its entire surface.

Female.—Wingless form. Length 2.5 mm. Agrees well in structure and color with the winged form, except the antennae are a little longer and the legs are more decidedly yellow.

Type.—Cat. No. 5518, U. S. Nat. Museum. From St. Paul Island and Unalaska. Nine specimens.

ZELOTYPA BOREALIS sp. nov.

Female.—Length 3 mm. Polished black; first five or six joints of the antennae brownish-yellow; legs honey-yellow, the hind coxae basally and the clavate part of the hind femora blackish or obfuscated. Wings hyaline, the venation light brown, the tegulae yellowish.

The antennae are rather stout, shorter than the body, 15-jointed; the scape is stout, a little thicker at the middle than at the ends and as long as the first three joints of the flagellum (excluding the pedicel) united; the first joint of the flagellum is the longest, very nearly as long as the second and third united, the third joint is only two-thirds the length of the second, the fourth joint is oblong, the following to last being moniliform, briefly pedicellate, 6 to 12 a little wider than long, the last ovate, not longer than the fourth. Metathorax as in *Z. scutellata*. Abdomen pointed ovate, the petiole stout, only twice as long as wide, longitudinally furrowed, the interstices between the furrows above, wrinkled; body of abdomen much as in previous species except that there is a median grooved line above that extends to nearly the middle of the first segment. Wing venation as in previous species except that the marginal cell is slightly more than twice as long as the marginal vein.

Type.—Cat. No. 5519, U. S. Nat. Museum. From Muir Inlet, June 12 (Fur Seal Commission). Two female specimens.

ZELOTYPA ALASKENSIS sp. nov.

Male.—Length 2.5 mm. Polished black; first two joints of antennæ, tegulæ and the legs brownish-yellow or honey-yellow, the hind coxæ basally, the clavate part of their femora, and their tibiæ apically, obfuscated; wings hyaline, the veins brown.

The antennæ are fully as long as the body, 14-jointed, the joints elongate, cylindrical; the scape is slender and about as long as the pedicel and the first joint of the flagellum united, or very slightly longer; the pedicel is scarcely longer than thick; the first joint of the flagellum is the longest joint, a little longer than the second and excised beneath for more than half its length and appearing as if angulated when viewed from the side; the following joints are subequal, imperceptibly shortening to the last, the penultimate being hardly four times as long as thick, the last being one-third longer than the penultimate. The front wings differ from the two previous species in having the marginal vein and the submarginal cell of approximately equal length, the marginal vein being a little more than thrice as long as the stigmal or first branch of the radius. The petiole of the abdomen is a little more than four times as long as thick, smooth or nearly so, but with a few longitudinal carinæ; body of abdomen oblong-oval, smooth and highly polished, the medial grooved line above extending only to the basal third of first segment.

Type.—Cat. No. 5520, U. S. Nat. Museum. From Virgin Bay, June 26. One specimen.

Genus *Aclista* Förster.

ACLISTA CALIFORNICA Ashmead.

Aclista californica ASHMEAD, Monogr. N. A. Proctotryp., p. 378, 1893.—DALLA TORRE, Cat. Hym., v, p. 452, 1898.

Type.—Cat. No. 5755, U. S. Nat. Museum (Ashmead Collection). From Belkofski, July 22. One specimen not distinguishable from the type taken in California.

Genus *Zygota* Förster.

ZYGOTA AMERICANA Ashmead.

Zygota americana ASHMEAD, Monogr. N. A. Proctotryp., p. 373, 1893.—DALLA TORRE, Cat. Hym., v, p. 453, 1898.—ASHMEAD, Fur Seals and Fur Seal Islands, iv, p. 336, 1899.

Type.—Cat. No. 5756, U. S. Nat. Museum (Ashmead Collection). From Bering Island (Barrett-Hamilton); Sitka.

Family DIAPRIIDÆ.

Genus *Spilomicrus* Westwood.

SPILOMICRUS ALASKENSIS sp. nov.

Female.—Length 1.8 mm. Polished black; legs black, with the sutures between the coxæ and the trochanters, the knees, apices of tibiæ and all tarsi, except last joint, honey-yellow, the tibiæ, except as noted, fuscous. Wings hyaline, the veins brown-black, the marginal vein being fully four times as long as thick, the stigmal vein very short, wider than long, with a delicate fuscous ray from its tip, one part extending backwards as in a Belytid, the other extending forward and forming a very narrow indistinct, but open marginal cell.

The thorax has the parapsidal furrows complete, each parapside with a large, deep, longitudinal fovea on its disk, the scutellum with a large fovea at its base, not divided by a median carina, while the meta-thorax has a distinct median carina.

The abdomen is conic-ovate, pointed at apex and highly polished, with the petiole opaque and only a little longer than thick.

Type.—Cat. No. 5521, U. S. Nat. Museum. From Muir Inlet, June 12 (Fur Seal Commision). One specimen.

This species differs from all others in our fauna by the simple basal scutellar fovea, by the deeply foveate parapsides, by venation and by the color of the legs.

Family CERAPHRONIDÆ.

Subfamily *MEGASPILINÆ*.

Genus *Lygocerus* Förster.

LYGOCERUS ALASKENSIS sp. nov.

Female.—Length 2 mm. Black and shining, not sculptured; palpi brownish; mandibles dark rufo-piceous; antennæ entirely black, except a faint yellowish tinge at the extreme apex of the pedicel, legs black, with the knees, tibiæ, except medially, and the tarsi except the last joint, dark honey-yellow, the tibiæ medially more or less fuscous, the claws black; tegulæ piceous. Wings hyaline, the large stigma, the costa and the stigmal vein being reddish-brown.

The head is polished, impunctate, seen from in front wider than long and with some short, sparse hairs anteriorly below the insertion of the antennæ. Eyes oblong-oval, faintly hairy. Antennæ 11-jointed, black, and reaching to the middle of the abdomen; the scape is as long as the pedicel and the first two joints of the flagellum united; the first and last joints of the flagellum are equal in length and a little longer than the intermediate joints which are subequal and scarcely more than twice as long as thick, the first and the last joints being a little more than thrice as long as thick; the pedicel is not quite two-thirds the length of the first joint of the flagellum.

The thorax is smooth and shining, the mesonotum having three distinct furrows, the pronotum being very short while the metathorax is abruptly shortened and faintly alutaceous.

The abdomen is ovate, polished black, subdepressed, wider than thick dorso-ventrally, a little longer than the head and thorax united, the ovipositor subexserted, the petiole extremely short, transverse and striate; body of abdomen has an elevated rim at extreme base where it unites with the petiole.

Type.—Cat. No. 5522, U. S. Nat. Museum. From St. Paul Island, August 10 (Fur Seal Commission). One specimen.

This species is allied to *L. stigmatus* Say but it is slightly larger and easily separated by the relative lengths of the flagellar joints of antennæ and by the difference in the pedicel.

Superfamily VI. CYNIPOIDEA Ashmead.

Family FIGITIDÆ.

Subfamily EUCÆLINÆ.

Genus *Tetrarhapta* Förster.

TETRARHAPTA ALASKENSIS sp. nov.

(Pl. IX, fig. 2.)

Female.—Length 1.4 mm. Polished black; the mandibles, knees, base and tips of tibiæ and all tarsi, testaceous or reddish; wings hyaline, largely pubescent, the apex of the anterior wings subemarginate, the veins brown-black, the marginal cell open all along the outer margin.

The 13-jointed antennæ terminate in a large 4-jointed club, the joints being fluted, the first being a little shorter than the second, the second and third subequal, the last large, ovate, one-half longer than

the third; the joints of the funicle are slender, subcylindrical, the first being fully twice as long as the second, the following very imperceptibly shortening to the club; the scape is obconical, about one-third longer than the pedicel. The scutellum, along the sides, is delicately, longitudinally aciculate, the cup being very narrow, ellipsoidal; the metathorax is smooth and shining, or at the most, faintly alutaceous and bicarinate.

Male.—Length 1.5 mm. Agrees well with the female except that the antennæ are longer, 15-jointed, with the first joint of the flagellum long and stout, slightly curved, and about as long as the second and third joints united, the following joints being nearly equal, about thrice as long as thick and all strongly fluted.

Type.—Cat. No. 5523, U. S. Nat. Museum. From St. Paul Island, August 15 (Fur Seal Commission). Described from one male and three female specimens.

Genus *Eucœla* Westwood.

EUCÆLA ALASKENSIS sp. nov.

Female.—Length 2 mm. Polished black; the mandibles, the antennæ, except the scape and pedicel, and the legs, except more or less of the middle and hind coxæ, rufo-testaceous, the femora somewhat obfuscated toward base; wings hyaline, pubescent, the veins reddish-brown, the marginal cell completely closed, tegulæ piceous black.

The first two joints of the flagellum are cylindrical, subequal, a little more than twice longer than thick, the following joints gradually thickening toward apex, elliptic-oval, delicately fluted, and subequal in length, except the last, which is considerably longer than the penultimate. The scutellum at the sides is opaque, finely rugulose, the cup oval, with its disk slightly depressed, a fovea posteriorly and a row of minute punctures along its margins. The metathorax above and posteriorly is finely rugulose, faintly pubescent and bicarinate, its pleura being smooth and polished. Abdomen normal, a little longer than the head and thorax united and with a narrow pubescent girdle at base.

Type.—Cat. No. 5524, U. S. Nat. Museum. From Seldovia, July 2. One female specimen.

Subfamily ALLOTRIINÆ.

Genus *Alloxysta* Förster.

ALLOXYSTA ALASKENSIS sp. nov.

Male.—Length 1 to 1.1 mm. Polished black; the face below the antennæ, cheeks, mandibles, palpi, antennæ and legs, pale yellow, the

femora and tibiæ, except their apices, obfuscated or light brownish; wings hyaline, the veins brownish-yellow.

The antennæ are long, filiform, longer than the body, 14-jointed; the flagellar joints 1 to 3 are the longest joints, the first straight, cylindrical, more than twice as long as thick, the second and third somewhat thickened and both curved, thrice as long as thick, the following joints slender, hardly more than twice as long as thick and clothed with a short, fine pubescence. Thorax as in *Allotria*. Wings nearly twice the length of the body, the marginal cell being open all along the front margin, the second abscissa of the radius being curved and nearly twice the length of the first.

Female.—Length 1.5 mm. Agrees well with the male except that the head is castaneous, the yellow of the face beginning a little above the insertion of the antennæ, the first five joints of the antennæ and the legs being yellow, the rest of the antennæ being brown-black.

The antennæ are as long as the body, 14-jointed, slightly thickened toward apex, the joints of the flagellum elongate, the second and third joints of same being longer than the first, the second being longer than the third, and the longest joint of all, the following joints to the last being nearly equal in length, the last being longer than the penultimate.

Type.—Cat. No. 5525, U. S. Nat. Museum. From Muir Inlet, June 12; St. Paul Island, August 6 (Fur Seal Commission). Three male and two female specimens.

Superfamily VII. CHALCIDOIDEA.

Family TORYMIDÆ.

Genus *Torymus* Dalman.

TORYMUS CECIDOMYLÆ (Walker).

Callimome cecidomyiæ WALKER, Ann. & Mag. Nat. Hist., XIV, p. 15, ♀, 1844.—CRESSON, Syn. Hym. North Am., p. 237, 1887.—DALLA TORRE, Cat. Hym., v, p. 302, 1898.

Type in British Museum. From Kodiak, July 20; Popof Island, July; Virgin Bay, June 24. Four specimens.

Originally described from Hudson Bay Territory. It is a parasite on *Cecidomyia communis* Barnston MS. The four specimens taken are without much doubt referable to this species. They exhibit considerable variation in color of the antennal scape and of the legs. The scape is most frequently metallic, though sometimes wholly yellow beneath, or with only a yellow spot at extreme base, the legs varying in the amount of green on the femora and of brown on the tibiæ.

Family MISCOGASTERIDÆ.

Subfamily TRIDYMINÆ.

Genus *Terobia* Förster.

TEROBIA VULGARIS sp. nov.

(Pl. IX, fig. 3.)

Female.—Length 1.8 to 2 mm. Most variable in color, metallic bluish-green, æneous or bronzed green, with bluish, purplish and brassy reflections, the parapsides, mesopleura and metathorax, most frequently bluish or blue-black, faintly tinged with metallic green, the head, prothorax and at least the middle mesothoracic lobe metallic green or brassy; abdomen most frequently æneous black, sometimes with a decided brassy tinge; scape, pedicel and legs, except sutures of trochanters, tips of femora, the tibiæ and the tarsi except as hereafter noted, æneous black or metallic; the sutures of trochanters, tips of femora, the tibiæ, except apices of the middle and hind tibiæ, and the tarsi, except last joint, honey-yellow or brownish-yellow; tips of middle and hind tibiæ and the last joint of the tarsi dark brown or fuscous; the middle tibiæ sometimes before the middle are more or less obfuscated; the flagellum black or brown-black, sparsely pubescent; tegulæ testaceous or yellowish; wings hyaline, the venation brown; the stigmal vein with its club is rather long, but a little shorter than the marginal, the club being large and with a small uncus obliquely directed towards the margin of the wing, and if continued would form a triangular marginal cell; the postmarginal vein is very long, nearly twice as long as the marginal.

The head is transverse, a little more than thrice as wide as thick antero-posteriorly, much wider than the prothorax and possibly a little wider than the mesothorax from tegula to tegula; viewed from in front it is a little wider than long, obtusely triangular; posteriorly it is smooth, on the vertex and anteriorly it is feebly alutaceously sculptured; ocelli small, arranged in an obtuse triangle; eyes oblong-oval; the malar space distinct, at least one-third the length of the eye; clypeus small, obtrapezoidal, indistinctly separated, and indistinctly bidentate anteriorly or with a slight median incision; mandibles (?) 4-dentate.

The antennæ are 13-jointed, with 2 minute ring-joints inserted near the middle of the face above a line drawn from the base of the eyes; the scape is about as long as the first three funicle joints united; pedicel obconical, scarcely longer than thick at apex; the flagellum is subclavate, thrice as long as the scape, with the joints all delicately fluted, the funicle being 6-jointed, the joints oblong, about one and a half

times as long as thick, subequal in length, the first slightly the smallest joint; the club fusiform, stouter than the funicle and 3-jointed, the first and second joints subquadrate, the third obtusely conical.

The thorax, except the metanotum, is almost smooth, or at most with a faint or microscopic reticulate sculpture, the disk of the mesopleura being smooth and highly polished, the parapsidal furrows distinct and complete, the mesothoracic lobes subconvex; the scutellum is divided by a transverse grooved line near its apex; the metathorax is shagreened, without a distinct median carina but with the lateral carinæ more or less indicated; while the spiracles are small and round.

The abdomen is briefly petiolate, shorter than the thorax and highly polished, impunctate, except the petiole which is shagreened; the body of the abdomen seen from above is obovate, seen from the side it is more conical, the venter being subcompressed; the first (body) segment is the longest, fully as long as segments 2 and 3 united, the following segments very gradually shortening.

Male.—Length 1.6 to 1.8 mm. Agrees well with the female, except it is usually more bluish, its antennal and abdominal characters are different and the tibiæ are fuscous or brown with both ends yellow (more rarely wholly yellow with the apical half of the femora yellow). The antennæ are slightly longer, the flagellum being filiform, not subclavate, and clothed with sparse but more erect hairs than in the female, the scape being clavate, thickened towards apex beneath, the funicle joints being fully twice, or more than twice, as long as thick, the first joint being much longer, from $3\frac{1}{2}$ to 4 times as long as thick, rarely only thrice as long as thick. Abdomen oblong-oval.

Type.—Cat. No. 5526, U. S. Nat. Museum. From St. Paul Island (Fur Seal Commission). Many specimens.

Family PTEROMALIDÆ.

Subfamily PTEROMALINÆ.

Genus *Eutelus* Walker.

EUTELUS CONFUSUS sp. nov.

Female.—Length 1.5 mm. Head and thorax bluish, finely and closely punctate, the pleura and metathorax with a metallic greenish tinge; antennæ dark brown, inserted far anteriorly, near the anterior margin of the head; legs yellowish with the coxæ metallic green, the anterior and middle femora, except tips, brown, the hind femora black or æneous black. Wings hyaline, the tegulæ and veins pale yellowish.

Abdomen conic-ovate, æneous black, depressed above, carinate or boat-shaped beneath, and a little longer than the head and thorax united. The flagellum is subclavate, less than twice as long as the scape, the funicle joints not longer than wide, with at least the fifth and sixth joints wider than long.

Male.—Length 1.2 mm. Metallic blue green, with the scape of the antennæ and the pedicel, except a spot above at base, and the legs, except the coxæ, yellowish-white, the funicle light brownish, the joints gradually increasing in size, in outline all obtrapezoidal, while the club is fusiform and black.

Type.—Cat. No. 5527, U. S. Nat. Museum. From St. Paul Island (Fur Seal Commission).

Family EULOPHIDÆ.

Subfamily TETRASTICHINÆ.

Genus *Tetrastichus* Haliday.

TETRASTICHUS ANTHRACINUS sp. nov.

Female.—Length 1.6 mm. Coal black, impunctate; mandibles, all tarsi except the last joint, a spot on the middle and hind knees, apices of the front femora, and their tibiæ, except apically, honey-yellow; antennæ dark brown, pubescent. Wings hyaline, the tegulæ black, the veins dark brown. Abdomen long-ovate, longer than the head and thorax united, carinate beneath.

Type.—Cat. No. 5528, U. S. Nat. Museum. From Seldovia, July 7. One specimen.

TETRASTICHUS ALASKENSIS sp. nov.

Male.—Length 1.2 mm. Black, the abdomen æneous black; mandibles, trochanters, apices of all femora, the front tibiæ, an annulus at base of middle and hind tibiæ, and all tarsi, except the last joint, brownish-yellow; antennæ black pubescent. Wings hyaline, the tegulæ yellow, the veins light brown, the base of the stigmal vein being pallid or whitish. Abdomen pointed ovate, not longer than the head and thorax united, above flat, beneath convex.

Type.—Cat. No. 5529, U. S. Nat. Museum. From Popof Island, July 19. One specimen.

Subfamily *ELACHISTINÆ*.Genus *Elachistus* Spinola.*ELACHISTUS GLACIALIS* sp. nov.

Female.—Length 2 mm. Polished black, impunctate, clothed with a sparse, whitish pubescence; mandibles dark rufous; legs except coxæ and more or less of the femora, brownish-yellow, the coxæ black, the front and middle femora toward the base fuscous, the hind femora, except at apex, dark-brown; scape and pedicel of antennæ black, the flagellum brown-black, the funicle 4-jointed, the first joint the longest, about twice as long as thick, the following joints shortening, the fourth being only about as long as thick, the club cone-shaped; wings ample, hyaline, with the veins brown, the marginal vein long, twice the length of the stigmal or as long as the subcostal vein, the postmarginal a little shorter than the marginal; abdomen broadly ovate, depressed, and scarcely as long as the thorax, the ovipositor subexserted.

Male.—Length 1.8 mm. Agrees well with the female, except in the following differences: The legs, except the coxæ, knees and tarsi, are brown-black or fuscous, the coxæ being black, the knees and tarsi yellowish; the flagellum is compressed, the joints of the funicle briefly pedicellate, appearing subquadrate, as seen from the side, the first joint being oblong, while the abdomen is oblong-oval.

Type.—Cat. No. 5530, U. S. Nat. Museum. From Muir Inlet, June 12 (Fur Seal Commission), one female; Yakutat, June 21, one male.

Subfamily *EULOPHINÆ*.Genus *Eulophus* Geoffroy.*EULOPHUS KUKAKENSIS* sp. nov.

Male.—Length 1.5 mm. Æneous black, shagreened, the pronotum above, the scutellum, the mesopleura posteriorly and the metapleura with a decided greenish metallic tinge; flagellum brown-black, with 3 very long branches, each branch ciliate with long hairs, subequal in length, the first branch, however, a little the longest and as long as the flagellum; coxæ metallic, the trochanters, apices of the front and middle femora and tibiæ, except the hind tibiæ, and tarsi, honey-yellow, rest of the femora black, the hind tibiæ fuscous; wings hyaline, the veins light brownish; abdomen oblong, æneous black, except a yellow spot or band near its base, visible both from beneath and above.

Type.—Cat. No. 5531, U. S. Nat. Museum. From Kukak Bay, July 4, one male specimen.

Superfamily VIII. **ICHNEUMONOIDEA** Ashmead.

Family **ICHNEUMONIDÆ**.

Tribe *JOPPINI*.

Genus **Automalus** Wesmael.

AUTOMALUS NIGROPILOSUS sp. nov.

(Pl. IX, fig. 4.)

Male.—Length 19 mm. Head, except face below insertion of antennæ, antennæ, except a spot on scape beneath, thorax, abdomen, coxæ and first joint of all trochanters, black; face below antennæ and spot on scape beneath, yellow; legs, except coxæ and first joint of trochanters, flavo-ferruginous. Wings hyaline, or at least only faintly tinged, the stigma and veins brown, the disco-cubital vein broken by a slight stump of a vein a little beyond its middle, the second recurrent nervure broken by a slight stump of a vein near its middle.

The head and thorax are shining but sparsely punctate and sparsely clothed with a black pubescence, the metathorax being rugulose, obliquely truncate behind, without a distinct areola, but with long lateral areas and distinct pleural carinæ. The abdomen is elongate, nearly twice as long as the head and thorax united, opaque, the petiole at apex and the second segment rather coarsely rugulosely punctate, the following segments more finely and evenly sculptured, the gastro-cæli large, oblique, the space between being nearly as wide as their length.

Type.—Cat. No. 5532, U. S. Nat. Museum (Fur Seal Commission). From Juneau, July 25; Popof Island, July 13. Three specimens.

Tribe *ICHNEUMONINI*.

Genus **Stenichneumon** Thomson.

STENICHNEUMON UNALASKÆ sp. nov.

Male.—Length 16 mm. Black; face below the insertion of the antennæ, including the clypeus, the two apical joints of palpi, scape beneath, tegulæ, an abbreviated line on the upper posterior margin of the pronotum, apices of the front and middle femora, all tibiæ, except

the hind tibiæ at apex, all tarsi, except the last three joints of hind tarsi, and abdominal segments 2, 3 and 4, except a lateral streak on the second basally, a band at base of second and third, yellow. There is also a narrow transverse yellow line at the apex of the fifth abdominal segment. Wings subhyaline, the stigma and veins, except the subcostal vein at its apical two thirds, brown. The head and thorax are distinctly, rather closely punctate, the clypeus very sparsely punctate, the mesopleura beyond the discal impression and a spot near the upper angles of the metapleura alone smooth and impunctate. The metathorax is rugulose, the areola being large, quadrate, the lateral basal and median areas being confluent. The hind coxæ are strongly punctate, the front and middle coxæ less strongly punctate. Wings with the venation normal, the submedian cell longer than the median, the disco-cubital nervure not broken by a distinct stump of a vein, the areolet pentagonal, but with the sides strongly convergent above, the transverse cubiti almost meeting. The abdomen is about twice as long as the head and thorax united, the petiole rugulose at apical third, segments 2 to 4 rugulosely punctate, the fourth less distinctly at apex, the following segments nearly smooth, at most alutaceously sculptured and finely, sparsely punctate; gastrocœli broad and deep with striæ at bottom.

Type.—Cat. No. 5533, U. S. Nat. Museum. From Unalaska, July 17. One specimen.

Genus *Ichneumon* Linné.

TABLE OF SPECIES.

Body <i>mostly black</i> , or head and thorax black.....	2.
Body <i>mostly rufous</i> , or ferruginous, or thorax never entirely black.	10.
2. Abdomen <i>not entirely black</i>	4.
Abdomen <i>entirely black</i> .	
Face below antennæ ivory white	3.
Face entirely black.	
Legs, except hind tarsi, red.....	<i>I. imitator</i> .
3. Scutellum and postscutellum yellow; scape beneath yellowish or whitish; legs red; coxæ and trochanters, except more or less of the first joint of front and middle pairs, black; anterior tibiæ and tarsi paler, yellowish or brownish-yellow; tips of hind tibiæ and more or less of their tarsi, fuscous.....	<i>I. sitkensis</i> .
Scutellum with yellow spot at apex; postscutellum and scape beneath black; legs red, but with the coxæ, except a white spot on front pair beneath, trochanters, front femora beneath, middle	

- femora more or less basally and hind femora black; anterior tibiæ and tarsi yellowish; apex of hind tibiæ and their tarsi fuscous. *I. kincaidi*.
4. Abdomen *not nearly black*, with one or more segments red or yellow 5.
 Abdomen *almost wholly black*, with only extreme apex of the petiole and extreme apices of second and third segments narrowly testaceous.
 Face below antennæ, scape beneath, palpi, an abbreviated line in front of tegulæ and one below, and the anterior tarsi, ivory or yellowish-white; scutellum and postscutellum yellow; legs red, with all coxæ, first joint of trochanters, hind femora within tips of their tibiæ and their tarsi, black..... *I. simulator*.
5. Abdomen with second and third segments, and sometimes the fourth or others, more or less red or yellow but stained or marked with black..... 6.
 Abdomen with second and third segments entirely red 8.
6. Second and third segments more or less yellow 9.
 Second and third segments more or less red.
 Scutellum yellow..... 7.
 Scutellum black.
 Face entirely black; legs black, with the apices of the front and middle femora and all tibiæ and tarsi, except sometimes the hind tibiæ at apex reddish-yellow. Male..... *I. cervulus*.
7. Face below antennæ and scape beneath, yellow.
 Legs black with anterior femora, except beneath toward base, apices of middle femora, spot at base of hind femora within, all tibiæ, except apical third of hind tibiæ and tarsi, except apices of joints 1 to 4, and fifth joint of hind tarsi entirely, reddish-yellow. Male.
I. kodiakensis.
8. Face below antennæ, except an orbital line and scape beneath, black; scutellum and legs, except coxæ and trochanters, red. Male.
I. popofensis.
 Face below antennæ and scape beneath, yellow; scutellum red or with a red spot; the legs red, with the coxæ, trochanters, apices of hind femora, and their tibiæ, black. Male..... *I. glacialis*.
9. Face, scape beneath tegulæ, an abbreviated line in front and below it, the legs (except a spot beneath and behind the front and middle femora, a small spot on middle coxæ, hind coxæ, first joint of their trochanters, their femora and apex of their tibiæ), the scutellum and broad bands on second and third abdominal segments, yellow; sometimes the collar and fourth abdominal segment are maculate with yellow. Male..... *I. wilsoni*.
10. Males..... 11.
 Females.
 Ferruginous; sutures of thorax, prosternum, mesosternum broadly

along anterior margin, metathorax anteriorly and beneath, including metasternum and lower half of metapleura, and a band at base of second, third and fourth abdominal segments, black...*I. brevipennis*.

11. Face below antennæ and scape beneath yellow.

Thorax mostly black, the mesonotum and the scutellum rufous; legs, except the hind tarsi and the front coxæ and tarsi, ferruginous, the hind tarsi fuscous, the front coxæ and tarsi pale yellowish or yellowish-white.....*I. brevipennis*.

ICHNEUMON IMITATOR sp. nov.

Male.—Length 10.5 to 11 mm. Black and shining but punctate; mandibles rufo-piceous; palpi fuscous; tegulæ and the epitegulæ testaceous; legs, except the claws, pulvilli and hind tarsi, which are black or fuscous, red. Wings subfuliginous, the stigma except medially, and the veins brown-black, the stigma medially being testaceous. The antennæ are 37-jointed and extend to beyond the middle of the abdomen, tapering off to a point at apex, the joints after the eighth being more or less nodose beneath. The pubescence on the face, mandibles, and sides of the thorax is whitish, that on the vertex of the head, the mesonotum, and the scutellum being more or less fuscous, although there are some whitish hairs intermixed with it. The metathoracic areola is large, quadrate, a little longer than wide, the basal lateral and the median lateral areas being confluent. The wing venation is normal, the submedian cell a little longer than the median, the discocubital nervure broken by a stump of a vein very near its middle, the areolet irregularly pentagonal, the transverse cubiti converging above, the upper face formed by them, or the part represented by the second abscissa of the radius, being much the shortest face of the five; the second recurrent nervure joins the areolet much beyond its middle, while the transverse median nervure in the hind wings is nearly straight, but broken by the subdiscoidal nervure below the middle or at about its basal third. The abdomen is elongate, nearly twice as long as the head and thorax united, black except the venter, which is more or less dark rufous, the ventral segments 2 to 5 with a distinct fold; the petiole, except a narrow, smooth, shining spot at the extreme apex, is finely rugulose, the second and following segments are coriaceous, the second and third segments being also more or less punctate basally, the second with some irregular elevated lines extending into the gastrocœli and some finer elevated lines extending from them.

Type.—Cat. No. 5534, U. S. Nat. Museum. From Sitka, June 16; Juneau, July 25. Two specimens. The species, except in the color

of the face and coxæ, and in size, superficially resembles *Automelus nigropilosus*.

ICHNEUMON SITKENSIS sp. nov.

Male.—Length 9 to 10.5 mm. Black and shining; the head above, especially close to the eye margins and the thorax above are coriaceous, subopaque and finely punctate, the mesopleura shining, closely punctate, becoming rugulosely punctate toward hind margins, the metathorax rugulose, the posterior face with irregular, elevated transverse lines; flagellum black; face below insertion of antennæ, an orbital line above, an orbital line on the lower hind orbits, scape beneath, palpi, an abbreviated line in front of the tegulæ and a line below, apices of the front and middle coxæ, and their trochanters, ivory or yellowish-white; ocelli pale; scutellum and postscutellum yellow; legs red with the coxæ and trochanters, except as noted, black; the anterior and middle tibiæ paler, yellowish or brownish-yellow, the anterior and middle coxæ at apex and their trochanters whitish, the tip of hind tibiæ and more or less of their tarsi fuscous. Wings hyaline, the stigma and veins brown, the disco-cubital vein not broken by a stump of a vein. The metathoracic areola is quadrate or nearly so, very slightly wider than long, the anterior angles of same being slightly rounded, the basal lateral and middle lateral areas are confluent, while the apical areas are complete. The abdomen is elongate, about twice longer than the head and thorax united, the first segment, or the petiole, being finely rugulose at apex, the second, third and fourth segments, subopaque, finely coriaceous, those beyond smoother, shining, at the most feebly alutaceous, while the gastrocæli are transverse and separated from each other by a small space.

Type.—Cat. No. 5535, U. S. Nat. Museum. From Sitka, June 16. One specimen.

ICHNEUMON KINCAIDI sp. nov.

Male.—Length 10 mm. Closely resembles *I. sitkensis* and easily confused with it but for the following differences: There is a yellow spot at the summit of eyes, on the lower hind orbit and on the middle of the superior margin of the pronotum; the antennæ, except a yellowish spot on joints 15 and 16 *above*, are black, the scape not white beneath, all coxæ and trochanters and the hind femora are black, although the front coxæ *beneath* and the trochanters at apex *narrowly* are white; rest of legs, except the tibial spurs which are white and the apices of hind tibiæ and tarsi, which are blackish or fuscous, red.

Wings faintly dusky, the disco-cubital nervure broken by a stump of a vein a little before its middle. The metathoracic areola is as in *I. sitkensis* except that the basal lateral and the middle lateral areas are separated, not confluent.

Type.—Cat. No. 5536, U. S. Nat. Museum. From Virgin Bay, June 26. One specimen.

ICHNEUMON SIMULATOR sp. nov.

Male.—Length 9 mm. Closely resembles and easily confused with both *I. sitkensis* and *I. kincaidi* but for the following differences: The flagellum is ferruginous beneath for three-fourths its length; the mesothoracic areola is large, quadrate, the surrounding carinæ being poorly defined, the posterior carina being sinuate medially; the basal lateral and middle lateral areas are wholly confluent without even a trace of the dividing carina; the legs are rufous with all coxæ and trochanters, except the second joint of the hind trochanters, black, the apical half of the hind tibiæ and their tarsi, which are black or fuscous; while the abdomen has a spot at apex of the first segment and the extreme apices of the second and third segments narrowly, testaceous.

Type.—Cat. No. 5537, U. S. Nat. Museum. From Kukak Bay, July 4. One specimen.

ICHNEUMON CERVULUS Provancher.

Ichneumon cervulus PROVANCHER, Nat. Can., VII, p. 83, ♂, 1875.—PROVANCHER, Fn. ent. du Can. Hym., p. 282, 1883.—CRESSON, Syn. Hym. North Am., p. 184, 1887.

Type in collection of the American Entomological Society. From St. Paul Island, August 16; Belkofski, July 22 (Fur Seal Commission).

ICHNEUMON KODIAKENSIS sp. nov.

Male.—Length 13 mm. Black, punctate; face below the insertion of the antennæ, except a small median spot basally and the surface surrounding the clypeal spiracles, the scape beneath, a small stripe on tegulæ and a line in front and below, the scutellum, second joint of trochanters, the anterior femora at apex and beneath, apex of middle femora, all tibiæ and tarsi, except the hind tibiæ at apex and the apices of joints of hind tarsi 1 to 4 and the fifth joint, lemon-yellow; abdominal segments 2 and 3, except the basal half of the first mentioned and a narrow stripe at base of the third, yellow. Wings subfuscous, the veins brown-black, the stigma within and the poststigmatal or postmar-

ginal vein brownish-yellow, the disco-cubital nervure not broken by a stump of a vein, the second recurrent nervure joining the areolet a little before its middle. The metathoracic areola is large, quadrate or nearly so, a little wider than long, with the anterior angles slightly rounded, the basal lateral and middle lateral areas distinctly separated.

Type.—Cat. No. 5538, U. S. Nat. Museum. From Kodiak, July 20. One specimen.

ICHNEUMON POPOFENSIS sp. nov.

Male.—Length 9.5 to 10 mm. Black and shining, although punctate; the front orbits have a narrow yellow line extending from a little below the middle of the face to near the summit of the eyes; the apical half, or more, of the mandibles, the scutellum, the legs, except coxæ and trochanters, and abdominal segments 2 and 3 and sometimes a lateral spot on 4, are red. Wings hyaline, or only faintly tinged, the stigma and veins brown, the disco-cubital vein with only a slight trace of a stump of a vein, while the second recurrent nervure joins the areolet at its middle. The metathoracic areola is large, quadrate, while the basal lateral and middle lateral areas are confluent. The abdomen is about twice as long as the thorax, the petiole aciculate at apex, dorsal segments 2 to 4 closely punctate, the following segments smoother, feebler, more sparsely and less distinctly punctate, while the gastrocœli are transverse, the space before each being striate.

Type.—Cat. No. 5539, U. S. Nat. Museum. From Popof Island, July 8. Two specimens.

ICHNEUMON GLACIALIS sp. nov.

Male.—Length 8 mm. Resembles *I. popofensis* and easily confused with it but for the following differences: The face below the insertion of the antennæ and a spot on scape beneath are lemon-yellow, not black; the palpi are yellowish-white: the apices of the hind femora and tibiæ are black; the first segment of the abdomen at apex, as well as the second and third, is red; the metathoracic areola is large, quadrate, but considerably broader than long; the second abdominal segment is only sparsely and feebly punctate at base, the following segments being smooth, the extreme apices of the third and fourth being testaceous; while the wings are subfuscous, the disco-cubital vein broken by a stump of a vein, the second recurrent nervure joining the areolet a little beyond the middle.

Type.—Cat. No. 5540, U. S. Nat. Museum. From Juneau, July 25. One specimen.

ICHNEUMON WILSONI (Cresson).

Ischnus wilsoni CRESSON, Proc. Ent. Soc. Phila., II, p. 188, 1864.

Ichneumon wilsoni CRESSON, Trans. Am. Ent. Soc., VI, p. 161, 1877.—

CRESSON, Syn. Hym. North Am., p. 189, 1887.

Type in collection of the American Entomological Society. From Seldovia, July 21; Juneau, July 25. Six specimens.

ICHNEUMON BREVIPENNIS Cresson.

Ichneumon brevipennis CRESSON, Proc. Ent. Soc. Phila., III, p. 174, 1864.—

CRESSON, Trans. Am. Ent. Soc., VI, p. 182, 1877.—CRESSON, Syn.

Hym. North Am., p. 183, 1887.

Type in collection of the American Entomological Society. From Muir Inlet, June 11 (Fur Seal Commission); Kukak Bay, July 4; Yakutat, June 21; Virgin Bay, June 26. Five females and three males.

Genus *Melanichneumon* Thomson.

MELANICHNEUMON SELDOVIÆ sp. nov.

Male.—Length 10 mm. Black; face below insertion of antennæ, mandibles, scape beneath and the palpi except first three joints of labial palpi, and the first joint and base of second joint of maxillary palpi ivory white; first three joints of labial palpi and the first joint and apex of second joint of maxillary palpi fuscous, the second joint of the last mentioned being much dilated apically; flagellum pale brownish beneath, with an annulus, joints 13 to 15 being yellowish-white; scutellum and postscutellum yellow; legs rufous, with the coxæ and first joint of trochanters except sutures, black, the hind tibiæ toward apex and their tibiæ, fuscous. Wings hyaline, the disco-cubital vein not distinctly broken by a stump of a vein, the arcolet irregularly pentagonal, the second recurrent nervure joining it before the middle. The metathoracic areola is hexagonal, the basal lateral and the middle lateral areas partly confluent, the transverse carina dividing them being distinct only at base, while the lateral apical areas are wanting.

Type.—Cat. No. 5541, U. S. Nat. Museum. From Seldovia, July 21. One specimen.

This species, without the closest attention to its generic characters, could easily be confounded with *Ichneumon imitator*, *I. sitkensis* and *I. kincaidi*.

Genus *Craticheumon* Thomson.

This genus, not hitherto reported from North America, is represented in Alaska by five species, all new, distinguishable as follows:

TABLE OF SPECIES.

- Mostly *rufous* or ferruginous, or at least with mesonotum or scutellum *rufous*..... 3
- Mostly *black*, or head and thorax *black*.
Abdomen mostly *rufous* or ferruginous..... 2
- Abdomen entirely *black*.
Face below antennæ, spot on orbits at summit of eyes, and line opposite insertions of antennæ, white; legs ferruginous, with coxæ, first joint of trochanters, hind femora, and apices of their tibiæ *black*.
Male..... *C. alaskensis*.
2. Face and antennæ wholly *black*; abdomen at apex *black*, segments 1 to 3 and 4 except at apex, red; legs *black*, with apices of anterior and middle femora, their tibiæ and tarsi and hind tibiæ, except at apex, and their tarsi, reddish-yellow. Male... .. *C. Kodiakensis*.
Face below antennæ, anterior orbits, dot at summit of eyes, scape beneath, tegulæ, an abbreviated line in front of them, the tibial spurs, and front and middle coxæ and trochanters, ivory or yellowish-white; flagellum, except above, rest of legs, except first joint of hind trochanters and hind tarsi, which are fuscous, and abdomen, except the first segment, *rufous* or ferruginous. Male..... *C. yakutatensis*.
3. Mostly *rufous* or ferruginous..... 4
Mostly *black*, with mesonotum, scutellum and abdomen, except first segment, more or less basally, *rufous*, rarely with the metathorax marked with *rufous*; face, below antennæ, scape beneath, palpi, a short line on upper margin of prothorax in front tegulæ, a spot *vis-à-vis* on lower margin, front coxæ and trochanters, yellowish-white.
C. confusus.
4. Thoracic sutures strongly marked with *black*.
Metathorax entirely *black*; flagellum incrassated, *black*, with a yellowish annulus near the middle, the first three joints only a little longer than thick, those beyond transverse; legs and abdomen, except most of the petiole, *rufous*. Female..... *C. popofensis*.
Metathorax *rufous*; face below antennæ, orbits, scape beneath and front coxæ beneath, yellowish-white; legs, except front trochanters, middle coxæ and trochanters, more or less, apices of hind coxæ, first joint of their trochanters, extreme apex of their femora, tips of hind tibiæ and their tarsi, which are blackish or fuscous, red; abdomen entirely red. Male..... *C. popofensis*.

CRATICHNEUMON ALASKENSIS sp. nov.

Male.—Length 8 mm. Black shining, the head and thorax punctate; face below insertion of antennæ, mandibles, palpi, and an abbreviated line in front of the tegulæ, ivory white; legs, except coxæ, trochanters, and hind femora, mostly ferruginous, the front femora beneath, the middle femora basally, apex of the hind tibiæ and hind tarsi being black or fuscous; tibial spurs whitish. Wings hyaline, the stigma and veins brown, the disco-cubital vein simple, not broken by a stump of a vein, the second recurrent nervure joining the areolet beyond its middle, the sides of the areolet strongly converging above. The metathoracic areola is horse-hoof shaped, the basal lateral and middle lateral areas being distinctly separated.

Type.—Cat. No. 5541, U. S. Nat. Museum. From Kodiak, July 20. One specimen.

CRATICHNEUMON KODIAKENSIS sp. nov.

Male.—Length 15.5 mm. Black shining and punctate; labium, apical joints of labial palpi and last three joints of maxillary palpi, yellowish; mandibles except at base rufous; legs black, with the apices of the front and middle femora, their tibiæ and tarsi and the hind tibiæ, except at apex and their tarsi, reddish-yellow; abdominal segments 2 to 5, except the first apically, rufous. Wings subhyaline, the stigma, except the margins, brownish-yellow, the internal veins dark brown, the disco-cubital vein not broken by a stump of a vein, the areolet rather large, pentagonal, the second recurrent nervure joining it only slightly, hardly perceptibly, before its middle. The metathoracic areola is horse-hoof shaped, the basal lateral and the middle lateral areas being confluent. The abdomen is distinctly punctate, the punctuation on the second and third segments being closer and more distinct, on the following finer and less distinct, the second with some coarse elevated lines basally, the gastrocœli broad and widely separated, the apex of the petiole being longitudinally striate.

Type.—Cat. No. 5542, U. S. Nat. Museum. From Kodiak, July 20. One specimen.

CRATICHNEUMON YAKUTATENSIS sp. nov.

Male.—Length 7.5 to 8 mm. Head thorax and petiole of abdomen, except at apex, black; a dot at summit of eyes, the anterior orbits, face below antennæ, lower hind orbits and the cheeks, mandibles except teeth, palpi, scape beneath, tegulæ, an abbreviated line in front of

them, along the upper margin of the pronotum, and a short line beneath, tibial spurs, and the anterior and middle coxæ and trochanters, ivory or yellowish-white; rest of legs, except the base of hind trochanters, apices of hind tibiæ and tarsi which are black or fuscous, and the abdomen, red; scutellum and postscutellum yellow; ocelli whitish; flagellum ferruginous beneath. Wings hyaline, the stigma and veins, except the subcostal, median and submedian veins basally, being brown-black; the disco-cubital vein has only a trace of a stump of a vein, the areolet being irregularly pentagonal, the sides strongly convergent above, and receiving the second recurrent nervure very slightly beyond its middle. The head is feebly, sparsely punctate, the cheeks and temples being impunctate, thorax sparsely but more distinctly punctate, the metathorax rugulose, strongly and completely areolated, the areola horse-hoof shaped, wider than long. The abdomen is twice as long as the thorax, smooth and shining, the petiole very sparsely punctate, except at extreme apex where it is smooth and impunctate, second and third segments punctate, the second the more strongly punctate, the gastrocœli small and not very deeply impressed.

Type.—Cat. No. 5543, U. S. Nat. Museum. From Yakutat, June 21; Popof Island, July 11, two specimens.

CRATICHNEUMON CONFUSUS sp. nov.

Male.—Length 6 to 7 mm. Head, except anteriorly and the thorax except the mesonotum and scutellum, black; abdomen, except basal two-thirds of first segment, basal half or more of second segment, a broad band at base of third segment, and usually a very narrow band at base and apex of fourth segment, which are black, rufous or ferruginous; face below the insertion of the antennæ and extending more or less along the front orbits, cheeks and lower hind orbits, mandibles, except teeth, palpi, scape beneath, a short line in front of tegulæ and a spot or line beneath, a line on lower margin of the pronotum just above the prosternum and the tibial spurs, ivory or yellowish-white; sometimes the front and middle coxæ are also more or less whitish; flagellum black, broadly ferruginous beneath; legs rufous, with the hind tarsi fuscous. Wings hyaline, the stigma and veins, except the subcostal median and submedian veins basally, brown, the subcostal, median and submedian veins basally, being pale yellowish; the disco-cubital vein is broken by a small stump of a vein just beyond its middle; the areolet is irregularly pentagonal, the second recurrent nervure received beyond its middle.

The head and thorax above are sparsely punctate, the pleura being rugulose punctate, the metathorax more strongly rugulose, the wrinkles in the areas, and particularly in the petiolar area, which is very long, being transverse; the areola is horse-hoof shaped, the basal lateral and the median lateral areas being confluent. The abdomen is fully twice and sometimes more than twice longer than the thorax; the petiole is punctate and somewhat aciculate to slightly beyond the spiracle, the surface beyond being smooth or only faintly punctate; dorsal segments 2 and 3 alutaceous and also punctate, the punctuation of the second being more distinct and somewhat rugulose basally, the segments beyond smooth, impunctate.

Type.—Cat. No. 5544, U. S. Nat. Museum. From Yakutat, June 21; Orca, June 26. Several specimens.

This species mimics the male of *Ichneumon brevipennis* Cresson in color, and the metathoracic characters must be closely scrutinized or it may be easily confounded with it.

CRATICHNEUMON POPOFENSIS sp. nov.

Female.—Length 7 mm. Ferruginous; a frontal spot above antennæ, stemmaticum, occiput, prosternum, thoracic sutures, the transverse depression of the prothorax and metathorax entirely and base of petiole, black; flagellum brown black, with joints 8 to 11 more or less whitish or pale yellowish; palpi white; apex of hind tibiæ and more or less of hind tarsi, fuscous.

Stature similar to *Ichneumon brevipennis* Cresson, the head subquadrate, the antennæ stout, 26-jointed, the joints of the flagellum after the fourth, transverse, the first only about twice as long as thick, joints 2 to 4 gradually shortening, the fourth not longer than thick. Thorax smooth, sparsely punctate, the metathorax rugulose, the areola large, nearly horse-hoof shaped, the anterior lateral angles being obtuse, the basal lateral and middle lateral areas being confluent. The abdomen is hardly one and a half times as long as the head and thorax united; the petiole, except at apex, is finely rugulose, the second and third segments alutaceous and punctate, the punctures on the third being shallower and more sparsely distributed, the following segments being smooth, impunctate, the gastrocæli shallow and poorly defined; ovipositor subexserted, the sheaths black.

Male.—Agrees well with the female, except that the metathorax is ferruginous, except along the pectus, the flagellum being black above, ferruginous beneath, *without* an annulus, while the apices of coxæ,

first joint of trochanters and the extreme apices of hind femora and tibiæ and hind tarsi, are fuscous.

Type.—Cat. No. 5545, U. S. Nat. Museum. From Popof Island, July 10. Two specimens.

Genus *Probolus* Wesmael.

PROBOLUS SUBDENTATUS sp. nov.

Male.—Length 8.5 mm. Rufous or ferruginous; the occiput, ocelli and space anteriorly to the insertion of the antennæ, the space surrounding the clypeal spiracles and the sutures of the thorax, black; front and hind orbits, a spot on each side of the clypeus, a spot at summit of eyes, and the palpi, yellowish-white. Wings hyaline or only faintly tinged, the costal vein anteriorly and the stigma brownish-yellow, the internal veins darker or brown.

The head and thorax are distinctly, rather closely punctate, the metathorax being rugulose. The sutures of the thoracic sclerites, the depression at base of scutellum, the mesonotal ridge extending on to the scutellum, the depressions at the insertion of the wings, the incision between the postscutellum and the metathorax, and the hind margin of the metathorax at base of coxæ and insertion of abdomen, are black. The dorsum of the metanotum is very short, the metathorax being obliquely truncate from just beyond its base, the upper hind angles subdentate, the carinæ very strong and forming complete areas, the areola in outline semicircular, the spiracles being elongate. The abdomen is longer than the head and thorax united; the petiole or first segment is rather coarsely rugulose, with a hump-like elevation at its apical third, its dorsum strongly bicarinate, the carinæ extending from base to apex; segments 2 and 3 rugoso-punctate, both, however, smooth toward apex, the gastrocoeli deep, transverse; fourth segment finely and sparsely punctate towards base, the segments beyond smooth or nearly so, at most very sparsely and microscopically punctate.

Type.—Cat. No. 5546, U. S. Nat. Museum. From Kukak Bay, July 4. One specimen.

PLATYLABUS INCABUS Davis.

Platylabus incabus DAVIS, Trans. Am. Ent. Soc., xxiv, p. 352, ♀, 1897.

Male.—Length 8.5 mm. Agrees fairly well with Davis's description of the female except as follows: The anterior orbits have a faint much abbreviated white line opposite but a little *above* the insertion of the antennæ and an abbreviated but more distinct white line on the

hind orbits; the antennæ, except a yellowish-white spot on joints 14 and 15, are wholly black; the legs are red, with the coxæ slightly at base, hind tibiæ toward apex and their tarsi *faintly*, fuscous or blackish; while the abdomen is alutaceous and feebly but distinctly punctate, especially on segments 2 and 3, the punctuation of the fourth segment very faint, the fifth and beyond alutaceous, impunctate, the petiole rugulose its entire length except a narrow transverse, smooth, shining spot at the extreme apex of the middle lobe, or space between the dorsal carinæ.

From Popof Island, July 6.

This species was originally characterized by Mr. Davis from a single female, taken by Professor Aldrich, at Moscow, Idaho.

PLATYLABUS CALIFORNICUS Cresson.

Platylabus californicus CRESSON, Proc. Acad. Nat. Sci. Phila., p. 357, 1878.—
CRESSON, Trans. Am. Ent. Soc., vi, p. 201, 1877.—CRESSON, Syn.
Hym. North Am., p. 191, 1887.

Type in collection of the American Entomological Society. From Kukak Bay, July 4. One female.

Tribe PHÆOGENINI.

Genus *Centeterus* Wesmael.

CENTETERUS DORSATOR sp. nov.

Male.—Length 6 mm. Head, except face, upper orbits and a spot back of the ocelli, the antennæ, prosternum, mesosternum, anterior margin of the mesopleura, metathorax entirely, sutures of thorax above, petiole of abdomen, except at apex, and the middle and hind coxæ beneath, black; the lines on front orbits and the spot back of ocelli lemon-yellow; rest of body ferruginous, except that the first joint of the middle and hind trochanters, tips of hind tibiæ and their tarsi, and lateral blotches on dorsal abdominal segments 2 to 4 are fuscous.

The head is subquadrate, the temples broad, apparently smooth and impunctate, although with a strong lens the frontal depression is seen to be alutaceous. The thorax is smooth and shining, but with some sparse, minute punctures scattered over its surface, the metathorax being finely rugulose, the areola quadrate, open towards the base, the basal lateral and middle lateral areas confluent. The abdomen is longer than the head and thorax united, smooth and impunctate, except that the petiole and the second segment under a strong lens, are seen to have a very fine, coriaceous sculpture.

Type.—Cat. No. 5547, U. S. Nat. Museum. From St. Paul Island (Fur Seal Commission).

Genus *Eriplatys* Förster.

ERIPLATYS SITKENSIS sp. nov.

Female.—Length 4 mm. Head, scape of antennæ, thorax, hind coxæ and first segment of abdomen, black; mandibles, legs and rest of the abdomen, ferruginous; flagellum brown-black, with the first joint, the pedicel and ring-joint narrowly yellowish at apex. Wings hyaline, the stigma and veins light brown. The antennæ are rather stout, 22-jointed, thickened and convoluted toward apex, the scape very large, subglobose, obliquely truncate at apex, the first three joints of the flagellum obconic, subequal, hardly twice as long as thick at apex, the following shorter, joint 11 and beyond to last being transverse, the last cone-shaped. The head and thorax above are smooth and polished, or at most with a few, sparse, minute punctures scattered over the surface, the face and mesopleura more distinctly punctate, the metathorax rugulose and completely areolate, the areola hexagonal. The abdomen is pointed at apex and a little longer than the head and thorax united, smooth and polished, excepting that the surface of the petiole, the second dorsal segment and the third to a slight extent, if examined under a strong lens, appear very finely coriaceous, the thyridia on the second being represented by faint transverse depressed lines near the base.

Type.—Cat. No. 5548, U. S. Nat. Museum. From Sitka, June 16. One specimen.

Subfamily *CRYPTINÆ*.

Tribe *STILPNINI*.

Genus *Xestophya* Förster.

XESTOPHYA POLITA sp. nov.

Female.—Length 1.8 to 2 mm. Polished black, impunctate except the sides of the thorax and the abdomen, which are sometimes dark rufo-piceous, sometimes more or less yellowish basally. Antennæ 16- to 17-jointed (the last joint sometimes indistinctly articulated or closely united with the preceding), the flagellum is subclavate, brown-black, the first joint with an annulus at base and the pedicel yellow. Legs black or piceous black, with the sutures of the trochanters, extreme apices of femora and all tibiæ and tarsi, except the last joint, yellow. Wings hyaline, with the stigma and veins brownish-yellow or pale

yellow. The metathorax is incompletely areolated, the areola and the petiole area confluent, the lateral apical areas complete, the basal lateral and the middle lateral areas being represented by a single large area.

The abdomen varies from black to rufo-piceous, the petiole usually rufous and finely, longitudinally aciculated at apex, about thrice as long as wide; the body of abdomen viewed from above is oblong-oval or obovate, viewed from beneath it is seen to be compressed at apex; the whole surface is highly polished, impunctate, segments 1 to 3 (or 2 to 4, counting the petiole as the first) occupying most of the surface, the first the longest segment; ovipositor exerted but not as long as the basal joint of hind tarsi.

Male.—Length 1.5 to 1.8 mm. Agrees very well with the female except that the antennæ are longer, filiform, not thickened toward apex, and always 19-jointed; the abdomen is clavate, the petiole much longer and black, the body being pear-shaped, the two basal segments and sometimes the third are usually rufous, while the tibiæ are embrowned; palpi yellowish.

Type.—Cat. No. 5549, U. S. Nat. Museum. From St. Paul Island, August 15 (Fur Seal Commission). Eight specimens.

XESTOPHYA NIGRIPES sp. nov.

Male.—Length 2.5 mm. Wholly black, except as follows: An annulus at base of first joint of the flagellum, tibial spurs, sutures between the trochanters and base of femora, the extreme apex of front femora, their tibiæ at base and beneath and their tarsi, pale yellowish, rest of legs and the palpi black. Wings hyaline, the stigma and veins light brownish.

Type.—Cat. No. 5550, U. S. Nat. Museum. From St. Paul Island, August 15 (Fur Seal Commission). One specimen.

Genus *Asynocrita* Förster.

ASYNOCRITA sp.

From Unalaska. A single specimen too badly broken for describing.

Genus *Exolytus* Holmgren.

This genus is probably parasitic upon dipterous larvæ and is well represented in all boreal regions, though comparatively few have been described in the North American fauna. There are now known from Alaska eleven species (*sens. lat.*) which may be recognized by the use of the following table.

7. Clypeus black..... 8
 Clypeus not black.
 Antennæ 24-jointed, the flagellum ferruginous; clypeus, mandibles, except teeth, palpi at base, tegulæ, a spot in front, apices of front and middle coxæ, all trochanters more or less, tibial spurs and the ventral fold of abdomen, ivory or yellowish-white. Female.
E. clypeatus.
- Antennæ 23-jointed, the flagellum black; clypeus and legs, except the hind coxæ, ferruginous; palpi and tegulæ pale yellow. Male.
E. seldoviciæ.
8. Abdomen mostly red or segments 1 to 6 banded with red..... 12.
 Abdomen mostly black, with usually only the second and third segments red or red in part..... 9.
9. Antennæ 21-jointed or less..... 10.
 Antennæ 26-jointed.
 Third abdominal segment red or red in part, especially basally, sometimes the apex of the second segment red.
 All coxæ black; basal joint of trochanters, the femora more or less and the hind tarsi black, rest of legs rufo-testaceous.
E. rubrocinctus.
- Antennæ? broken.
 Second abdominal segment, except the extreme base, and the third segment, except at apex, red; legs, including coxæ, fulvo-ferruginous. Female.....*E. ungensis.*
10. Antennæ 20-jointed or less..... 11.
 Antennæ 21-jointed.
 Second and third abdominal segments red; legs, including coxæ, ferruginous.....*E. sarpedontis.*
11. None in this section from Alaska.
12. Antennæ 28-jointed.
 Antennæ not ringed with white.....*E. ithacæ.*
 Antennæ ringed with white.....*E. concamerus.*

EXOLYTUS PERPLEXUS sp. nov.

Male.—Length 4 to 4.5 mm. Polished black, impunctate; an annulus at base of first joint of the flagellum, sutures of trochanters, knees, tibiæ beneath *sometimes* but rarely, tibial spurs and the extreme apices of the tarsal joints, testaceous. The antennæ are 24-jointed, the third joint the longest, a little longer than the fourth. Wings hyaline, the stigma and veins dark brown, the costæ, median and submedian veins in the front wings toward base, and the subcostal,

median and submedian veins in the hind wings, yellow; areolet open behind. The lateral depressions of the scutellum, the mesopleura superiorly, just beneath the insertion of the wings, and the petiole of the abdomen, are striated.

Type.—Cat. No. 5563, U. S. Nat. Museum. From St. Paul Island, August (Fur Seal Commission). Three specimens.

EXOLYTUS POPOFENSIS sp. nov.

Female.—Length 6 mm. Polished black, impunctate, the mesopleura superiorly beneath the insertion of the wings and the petiole of the abdomen not striated; pedicel at apex and the ring-joint flavotestaceous; legs more or less black, with the sutures of trochanters, tips of front and middle femora (the former almost wholly beneath), their tibiae and tarsi and the hind tarsi, testaceous; hind tarsi fuscous, the joints of the anterior and middle tarsi are also sometimes more or less subfuscous. Antennae 21-jointed. Wings hyaline, the stigma and veins brown, as in *E. perplexus*.

Male (?)—Length 4 mm. Agrees well with the female, except that the mesopleura beneath the wings and the petiole of the abdomen are coriaceous and not perfectly smooth and polished as in the opposite sex.

Type.—Cat. No. 5564, U. S. Nat. Museum. From Popof Island, August (Fur Seal Commission).

EXOLYTUS NIGER Ashmead.

Exolytus niger ASHMEAD, Fur Seals and Fur Seal Islands, Pt. IV, p. 338, ♀, 1899.

Type.—Cat. No. 4041, U. S. Nat. Museum. From Bering Island (Dr. Stejneger); Alaska, Pribilof Islands (F. A. Lucas).

EXOLYTUS SANCTIPAULI sp. nov.

Female.—Length 4 to 4.5 mm. Polished black and in color and sculpture is very nearly a counterpart of *E. perplexus* from which it may, however, be easily distinguished by having only 20-jointed antennae, by the areolet in the front wings being closed by an hyaline, although distinct, vein, and by the less distinctly striated petiole of the abdomen. Two or three of the specimens have the legs colored as in *E. popofensis*.

Type.—Cat. No. 5565, U. S. Nat. Museum. From St. Paul Island, July 21 (Fur Seal Commission); Popof Island, July 9, 10.

EXOLYTUS UNGÆ sp. nov.

Male and Female.—Length 3 to 3.5 mm. Polished black, impunctate; an annulus at base of first joint of the flagellum, mandibles and legs, except as hereafter noted, pale ferruginous or yellowish; base of middle coxæ and hind legs, except sutures of trochanters, basal two-thirds of their tibiæ and the tibial spurs, black; all tarsi fuscous or subfuscous *sometimes*; palpi and tegulæ yellowish-white. Antennæ 20-jointed. Wings hyaline, the stigma and veins brown, the areolet open behind, the transverse median nervure interstitial, *or very nearly*. The mesopleura beneath the wings and the petiole of the abdomen are impunctate although the latter sometimes exhibits a faint alutaceous sculpture, more noticeable in the male.

Type.—Cat. No. 5566, U. S. Nat. Museum. From Unga, July 21; Unalaska, August 24.

EXOLYTUS ALASKENSIS sp. nov.

Female.—Length 5.5 mm. Polished black, impunctate; palpi and tegulæ yellowish-white, legs, except the hind coxæ and the first joint of their trochanters, pale ferruginous or brownish-yellow. Antennæ 20-jointed. Wings hyaline, the stigma and veins brown, the areolet closed but the closing vein is hyaline, nearly obsolete, so that without care one might easily take it to be open. Abdomen much elongate, twice longer than the thorax, the petiole smooth except towards the base, where it is feebly alutaceous.

Type.—Cat. No. 5567, U. S. Nat. Museum. From Popof Island, July 8. One specimen.

EXOLYTUS KINCAIDI sp. nov.

Female.—Length 4.5 mm. Polished black, with the transverse depressions at sides of the prothorax, the depressions at sides of scutellum and mesopleura superiorly just beneath the wings, lineated; the petiole of the abdomen has a slight median furrow at its apex and some feeble lineations on either side of the furrow. Mandibles and palpi black. Antennæ 19-jointed. Wings hyaline, the stigma and veins brownish, the areolet closed by an hyaline nervure, while the recurrent nervure at apex and the disco-cubital nervure beyond the middle are broken by *bullæ*.

Type.—Cat. No. 5568, U. S. Nat. Museum. From St. Paul Island, August 15 (Fur Seal Commission).

EXOLYTUS INSULARIS sp. nov.

Female.—Length 4 mm. In color very similar to *E. kincaidi* and agreeing with it also in having 19-jointed antennæ but readily separated by the differences brought out in the table of species—color of legs and relative length of antennal joints—and the following differences: The depressions at the sides of the pronotum are not lineated, the apex of the clypeus and the mandibles are rufous, the labial palpi yellowish, while the petiole of abdomen is smooth and without the median furrow at apex.

Type.—Cat. No. 5569, U. S. Nat. Museum. From Popof Island, July 10. One specimen.

EXOLYTUS CLYPEATUS sp. nov.

(Pl. ix, fig. 5.)

Female.—Length 6 mm. Polished black, with the clypeus, mandibles, except teeth, palpi at base, tegulæ, a spot in front of it, the apices of front and middle coxæ, all trochanters, except more or less of the first joint *above*, tibial spurs and the ventral fold of abdomen, ivory or yellowish-white; rest of legs pale ferruginous or yellowish, the middle femora basally brownish, the middle and hind coxæ and the hind femora mostly black. Antennæ 24-jointed, the flagellum ferruginous. Wings hyaline, the stigma and costal vein brownish, the internal veins paler, the areolet open, without a vestige of the second transverse cubitus. Abdomen very long, compressed more than twice longer than the head and thorax united, the petiole feebly coriaceous with the spiracles placed before its middle.

Type.—Cat. No. 5570, U. S. Nat. Museum. From Popof Island, July 11. One specimen.

EXOLYTUS SELDOVIÆ sp. nov.

Male.—Length 5.5 mm. Black, with the mandibles, legs, except hind coxæ, the apex of the second dorsal abdominal segment and the base of the third dorsal segment, red or rufo-testaceous; palpi, tegulæ and front coxæ and trochanters pale yellowish. Antennæ 23-jointed. Wings hyaline, the stigma and veins brown, the epitegulæ, subcostal vein and the veins in the hind wings toward base, pale yellowish; areolet closed by an hyaline vein. Abdomen polished, shining, the petiole elongate, lineated at the sides.

Type.—Cat. No. 5572, U. S. Nat. Museum. From Seldovia, July 4. One specimen.

EXOLYTUS RUBROCINCTUS sp. nov.

Male.—Length 6.5 mm. Polished black; palpi yellowish; the third dorsal abdominal segment, except sometimes at apex, ventral segments 2 and 3 and the legs, except coxæ, basal joint of trochanters, more or less of femora and the hind tarsi which are black, are red or rufo-testaceous. Antennæ 26-jointed. Wings hyaline, the stigma and veins brown, the epitegulæ and the subcostal vein pale yellowish, the areolet open.

Type.—Cat. No. 5571, U. S. Nat. Museum. From Popof Island, July 8. Two specimens.

EXOLYTUS UNGENSIS sp. nov.

Female.—Length 5 mm. Black; the tegulæ and legs pale ferruginous, the front and middle coxæ and trochanters yellowish; abdomen with the venter at apex and dorsal segments 2 and 3, except the former narrowly at base and the latter at apex, red. Antennæ? broken. Wings hyaline, the stigma and veins brown, the epitegulæ, subcostal, median and submedian veins pale yellowish. Abdomen smooth and polished, the petiole with a few irregular, longitudinal wrinkles, but not distinctly striated.

Type.—Cat. No. 5573, U. S. Nat. Museum. From Unga, July 21. One specimen.

Genus *Atractodes* Gravenhorst.

ATRACTODES YAKUTATENSIS sp. nov.

Male.—Length 3.5 mm. Black, coriaceously opaque; mandibles, sutures of trochanters and knees rufo-testaceous; tegulæ and tibial spurs pale yellowish. Wings hyaline, the stigma and veins brown, the areolet open behind.

The head is transverse, at least thrice as wide as thick antero-posteriorly, the temples only about half the width of the eyes, the eyes being large, oval. The metathorax is long, arcolated, the areola complete, hexagonal. The abdomen is scarcely the length of the thorax, finely coriaceous, the petiole striate, a little longer than the second segment.

Type.—Cat. No. 5574, U. S. Nat. Museum. From Yakutat, June 21. One specimen.

Tribe *PHYGADEUONINI*.Genus *Stibeutes* Förster.

STIBEUTES NIGRITA Ashmead.

Stibeutes nigrita ASHMEAD, Fur Seals and Fur Seal Isl., Pt. IV, p. 338, ♀, 1899.

Type.—Cat. No. 3650, U. S. Nat. Museum. From St. Paul Island (Fur Seal Commission); Copper Island, Asia (Dr. L. Stejneger).

Genus *Stiboscopus* Förster.

In this genus should be placed *Stilpnus hudsonicus* Cresson, described from Hudson Bay Territory. It is well represented in our fauna and six species have been recognized in the Alaskan material, distinguishable by the aid of the following table.

TABLE OF SPECIES.

- | | |
|---|-------------------------|
| 1. Species <i>ferruginous</i> | 6 |
| Species <i>black</i> or at least with the head and thorax black. | |
| Abdomen entirely black or at most with only a slight piceous tinge on the second segment..... | 2 |
| Abdomen not entirely black..... | 4 |
| 2. Hind coxæ alone black, the front and middle coxæ ferruginous or only black basally..... | 3 |
| All coxæ black. | |
| Legs mostly black, with the sutures of trochanters, tibiæ and the extreme apices of tarsal joints, dark rufous; antennæ 20-jointed, incrassate toward apex. Female..... | <i>S. sanctipauli</i> . |
| 3. Legs, except hind coxæ, ferruginous; antennæ 21-jointed, not incrassate toward apex. Female..... | <i>S. alaskensis</i> . |
| 4. Abdomen black, with the sutures 1 and 2 testaceous, the color sometimes extending more or less distinctly on the surrounding surface..... | 5 |
| Abdomen black, with a narrow testaceous band at base of third segment. | |
| Antennæ 24-jointed; legs mostly black with sutures of trochanters, knees, tibiæ, except at apex, and the front and middle tarsi, flavo-testaceous. Male..... | <i>S. solitarius</i> . |

5. Hind coxæ black; anterior and middle legs ferruginous or reddish, the hind legs black or fuscous, their tibiæ more or less ferruginous basally.

Antennæ 23-jointed; abdomen with the petiole shagreened, the second and following segments smooth. Male.....*S. mandibularis*.

Antennæ 21-jointed, very long; abdomen with the petiole and the second segment finely shagreened, those beyond smooth. Male.

S. silkensis.

6. Antennæ 25-jointed; sheaths of ovipositor black; wings hyaline, the costal vein and the stigma light brown or brownish-yellow, the subcostal vein and the internal veins dark brown. Male...*S. ferrugineus*.

STIBOSCOPIUS SANCTIPAULI sp. nov.

Female.—Length 2.5 mm. Polished black, the ovipositor about one-third the length of the abdomen, the sutures of the trochanters, tibiæ and the extreme apices of the tarsal joints dark rufous. Antennæ 20-jointed, thickened toward apex, the first joint of the flagellum only about two-thirds the length of the second. Wings subhyaline, the stigma and veins brown. The head is large, quadrate; the mesonotum on the disk is flat, the scutellum with a crenate furrow across the base; the metathorax is completely areolated, the areola nearly horse-hoof shaped. Abdomen polished, shining; the first segment is feebly coriaceous at sides and towards base, polished at apex, the second and third segments large, subequal, broader than long, the second a little longer than the first.

Type.—Cat. No. 5576, U. S. Nat. Museum. From St. Paul Island, August 15 (Fur Seal Commission). One specimen.

STIBOSCOPIUS ALASKENSIS sp. nov.

Female.—Length 3.4 mm. Polished black; legs, except the middle coxæ, basally and the hind coxæ ferruginous; antennæ 21-jointed, the first joint of the flagellum a little longer than the second, with a pale annulus at base. Wings hyaline, the stigma and veins yellowish. The head is transverse quadrate, the mesonotum feebly depressed posteriorly, the scutellum with a non-crenate furrow across the base, the metathorax areolated, the areola hexagonal, wider than long. Abdomen oblong-oval, similar to *S. sanctipauli*, except that the petiole or first segment is longitudinally striate.

Type.—Cat. No. 5577, U. S. Nat. Museum. From St. Paul Island, August 15 (Fur Seal Commission). One specimen.

STIBOSCOPUS SOLITARIUS sp. nov.

Male.—Length 3.5 mm. Black, the head above and the mesothorax, except the metanotum, polished, shining; abdomen with a narrow testaceous band at base of third; palpi and tegulæ yellowish-white; legs mostly black, with the sutures of the trochanters, knees, tibiæ, except at apex, and the front and middle tarsi, flavo-testaceous. Metathorax areolated, the areola hexagonal, longer than wide. Wings hyaline, the stigma and veins brown. Abdomen a little longer than the head and the thorax united, the first three segments finely coriaceous, opaque, the following smoother, the second segment a little longer than wide, the third a little wider than long.

Type.—Cat. No. 5578, U. S. Nat. Museum. From Popof Island, July 12. One specimen.

STIBOSCOPUS MANDIBULARIS sp. nov.

Male.—Length 4 mm. Polished black; abdominal sutures 1 and 2 testaceous; legs, except the hind tibiæ basally and the middle femora basally ferruginous. Antennæ 23-jointed, the first three joints of the flagellum subequal, the first scarcely longer than the second. Wings hyaline, the stigma and veins brown. Metathorax areolated, the areola hexagonal. Abdomen a little longer than the head and thorax united, polished, shining, except the petiole which is feebly wrinkled, subopaque, with two feeble, median dorsal carinæ toward base.

Type.—Cat. No. 5579, U. S. Nat. Museum. From St. Paul Island, August (Fur Seal Commission). One specimen.

STIBOSCOPUS SITKENSIS sp. nov.

Male.—Length 3.5 mm. Polished black; mandibles rufo-piceous; sutures 2 and 3 of abdomen and the legs, except hind coxæ, their femora, their tibiæ toward apex and their tarsi, ferruginous. Antennæ 21-jointed, the three or four basal joints of the flagellum elongate, the first the longest with a yellowish annulus at base. Metathorax areolated, the carinæ strongly elevated, the areola hexagonal, longer than wide. Wings hyaline, the stigma and veins light brown, the areolet irregularly pentagonal, receiving the second recurrent nervure much beyond its middle. Abdomen elongate, longer than the head and thorax united, the petiole and second segment shagreened, the following smooth and polished.

Type.—Cat. No. 5580, U. S. Nat. Museum. From Sitka, June 15. One specimen.

STIBOSCOPUS FERRUGINEUS sp. nov.

Female.—Length 7 mm. Ferruginous, the antennæ and legs paler, more of a brownish-yellow; head subquadrate, coriaceous, the eyes black. Antennæ 25-jointed, slightly thickened toward apex, the first and second joint of flagellum elongate, subequal. Wings hyaline or at most only faintly tinged, the stigma and veins brown, the areolet large, pentagonal, the sides nearly parallel. Metathorax incompletely areolated, the areola hexagonal, the lateral longitudinal carinæ and the basal and lateral median areas obliterated. Abdomen with the first three segments finely, uniformly coriaceous.

Type.—Cat. No. 5581, U. S. Nat. Museum. From Popof Island, July 9. One specimen.

Genus *Bathymetis* Förster.

This genus is well represented in North America. The following table will enable the student to separate the species found in Alaska:

TABLE OF SPECIES.

Species <i>rufous</i> or ferruginous.....	26.
Species <i>black</i> or the head and thorax black.....	2.
2. Abdomen entirely black or at most with a piceous or testaceous tinge in one or more of the sutures.....	3.
Abdomen not entirely black, either red or with one or more of the segments red or marked with red.....	13.
3. All coxæ black or black basally.	
Antennæ 20-jointed or less. (Male 24-jointed).....	8.
Antennæ 21-jointed or more.....	4.
4. Antennæ less than 24-jointed. (Female 20-jointed.)	
Antennæ 24-jointed. Male. (Female 20-jointed.)	
Legs black, with the sutures or more of trochanters, apices of front and middle femora, the front tibiæ and tarsi and the middle and hind tibiæ, except at apex, testaceous; first and second joints of the flagellum about equal, fully thrice as long as thick; abdomen one-third longer than the head and thorax united, the petiole stout, finely rugulose, not distinctly aciculate except along the sides.	

B. nigricornis.

5. Antennæ 22-jointed or less.....6.
 Antennæ 23-jointed. (Female 19-jointed.)
 Legs black, with the sutures of trochanters, front and middle legs except femora basally, tips of hind femora and their tibiæ, except apex, rufo-testaceous.....*B. simillima*.
6. Antennæ 21-jointed. Male..... 7.
 Antennæ 22-jointed. Male. (Female 18-jointed.)
 Legs, except the anterior coxæ basally, the middle and hind coxæ, bases of front and middle femora and hind legs, except basal two-thirds of tibiæ which are black, ferruginous; abdomen with usually more or less of the third dorsal segment red, or the apex of the second and the base of the third segments are reddish. Male..... *B. confusa*.
7. Legs black with the sutures of trochanters, apices of femora, all tibiæ, except the hind pair at apex, and the anterior and middle tarsi more or less testaceous; first and second joints of flagellum subequal, the first slightly the longer with a pale annulus at base, about $3\frac{1}{2}$ times as long as thick; abdomen longer than the head and thorax united, the petiole finely rugulose to a little beyond the spiracles. Male.
B. unguæ.
8. Antennæ less than 20-jointed..... 11.
 Antennæ 20-jointed.
 Females 9.
 Males 10.
9. Legs black, with the sutures of the trochanters, apices of femora (the anterior usually entirely beneath), and the tibiæ, except the posterior at apex, dark rufous, the tarsi black or fuscous; pedicel testaceous at apex; metathoracic areola hexagonal, fully as long as wide or a little longer; first joint of flagellum only about two-thirds the length of the second, the third only a little shorter than the second, joints 5 and those beyond to the last, not, or scarcely, longer than thick, the last oblong.....*B. nigricornis*.
 Legs black with the apex of front coxæ, their femora, except slightly at base above, their tibiæ and tarsi, second joint of middle and hind trochanters, apices of their femora, middle tibiæ and tarsi and hind tibiæ, except at apex, rufo-testaceous; pedicel and first joint of flagellum at base, rufo-testaceous; metathoracic areole hexagonal, a little wider than long.
 First joint of flagellum about two-thirds the length of the second, the third only a little shorter than the second, joints 7 and 8. a little thicker than long, the following to the last a little longer than thick, the last joint oblong; petiole finely coriaceous.....*B. imitator*.
 First joint of flagellum only a little longer than thick at apex, usually two-thirds the length of the second, joints 5 and 6 quadrate, the following to the last a little longer than thick, the last oblong, nearly thrice as long as thick; petiole coriaceous to the spiracles and along the sides to beyond the spiracles.....*B. simulans*.

10. All coxæ black, the anterior sometimes testaceous at apex, rest of legs mostly black, with sutures of trochanters, tips of femora, tibiæ except hind pair, and the tarsi, except the posterior, dark rufous, the middle and front tarsi with the joints more or less fuscous basally; first and second joints of flagellum equal hardly or not more than thrice longer than thick at apex.

Metathoracic areola hexagonal but much *wider* than long; fovea at base of scutellum smooth, without striæ; antennal joints 13 to 19 distinctly longer than thick..... *B. quadriceps*.

Metathoracic areola hexagonal but *longer* than wide; fovea at base of scutellum with striæ; antennal joints 13 to 19 hardly longer than thick..... *B. simulator*.

11. Antennæ 18-jointed..... 12.
Antennæ 19-jointed.

Legs black, with the sutures of trochanters apices of femora and tibiæ except the posterior at apex rufo-testaceous, tarsi black or fuscous, the extreme tips of the anterior and middle tarsal joints (rarely entirely) and the apex of the antennal pedicels testaceous.

First joint of the flagellum only two-thirds the length of the second, joints 5 to 10 not longer than thick, the last oblong, thrice as long as thick; petiole of abdomen coriaceous or finely shagreened to the spiracles. Female..... *B. simillima*.

12. Legs black, with the sutures of trochanters, tips of femora, the front and middle tibiæ and tarsi and the hind tibiæ, except at apex, rufo-testaceous; third joint of antennæ obconical, only a little longer than thick at apex and much shorter than the fourth, joints 7-10 quadrate or nearly. Female. (Male 22-jointed antennæ.)..... *B. confusa*.

13. Abdomen not entirely red, always black at base and apex.... 14.
Abdomen, except sometimes the petiole or the petiole at base, entirely red or ferruginous..... 24.

14. Abdomen with dorsal segments 2 and 3 and sometimes 4, or at least basally or in the sutures, red..... 22.
Abdomen quite differently marked, dorsal segments 2 and 3 never both red..... 15.

15. Antennæ 23-jointed or less..... 17.
Antennæ 24-jointed. Male. (Female 20-jointed).... 16.

16. Abdomen with the second suture and extreme apex of the segment, and the base of third segment or the third wholly testaceous or dark rufous; rarely with base of fourth segment red; first and second joints of flagellum equal or very nearly, the penultimate joint very distinctly longer than thick. *B. rubrocincta*.

- Abdomen with second suture including the extreme apex of the second segment and the apex of the third segment, testaceous (sometimes with only the second and third sutures testaceous); second joint of flagellum a little shorter than the first, the following imperceptibly shortening the penultimate joint being only a little longer than thick.
B. imitator.
17. Antennæ 22-jointed or less..... 18.
Antennæ 23-jointed. Male. (Female 19-jointed.)
Abdomen with the third segment dark rufous.....*B. simillima.*
18. Antennæ 21-jointed or less..... 19.
Antennæ 22-jointed. Males. (Female 18-jointed.)
Abdomen with the extreme apices of the second and the third segments testaceous.....*B. confusa.*
Abdomen with the apex of the second segment and the third entirely testaceous.....*B. confusa.*
19. Antennæ 20-jointed or less..... 20.
Antennæ 21-jointed. Female.
Abdomen with the apex of the second segment, second suture and the third segment basally, testaceous.....*B. unguæ.*
20. Antennæ 19-jointed or less..... 21.
Antennæ 20-jointed.
Females. (Male 24-jointed.)
Abdomen with base of second segment and the third more or less dark rufous.
Length 4 mm. Metathoracic areola horse-hoof shaped; areolet receiving the second recurrent nervure before its apical third.
B. rubrocincta.
Length 3 mm. Metathoracic areola hexagonal; areolet receiving the second recurrent nervure at its apical third.....*B. imitator.*
Males. (Female unknown.)
Length 3.5 mm. Third and fourth antennal joints equal, both a little longer than the fifth.....*B. quadriceps.*
Length 4 mm. or more. Third antennal joint a little shorter than fourth, but equal to the fifth.....*B. simulator.*
21. Antennæ 19-jointed. Female.....*B. simillima.*
Antennæ 18-jointed. Female.....*B. confusa.*
22. Antennæ 21-jointed or less.....23.
Antennæ 24-jointed. Male.
Abdomen black, with dorsal segments 2 and 3 red, and sometimes the apex of the first and the base or more of the fourth, red...*B. bicolor.*
23. Antennæ 21-jointed. Male.
None in this section known from Alaska.
Antennæ 19-jointed. Female. (Males 23-jointed.)
None in this section known from Alaska.

24. All coxæ red or pale, never black..... 25.
 All coxæ black.
 Antennæ 22-jointed. Female.
 None in this section known from Alaska.
 Antennæ 20-jointed. Female..... *B. bicolor*.
25. To this section belong *Phygadenon californicus* Cr., *P. crassipes* Prov. and *P. vulgaris* Cr.
26. None in this section are found in Alaska.

BATHYMETIS NIGRICORNIS sp. nov.

Female.—Length 3.5 mm.; ovipositor a little longer than the petiole. Polished black, the face sparsely punctate, the metathorax finely wrinkled and completely areolated; mandibles, except teeth, sutures of trochanters, knees and tibiæ, except the apex of the hind tibiæ, dark rufo-testaceous, the tarsi mostly fuscous, the anterior and middle tarsi with the apices of joints and beneath usually testaceous, rarely wholly testaceous; tegulæ and tibial spurs yellowish-white. Wings hyaline, the stigma and veins dark brown. Head quadrate, the temples full, broader than the eyes. Antennæ 20-jointed, slightly thickened toward the apex, the second and third joints of the flagellum subequal, about one-half longer than the first, the joints beyond, to the last, shorter joints 5 and 6 quadrate or nearly so, the following to the last a little wider than long, the last oblong, a little more than twice longer than thick.

Male.—Length 5 mm. Agrees well with the female except in the usual sexual differences. The head is subquadrate, the abdomen longer, clavate, one-third longer than the head and thorax united, the petiole finely rugulose, longitudinally aciculated at sides, while the antennæ are 24-jointed, the flagellum being filiform, the first and second joints of same subequal in length, or at most, with the first very slightly the longer.

Type.—Cat. No. 5582, U. S. Nat. Museum. From St. Paul Island (Fur Seal Commission).

BATHYMETIS IMITATOR sp. nov.

Female.—Length 2.8 to 3 mm.; ovipositor not longer than the petiole. Polished black, the base below the antennæ sparsely punctate, the space above flat or depressed and smooth; legs black, with the apices of front coxæ, their femora, except slightly basally above, their tibiæ and tarsi, second joint of middle and hind trochanters, apices of their femora, middle tibiæ and tarsi and the hind tibiæ, except at apex,

rufo-testaceous. Metathorax with the areola hexagonal, a little wider than long. Abdomen black, with the second segment at base and the second suture usually testaceous.

The antennæ are 20-jointed, incrassated toward apex, black, with the pedicel, and first joint of the flagellum, testaceous; the first joint of the flagellum is about two-thirds the length of the second, the third only a little shorter than the second, joints 7 and 8 a little wider than long, the following to the last a little longer than thick, the last joint being oblong.

Male.—Length 3.5 to 3.8 mm. Resembles *B. nigricornis* and agrees with it closely, except slightly in color and in two or three slight structural characters: The antennæ are 24-jointed, a little slenderer, with the first joint of the flagellum a little longer than the second: the palpi and tegulæ are yellowish-white; the legs are black, with the second joint of trochanters, the femora at apex (the front pair very broadly), the tibiæ, except the hind pair at apex, and the tarsi, except the posterior, rufo-testaceous; apices of hind tibiæ and their tarsi black or fuscous; while the abdomen is black with the first suture and the margins of the segments surrounding it, and the apex of the second segment, testaceous.

Type.—Cat. No. 5584, U. S. Nat. Museum. From St. Paul Island (Fur Seal Commission).

BATHYMETIS SIMULANS sp. nov.

Female.—Length 5 mm. Polished black; mandibles and legs, except the middle coxæ basally, the hind coxæ, first joint of trochanters, anterior and middle femora basally, the hind femora, apices of their tibiæ and their tarsi, which are black, rufo-testaceous; face below antennæ punctate, the clypeus well separated with some sparse punctures; palpi and tegulæ yellowish-white. Antennæ 20-jointed. Wings hyaline, the stigma and veins, except the median and submedian veins basally which are yellowish, brown-black; the areolet is irregularly pentagonal, the recurrent nervure joining it beyond the middle. Abdomen black, with the apex of the petiole and the lateral membranous part and the second suture testaceous.

Type.—Cat. No. 5585, U. S. Nat. Museum. From St. Paul Island, August 15 (Fur Seal Commission).

BATHYMETIS RUBROCINCTA sp. nov.

Female.—Length 4.5 mm.; ovipositor only two-thirds the length of the petiole. Polished black, the face below the antennæ closely

punctate; palpi subfuscous; mandibles and legs mostly rufo-testaceous, a blotch on first joint of trochanters and front and middle femora basally, fuscous, the hind femora, except at apex, their tibiæ at apex and their tarsi black; tegulæ yellowish-white. Antennæ 20-jointed, black, the pedicel testaceous at apex; flagellum imperceptibly thickened towards apex, the first joint obconical, less than two-thirds the length of the second, the third joint, if anything, very slightly longer than the second or fully as long, joints 4 and 5 a little longer than thick, 6 to last a little wider than long, the last fusiform, longer than thick at base. The metathorax is completely areolated, the areola hexagonal. Wings hyaline, the stigma and veins brown, the areolet receiving the second recurrent nervure beyond its middle. Abdomen oblong-oval, with the petiole rather long, segments 2 and 3 more or less dark rufous, sometimes obfuscated or dusky across the middle, or with only the sutures and basis of segments testaceous; body of abdomen smooth and highly polished, the petiole finely shagreened.

Male.—Length 4 mm. Black, with the legs colored as in female, the abdomen with the third segment more or less dark rufous, sometimes wholly rufous, the second suture testaceous. Antennæ 24-jointed, the first and second joints of the flagellum equal or very nearly, about twice as long as thick.

Type.—Cat. No. 5586, U. S. Nat. Museum. From Sitka, June 16; St. Paul Island, August (Fur Seal Commission).

BATHYMETIS SIMILLIMA sp. nov.

(Pl. x, fig. 1.)

Female.—Length 2.5 to 3 mm. Polished black and colored as in *P. simulans* but distinguished by the antennæ, which are 19-jointed, not 20-jointed.

The flagellum is obscure rufous basally, the first joint two-thirds the length of the second, the third joint scarcely shorter than the second, joints 5 to 10 not longer than thick.

The abdomen is most frequently entirely black, although sometimes one or two of the sutures, and the surrounding surface, or the apices of one or two of the segments are testaceous; the petiole is coriaceous or finely shagreened beyond to the spiracles; the following segments are highly polished.

Male.—Length 3.2 to 4.5 mm. Agrees fairly well with two or three of the other males described here, but for the following differences: The antennæ are 23-jointed, black, with the scape beneath and an annulus at base of the flagellum testaceous, the first three joints of the

flagellum subequal, the first slightly longer than the second, all the joints delicately fluted; mandibles rufous; palpi and tegulæ yellowish; legs very variable in color, black and rufo-testaceous, most frequently with coxæ, base of front and middle femora and the hind femora black, the tips of hind tibiæ and their tarsi fuscous. Abdomen also variable in color, entirely black, or with one or more of the sutures rufo-testaceous, or with one or more of the segments testaceous or blotched with testaceous.

Type.—Cat. No. 5587, U. S. Nat. Museum. From St. Paul Island, August; Unga, July 21 (Fur Seal Commission).

BATHYMETIS CONFUSA sp. nov.

Female.—Length 3.8 mm. Polished black, the face below the antennæ sparsely punctate; palpi fuscous; mandibles, sutures of trochanters, tips of femora, the anterior and middle tibiæ and tarsi, except last joint, and the hind tibiæ, except at apex, rufo-testaceous.

Head subquadrate, the temples broader than the eyes. Antennæ 18-jointed, the flagellum very slightly and gradually thickened towards apex, the first and third joints of the flagellum of an equal length, a little shorter than the second, joints 7 to 9 quadrate, not longer than wide, the following to the last a little longer than wide, the last joint oblong, nearly twice as long as the penultimate. Wings hyaline, the stigma and veins brown-black, the tegulæ piceous, the epitegulæ and submedian vein pale yellowish. Abdomen oblong, polished black, one-third longer than the head and thorax united, the ovipositor not longer than the petiole, the latter finely coriaceous to its apical third.

Male.—Length 4 to 4.5 mm. Differs in having 22-jointed antennæ, the first and second flagellar joints equal, a little longer than the third; tegulæ pale yellowish; legs ferruginous with the coxæ and the hind legs, except the basal two-thirds of the tibiæ, black, the front coxæ ferruginous at apex, while the front and middle femora are more or less black or fuscous basally. Abdomen black with the third dorsal segment more or less red, or the second at apex and the third at base are red.

Type.—Cat. No. 5588, U. S. Nat. Museum. From St. Paul Island (Fur Seal Commission).

BATHYMETIS UNGÆ sp. nov.

Male.—Length 4 to 4.5 mm. Polished black, the face distinctly punctate, the fovea at base of scutellum with striæ at bottom, the met-

anotum finely wrinkled; mandibles and tegulæ dark rufo-piceous; palpi fuscous; sutures of trochanters, the anterior tibiæ entirely, the middle tibiæ, except at apex and the hind tibiæ beneath, rufo-testaceous; hind tibiæ outwardly or above, and all tarsi, black or fuscous. Head quadrate. Antennæ 21-jointed, the first joint of the flagellum the longest joint, as long as the third and fourth joints united, the second a little shorter than the first, but one-half longer than the third. Wings subfuscous, the stigma and veins brown-black, the outer vein of the areolet slender and pellucid. Abdomen elongate, polished and shining, except the petiole, which is subopaque, coriaceous, with some irregular, short aciculations.

Type.—Cat. No. 5589, U. S. Nat. Museum. From Unga, July 21 (Fur Seal Commission).

BATHYMETIS QUADRICEPS sp. nov.

Male.—Length 3.5 mm. Polished black, the face below the antennæ finely, closely punctate; palpi fuscous; a narrow annulus at base of first joint of flagellum, mandibles, sutures of trochanters, knees, anterior and middle tibiæ, and more or less of their tarsi rufo-testaceous; tegulæ rufo-piceous; epitegulæ and submedian vein yellowish-white. Antennæ 20-jointed, joints 3 and 4 equal, a little longer than the fifth, joints 13 to 19 distinctly longer than thick, the last joint conical. Scutellum with a smooth furrow across the base. Metathorax feebly wrinkled but shining, and completely areolated, the areola hexagonal, much wider than long. Wings hyaline, the stigma and veins brown, the areolet pentagonal, receiving the second recurrent nervure at its middle. Abdomen clavate, smooth and shining, except the petiole, which is feebly alutaceous, with the spiracles somewhat prominent.

Type.—Cat. No. 5590, U. S. Nat. Museum. From Popof Island, July 7; St. Paul Island, August 15 (Fur Seal Commission).

BATHYMETIS SIMULATOR sp. nov.

Male.—Length 4.5 mm. Agrees very closely with *B. quadriceps* in color and in having 20-jointed antennæ, but may be separated readily by the following differences: The palpi are pale yellowish, not fuscous; antennal joints 13 to 19 are not, or scarcely, longer than thick; the transverse furrow at base of the scutellum is finely striate at the bottom; the metanotum is more coarsely wrinkled, with the areola longer than wide; the stigma and veins are darker brown, almost black, the areolet receiving the second recurrent

nervure a little beyond the middle; while the petiole of the abdomen is stouter, finely coriaceous, except at apex, with the spiracles normal.

Type.—Cat. No. 5591, U. S. Nat. Museum. From St. Paul Island (Fur Seal Commission).

BATHYMETIS BICOLOR sp. nov.

Female.—Length 5 to 5.5 mm. Head, thorax, antennæ, coxæ, first joint of trochanters, and basal segment of abdomen, except sometimes apically, are black; rest of legs and abdomen red, sometimes the basal two or three joints of the antennæ are more or less ferruginous. The head is transverse, the temples rounded. The antennæ are 20-jointed, the flagellum being thickened towards apex, the first joint of same being the longest joint, about twice as long as thick at apex, the following joints to the 5th gradually shortening, joint 6 and those beyond being a little wider than long, the last oblong. Wings oblong, the stigma and veins brown, the epitegulæ yellowish-white, the areolet receiving the second recurrent nervure at or very near its middle.

Male.—Length 5.5 to 6 mm. Agrees well with the female in color except that the apex of the fourth abdominal segment and the following segments are black, while the antennæ are longer, filiform, 24-jointed, the third joint only a little longer than the fourth, the following joints to the last very gradually and slightly shortening, but none wider than long.

Type.—Cat. No. 5592, U. S. Nat. Museum. From Berg Bay, June 10.

Genus *Plectocryptus* Thomson.

Two species taken in Alaska belong in this genus; they may be separated as follows:

1. Ferruginous, with sutures of thorax black.
 - Antennæ less than 26-jointed..... 2
 - Antennæ 26-jointed.
 - Flagellum black, joints 6 to 12 yellowish-white, the second and third joints about equal in length, not much longer than thick at apex, shorter than the first *P. yakutatensis*.
2. Antennæ 24-jointed, brownish-yellow to joint 14 or 15, beyond fuscous or black; flagellar joints 2 and 3 equal, scarcely longer than thick and shorter than the first *P. popofensis*.

PLECTOCRYPTUS YAKUTATENSIS sp. nov.

(Pl. ix, fig. 6.)

Female.—Length 7 mm.; ovipositor as long as the first two joints of hind tarsi. Ferruginous, with the sutures of the thorax and the antennæ toward apex black. Antennæ 26-jointed, incrassated, the pedicel and joints 1 to 5 or 6 of flagellum fuscous, joints 14 and beyond black; the first joint of the flagellum is about twice as long as thick, the second and those beyond to the fifth shortening, those beyond to the last broadening and all wider than long. Wings hyaline, the stigma and veins brown, the costæ and basal veins blackish, the areolet irregularly pentagonal, receiving the second recurrent nervure at its apical third. Metathorax areolated but with the basal lateral and the middle lateral areas confluent, the spiracles elongate. Abdomen with the petiole and second segment distinctly punctate, the third segment feebly and indistinctly punctate, the following segments smooth and shining.

Type.—Cat. No. 5593, U. S. Nat. Museum. From Yakutat, June 21; Muir Glacier; Sitka (Fur Seal Commission).

PLECTOCRYPTUS POPOFENSIS sp. nov.

Female.—Length 5.5 mm.; ovipositor a little longer than the basal joint of hind tarsi. Ferruginous, with the sutures of the thoracic sclerites black; palpi yellowish-white; antennæ fuscous or blackish toward apex. The head is quadrate. The antennæ are 24-jointed, stout, strongly incrassated toward apex, the scape large, subglobose, the flagellum involuted, the first joint of same being about twice as long as thick, the following joints to the last, after the third, transverse, the last oblong. The thorax is minutely, sparsely punctate, the mesopleura from the discal impression posteriorly, being closely punctate; the metathorax is quadrate, impressed behind and rugulose, the areola large, quadrate, the basal lateral and the middle lateral areas confluent. Wings hyaline, the stigma and veins brown, the areolet rather large, irregularly pentagonal, receiving the second recurrent nervure beyond the middle. The abdomen is hardly longer than the head and thorax united, smooth and polished, except the petiole and the second dorsal segment which are punctate.

Type.—Cat. No. 5594, U. S. Nat. Museum. From Popof Island, July 8. One specimen.

This species in color mimics *Ichneumon popofensis* and, but for some slight structural characters, is scarcely distinguishable from it.

Genus **Microcryptus** Thomson.

TABLE OF SPECIES.

Black; all coxæ black.

Legs ferruginous; abdomen black, with the apices of dorsal segments 2, 3 and 4 ferruginous. Male.....*M. trifasciatus*.

Legs black and ferruginous; scape beneath, anterior and middle coxæ at apex and trochanters pale yellowish; abdomen black with the second dorsal segment at apex narrowly, the whole of the third and the middle of the fourth dorsal segments ferruginous...*M. alaskensis*.

MICROCRYPTUS TRIFASCIATUS sp. nov.

Male.—Length 5.4 mm. Black, coriaceous; palpi fuscous; epitegulæ yellowish-white; legs, except coxæ and first joint of trochanters and apical margins of dorsal abdominal segments 2, 3 and 4, the latter very narrowly, ferruginous; the coxæ, first joint of the trochanter and abdomen black. Wings hyaline, the stigma and veins brown, the areolet pentagonal, receiving the recurrent nervure very slightly beyond the middle, the submedian cell a little longer than the median.

Type.—Cat. No. 5595, U. S. Nat. Museum. From St. Paul Island, August 16 (Fur Seal Commission).

MICROCRYPTUS ALASKENSIS sp. nov.

Male.—Length 4.6 mm. Black; scape beneath, palpi, tegulæ, epitegulæ, apices of front and middle coxæ, their trochanters and the tibial spurs ivory or yellowish-white; rest of legs, except as noted, ferruginous, the front and middle coxæ black or fuscous, the hind legs mostly black, with the second joint of trochanters and the tibiæ basally ferruginous; mandibles and the extreme apex of dorsal abdominal segment 2, the whole of 3 and most of 4, rufous. Wings hyaline, the stigma and veins brown. Metathorax completely areolated. Abdomen, except the petiole which is aciculate and the second segment which is feebly shagreened, smooth and shining.

Type.—Cat. No. 5575, U. S. Nat. Museum. From Sitka, June 16. One specimen.

Genus **Plesiognathus** Förster.**PLESIOGNATHUS RUBROCINCTUS** sp. nov.

Male.—Length 4 mm. Polished black, the face finely punctate and clothed with a sericeous pile; mandibles and legs, except coxæ, first joint of trochanters, front and middle femora basally, hind femora at

basal two thirds, apex of hind tibiæ and their tarsi, which are black or fuscous, pale ferruginous; palpi and tegulæ yellowish-white; abdomen, except sutures 2 and 3 and most of second segment which are red, black. The head is quadrate, the temples broad. Antennæ 23-jointed, black, except a pale annulus at base of third joint, the third and fourth joints about equal in length or very nearly, about thrice as long as thick, the following joints to the last very gradually shortening, the penultimate being only a little longer than thick, the last fusiform, about as long as the two preceding united. Wings hyaline, the stigma and veins brown, the areolet pentagonal, receiving the second recurrent nervure very near its middle or only a little beyond it, the submedian cell a little longer than the median. The metathorax is finely wrinkled and completely areolated with the areola pentagonal, longer than wide. Abdomen elongate, smooth and polished, except the petiole which is finely coriaceous, with some irregular longitudinal raised lines and with two delicate dorsal carinæ that become obsolete beyond the spiracles just before attaining the apex of the segment.

Type.—Cat. No. 4042, U. S. Nat. Museum. From Pribilof Islands (Fur Seal Commission).

Genus *Hedylus* Förster.

HEDYLUS CRASSICORNIS Ashmead.

Hedylus crassicornis ASHMEAD, Fur Seals and Fur Seal Isl., Pt. IV, p. 339, ♀, 1899.

Type.—Cat. No. 4043, U. S. Nat. Museum. From Bering Island (Mr. Barrett-Hamilton).

HEDYLUS sp.

Belkofski. One badly broken female specimen, not in a condition for describing.

Genus *Bachia* Förster.

BACHIA NIGRA Ashmead.

Bachia nigra ASHMEAD, Fur Seals and Fur Seal Isl., Pt. IV, p. 340, ♀, 1899.

Type.—Cat. No. 4044, U. S. Nat. Museum. From St. Paul Island (Fur Seal Commission); Bering Island, July, 1897 (Mr. Barrett-Hamilton).

Tribe *HEMITELINI*.Genus *Spinolia* Förster.*SPINOLIA MINUTA* sp. nov.

Female.—Length 2 mm. Polished black; legs, except hind coxæ, ferruginous, the hind femora faintly dusky above. Antennæ 20-jointed, slightly thickened toward apex, the scape black, the pedicel yellow, the flagellum brown-black, the first joint being the longest joint. Wings hyaline, narrowed and somewhat abbreviated, the stigma and veins pale yellowish, the areolet entirely absent, the first abscissa of the radius oblique and interstitial with the second recurrent nervure, and having the same direction, the second abscissa of the radius being strongly curved upwards; the third discoidal cell is very narrow at base.

Type.—Cat. No. 5996, U. S. Nat. Museum. From St. Paul Island (Fur Seal Commission). One specimen.

Genus *Acrolyta* Förster.*ACROLYTA KARLUKENSIS* sp. nov.

Female.—Length 2.5 mm. Ovipositor not longer than the petiole. Polished black; basal half, or more, of the second dorsal abdominal segment and sometimes the base of the third narrowly at the middle, red; petiole longitudinally aciculated; mandibles and legs pale yellowish, the coxæ, femora and hind tibiæ fuscous or brownish. Antennæ 20-jointed, black, the third joint long, cylindrical, about six times as long as thick, with a pale annulus at base, but only a little longer than the fourth. Wings hyaline, the stigma and veins light brown.

Type.—Cat. No. 5597, U. S. Nat. Museum. From Karluk (Fur Seal Commission). One specimen.

ACROLYTA ACICULATA sp. nov.

Male.—Length 3.5 mm. Polished black, the clypeus rugosely punctate, the face above alutaceous; mandibles, sutures of trochanters, apices of the femora and the anterior and middle femora beneath, their tibiæ, except the hind pair at apex and tarsi, except middle and hind pairs, rufo-testaceous; tips of hind tibiæ and hind tarsi more or less fuscous or subfuscous. Wings hyaline, the stigma and veins reddish-brown, the areolet more or less partly open behind. Antennæ 24-jointed, the first joint of the flagellum about one third longer than the second, with a pale annulus at extreme base. Abdomen clavate,

smooth and shining, except the petiole which is almost as long as segments 2 and 3 united, and longitudinally striate or aciculate.

Type.—Cat. No. 5583, U. S. Nat. Museum. From Sitka, June 16; St. Paul Island (Fur Seal Commission).

Genus **Thestis** Förster.

THESTIS TRICINCTA sp. nov.

Female.—Length 3.5 mm.; ovipositor about half the length of the abdomen. Polished black, except the petiole and second segment of the abdomen which are opaque and coriaceous; the abdominal segments 2 and 3 at apex are yellow, while the extreme apex of the fourth segment has a testaceous tinge; clypeus, mandibles, palpi, tegulæ and the anterior and middle coxæ and trochanters are yellowish-white; rest of legs, except the front pair and the hind pair in part, ferruginous, the front legs yellowish, the hind coxæ and femora black, their tarsi fuscous; flagellum brown, yellowish beneath near base. Eyes very large, convergent below and leaving no malar space. Thorax with the parapsidal furrows distinct, converging and uniting a little beyond the middle of the mesonotum. Metathorax constricted at base, completely and strongly areolated. Wings hyaline, the stigma and veins light brown.

Type.—Cat. No. 5598, U. S. Nat. Museum. From Popof Island, July 8; Unga, July 7.

This is one of the genera placed by Förster in this group; I think it should be removed to the tribe *Plectisçini*. It seems to fall in naturally between *Symphylus* and *Eusterinx*.

Genus **Aclastus** Förster.

ACLASTUS RUFIPES sp. nov.

Female.—Length 3.2 mm.; ovipositor shorter than the petiole. Polished black: palpi fuscous; legs, except hind coxæ, ferruginous, the tibial spurs and tarsi paler, the hind coxæ black. Antennæ 21-jointed, brown-black, the pedicel yellowish, the first joint of the flagellum more than thrice longer than thick, longer than the second. Metathorax short, wrinkled and completely areolated, the arcola hexagonal, wider than long, the petiolar area very long. Abdomen broadly oval, smooth and polished, except the petiole which is longitudinally striate.

Type.—Cat. No. 5999, U. S. Nat. Museum. From St. Paul Island, August 16 (Fur Seal Commission).

Genus **Habromma** Förster.**HABROMMA NIGRUM** sp. nov.

Male.—Length 3 mm. Polished black; apices of front femora and their tibiæ and tarsi yellowish; middle tibiæ and tarsi and hind tibiæ obscure ferruginous, the tips of the hind tibiæ and their tarsi fuscous. Antennæ 20-jointed, the third joint the longest, fully thrice as long as thick, a little longer than the fourth. Eyes faintly hairy. Thorax with the parapsidal furrows distinct anteriorly, obsolete at the middle, the metathorax wrinkled, completely areolated except that the basal lateral and the middle lateral areas are confluent. Abdomen clavate, highly polished, except that the petiole is wrinkled and carinate, nearly of a uniform thickness throughout, only a little narrower before the spiracles, the dorsal carinæ parallel and extending clear to the apex.

Type.—Cat. No. 5600, U. S. Nat. Museum. From St. Paul Island (Fur Seal Commission).

Genus **Algina** Förster.**ALGINA ALASKENSIS** sp. nov.

Female.—Length 4 mm.; ovipositor half the length of the abdomen. Polished black, except the metathorax and the first and second dorsal segments of the abdomen which are finely coriaceous; sutures of trochanters, knees, tibiæ and tarsi testaceous, the hind tarsi and tibiæ toward apex fuscous. Head large, quadrate. Antennæ 21-jointed, fuscous toward apex, blackish toward base, the apices of joints 2 to 5 narrowly testaceous. Metathorax squarely truncate posteriorly, the metanotum completely areolated, the petiolar area confluent with the apical middle area. Petiole of abdomen stout, at apex nearly as wide as long. Wings hyaline, the stigma, except a spot at base, and the veins brown; spot at base of stigma, tegulæ and epitegulæ yellowish-white.

Type.—Cat. No. 5601, U. S. Nat. Museum. From Popof Island.

Genus **Ænoplex** Förster.**ÆNOPLEX RUFIPES** sp. nov.

Male.—Length 6 mm. Rather robust, black and shining, although sparsely and distinctly punctate, the face below the antennæ opaque, closely confluent punctate, the pronotal depressions lineate, the mesopleura rugulose, the metathorax very coarsely rugulose and deeply exca-

vated posteriorly, the clypeus shining with some sparse punctures; palpi yellowish-white; scape beneath, a spot on mandibles, and the front and middle trochanters yellowish; coxæ black; front and middle legs reddish-yellow, the hind legs red, their tarsi fuscous.

Antennæ 26-jointed, the third joint the longest, distinctly longer than the fourth and a little more than thrice as long as thick. Wings hyaline, the stigma and veins dark brown. Abdomen black, with the apex of the second dorsal segment, the third segment entirely and a tinge at base of fourth, red; the petiole is stout, shagreened and carinate, the lateral and dorsal carinæ extending to apex; the apex with some longitudinal striæ between the dorsal carinæ; the second segment is coriaceous except at the apical third or fourth, the apical third or fourth of the second segment and the following segments smooth and polished.

Type.—Cat. No. 5602, U. S. Nat. Museum. From Kodiak, July 20. One specimen.

Genus *Philonygus* Förster.

PHILONYGUS ALASKENSIS sp. nov.

Male.—Length 3.6 mm. Elongate, shining black; face below the antennæ finely punctate, *above* and the cheeks and temples polished, impunctate; palpi, except the two apical joints, tegulæ and sutures of trochanters, yellowish-white; a spot on mandibles, the knees and the front and middle femora *beneath*, testaceous.

Antennæ 22-jointed, as long as the body, the third and fourth joints the longest, and of an equal length, although only a little longer than the fifth. Wings hyaline, the stigma and veins brown-black. The parapsidal furrows are indicated anteriorly by punctate lines. The metathorax is finely wrinkled but shining and completely areolated. Abdomen elongate, clavate, the petiole and the second segment opaque, coriaceous, the third segment feebly coriaceous but shining, the following smooth or nearly so and shining.

Type.—Cat. No. 5603, U. S. Nat. Museum. From Popof Island, July 11.

PHILONYGUS GLACIALIS sp. nov.

Male.—Length 6.5 mm. Polished black; palpi fuscous; mandibles and tegulæ black; apical half or more of front and middle femora, and their tibiæ, ferruginous. Antennæ 23-jointed, black, shorter than the body. Wings hyaline, the stigma and veins dark-brown. The

parapsidal furrows are distinct to beyond the middle of the mesonotum, while the metathorax is shining and completely areolated.

Type.—Cat. No. 5745, U. S. Nat. Museum. From Lowe Inlet, June 3.

Genus *Ilapinastes* Förster.

ILAPINASTES INCERTUS sp. nov.

Male.—Length 3.5 mm. Polished black, the face closely punctate, palpi yellowish with two or three of the joints dusky medially; tegulæ, sutures of the trochanters, front and middle knees and their tibiæ *beneath* and the tibial spurs, yellowish; rest of legs black or fuscous. Wings hyaline, the stigma and veins brown, the stigma with a whitish spot at base. Abdomen black, with the third segment at its extreme apex and a narrow band at base, testaceous; the petiole is punctate, the second segment coriaceous, the following smooth and impunctate, except that the third segment exhibits, under a strong lens, a feeble punctuation towards its base.

Type.—Cat. No. 5604, U. S. Nat. Museum. From Popof Island, July 11.

Genus *Isochresta* Förster.

ISOCHRESTA UNICINCTA sp. nov.

Male.—Length 3.6 mm. Polished black, the face faintly punctate just beneath the insertion of the antennæ and sericeous; sutures of trochanters, apices of femora, all tibiæ and the front and middle tarsi, yellowish; the apex of the hind tibiæ is subfuscous, their tarsi fuscous. The abdomen except the third segment is black, the third segment having a testaceous band across the base; the petiole is coriaceous and bicarinate to beyond the spiracles. Antennæ 20-jointed, with the third joint a little longer than the fourth. Metathorax finely rugulose and completely areolated.

Type.—Cat. No. 5605, U. S. Nat. Museum. From St. Paul Island, August 16 (Fur Seal Commission).

Tribe *PEZOMACHINI*.

Genus *Thaumatotypus* Förster.

THAUMATOTYPUS ALASKENSIS (Ashmead).

Cremnoides alaskensis ASHMEAD, Trans. Am. Ent. Soc., xxiii, p. 211, ♀, 1896.

Type.—Cat. No. 3717, U. S. Nat. Museum. From Wrangell (Professor H. F. Wickham).

Genus *Theroscopus* Förster.

Three of the Alaskan pezomachines fall in this genus and may be tabulated as follows :

TABLE OF SPECIES.

- | | |
|---|-----------------------|
| 1. Winged | 3. |
| Wingless | 2. |
| 2. Black; legs, including coxæ, red. Female..... | <i>T. rufipes.</i> |
| Ferruginous, the head alone black. Female..... | <i>T. kukakensis.</i> |
| 3. Body, except a reddish tinge at apex of second abdominal segment, black; legs honey-yellow, with all coxæ, first joint of trochanters and hind femora black, the front and middle femora basally and the apices of hind tibiæ and joints of their tarsi, fuscous.* Male. | |
| | <i>T. popofensis.</i> |

THEROSCOPIUS RUFIPES sp. nov.

Female.—Length 3.5 mm. Black, subopaque, coriaceous; pedicel and annulus at base of first joint of flagellum flavo-testaceous; mandibles rufo-piceous; legs, including coxæ, rufo-testaceous.

Head large, subquadrate, much wider than the thorax, the temples full, as wide as the eyes. Thorax constricted at the middle, the scutellum small but distinct. Wings wanting or at most represented by a white scale. Metathorax obliquely truncate posteriorly, without a distinct transverse carina, the latter being represented by a trace only at the upper hind angles of the truncature. The abdomen and antennæ are broken in the single specimen and cannot be described in detail.

Male.—Length 2.2 mm. Apterous and agrees well with the female, except in its much smaller size and in having the legs paler, more decidedly yellowish than rufous. The antennæ are 19-jointed, with the flagellum brown. The abdomen is about one third longer than the head and thorax united, black and shining, except the claspers which are large and broad, and dark rufous.

Type.—Cat. No. 5606, U. S. Nat. Museum. From St. Paul Island, August 13 (Fur Seal Commission). Two specimens.

THEROSCOPIUS KUKAKENSIS sp. nov.

Female.—Length 3 mm.; ovipositor about the length of the petiole. Pale ferruginous, with the head and the sheaths of the ovipositor black; antennæ and legs brownish-yellow; head and thorax coriaceous, opaque, the abdomen smoother and more shining although feebly coriaceous.

The head is large, transverse, nearly twice the width of the thorax, with the temples rounded, not quite the width of the eyes. The thorax is constricted near the middle, the scutellum being only feebly differentiated by a small elevation which is not distinctly separated from the mesonotum. Metathorax rounded off posteriorly and without a trace of the transverse apical carina.

Type.—Cat. No. 5607, U. S. Nat. Museum. From Kukak Bay, July 4. One specimen.

THEROSCOPIUS POPOFENSIS sp. nov.

Male.—Length 4.4 mm. Black, subopaque, coriaceous, the abdomen shining with a piceous or rufous tinge at apex of the second segment; palpi fuscous; first joint of the flagellum with a yellowish annulus at extreme base; legs honey-yellow, with the coxæ, first joint of trochanters and the hind femora black; tips of hind tibiæ, their tarsi, more or less, except at apices of joints and beneath, and the middle and front femora *above* basally, fuscous. Wings hyaline, the stigma dark brown but yellowish at base and between the parastigma and stigma, the internal veins brownish, the tegulæ and the longitudinal veins at the base of the wings pale yellowish. The antennæ are 22- or 23-jointed, not quite the length of the body, the first joint of the flagellum the longest although only a little longer than the second, the joints beyond imperceptibly shortening. The metathorax has the pleural and transverse apical carinæ distinct and there is also a more or less completely defined hexagonal area.

Type.—Cat. No. 5608, U. S. Nat. Museum. From Popof Island. One specimen.

Genus *Pezomachus* Gravenhorst.

PEZOMACHUS NIGRELLUS sp. nov.

Male and Female.—Length 1.5 to 2 mm. Entirely black and shining although the surface is feebly alutaceous sculptured; legs black or dark fuscous, with usually the sutures of the trochanters, knees and the front and middle tibiæ and tarsi and sometimes the hind tibiæ basally, rufo-testaceous, rarely with all the tibiæ and tarsi rufo-testaceous.

The antennæ are as long as or a little longer than the body, in the female 18-jointed, in the male 20-jointed, the first joint of the flagellum being slightly the longest and always with a yellowish annulus at the extreme base. Both sexes are apterous. The metathorax is some-

what squarely and abruptly truncate posteriorly, the truncature being encircled by a delicate carina. The abdomen in the female is oblong-oval, about thrice the width of the thorax; above it is highly convex, beneath flat, the ovipositor being short, hardly the length of the petiole, dorsal segments 2 to 4 subequal, the second not or scarcely shorter than the petiole. In the male the abdomen is much narrower, scarcely twice as wide as the thorax, with large broad, dark rufous claspers; otherwise hardly distinguishable from the female.

Type.—Cat. No. 4015, U. S. Nat. Museum. From St. Paul Island, Pribilof Islands (Fur Seal Commission). 81 specimens representing both sexes.

PEZOMACHUS OBESUS sp. nov.

Female.—Length 3.5 mm. Black and shining; mandibles and legs, including coxæ, uniformly pale ferruginous or brownish-yellow; flagellum light brown, the pedicel and an annulus at base of first joint, pale yellowish. The head is large, quadrate, shining, the temples full, as wide as the eyes; antennæ 19-jointed, about two thirds the length of the body; the thorax constricted a little beyond the middle, its anterior lobe being distinctly the longer, the scutellum entirely wanting, the metathorax obliquely truncate posteriorly, the truncature surrounded by a delicate carina, while its disk above has a small central fovea or impression. The abdomen is large, swollen, oblong, oval; across its widest part it is fully thrice the width of the thorax, dorsal segments 2 and 3 subequal, 4 and 5 shorter; ovipositor short, not longer than the petiole.

Type.—Cat. No. 5609, U. S. Nat. Museum. From St. Paul Island (Fur Seal Commission).

PEZOMACHUS ALASKENSIS Ashmead.

Pezomachus alaskensis ASHMEAD, Proc. U. S. Nat. Mus., XII, p. 421, ♀, 1890.

Type.—Cat. No. 2052, U. S. Nat. Museum. From Nushagak River (Chas. W. McKay).

Tribe *CRYPTINI*.

Genus *Cryptoideus* Ashmead.

CRYPTOIDEUS SITKENSIS sp. nov.

Female.—Length 10 mm.; ovipositor two-thirds the length of the abdomen. Ferruginous with the head and the sutures of the thorax black; antennæ blackish toward apex, the first three joints of the

flagellum elongate, the first the longest, about seven times as long as thick. Head closely, rugulose punctate, the clypeus with a median tooth anteriorly. Thorax smooth and shining but sparsely punctate, the parapsidal furrows distinct anteriorly for more than half the length of the mesonotum; the metathorax has two transverse carinæ and a more or less complete areola, the lateral carinæ of same being however very delicate; spiracles oval but not large. Wings hyaline, with a small but distinct fuscous cloud beneath the stigma; the disco-cubital vein is broken by a long stump of a vein at its middle; areolet pentagonal, narrowed above. The abdomen is longer than the head and thorax united, the petiole being smooth, elbowed at its apical third and with two dorsal carinæ that extend a little beyond the spiracles; dorsal segments finely, closely punctulate or shagreened, the sculpture of segment 5 and beyond being finer and less distinct.

Type.—Cat. No. 5610, U. S. Nat. Museum. From Sitka, June 16. One specimen.

Differs from the type species of *Cryptoideus* in having the apical transverse carina complete, but agrees otherwise in all essential generic characters.

Subfamily *PIMPLINÆ*.

Tribe *LISSONOTINI*.

Genus *Himertosoma* Schmiedeknecht.¹

HIMERTOSOMA SCHMIEDEKNECHTI sp. nov.

Male.—Length 4.5 mm. Black; face below the insertion of the antennæ, except a short median line at base, cheeks, mandibles, palpi, tegulæ, and the front and middle coxæ and trochanters and the second joint of the hind trochanters, yellow or yellowish-white; rest of front and middle legs fulvous, the hind legs black. Wings hyaline, the stigma and veins brownish-yellow, the venation similar to that in the genus *Lampronota* except that the submedian cell is fully as long as the median, or a little longer, the disco-cubital vein being curved, while the transverse median nervure in the hind wings is broken far below the middle. Abdomen polished black, except the petiole which is finely wrinkled and bicarinate, the ventral fold more or less yellowish or whitish.

¹This genus and *Ecthrodoca* Schmiedeknecht, do not appear in my classification of the Ichneumon Flies (Proc. U. S. Nat. Mus., xxiii, 1890); they were characterized after it was submitted for publication, *vide* Zoöl. Jahrb. Jena, Bd. xiii, 1890, pp. 303, 306.

Type.—Cat. No. 5611, U. S. Nat. Museum. From Yakutat, June 24. One male specimen.

Named in honor of Dr. O. Schmiedeknecht, the distinguished hymenopterologist of Blankenburg, Germany, who has so ably monographed the *Pimplinae* of the European fauna.

Genus **Lampronota** Haliday.

LAMPRONOTA LUGUBRIS Cresson.

Lampronota? lugubris CRESSON, Proc. Acad. Nat. Sci. Phila., p. 379, ♀, 1878.—CRESSON, Syn. Hym. North America, p. 219, 1887.
Cylloceria fuscolina DAVIS, Trans. Am. Ent. Soc., XXIV, p. 371, ♂, 1897.

Type in Collection of the American Entomological Society. From Popof Island, July 10; Unalaska, August 24. Three male specimens.

Originally described by Cresson from a single female collected at Lake Quesnel, British Columbia. The male was described as *Cylloceria fuscolina* by Davis in 1897. It resembles the male of *Lampronota occidentalis* Cresson, but is at once separated by having all the coxæ black, the first joint of the trochanters being dusky above, while the hind tibiæ and tarsi are entirely black.

Genus **Phytodietus** Gravenhorst.

Two species belonging to this genus have been found in Alaska and may be tabulated as follows :

TABLE OF SPECIES.

Black; extreme apices of dorsal segments 2 to 6 more or less white.

Clypeus yellow, the face above black; all coxæ, except the apices of front and middle pairs which are whitish, black.....*P. clypearius*.

Clypeus and the face lemon-yellow; front and middle coxæ and trochanters white, the hind legs, except the second joint of the trochanters, black.....*P. flavifrons*.

PHYTODIETUS CLYPEARIUS sp. nov.

Male and Female.—Length 5.5 mm. Polished black, the face coriaceous; clypeus, mandibles, palpi, tegulæ, the extreme tips of dorsal abdominal segments 3 to 6, or the sutures, the tips of front tibiæ and more or less of the apices of the front and middle coxæ, yellow or yellowish-white; rest of legs, except coxæ, basal joint of hind trochanters, extreme apex of their femora and their tibiæ and tarsi which are black, fulvous, the middle tibiæ *above* and their tarsi usually

fuscous. Wings hyaline, the stigma and veins light brown, the areolet rather long, oblique, while the submedian cell is distinctly longer than the median. Abdomen polished black, subcompressed at apex, the petiole with two abbreviated carinæ at basal third, the ovipositor about the length of the abdomen.

Type.—Cat. No. 5612, U. S. Nat. Museum. From Yakutat, June 21.

PHYTODIETUS FLAVIFRONS sp. nov.

Male.—Length 6 mm. Polished black; a dot on vertex above each eye, the face below the antennæ, the cheeks and the mandibles, lemon-yellow; palpi, scape and pedicel *beneath*, tegulæ, a spot beneath, a spot on prosternum anteriorly, front and middle coxæ and trochanters, tibial spurs and second joint of hind trochanters, yellowish-white; rest of legs, except the hind pair, fulvous, hind legs black, their femora mostly red, with sometimes the extreme base and apex subfuscous; otherwise in venation and structural characters as in *P. clypearius*. One specimen has the hind femora wholly rufous.

Type.—Cat. No. 5613, U. S. Nat. Museum. From Yakutat, June 21; Orca, June 24.

Genus *Trevoria* Ashmead.

TREVORIA YAKUTATENSIS sp. nov.

(Pl. x, fig. 3.)

Male.—Length 8 mm. Black; clypeus ferruginous, distinctly separated from the face; the legs, except the coxæ and trochanters, the hind tibiæ and tarsi and the middle tarsi which are black, are red. Wings hyaline, the stigma and veins brown, the areolet pentagonal, closed by a hyaline vein, receiving the second recurrent nervure beyond its middle, the submedian cell distinctly longer than the middle, while the transverse median nervure in the hind wings is broken far below the middle, very near its basal fourth. The head is transverse, opaque, coriaceous or finely, closely punctate. Metathorax finely rugulose, with two delicate, median carinæ at base above; the pleural carinæ are distinct. Abdomen elongate, sessile, twice longer than the thorax, depressed, finely, evenly shagreened, the sculpture smoother or less evident, on segment five and beyond, usually with a glabrous space at apex of segments. Claws simple, not pectinate.

Type.—Cat. No. 5614, U. S. Nat. Museum. From Yakutat, June 21. One specimen.

Genus *Lissonota* Gravenhorst.

LISSONOTA ALASKENSIS sp. nov.

Female.—Length 7.5 mm. Black, coriaceous; apex of second dorsal abdominal segment, base of third, and the legs, except coxæ, basal joint of trochanters and the hind tarsi, red. Wings hyaline, the stigma and veins brown, the areolet oblique, petiolate, the disco-cubital nervure curved but showing a faint trace of a stump of a vein at its basal third (so small as to be easily overlooked), the submedian cell a little longer than the median, while the transverse median nervure in the hind wings is not quite straight, very obtusely angularly broken a little below the middle.

Type.—Cat. No. 5614, U. S. Nat. Museum. From St. Paul Island (Fur Seal Commission). One specimen.

LISSONOTA RUFICOXIS Schmiedeknecht.

Lissonota sulferifera GRAVENHORST, var. *ruficoxis* SCHMIEDEKNECHT, Zool. Jahrb. Jena, XIII, p. 360, 1900.

Kukak Bay, July 4. One female specimen.

The single specimen taken, so far as the description goes, agrees perfectly, in size and color, with the brief description of this European species as given by Dr. Schmiedeknecht, who defined it as a variety of the European species *Lissonotus sulferifera* Gravenhorst. I have no European specimens of this variety for comparison, but if our specimen is identical with Schmiedeknecht's then I cannot agree with him in considering it a variety of *L. sulferifera*, since in comparison with European specimens of this species, besides a difference in the color of the legs, I find a difference in venation, and it should be considered a distinct species. The venation of the front wings is exactly as in *L. rimator* Thomson, and it is much closer related to that species than to *L. sulferifera*.

* Genus *Pimplopterus* Ashmead.

PIMPLOPTERUS YAKUTATENSIS sp. nov.

Female.—Length 6 mm. Black opaque, coriaceous, clypeus yellowish and distinctly separated from the face; legs, except the coxæ, basal joint of trochanters and hind tibiæ and tarsi red. Wings hyaline, the stigma and veins brown, the areolet oblique but sessile, receiving the second recurrent nervure beyond the middle, the submedian cell

distinctly longer than the median, the disco-cubital nervure strongly curved, the transverse median nervure in the hind wings broken far below the middle, at or near the basal fourth. The metathorax has the apical transverse carina alone distinct, the pleural carinæ being absent, while the spiracles are small, short oval. The abdomen is sessile, distinctly finely shagreened, the first segment longer than the second, without dorsal carinæ but with a median depression at the extreme base; the second and third segments are about equal in length but the third is slightly the wider; the fourth and fifth segments are very unequal in length, much shorter than the third, the fifth being only about one third the length of the second; the sixth segment is scarcely visible; ovipositor longer than the abdomen.

Type.—Cat. No. 5616, U. S. Nat. Museum. From Yakutat, June 21. One specimen.

PIMPLOPTERUS ALASKENSIS sp. nov.

(Pl. x, fig. 6.)

Female.—Length 8 mm. Head and thorax, except the clypeus and the mesonotum, and the abdomen, except the apex of the first segment and segments 2 to 4, black; clypeus, mesonotum, apex of first abdominal segment and dorsal segments 2 to 4, rufous; legs, except the hind trochanters, hind tibiæ and hind tarsi, ferruginous. Wings subhyaline with the venation as in *P. yakutatensis*. Ovipositor longer than the whole body.

Type.—Cat. No. 5717, U. S. Nat. Museum. From Kodiak, July 20. One specimen.

Genus *Harrimaniella* Ashmead.

Harrimaniella ASHMEAD, Proc. U. S. Nat. Mus., XXIII, p. 52, 1900.

Named in honor of Mr. Edward Henry Harriman, of New York, originator of the Harriman Expedition, and based on the species characterized below.

HARRIMANIELLA KUKAKENSIS sp. nov.

(Pl. x, fig. 2.)

Male.—Length 6.5 mm. Black, closely punctate; a dot at summit of each eye, the face except a median black stripe, the clypeus, cheeks, mandibles, except teeth, palpi, a broad line along the lateral margins of the mesonotum, tegulæ, a dot in front and beneath them, a dot above the insertion of the hind coxæ, the front and middle coxæ and trochanters yellow or yellowish-white; rest of legs, except the hind

tibiæ and tarsi, pale reddish, the hind tibiæ and tarsi black. Wings hyaline, the stigma and veins brown, the areolet oblique, petiolate, receiving the second recurrent nervure beyond the middle, the latter being slightly angulated above the middle, the submedian cell distinctly longer than the median, the disco-cubital nervure strongly curved, while the transverse median nervure in the hind wings is broken below the middle at about its basal third. The metathorax has two delicate parallel carinæ down its center which unite with the transverse apical carina, the pleural carinæ absent, the spiracles small, rounded. The abdomen is normal, finely shagreened, except the apices of the segments which are smooth and glabrous.

Type.—Cat. No. 5618, U. S. Nat. Museum. From Kukak Bay, July 4. One specimen.

Genus **Echthrodoxa** Schmiedeknecht.

ECHTHRODOXA GELIDA (Cresson).

Lampronota gelida CRESSON, Proc. Acad. Nat. Sci. Phila., p. 377, ♂, 1878.
—CRESSON, Syn. Hym. North America, p. 219, 1887.

Type in collection of the American Entomological Society. From Juneau, July 25; Seldovia, July 25. Occurs also in British Columbia.

ECHTHRODOXA CLYPEARIA sp. nov.

Male.—Length 11 mm. Black, with the head and thorax closely punctate, the first segment of abdomen sparsely punctate, except at apex, the second and following segments smooth, but under a strong lens show a fine coriaceous sculpture; clypeus, apex of second dorsal abdominal segment, the third wholly, except two spots, and sometimes a faint spot on the fourth laterally, yellowish; legs except coxæ and first joint of trochanters pale reddish. Wings hyaline, the stigma and veins brownish-yellow, the venation otherwise as in *E. gelida* Cresson.

Type.—Cat. No. 5619, U. S. Nat. Museum. From Seldovia, July 21. One specimen.

Tribe *PIMPLINI*.

Genus **Rhyssa** Holmgren.

RHYSSA ALASKENSIS sp. nov.

Female.—Length 17 mm. Black; front orbits to summit of eyes, a line on upper margin of pronotum, interrupted anteriorly at the middle, a line on the lower margin, or sides, just above front coxæ, a

spot beneath the tegulæ, an angulate line at apical angles of first dorsal abdominal segment, a transverse oblong spot at the apex of segments 2 to 5 and a line below it at the lateral apical angles, and a line at the apex of the sixth segment, white; the legs, except the coxæ, basal joint of hind trochanters and the hind tibiæ and tarsi, which are black, are red; sculpture and venation as in *Rhyssa persuasoria* Linné.

Type.—Cat. No. 5620, U. S. Nat. Museum. From Fox Point, July 28. One specimen.

Comes nearest apparently to *R. albomaculata* Cresson but is quite distinct in color of legs and in shape of the areolet in front wings.

Genus *Pimpla* Fabricius.

PIMPLA YAKUTATENSIS sp. nov.

Male.—Length 6 to 7 mm. Polished black, the face below the antennæ distinctly, closely punctate, the metathorax sparsely punctate without carinæ, the abdomen closely punctate, with dorsal segments 2 to 5 slightly tumid and smoother at their apices. The legs, except the hind tibiæ and tarsi, are red, the hind tibiæ and tarsi black or fuscous, the tibiæ with a yellowish or whitish annulus before the middle, sometimes incomplete or interrupted with black beneath, represented by a whitish spot on outer face. Wings hyaline, the stigma and viens brown, the areolet sessile, subrhomboidal, while the disco-cubital vein has usually only a faint trace of a stump of a vein beyond its middle, rarely distinct.

Type.—Cat. No. 5621, U. S. Nat. Museum. From Yakutat, June 21. Five specimens.

Genus *Epiurus* Förster.

In this genus fall two species, which may be separated as follows:
Black.

Hind coxæ and legs red.....2.
All coxæ and the first joint of trochanters black.

Legs, except as noted, red, the hind tibiæ and tarsi black or fuscous, the hind tibiæ with an annulus at base and a spot on outer face near the middle pale yellowish or whitish, the basal joint of their tarsi sometimes white at base.....*E. atrocoxalis*.

2. Legs, except the front and middle coxæ and the first joint of trochanters which are black, red; labial palpi fuscous; maxillary palpi pale yellowish.....*E. bicoloripes*.

EPIURUS ATROCOXALIS sp. nov.

Female.—Length 5.5 mm. Polished black, except the abdomen which is distinctly punctate, the first segment bicarinate for two thirds its length; legs except the coxæ, first joint of trochanters and the hind tibiæ and tarsi, red, the coxæ, hind tibiæ and tarsi black, the hind tibiæ with an annulus at base and a spot outwardly near the middle, or an annulus, white or yellowish-white, the basal joint of hind tarsi at base, and sometimes the second joint at base, whitish, wings hyaline, the areolet long, oblique, receiving the second recurrent nervure at its apex.

Male.—Length 5 mm. Agrees well with the female except that the hind tibiæ and tarsi are entirely black.

Type.—Cat. No. 5622, U. S. Nat. Museum. From Muir Inlet, June 12; Seldovia, July 21.

EPIURUS BICOLORIPES sp. nov.

Female.—Length 6.5 mm. Resembles *E. atrocoxalis* in sculpture but is readily separated by its larger size and by the color of the legs; the legs, except the front and middle coxæ and first joint of the trochanters are red, the front and middle coxæ and first joint of trochanters are black; labial palpi fuscous; maxillary palpi, tegulæ and epitegulæ yellowish-white, while the metanotum has two parallel dorsal carinæ.

Type.—Cat. No. 5623, U. S. Nat. Museum. From Berg Bay, July 10. One specimen.

Genus *Glypta* Gravenhorst.

GLYPTA KUKAKENSIS sp. nov.

Female.—Length 6.5 mm. Black with the head and thorax distinctly closely punctate, the dorsal segments 2 to 4 with oblique furrows; legs, including coxæ, red, the apices of hind tibiæ and their tarsi fuscous. Wings subhyaline, the stigma and veins brownish-yellow, the areolet open behind, the transverse cubitus about as long as the first abscissa of the radius. Metathorax above bicarinate, the carinæ divergent posteriorly.

Type.—Cat. No. 5624, U. S. Nat. Museum. From Kukak Bay, July 4. One specimen.

GLYPTA POPOFENSIS sp. nov.

Female.—Length 9 mm. Agrees very closely with *G. kukakensis* in sculpture and wing characteristics but differs in having the hind

tibiæ and tarsi fuscous, the tibiæ having a long whitish stripe posteriorly, or on the outer face, the first and second joints of hind tarsi having a whitish annulus at base, while the clypeus and the mandibles are red.

Male.—Length 6 mm. Differs from female in having the clypeus black, the hind tibiæ red, except an annulus toward base and the apices which are black, while their extreme base is whitish.

Type.—Cat. No. 5625, U. S. Nat. Museum. From Popof Island, July 12. Two specimens.

Tribe *XORIDINI*.

Genus *Holcostizus* Förster.

HOLCOSTIZUS YUKONENSIS (Ashmead).

Pimpla yukonensis ASHMEAD, Proc. U. S. Nat. Mus., XII, p. 445, ♀, 1890.

Type.—Cat. No. 2106, U. S. Nat. Museum. From Fort Yukon (L. M. Turner).

Genus *Odontomerus* Gravenhorst.

ODONTOMERUS MELLIPES (Say).

Anomalon mellipes SAY, Maclurian Lyc. Arts & Sci., I, p. 74, ♀, 1828.—LECONTE, Ed. Say, II, p. 378, 1859.

Odontomerus mellipes WALSH, Trans. St. Louis Acad. Sci., III, p. 164, ♀♂, 1873.—PROVANCHER, Fn. du Can. Hym., p. 490, 1883.—CRESSON, Syn. Hym. North America, p. 220, 1887.—ASHMEAD, in Smith's Ins. New Jersey, p. 575. 1900.

From Sitka, August.

Widely distributed throughout North America from Florida to Canada, and from the Atlantic to the Pacific.

Genus *Cubocephalus* Ratzeburg.

Three species fall in this genus, as defined by the writer in his Classification of the Ichneumon Flies, although there is some doubt as to its being the *Cubocephalus* of Ratzeburg, since it was identified from description alone and I have not been able to confirm it by a study of typical European specimens.

TABLE OF SPECIES.

Black species.

All coxæ rufous

All coxæ black.

Legs red, with the hind tibiæ and all tarsi black or fuscous, sometimes with the extreme apices of the joints of the first and middle tarsi testaceous; mandibles, except teeth, red.....*C. atrocoxalis*.

2. Legs rufous with the hind tibiæ and tarsi black, the middle tarsi fuscous, the apices of joints 1 to 4 yellowish; clypeus with the anterior margin testaceous; mandibles rufo-piceous with a large yellowish-white spot at base.....*C. alaskensis*.
 Legs rufous, with the hind femora toward apex and their tibiæ and tarsi black, the apex of the middle tibiæ and tarsi subfuscous; clypeus wholly black; mandibles yellowish-white with black teeth.
C. nigricornis
 (= *Echthrus nigricornis* Provancher, part).

CUBOCEPHALUS ATROCOXALIS sp. nov.

Female.—Length 8 to 10 mm.; ovipositor about two thirds the length of the abdomen. Black, very finely, closely punctate; mandibles, except teeth, and legs, except coxæ, hind tibiæ and tarsi red; palpi yellowish; tegulæ, epitegulæ and apices of ventral segments 1 to 3 yellowish-white. Wings subhyaline, the stigma and veins black, the areolet oblique, rhomboidal. Claws pectinate. Metathoracic areola partly formed but confluent with the petiolar area.

Type.—Cat. No. 5626, U. S. Nat. Museum. From Alaska (U. S. Coast and Geodetic Survey). Exact locality unknown. Easton, Washington (Albert Kæbele).

CUBOCEPHALUS ALASKENSIS sp. nov.

Female.—Length 7–8 mm. Agrees well with *C. atrocoxalis*, except that all the coxæ are red, the hind tibiæ and tarsi black, the middle tarsi more or less fuscous with the tips of the joints yellowish, the anterior margin of the clypeus and scape at apex narrowly, are testaceous; wings clear hyaline; while the four apical segments of the abdomen are almost smooth, shining.

Type.—Cat. No. 5627, U. S. Nat. Museum. Alaska.

CUBOCEPHALUS NIGRICORNIS sp. nov.

Echthrus nigricornis PROVANCHER (*partim*), Faun. ent. du Can., 11, p. 803, ♀ (*nec.* ♂, p. 486), 1883.—CRESSON, Syn. Hym. North America, p. 221 (part), 1887.

Cryptus or *Phygadenon* species DAVIS, Proc. Acad. Nat. Sci. Phila., p. 190 (part), 1894.

Female.—Length 7.5 to 8 mm. Agrees in stature and color fairly well with *C. alaskensis*, except that the clypeus is entirely black, not testaceous anteriorly, the apex of the hind femora and their tibiæ and tarsi are wholly black, the abdomen with a very fine alutaceous or coriaceous sculpture, while the areolet in the front wings is usually very irregularly pentagonal, although sometimes subrhomboidal or oblique as in the other species.

Type.—Cat. No. 5752, U. S. Nat. Museum. From Alaska (U. S. Coast and Geodetic Survey); Sherbrook, Canada (Abbe Bégin).

In *Le Naturaliste Canadien*, VII, 1875, p. 264, Abbe Provancher described a male insect under the name *Mesostenus nigricornis* which he afterwards in his *Fauna entomologique du Canada*, 1883, correlated incorrectly with a female under the same name.

The name *nigricornis* Provancher must be retained for the male which belongs to quite a different genus in a different tribe and sub-family; and the female, incorrectly correlated with it, I have here named *Cabocephalus nigricornis*.

Genus **Xylonomus** Gravenhorst.

XYLONOMUS FRIGIDUS Cresson.

Xylonomus frigidus CRESSON, *Trans. Am. Ent. Soc.*, III, p. 168, 1870.—PROVANCHER, *Fn. du Can. Hym.*, p. 489, 1883.—CRESSON, *Syn. Hym. North America*, p. 220, 1887.

Type in collection of the American Entomological Society. From Fort Yukon (L. M. Turner). Originally described from Hudson Bay Territory, but found throughout Canada and southward into the New England States and New York.

Subfamily *TRYPHONINÆ*.

Tribe *MESOLEPTINI*.

Genus **Spanoctecnus** Förster.

SPANOCTECNUS FLAVOPICTUS sp. nov.

Male.—Length 4.1 mm. Polished black; anterior orbits, face below antennæ, cheeks, mandibles, front and middle coxæ and trochanters, a line on each side of the mesosternum, and apical margins of dorsal abdominal segments 2 to 4, lemon-yellow; hind coxæ black; rest of legs, except the first joint of trochanters *above*, more or less, and the middle and hind femora *above*, more or less; hind tibiæ at apex and their tarsi, which are fuscous, red. Wings hyaline, the stigma and veins light brown, the tegulæ yellowish-white.

Type.—Cat. No. 5628, U. S. Nat. Museum. From Unalaska, September 17 (Fur Seal Commission). One specimen.

Genus **Eclytus** Holmgren.

ECLYTUS YAKUTATENSIS sp. nov.

Male.—Length 5 mm. Polished black; orbits opposite antennæ, the face below, including the cheeks and mandibles, except a tridentate (m) black mark just beneath the insertion of antennæ, and the front

and middle coxæ and trochanters, except a black streak above, yellow; hind legs black or dark fuscous; rest of legs rufo-testaceous.

Antennæ 28-jointed, brown black. Wings hyaline, the stigma and veins light brown, the outer edge of the stigma and the costal vein brown black. Abdomen elongate, smooth and shining, except the petiole which is finely, irregularly rugulose and bicarinate basally.

Type.—Cat. No. 5629, U. S. Nat. Museum. From Yakutat, June 21. Two specimens.

DALLATORREA gen. nov.

This new genus, remarkable in several particulars and especially in its mandibular and metathoracic characters, is named in honor of the learned author of the great work, *Catalogus Hymenopterorum*, Dr. C. W. von Dalla Torre, professor in the Imperial Leopold-Franzeus University, Innsbruck, Austria, who has not only been a prolific and valuable contributor toward a knowledge of European Hymenoptera, but who, in compiling this great catalogue—a labor of 30 years—has endeared himself to all working hymenopterologists and reared for himself a lasting monument.

The true position of this singular genus cannot be definitely settled until the female is discovered. From present knowledge it might just as well be placed in the tribe *Plectiscini*, with which it agrees in some of its cephalic characters, especially with such genera as *Catastenus* and *Symplecis*, as well as with the *Mesoleptini*.

For the present, however, judging alone from the characters of the male, I consider it to belong to this group, and in my generic table of the *Mesoleptini*, *Classification of the Ichneumon Flies*, p. 65, it will fall in next to the genus *Gausocentrus* Förster.

The two may be separated by the following characters:

- | | |
|---|------------------------------|
| Metathorax bispined, the mesonotal furrows strongly impressed anteriorly; scutellum black; eyes converging anteriorly; mandibles conically acute, although bidentate, the teeth very unequal, the inner tooth being very minute, almost invisible and less than half the length of the apical or outer tooth..... | <i>Dallatorrea</i> . |
| Metathorax normal, unarmed, the mesonotal furrows not strongly impressed: scutellum yellow; eyes parallel, not converging anteriorly; mandibles bidentate, the teeth equal..... | <i>Gausocentrus</i> Förster. |

DALLATORREA ARMATA sp. nov.

(Pl. x, fig. 5.)

Male.—Length 7 mm. Polished black; mandibles rufo-testaceous; palpi and tegulæ pale yellowish; front legs brownish-yellow, the

middle and hind legs, except the hind tarsi which are black or fuscous, reddish-brown; abdomen black with the apices of dorsal segments 2 and 3 narrowly yellowish; antennæ except the ring-joint, entirely black. Wings hyaline, the stigma and veins brown black, the discocubital vein broken by a slight stump of a vein before its middle, the areolet oblique, petiolate, receiving the second recurrent nervure near its apex. Scutellum longitudinally striate. Metathorax bidentate or bispined, the upper hind angles being produced into a long tooth or spine, the areola elongate, about thrice as long as wide. Abdomen twice longer than the head and thorax united, the petiole very long and slender, as long as segments 2 and 3 united, very slightly curved at apex as seen from the side, coriaceous, the spiracles situated at the basal third.

Type.—Cat. No. 5630, U. S. Nat. Museum. From Sitka, June 16. One specimen.

Genus **Gausocentrus** Förster.

Mr. Davis¹ has incorrectly placed in this genus *Mesoleptus strigosus* Cresson. The type of this species, No. 1604 (Belfrage Collection) is in the National Museum and a careful study of it shows that it is a Cryptine and not a Tryphonine, and in reality represents the male of *Mesostenus longicaudus* Cresson, a species which should be placed in the genus *Nematopodius* Gravenhorst, in my tribe *Mesostenini*. *Nematopodius longicaudus* Cresson is found from Texas to Canada and will doubtless be found to occur in Alaska.

Genus **Hypocryptus** Förster.

This genus is here recognized in our fauna for the first time.

TABLE OF SPECIES.

1. Head and thorax mostly black.
 - Abdomen more or less rufous, or with the middle segments rufous4.
 - Abdomen mostly black, none of the segments wholly rufous, although sometimes apically or medially striped or banded with rufous.....2.
2. Abdomen with a rufous stripe extending from base of second dorsal segment clear to the apex, dilated posteriorly and leaving the sides of the segment alone black3.

¹Trans. Amer. Ent. Soc., xxiv, p. 311, 1897.

Abdomen not so marked.

Face below the insertion of antennæ, cheeks, mandibles, palpi, tegulæ, a broad line in front of them on each lateral margin of the mesonotum, hind angles of pronotum, prosternum, mesosternum and the lower half of the mesopleura, the front and middle coxæ and trochanters, the second joint of hind trochanters and tibial spurs, lemon-yellow; rest of legs red; abdomen mostly black, the ventral fold and a spot at extreme apex of segments 3 to 7 yellowish. Male.....*H. kodiakensis*.

Face below the insertion of antennæ, cheeks, mandibles, palpi, tegulæ, a short line beneath a spot in front on each hind angle of pronotum, spot on prosternum, a line between the mesosternum and the mesopleura, dilated anteriorly and enclosing a black spot, the front and middle coxæ and trochanters, and the hind coxæ and trochanters *beneath*, lemon-yellow; rest of legs mostly rufous, the hind coxæ, trochanters and femora *above*, black, the hind tibiæ and tarsi fuscous, the middle tarsi above subfuscous. Male.

H. variegatipes.

3. Face below antennæ, except a black median line and two large black spots just above the clypeus, the clypeus, cheeks, mandibles, except tips, palpi, scape beneath, tegulæ, a broad line in front along the sides of the mesonotum, a line beneath, prosternum posteriorly, a broad line on each side of the mesosternum, the front and middle coxæ and trochanters, and the second joint of hind trochanters, lemon-yellow; rest of legs red. Female.....*H. popofensis*.

4. Abdomen with the apex of first dorsal segment, the second and third entirely and the fourth or most of the fourth, rufous; sometimes with the second and third segments alone rufous.....5.

Abdomen with the apex of the second dorsal segment and the third and fourth wholly rufous, the apex of the fourth sometimes black.

Face beneath antennæ, mandibles, palpi, scape and pedicel *beneath*, tegulæ, the scale in front, the front and middle legs, including coxæ and trochanters, tibial spurs and the hind trochanters and basal half of hind tibiæ lemon-yellow; hind coxæ and femora black, their tibiæ toward apex and their tarsi fuscous. *Female*.

H. seldoviae.

5. Hind coxæ black, the middle coxæ black only basally; face beneath, antennæ, mandibles, palpi, scape and pedicel beneath, scape in front, and the front and middle legs lemon-yellow, the hind legs, except coxæ and the apex of tibiæ, rufous. *Male*.....*H. seldoviae*.

Hind coxæ rufous, the middle and front coxæ yellow; face beneath, antennæ, except a slender black median line extending nearly to the base of the clypeus, mandibles, tegulæ, scape in front and the front and middle trochanters, lemon-yellow, rest of the legs, except the hind coxæ and tarsi which are fuscous, red; palpi white.

H. tibialis.

HYPOCRYPTUS KODIAKENSIS sp. nov.

Male.—Length 8 mm. Black with the face below the antennæ, including the clypeus, cheeks and mandibles, except teeth, the scape beneath, the pro- and mesosternum, the anterior and middle trochanters, tegulæ, a line below, the upper margin of the prothorax in front of the tegulæ, a hook-shaped line on each side of the mesonotum extending from the tegulæ anteriorly to the parapsidal depressions, a spot on the scutellum at apex, and a dot at the origin of the hind wings, lemon-yellow; palpi, tibial spurs and the hind trochanters, yellowish-white; rest of legs rufous. Wings hyaline, the stigma and veins dark brown. The head is opaque, finely coriaceous, the mesonotum is polished, impunctate; while the metathorax has two median carinæ, divergent posteriorly, the space between posteriorly being rugulose. The abdomen is elongate, subcylindrical, *above*, except a slight yellow stripe at the extreme apices of segments 3 to 7, black, *beneath* yellowish, with oblong black spots on segments 2 to 4. Antennæ above black, the flagellum beneath brownish.

Type.—Cat. No. 5631, U. S. Nat. Museum. From Kodiak, July 2. One specimen.

HYPOCRYPTUS VARIEGATIPES sp. nov.

Male.—Length 8 mm. Black, with the face below the antennæ, the cheeks, clypeus, mandibles, except teeth, scape and pedicel *beneath*, a line beneath tegulæ and a spot before, a spot on prosternum in front of the insertion of the coxæ, a broad line on each side of the mesosternum dilated anteriorly and enclosing a black spot, and the front and middle coxæ and trochanters lemon-yellow or yellowish-white; rest of front and middle legs, and the hind femora and tibiæ *beneath*, red; hind legs above black, the coxæ and trochanters *beneath* yellowish; flagellum beneath ferruginous; abdomen above black, with the extreme apices of segments 2 to 7, a median spot at base and apex of segments 2 and 3, that on the third being more or less conjointed to a median line, and a small median spot at apices of the following segments testaceous. Wings hyaline, the stigma, except a white spot at its base, and the veins brown.

Type.—Cat. No. 5632, U. S. Nat. Museum. From St. Paul Island, August 25 (Fur Seal Commission). One specimen.

HYPOCRYPTUS POPOFENSIS sp. nov.

Male.—Length 6.5 mm. Black; face, except a short median black spot just beneath the insertion of the antennæ and two large quadrate

spots just below it above the clypeus, the cheeks, mandibles, except teeth, and the scape and pedicel beneath, lemon-yellow; basal half of flagellum *beneath* and the apical half or more entirely ferruginous; tegulæ, a line beneath and a spot in front, a broad line on each side of the mesonotum, a large spot on prosternum in front of each coxa, a broad band on each side of the mesosternum, the front and middle coxæ and trochanters, and the tibial spurs, yellowish-white; rest of legs, except the hind tarsi red, the hind tarsi subfuscous. Wings hyaline, the stigma and subcostal vein yellowish, the internal veins brown.

Type.—Cat. No. 5633, U. S. Nat. Museum. From Popof Island, July 12. One specimen.

HYPOCRYPTUS SELDOVIÆ sp. nov.

Female.—Length 10 mm. Black, the abdomen with a median spot at apex of dorsal segment 2 and segments 3 and 4 entirely rufous; face below antennæ, scape and pedicel *beneath*, and the front and middle legs, except basally, lemon-yellow; hind coxæ and femora black, their tibiæ *above* and the tarsi fuscous or black, the tibiæ *beneath* reddish; flagellum, except a few of the basal joints *above* ferruginous; palpi, tegulæ, a small spot in front, the front and middle coxæ and trochanters and the hind trochanters yellowish-white. Wings hyaline, the subcostal vein, the parastigma and poststigmatal vein, yellowish, the stigma and the internal veins dark brown.

Male.—Length 9 mm. Differs from female in having the dorsal abdominal segments 2, 3 and 4 red, the base of the middle coxæ black, while the hind legs, except the hind coxæ which are black, and the trochanters *above* which are fuscous, are red.

Type.—Cat. No. 5634, U. S. Nat. Museum. From Seldovia, July 20; Kukak Bay, July 4.

HYPOCRYPTUS TIBIALIS sp. nov.

Male.—Length 8.5 mm. Black, the abdomen with dorsal segments 3 and 4 usually blotched with red, rarely wholly red, segment 5 with an obscure reddish spot at basal middle, while the extreme apices of segments 6 and 7 are yellowish; face below antennæ, except a median black line, the clypeus, cheeks, mandibles, except teeth, scape beneath, and a small spot in front of tegulæ, lemon-yellow; flagellum beneath ferruginous; palpi, tegulæ, front and middle coxæ and trochanters yellowish-white; rest of legs, except the hind tibiæ and tarsi, which are fuscous, red. Wings hyaline, the stigma and subcostal vein yellowish, the internal veins dark brown.

Type.—Cat. No. 5635, U. S. Nat. Museum. From Popof Island, July 4. One specimen.

Genus **Mesoleptus** Gravenhorst.

MESOLEPTUS UNALASKÆ sp. nov.

Female.—Length 7 mm. Black; face below antennæ, except a median black line, connected with a triangular black spot just above the clypeus, the cheeks, clypeus, mandibles, except teeth and a spot at base, the palpi, scape and pedicel beneath, tegulæ, epitegulæ, sutures of trochanters and the second joint of same, tibial spurs, venter and the extreme apices of dorsal abdominal segments 2 and 3 (nearly invisible unless viewed from behind) yellowish-white; flagellum beneath ferruginous; all coxæ and first joint of trochanters, at least above, black; rest of legs red. Wings hyaline, the stigma and subcostal vein yellowish, the internal veins brown.

Type.—Cat. No. 5636, U. S. Nat. Museum. From Unalaska, August 24 (Fur Seal Commission).

Tribe *CTENISCINI*.

Genus **Microplectron** Förster.

MICROPLECTRON ALASKENSIS sp. nov.

Male.—Length 3.6 mm. Black, the face, except a broad median line extending to the clypeus, clypeus, mandibles, scape and pedicel beneath, and apical median blotches on dorsal abdominal segments 2, 3 and 4, as well as the *extreme* apices of the following segments, lemon-yellow; palpi, tegulæ, apices of front and middle coxæ and *beneath*, their trochanters and the hind trochanters yellowish-white; front and middle coxæ basally and the hind coxæ black; rest of legs mostly rufous, the hind femora, tibiæ and tarsi brownish or subfuscous. Wings hyaline, the stigma and veins brown, the poststigmatal vein and subcostal veins, as well as the parastigma and the veins in the hind wings, pale yellowish.

Type.—Cat. No. 5637, U. S. Nat. Museum. From Popof Island, July 9. One specimen.

Genus **Cteniscus** Haliday.

TABLE OF SPECIES.

1. Thorax and the head, at least above, black.....2.
- Thorax not black5.

2. Hind coxæ not black.....4.
 Hind coxæ always black, the middle usually black only at base.
 Face below the insertion of the antennæ yellow but *without* a median black line.....3.
 Face below the insertion of the antennæ yellow but *with* a median black line that extends to base of clypeus.
 Female: abdomen black but with the three or four apical segments, and segments 2 and 3 at apex, mostly rufous.....*C. clypeatus*.
 Male: abdomen mostly black, with usually the apical margins of segments 2 and 3 and 6 and 7, rufous; there is also usually a median rufous spot on 3 and 4.....*C. clypeatus*.
3. Front and middle coxæ at apex, their trochanters and the hind trochanters yellowish-white; rest of coxæ, and the hind femora black, the hind tibiæ and tarsi subfuscous, the front and middle legs fulvous; abdomen black with the apex of the second segment, a broad median stripe on the third at apex, and the sutures of the following segments rufous.....*C. nigrofemoralis*.
4. None in this section from Alaska.
 5. None in this section from Alaska.

CTENISCUS CLYPEATUS Cresson.

Cteniscus clypeatus CRESSON, Trans. Am. Ent. Soc., II, p. 113, ♀, 1869.

Mesoleptus concolor PROVANCHER, Nat. Can., VII, p. 139, 1875.—PROVANCHER, Fn. du. Can. Hym., p. 403, 1883.—CRESSON, Syn. Hym. North America, p. 212, 1887.—DAVIS, Trans. Am. Ent. Soc., XXIV, p. 228, 1897.

Type in collection of the American Entomological Society. From St. Paul Island, August 15 to 25 (Fur Seal Commission). Many specimens. Occurs in the White Mountains of N. H., the mountains of Colorado, Hudson Bay Territory and in Oregon and Washington.

CTENISCUS NIGROFEMORALIS sp. nov.

Male.—Length 7.8 mm. Black; face from some distance from below the antennæ, not immediately from their insertion, the clypeus, except a black sutural line, cheeks, the mandibles except the teeth, and scape and pedicel *beneath*, lemon-yellow; palpi, tegulæ, a small spot in front, epitegulæ, apices of front and middle coxæ, their trochanters, and the hind trochanters yellowish-white; rest of coxæ and hind femora black, the rest of the legs mostly reddish, the hind tibiæ and tarsi usually more or less obscured or subfuscous. Wings hyaline, the stigma, except at apex and base, and the internal veins brownish. Abdomen black with the apices of dorsal segments 2 and 3 and a median stripe on the second, rufo-testaceous.

Type.—Cat. No. 5638, U. S. Nat. Museum. From Kukak Bay, July 4. One specimen.

Genus **Diaborus** Förster.

DIABORUS SEXMACULATUS sp. nov.

Male.—Length 10 mm. Black; face, except a median line connected with a black band across base of clypeus, the remainder of clypeus, spot on cheeks, epitegulæ, a line on upper margin of prothorax interrupted anteriorly, and spots, or bands at apices of dorsal abdominal segments 2 to 7, lemon-yellow; mandibles, except teeth, the palpi, tegulæ and front coxæ and trochanters, yellowish-white; rest of legs except as noted, reddish yellow, the hind coxæ and first joint of trochanters above black, the apex of the tibiæ and tarsi fuscous. Wings hyaline, the stigma and subcostal vein yellowish, the other veins dark brown.

Type.—Cat. No. 5639, U. S. Nat. Museum. From Popof Island, July 8. One specimen.

DIABORUS CITRIFRONS sp. nov.

Male.—Length 6 mm. Black; face below antennæ entirely, cheeks, mandibles, scape beneath, a line on upper margin of the prothorax, interrupted anteriorly, a short line beneath the tegulæ, scutellum, post-scutellum, and a triangular spot at apices of dorsal abdominal segments 1, 2 and 3, and bands at the apices of the following segments, lemon-yellow; palpi, tegulæ, a line on the lower margin of the prothorax, the front and middle coxæ and trochanters, the hind coxæ above and the second joint of their trochanters, yellowish-white; remainder of legs, except the hind tibiæ at apex and their tarsi red; the hind coxæ beneath and the first joint of the trochanters are black, the hind tibiæ at apex and their tarsi are fuscous. Wings hyaline; the stigma, except at base and the subcostal vein, which are yellowish, and the internal veins, dark brown.

Type.—Cat. No. 5640, U. S. Nat. Museum. From Popof Island, July 11. One specimen.

Tribe *CTENOPELMINI*.Genus **Erromenus** Holmgren.

ERROMENUS ANNULIPES sp. nov.

Female.—Length 6.8 mm. Black; clypeus and legs, except as hereafter noted, red; mandibles, except teeth, epitegulæ and the subcostal vein, front and middle trochanters, except the first joint of the middle above, the tibial spurs, and the extreme apices of dorsal ab-

dominal segments 2 and 3 yellow or yellowish-white; palpi and an annulus of the hind tibiæ before the middle, white; coxæ, hind trochanters, apices of hind femora, their tibiæ, except the white annulus, and their tarsi black. Wings hyaline, the stigma and veins brown, the disco-cubital nervure broken by a distinct stump of a vein, the areolet complete.

Type.—Cat. No. 5641, U. S. Nat. Museum. From Popof Island, July 11. Two specimens.

Genus **Monoblastus** Hartig.

MONOBLASTUS NIGER sp. nov.

Male.—Length 7 mm. Black; mandibles with a rufous spot near the middle; palpi, epitegulæ and the subcostal vein, yellowish; apices of all femora and all tibiæ and tarsi, except the last three joints of the middle and hind tarsi, testaceous, the terminal joints mentioned being more or less fuscous, especially above. Wings hyaline, the stigma, except at base, and the veins dark brown; the disco-cubital vein is strongly curved, but has a short stump of a vein at its basal third. The head in front is closely confluent punctate, behind and on vertex it is smooth and shining, although sparsely punctate. The thorax above is sparsely but distinctly punctate, the metathorax rugulose, opaque, except the surface within the basal lateral areas which is smooth and shining.

Type.—Cat. No. 5642, U. S. Nat. Museum. From Popof Island, July 9. One specimen.

Genus **Polyblastus** Förster.

POLYBLASTUS GLACIALIS sp. nov.

Female.—Length 8 mm. Black; anterior half of clypeus, dorsal abdominal segments 2, 3 and 4, and the legs, except as hereafter noted, rufous; all coxæ and trochanters, the hind femora and their tibiæ at apex black, the hind tibiæ basally and their tarsi more or less yellowish, the tarsal joints at apex being fuscous; tegulæ dark piceous; the epitegulæ, subcostal vein, base of stigma and palpi, yellowish-white, the rest of the stigma and the internal veins brown. The face is finely, closely punctate, the basal half of the clypeus shining, with some coarse punctures; the thorax above is shining, although sparsely minutely punctate; the metathorax is rugulose, the carinæ strong, but with the basal middle and middle lateral areas confluent; while the first segment of the abdomen is rugulose with two dorsal carinæ that extend four-fifths its length.

Proc. Wash. Acad. Sci., May, 1902.

Type.—Cat. No. 5643, U. S. Nat. Museum. From St. Paul Island, August 17 (Fur Seal Commission). One specimen.

Genus **Scorpiorus** Förster.

SCORPIORUS ALASKENSIS sp. nov.

Female.—Length 5.5 mm. Black; a dot on cheeks, a triangular spot on anterior angles of face just above the clypeus, the clypeus, mandibles, scape beneath, the venter and the extreme apex of the sixth dorsal abdominal segment yellow; legs, except more or less of the coxæ above, a broad band at apex of the second dorsal abdominal segment, the third segment entirely, and the apex of the fourth, rufous; palpi, tegulæ, epitegulæ, subcostal vein, and a spot at the base of the stigma, ivory-white or yellowish-white. Wings hyaline, the stigma except as noted, and the internal veins, brown. Metathorax areolated, as in *Polyblastus glacialis*. Abdomen with the first segment broad, finely rugulose, the dorsal carinæ extending only to its middle.

Type.—Cat. No. 5644, U. S. Nat. Museum. From Popof Island, July 11. One specimen.

SCORPIORUS NIVEICOLA sp. nov.

Female.—Length 3.5 mm. Black; the clypeus, mandibles, palpi, tegulæ, epitegulæ, subcostal vein and the base of the median vein, white; legs and the first and second segments of the abdomen, brownish-yellow or reddish-yellow. Wings hyaline, the stigma and veins brown. Face smooth, shining, at the most sparsely and microscopically punctate medially. Thorax polished, impunctate, the scutellum elevated, with a deep transverse furrow across the base, the metathorax finely rugulose, carinate, the basal lateral and middle areas confluent. Abdomen smooth, shining, the first segment at the most alutaceous, the dorsal carinæ not extending beyond its middle.

Male.—Differs from female in having two broad white spots on face anteriorly, one on each side, that extend on to the cheeks; the scape and pedicel beneath are white; the apex of the hind tibiæ and their tarsi are fuscous; the abdomen has the second and third dorsal segments and the apex of the fourth, brownish-yellow, while the first segment is the longest with the dorsal carinæ extending nearly to its apex.

Type.—Cat. No. 5645, U. S. Nat. Museum. From Muir Inlet, June 12; Popof Island, July 9.

Tribe *TRYPHONINI*.Genus *Trematopygus* Holmgren.

TREMATOPYGUS KUKAKENSIS sp. nov.

Female.—Length 5 mm. Black; mandibles, except the teeth and a spot at base, the legs, except the coxæ and the hind tarsi, and dorsal abdominal 3 at apical half and 4 entirely, rufous; palpi, tegulæ, epitegulæ, subcostal vein, and base of stigma, yellowish-white. Head and thorax coriaceous, the metathorax rugulose, completely areolated. Abdomen with the petiole and second dorsal segment coriaceous, the following segments finely punctate, the dorsal carinæ of the petiole indistinct, close and nearly parallel.

Type.—Cat. No. 5647, U. S. Nat. Museum. From Kukak Bay, July 4. One specimen.

Genus *Cosmoconus* Förster.

COSMOCONUS CANADENSIS (Provancher).

Tryphon canadensis PROVANCHER, Nat. Can., VII, p. 117, 1875.

Mesoleius canadensis PROVANCHER, Fn. du Can. Hym., p. 417, 1883.—CRESSON, Syn. Hym. North America, p. 210, 1887.

Cosmoconus canadensis DAVIS, Trans. Am. Ent. Soc., XXIV, p. 280, 1897.—ASHMEAD, Smith's Ins. of New Jersey, p. 578, 1900.

Type.—In Parliament Building, Quebec, Canada. From Juneau, July 25. Two male specimens.

Genus *Tryphon* Gravenhorst.

TRYPHON ALASKENSIS sp. nov.

Female.—Length 6.8 mm. Black; anterior half of clypeus, mandibles, legs, except coxæ, trochanters, hind femora and apex of their tibiæ and their tarsal joints at tips, and dorsal abdominal segments 3, 4 and 5, rufous; coxæ, trochanters, hind femora, their tibiæ at apex and the apices of tarsal joints, fuscous; palpi, epitegulæ, subcostal vein and a spot at base of stigma, yellowish-white. Wings hyaline, the stigma and veins, except as noted, brown.

Type.—Cat. No. 5648, U. S. Nat. Museum. From St. Paul Island, August 25 (Fur Seal Commission).

Genus *Trophoctonus* Förster.

TROPHOCTONUS INSULARIS sp. nov.

Male.—Length 7.5 mm. Dark rufous, with the sutures of the thorax, prosternum, mesosternum, metathorax and the extreme base of

first abdominal segment with its dorsal carinæ, black; face with a spot at each anterior angle, clypeus, a spot at base of mandibles, epitegulæ, costæ, and a spot at base of stigma, ivory, or yellowish-white; legs ferruginous. Wings subfuscous, the stigma and veins, except as noted, brown. Face finely punctate, the vertex and the thorax smoother, shining but sparsely, minutely punctate; the prothorax in the lateral depressions is distinctly wrinkled; the metathorax is short but strongly and completely areolated; while the first and second dorsal segments of the abdomen are finely rugulose, the first with two strong dorsal carinæ that become obsolete at the apical third of the segment.

Type.—Cat. No. 5648, U. S. Nat. Museum. From Popof Island, July 9. One specimen.

Genus **Sychnoportus** Förster.

SYCHNOPORTUS LONGITARSIS sp. nov.

Male.—Length 4 mm. Black; face below antennæ, except a black line extending off oblique from the basal sutures of the clypeus on to the cheeks, the clypeus, the mandibles and the front and middle coxæ and trochanters lemon-yellow; the legs, except the middle coxæ above, the hind coxæ anteriorly, first joint of their trochanters, tips of their tibiæ and tarsi, which are black or fuscous, and the abdomen, except the basal two thirds of the first segment and segments 5, 6 and 7 which are black, are rufous. Wings hyaline, the stigma and veins brown.

Type.—Cat. No. 5649, U. S. Nat. Museum. From Kukak Bay, July 4. One specimen.

Genus **Tlemon** Förster.

TLEMON DELICATUS sp. nov.

Male.—Length 5 mm. Black; clypeus, mandibles, hypotegulæ and the epitegulæ lemon-yellow; palpi, tegulæ and the front and middle coxæ and trochanters, ivory or yellowish-white; hind coxæ black, first joint of hind trochanters above, apex of their tibiæ and their tarsi fuscous, the remainder of the legs reddish-yellow or brownish-yellow. Wings hyaline, the stigma and veins brown. Face feebly coriaceous, the clypeus highly polished, impunctate; thorax above and a spot on the middle of the mesopleura smooth, shining, impunctate while the metathorax is rugulose, not short, and incompletely areolated.

Type.—Cat. No. 5650, U. S. Nat. Museum. From Kukak Bay, July 4. One specimen.

Genus **Polyterus** Förster.**POLYTERUS SEXCARINATUS** sp. nov.

Female.—Length 8.5 mm. Black; clypeus and mandibles dark rufous; palpi yellowish, with the two basal joints brownish or fuscous; legs, except the hind tibiæ and tarsi, including tibial spurs ferruginous, hind tibiæ, their spurs and tarsi black. Head coriaceous opaque; thorax above shining, although microscopically punctate, the metathorax wrinkled but shining, and with six longitudinal carinæ, the two middle rather close at their origin but diverging posteriorly and uniting with the transverse apical carina, the space between being transversely rugulose and twice as wide at apex as at base. Wings hyaline, or only faintly tinged, the stigma and veins brown.

Type.—Cat. No. 5651, U. S. Nat. Museum. From Alaska (U. S. Coast and Geodetic Survey). Two specimens.

Genus **Hyposyntactus** gen. nov.

In a table of genera this new species will fall next to *Syntactus* Förster. The two may be separated as follows:

Clypeus with a transverse furrow at apex.

Metanotum *without* median carinæ; hind legs long, their tarsi thickened, the longer spur of the tibiæ not or rarely half the length of the basal tarsal joint; disco-cubital nervure not broken by a stump of a vein.....*Syntactus*.

Metanotum *with* two median carinæ forming an areola, which, however, is open at base; hind legs normal, the longer tibial spur of hind legs fully half the length of the basal tarsal joint; disco-cubital nervure angularly broken by a stump of a vein.....*Hyposyntactus*.

HYPOSYNTACTUS FLAVIFRONS sp. nov.

(Pl. x, fig. 4.)

Male.—Length 10 mm. Black; face below antennæ, mandibles, scape beneath, a line on collar above, a triangular spot on each side of the mesonotum anteriorly at the base of the parapsidal furrows, the tegulæ, hypo- and epitegulæ, a line beneath, a dot on each side of the prosternum in front of the front coxæ, a spot on mesoternum, the front and middle legs, the hind trochanters, basal two thirds of hind tibiæ and their tarsi except last joint, and dorsal abdominal segments 2, 3 and 4, except narrowly at apex, lemon-yellow. Wings hyaline, the stigma within yellowish, outwardly as well as the internal veins, brown, the disco-cubital nervure angularly broken by a stump of a vein before the middle.

Type.—Cat. No. 5652, U. S. Nat. Museum. From Juneau, July 25. One specimen.

In color and general appearance this species very closely resembles *Cosmoconus canadensis* Provancher, and one must give the closest attention to its structural characters or it might be easily confounded with it.

Genus *Calliphrurus* Förster.

Prior to the Harriman Expedition only a single species belonging to this genus was known in North America.

In the Alaskan material ten additional species have been discovered, which may be tabulated as follows :

TABLE OF SPECIES.

1. Head and thorax black.

Abdomen not entirely black ; dorsal segments more or less rufous. 8.

Abdomen black or at most with only the extreme apex of one or more of the segments whitish or testaceous.....2.

2. All coxæ black.....3.

Not all the coxæ black.....5.

3. Smaller species, less than 6 mm. or no longer.....4.

Larger species, more than 6 mm. long.

Legs rufous with the front and middle trochanters, the second joint of hind trochanter, tibial spurs, palpi, tegulæ, and ventral fold yellowish-white ; coxæ, hind femora, base and apex of their tibiæ and tarsi black.

Abdomen above black with the apices of the second and third segments nearly yellowish ; clypeus and mandibles yellow ; no spot in front of each lateral mesothoracic lobe. Female.....*C. clypeatus*.

Abdomen with dorsal segments 2 to 6 or 7, narrowly at apex flavo-testaceous, the third and fourth usually also with a large median spot toward apex ; clypeus, mandibles and a spot on scape beneath yellow ; legs rufous. Male.....*C. clypeatus*.

Legs rufous, with the trochanters, except first joint *above*, palpi, tegulæ and ventral fold yellowish-white ; tibial spurs testaceous ; coxæ, basal joint of trochanters above, tips of hind tibiæ and tarsi black or fuscous.

Clypeus, mandibles and a triangular mark in front of each lateral mesothoracic lobe that extends slightly on to the angles of the middle lobe, yellow. Female.....*C. alaskensis*.

Clypeus, mandibles and tegulæ yellow or yellowish ; mesonotum immaculate ; flagellum, except two or three basal joints, ferruginous. Female.....*C. affinis*.

4. All coxæ black.

Legs rufous, the coxæ, first joint of trochanters and hind tarsi (sometimes) black; clypeus and mandibles, except teeth, tegulæ, and the extreme apices of dorsal abdominal segments 3 to 7, yellowish-white; flagellum ferruginous. Female.....*C. minor*.

Legs brownish-yellow, with the middle and hind femora more or less dusky or blackish; clypeus and mandibles yellowish; flagellum brown-black. Male.....*C. minor*.

5. Hind coxæ alone black.....6.

All coxæ rufous or pale, never black.....7.

6. Face below the antennæ, but not along the orbits and on the cheeks, the clypeus, mandibles, palpi, tegulæ, front and middle coxæ and trochanters, second joint of hind trochanters and tibial spurs, yellowish-white; flagellum brown-black. Female.....*C. popofensis*.

7. Legs rufous, with the hind tibiæ and tarsi more or less black or fuscous, the hind tibiæ with a rufous spot or broad band before the middle; clypeus, mandibles, except teeth, and the hind angles of pronotum, pale yellowish; tegulæ brown. Female.....*C. kukakensis*.

Legs pale ferruginous, with the tips of hind tibiæ and tarsi black or fuscous, the front and middle coxæ and all trochanters yellowish-white; face below antennæ including the clypeus, mandibles, a large spot on each side of mesonotum anteriorly, tegulæ, and a V-shaped mark on each side of the mesosternum yellow. Male.....*C. perplexus*.

8. All coxæ pale..... 11.

Hind coxæ black.....9.

9. Hind coxæ black.

Dorsal abdominal segments 2 to 7 mostly rufous or rufous in part.....10.

Dorsal abdominal segments mostly black, with 2 to 7 narrowly flavo-testaceous at apex.

Face entirely, a large spot on each side of the mesonotum anteriorly and a large triangular mark on each side just above the mesosternum lemon-yellow. Male.....*C. alaskensis*.

10. Clypeus, a lunate mark above and connected with it, mandibles, except teeth, palpi, tegulæ, front and middle coxæ and trochanters, and the tibial spurs, yellow or yellowish-white; remainder of legs except the apex of hind tibiæ and their tarsi, which are black, rufous. Male.

C. glacialis.

Face below antennæ, clypeus, mandibles, scape beneath, a large spot on anterior lateral margins of the mesonotum, a spot on each side of mesosternum anteriorly, and the tegulæ lemon-yellow; palpi, front and middle coxæ, apex of hind coxæ and all trochanters, except the first joint of the hind pair above, and the venter, yellowish-white. Male.....*C. frigidus*.

11. Face below antennæ, clypeus, mandibles, a spot on each side of the mesonotum anteriorly (sometimes Λ -shaped), the tegulæ, a spot in front and a line below, and front and middle coxæ and trochanters, yellowish-white; apex of hind tibiæ and their tarsi black; remainder of legs rufous; antennæ beneath ferruginous. Male..... *C. confusus*.

CALLIPHRURUS CLYPEATUS sp. nov.

Female.—Length 6.5 mm. Black; clypeus and mandibles lemon-yellow; palpi, tegulæ, hypo- and epitegulæ, front and middle trochanters and second joint of hind trochanters, tibial spurs and the venter ivory or yellowish-white; all coxæ, first joint of hind trochanters, base and tips of their tibiæ and the hind tarsi black; hind femora dark, rufo-piceous, rest of legs reddish. Wings hyaline, the stigma, except a spot at base, and the veins brown.

Male.—Length 7.5 mm. Agrees well with the female, except that the legs are entirely red, except the coxæ and the first joint of the trochanters; the first joint of the front and middle trochanters at apex and the second joint are white, while the dorsal abdominal sutures 4 to 7, as well as a median spot at apex of segments 3 and 4, are testaceous.

Type.—Cat. No. 5653, U. S. Nat. Museum. From Kodiak, July 20; St. Paul Island (Fur Seal Commission).

CALLIPHRURUS ALASKENSIS sp. nov.

Female.—Length 8 mm. Black; clypeus, mandibles, and a triangular spot on each side of the mesonotum anteriorly, lemon-yellow; palpi, tegulæ, apices of coxæ, first joint of trochanters beneath, the second joint entirely, and the venter ivory or yellowish-white; coxæ, first joint of trochanters above, apical third of hind tibiæ and their tarsi black; rest of legs red.

Male.—Differs from the female in having the entire face below the antennæ, a large spot on each side of the mesonotum, the hypo- and epitegulæ, and a band on each side of the mesosternum dilated anteriorly and enclosing a black spot, lemon-yellow; palpi, tegulæ, front and middle coxæ and trochanters and hind trochanters, except first joint at base above, ivory or yellowish-white; abdominal sutures, or along the sutures 2 to 7, and an obscure spot at base and apex of the third and sometimes on the fourth, flavo-testaceous; otherwise it is similar to the female.

Type.—Cat. No. 5654, U. S. Nat. Museum. From Popof Island, July 11.

CALLIPHRURUS AFFINIS sp. nov.

Female.—Length 6 mm. Allied to and closely resembling *C. alaskensis*, and agreeing with it in the color of abdomen and legs, but differs as follows: The clypeus, mandibles and tegulæ are yellow, the mesonotum immaculate, without the yellow spot on each side anteriorly, while the flagellum, except two or three of the basal joints, is ferruginous. It is also considerably smaller, the extreme apical margins of dorsal abdominal segments 2 to 7 being whitish and the antennæ are shorter.

Type.—Cat. No. 5655, U. S. Nat. Museum. From St. Paul Island, August 15 (Fur Seal Commission).

CALLIPHRURUS MINOR sp. nov.

Female.—Length 4.5 mm. Black; clypeus and mandibles, except teeth, testaceous; palpi and tegulæ white; flagellum ferruginous; legs, except coxæ and first joint of trochanters rufous; venter at the sutures and more or less of the ventral fold pale yellowish, while the dorsal abdominal segments 4 to 7 are narrowly whitish at apex. Wings hyaline, the stigma and veins pale yellowish.

Male.—Agrees well with the female except that the legs are brownish-yellow or reddish-yellow, the middle femora dusky basally, the coxæ, first joint of trochanters and the hind femora black, while the dorsal abdominal segments at apex are black, not narrowly white, except a small triangular spot at the lateral apical angles of the first segment.

Type.—Cat. No. 5656, U. S. Nat. Museum. From St. Paul Island, August 20, 24 (Fur Seal Commission).

CALLIPHRURUS POPOFENSIS sp. nov.

Female.—Length 6.5 mm. Black; abdomen with the second dorsal segment narrowly testaceous at apex, the following segments, if viewed from behind, showing a little white at their extreme apices; face immediately beneath the antennæ, but not along the orbits or on the cheeks, the clypeus, mandibles, palpi, tegulæ, a spot in front, front and middle coxæ and trochanters, second joint of hind trochanters, and the tibial spurs, yellow or yellowish-white; flagellum brown black. Wings hyaline, the stigma and veins dark brown.

Type.—Cat. No. 5657, U. S. Nat. Museum. From Popof Island, July 11. One specimen.

CALLIPHRURUS KUKAKENSIS sp. nov.

Female.—Length 6.5 mm. Black, with the extreme apex of dorsal abdominal segments 2, 3 and 5 narrowly whitish when viewed from behind; clypeus, mandibles, except teeth, and the hind angles of the pronotum, pale yellowish; legs except the hind tibiæ, tibial spurs and tarsi, which are black, rufous, the hind tibiæ usually with a rufous stripe or band before the middle. Wings hyaline, the stigma, except a pale spot at base, and the veins brown.

Type.—Cat. No. 5658, U. S. Nat. Museum. From Kukak Bay, July 10. One specimen.

CALLIPHRURUS PERPLEXUS sp. nov.

Male.—Length 6 mm. Black, with dorsal abdominal segments 2 to 7 more or less testaceous or whitish at their extreme apices; face beneath antennæ, clypeus, cheeks, mandibles, except teeth, scape beneath, a large spot on each side of the mesonotum anteriorly, tegulæ, and a V-shaped mark on each side of the mesosternum, lemon-yellow; legs pale ferruginous, with the hind tibiæ apically and their tarsi black or fuscous, while the front and middle coxæ, all trochanters and venter, pale yellowish or ivory white. Wings hyaline, the stigma and veins brown.

Type.—Cat. No. 5659, U. S. Nat. Museum. From Popof Island, July 10. One specimen.

CALLIPHRURUS GLACIALIS sp. nov.

Male.—Length 7 mm. Black, with dorsal abdominal segments 2 to 7 more or less rufous, 5, 6 and 7 very narrowly at apex; clypeus, a lunate mark just above it on face, mandibles, except teeth, and a spot on scape beneath yellow; legs rufous, with the hind coxæ, apex of hind tibiæ and their tarsi, black, the anterior and middle coxæ and trochanters, pale yellowish or yellowish-white.

Type.—Cat. No. 5660, U. S. Nat. Museum. From Juneau, July 25. One specimen.

CALLIPHRURUS FRIGIDUS sp. nov.

Male.—Length 8 mm. Black, with dorsal abdominal segment 2 at apex, and the following segments rufo-testaceous; face below antennæ, clypeus, cheeks, mandibles, except teeth, scape beneath, a large triangular spot on each side of the mesonotum, a spot on each side of the mesosternum, and the tegulæ, lemon-yellow; palpi, front and

middle coxæ, apex of hind coxæ and all trochanters, except the first joint of the hind trochanters above at base, and the venter, yellowish-white; remainder of leg rufous. Wings hyaline, the stigma within yellowish, outwardly and the other veins brown.

Type.—Cat. No. 5661, U. S. Nat. Museum. From Popof Island, July 10. One specimen.

CALLIPHURUS CONFUSUS sp. nov.

Male.—Length 7 mm. Black, with dorsal abdominal segment, 2 at apex, and segments 3, 4 and 5 almost entirely rufous, the fifth blackish laterally; face below antennæ, clypeus, mandibles, scape beneath, a large hook-shaped spot on each side of the mesonotum, tegulæ, a spot in front and a short line beneath, lemon-yellow; palpi, front and middle coxæ and trochanters and second joint of hind trochanters, yellowish-white; remainder of legs, except the apex of hind tibiæ and their tarsi which are black, rufous; ventral fold pale yellowish-white. Wings hyaline, the stigma and veins brown.

Type.—Cat. No. 5662, U. S. Nat. Museum. From Kukak Bay, July 4. Two specimens.

Genus *Gemophaga* Förster.

GEMOPHAGA RUFA sp. nov.

Male.—Length 7.5 mm. Rufous; sutures of the thorax and the pro- and mesosternum black; mandibles yellowish-white. Wings subfuscous, the stigma, except a yellowish spot at base, and the veins brown.

The metathorax is short but strongly and completely areolated, the carinæ sharply elevated, the spiracles large, broadly oval. Abdomen, except the first two segments and base of the third, is smooth and shining, the first two segments shagreened, the first with two strong dorsal carinæ.

Type.—Cat. No. 5663, U. S. Nat. Museum. From Popof Island, July 12. One specimen.

Genus *Mesoleius* Holmgren.

MESOLEIUS STEJNEGERI Ashmead.

Mesoleius stejneri ASHMEAD, Fur Seals and Fur Seal Islands, iv, p. 337, ♀, 1899.

Type.—Cat. No. 3651, U. S. Nat. Museum. From Bering Island (Dr. L. Stejneger); Pribilof Islands (Fur Seal Commission).

MESOLEIUS ALEUTIANUS Cresson.

Mesoleius aleutianus CRESSON, Proc. Acad. Nat. Sci. Phila., p. 371, ♂, 1878.
—CRESSON, Syn. Hym. N. Am., p. 209, 1887.

Type in collection of the American Entomological Society. From Aleutian Islands.

I have not recognized this species nor have I seen the type. Mr. Davis says it belongs to the genus *Lampronotus* Haliday, but the description alone shows that such cannot possibly be the case. It may, however, represent a male in some other genus in the tribe *Lissonotini*.

Tribe *BASSINI*.Genus *Bassus* Gravenhorst.

BASSUS PULCHRIPES Provancher.

Bassus pulchripes PROVANCHER, Fn. du Can. Hym., p. 428, 1883.—CRESSON, Syn. Hym. N. Am., p. 214, 1887.—DAVIS, Trans. Am. Ent. Soc., XXII, p. 20, ♀ ♂, 1895.

Type in Parliament Building, Quebec, Canada. From Muir Glacier. One female specimen. This species is found in Canada, Colorado and the White Mountains, New Hampshire.

Genus *Promethes* Förster.

PROMETHES UNICINCTUS sp. nov.

Female.—Length 5 mm. Black; a median spot on the ridge just below the insertion of the antennæ, the mandibles, hind angles of pronotum, a line beneath tegulæ, and a band at base of third abdominal segment and apex laterally, lemon-yellow; palpi, tegulæ, apices of front and middle coxæ and trochanters, and the second joint of hind trochanters yellowish-white; coxæ, except as noted, black; rest of legs, except the base of femora beneath, rufous. Wings hyaline, the stigma and costal vein yellowish, the subcostal and internal veins brown. Abdomen strongly compressed at apex, the basal segment rugulose, the second striate, the following smooth and polished.

Type.—Cat. No. 5664, U. S. Nat. Museum. From Kukak Bay, July 4. One specimen.

Genus *Bioblapsis* Förster.

BIOBLAPSIS TRICINCTA sp. nov.

Male.—Length 5.5 mm. Black; anterior orbits to summit of eyes, a rounded spot on middle of face, clypeus, mandibles, and three bands

on the abdomen, lemon-yellow; palpi, scape, pedicel and first joint of flagellum *beneath*, tegulæ, a spot in front, epitegulæ, apices of front and middle coxæ and trochanters, second joint of hind trochanters, and more or less of the front femora and tarsi *beneath*, yellowish-white; rest of coxæ black, remainder of legs mostly rufous, the femora with a blackish spot or stripe toward base beneath, the femora and tibiæ *outwardly* fuscous. Wings hyaline, the stigma and veins brownish.

Type.—Cat. No. 5665, U. S. Nat. Museum. From Berg Bay, June 10. One specimen.

Zootrephes Förster.

ZOOTREPHESS INSULARIS sp. nov.

Male.—Length 6 mm. Black; face below antennæ, clypeus, cheeks, mandibles, a U-shaped mark on mesonotum connected with a band on lateral margins, a dot on pronotum above, a spot in front of tegulæ, the epitegulæ, a spot beneath tegulæ, prosternum, mesosternum, except a large black spot posteriorly, the apical half of hind coxæ, the venter narrowly along the lateral margins, extreme apex of dorsal abdominal segment 2, most of 3, except a lateral black spot, and a median line on dorsal segment 4, lemon-yellow; palpi, tegulæ, front and middle coxæ and trochanters and hind trochanters yellowish-white; basal half of hind coxæ black, the remainder of the legs, except the hind pair, which are dusky behind, rufous; flagellum ferruginous, dusky above.

Type.—Cat. No. 5666, U. S. Nat. Museum. From Popof Island, July 8. One specimen.

Genus *Phthorina* Förster.

PHTHORINA BOREALIS sp. nov.

Male.—Length 4 mm. Polished black, the metathorax incompletely areolated; mandibles and legs from the apex of the femora and the apices of ventral abdominal segments, rufo-testaceous; palpi and epitegulæ yellowish-white, tegulæ black. Wings hyaline, the stigma, except a yellowish spot at base, and the veins dark brown. Abdomen, except the first segment, smooth and polished, the first segment feebly wrinkled and with two dorsal carinæ on the basal half.

Type.—Cat. No. 5667, U. S. Nat. Museum. From Popof Island, July 9. One specimen.

Genus **Enizemum** Förster.

ENIZEMUM TIBIALE (Cresson).

Bassus tibialis CRESSON, Trans. Am. Ent. Soc., II, p. 110, ♀, 1868.—CRESSON, Syn. Hym. North Am., p. 214, 1887.
Enizemum tibiale DAVIS, Trans. Am. Ent. Soc., XXII, p. 27, ♀♂, 1895.

Type in collection of the American Entomological Society. From St. Paul Island (Fur Seal Commission). Occurs also in Canada, Montana, Colorado, Kansas and Illinois.

Genus **Homotropus** Förster.

HOMOTROPUS ALASKENSIS sp. nov.

Female.—Length 5.5 mm. Black; a spot just above clypeus, the clypeus, mandibles, scape and pedicel beneath, a band on each side of the mesonotum, a spot in front of tegulæ and a line beneath, most of the coxæ and trochanters, the venter, and the second and third dorsal sutures of abdomen more or less lemon-yellow; basal half of hind coxæ and the front and middle coxæ basally, black; remainder of legs mostly ferruginous, the front and middle femora and tibiæ more or less streaked with yellow, the basal joints of trochanters and all femora at base *beneath* fuscous. Wings hyaline, the stigma, except along the outer margin, yellowish, costæ and internal veins brownish. Abdomen, except the first and second segments and the base of the third, smooth and shining; first and second segments rugulose, the first the more coarsely, the third feebly sculptured at base only.

Type.—Cat. No. 5669, U. S. Nat. Museum. From Popof Island, July 10, 14. Five specimens.

Tribe **ORTHOCENTRINI**.Genus **Synoplus** Förster.

SYNOPLUS BREVIPENNIS sp. nov.

(Pl. XI, fig. 2.)

Female.—Length 2.5 mm. Polished black; mandibles rufous; palpi pale fuscous, the last joint sometimes darker; legs ferruginous, the femora and hind coxæ usually, but not always, obfuscated, the trochanters and tibial spurs pale yellowish.

Antennæ 21-jointed, usually light brownish with the scape and terminal joints darker or fuscous; the first joint of the flagellum is the longest, a little longer than the second, or about $2\frac{1}{2}$ times as long as thick at apex, the following joints to the seventh very imperceptibly

shortening, the joints beyond to the last being quadrate or subquadrate, not longer than wide or a little wider than long, the last joint cone-shaped. Wings much abbreviated and narrowed, not reaching to or much beyond the middle of the abdomen; the tegulæ are pale yellowish or yellowish-white; the stigma and veins are brown, while the marginal cell is usually, but not always, closed. The metathorax is smooth, or at most alutaceous at apex and laterally, with the apical transverse carina distinct although delicate. The abdomen is strongly compressed from the second segment, shining black except the ventral segments at apex which are pale yellowish or whitish; the first segment laterally and at apex is finely, feebly shagreened; the second segment is feebly sculptured at its extreme base and within the basal lateral angles only; while the following are all smooth, impunctured.

Type.—Cat. No. 5670, U. S. Nat. Museum. From St. Paul Island, August (Fur Seal Commission). Fourteen specimens.

SYNOPLUS PLEURALIS sp. nov.

Female.—Length 2 mm. Polished black, with the pleura, metathorax, first segment of abdomen and legs light brown or brownish-yellow, the palpi and tegulæ white.

The antennæ are 20-jointed, the scape fuscous, the flagellum light brown. Wings much abbreviated and narrowed and very similar to those in *S. brevipennis*, except that the stigma is scarcely developed and the veins are much paler, nearly hyaline or with a yellowish tinge.

Type.—Cat. No. 5671, U. S. Nat. Museum. From St. Paul Island (Fur Seal Commission).

Genus *Hypoleptus* Förster.

HYPOLEPTUS ALASKENSIS sp. nov.

Female.—Length 2 mm. Polished black; mandibles, palpi and annulus at base of the flagellum, sutures of trochanters and the second joint, knees, and the tibiæ and tarsi, brownish-yellow, the apex of the hind tibia and their tarsi subfuscous; flagellum brown; apices of ventral abdominal segments whitish. Wings hyaline, the stigma and veins light brown. The antennæ are 18-jointed, the flagellum very gradually thickening towards apex; the first joint of the flagellum is the longest, about $3\frac{1}{2}$ times as long as thick at apex, a little narrowed towards base, the following gradually shortening and thickening, the three before the last being a little wider than long.

Male.—Length 3.4 mm. Differs from the female in having a longer more clavate abdomen, with the first and second dorsal seg-

ments more or less wrinkled or shagreened, while the flagellum is longer, filiform, the joints being cylindrical, subequal in length, about thrice as long as thick.

Type.—Cat. No. 5672, U. S. Nat. Museum. From St. Paul Island, August 22; Belkofski, July 7 (Fur Seal Commission). Fifteen specimens.

HYPOLEPTUS GLACIALIS sp. nov.

Male and Female.—Length 2.5 to 3 mm. Polished black; palpi brownish or fuscous; mandibles, a minute annulus at base of flagellum, sutures of trochanters and the second joint, knees and base of tibiæ yellowish, remainder of legs black or brownish-black; tegulæ and bands on venter yellowish-white. Wings hyaline, the costal vein to the parastigma black or piceous black, the stigma and internal veins brown.

The antennæ are long, 22-jointed (rarely 23-jointed); the flagellum except the annulus at base of first joint is brown-black, the first three or four joints subequal, about thrice as long as thick. The metathorax is about one and a half times as long as wide, feebly alutaceous towards apex, smooth at base above and with a distinct apical transverse carina. The abdomen is elongate, longer than the head and thorax united, polished, except the first and second dorsal segments which are aciculated along the lateral margins; the second has also two oblique furrows or impressed lines.

Type.—Cat. No. 5673, U. S. Nat. Museum. From Muir Inlet, June 12.

Genus *Neuroteles* Ratzeburg.

NEUROTELES DUBIOSUS sp. nov.

Male.—Length 4.2 mm. Polished black; two spots on face superiorly just beneath the antennæ, the labrum, mandibles, sutures of trochanters and the second joint, knees of front and middle legs, base of hind tibiæ, and the front and middle tibiæ and tarsi, pale yellowish; front and middle coxæ *beneath* brownish; palpi pale; tegulæ, epitegulæ, the longitudinal veins in front wings basally, and more or less of the ventral fold yellowish-white.

The antennæ are 28-jointed; the flagellum is brown-black, with the first three or four joints subequal, about $3\frac{1}{2}$ times as long as thick. The metathorax is smooth and shining, except apically and laterally where it is alutaceous or finely, irregularly wrinkled, the pleural carina being faintly indicated posteriorly. The abdomen is elongated and narrowed, twice the length of the thorax, the sides to near the apex

being parallel, the first and second segments shagreened, the first one third longer than the second, the following segments smooth and polished, the third segment a little shorter than the second.

Type.—Cat. No. 5674, U. S. Nat. Museum. From St. Paul Island, August 25 (Fur Seal Commission).

In describing this new species of *Neuroteles*, as defined to suit our American species, the opportunity is taken to state my disagreement with Mr. Davis in his removal of *Neuroteles americana*, *N. ulmicola* and *N. liriodendri* to the genus CAMEROTOPS Förster, as also in making the last two synonymous with *Brephoctonus flavosus* Ashm.; all are distinctly different.

Mr. Davis has overlooked important cephalic and metathoracic differences not readily appreciated by a beginner.

Genus *Delete*r Förster.

DELETER KINCAIDI sp. nov.

Female.—Length 2 mm. Polished black; apex of second dorsal abdominal segment and the third segment entirely testaceous; antennæ, except scape above, and the legs brownish, the trochanters, knees, base of tibiæ and the tarsi paler or yellowish; palpi white; tegulæ and stigma pale yellowish, the costæ and internal veins dark brown.

The antennæ are 22-jointed, slightly thickened toward apex, the five or six joints before the last being quadrate or nearly so, not or scarcely longer than thick, the first three or four basal joints of the flagellum being a little more than twice longer than thick, narrowed toward base.

Abdomen, except the first segment, smooth, impunctate, the first finely aciculate, the second with two oblique depressions basally.

Male.—Differs from female in having the antennæ filiform, the 5 or 6 terminal joints longer than thick, the abdomen, except the first segment being brownish-piceous, while the legs, except the hind coxæ and femora and tips of hind tibiæ, are yellowish, the hind coxæ and femora black, the tips of the hind tibiæ fuscous.

Type.—Cat. No. 5754, U. S. Nat. Museum. From Belkofski, July 22 (Fur Seal Commission).

DELETER FLAVIFRONS sp. nov.

Male.—Length 3 mm. Polished black; face below antennæ, mandibles and two stripes on the scape lemon-yellow; palpi, tegulæ, a dot in front, epitegulæ, apex of front coxæ, their trochanters, their femora except stripe beneath the tibiæ and tarsi *beneath*, sutures of middle and

hind trochanters, basis of their tibiæ, the tarsal joints more or less basally, and the first ventral abdominal segment and along the sutures of the second pale yellowish. Wings hyaline, the costæ brown-black, the stigma and internal veins brown.

The antennæ are 24-jointed, about as long as the body, filiform, brown-black; the first two joints of the flagellum are subequal, about $2\frac{1}{2}$ times as long as thick, the following to the last very gradually and imperceptibly shortening, the penultimate being very little longer than thick, the last fusiform, nearly as long as the two preceding united. Metathorax smooth, shining, at the most feebly aciculate posteriorly, the apical transverse and the pleural carinæ distinct. Abdomen, except the first segment, and the second feebly at base, smooth and shining, the first longitudinally aciculate, the second feebly and faintly aciculate at base only.

Type.—Cat. No. 5675, U. S. Nat. Museum. From Popof Island, July 10; St. Paul Island, August 24 (Fur Seal Commission).

Genus **Tapinops** Förster.

TAPINOPS CALIFORNICUS (Ashmead).

Orthocentrus californicus ASHMEAD, Proc. U. S. Nat. Mus., XII, p. 442, ♀, 1888.

Tapinops californicus ASHMEAD, Trans. Am. Ent. Soc., XXIII, p. 204, 1896.

Tapinops emarginatus DAVIS, nec Say, Trans. Am. Ent. Soc., XXIV, p. 222, 1897.

Tapinops abdominalis DAVIS, nec Provancher, loc. cit.

Tapinops pusillus DAVIS, nec Walsh, loc. cit.

From Sitka. Very common in the mountains of California.

Mr. Davis is clearly wrong, in making this species, and others, noted above, synonymous with *Ophion marginatus* Say, a species he never saw and which from Say's description cannot possibly belong to this genus. Long after his original description was published, Say wrote, "This species is very remarkable by the prominence of the head in front of the insertion of the antennæ which hence appear to be situated in a deep foveola; this character, together with the very short, robust feet proves a close relationship to *Alomya* to which in fact I would refer the species, but that there is *no appearance of a second cubital cellule; the antennæ have 36 joints.*" (Italics mine.)

Tapinops californicus Ashmead has an areolet or second cubital cell and the antennæ have only 29 joints. Davis evidently overlooks this note on Say's species.

I have recognized Say's species; it does not even belong to this tribe, but belongs to a genus in the next tribe or the *Exochini*.

Genus *Atmetus* Förster.

ATMETUS INSULARIS Ashmead.

Atmetus insularis ASHMEAD, Fur Seals and Fur Seal Islands, IV, p. 337, ♀, 1899.

Type.—Cat. No. 4039, U. S. Nat. Museum. From Muir Inlet, June 12; St. Paul Island, August 22 (Fur Seal Commission). Originally described from Copper Island, in Bering Sea.

The male has the upper half of the face, the clypeus, the mandibles and a spot in front of the tegulæ, lemon-yellow; the front and middle coxæ and trochanters and the hind trochanters are yellowish-white; while the antennæ are 27-jointed, the flagellum brown-black, beneath towards base fulvous.

Genus *Orthocentrus* Gravenhorst.

ORTHOCENTRUS NIGRITUS sp. nov.

Male.—Length 2.5 mm. Polished black; face below the antennæ but not the cheeks, lemon-yellow; mandibles testaceous; tegulæ and epitegulæ yellowish-white; legs mostly black with the front coxæ, trochanters, femora and tibiæ, except above, the sutures of middle coxæ and trochanters, apex of middle femora and the base of middle and hind tibiæ, rufo-testaceous; wings hyaline, the stigma and veins brown; abdomen, except the first dorsal segment and base of second, polished and impunctate; the first segment is longitudinally aciculated except a smooth longitudinal median space towards its base, while the second segment is aciculate from the basal oblique furrows, smooth and polished beyond.

Type.—Cat. No. 5676, U. S. Nat. Museum. From St. Paul Island, August 22 (Fur Seal Commission). One specimen.

Genus *Phænosemus* Förster.

PHÆNOSEMUS SITKENSIS sp. nov.

Male.—Length 4 mm. Polished black, the face distinctly, although somewhat sparsely, punctate; the upper margin of the facial elevation, mandibles, palpi, scape, tegulæ, apices of coxæ, the trochanters, knees and ventral fold yellow; remainder of legs brownish-yellow except the coxæ which are black, the hind femora which are brown-black, the middle and front femora basally and the terminal joints of the tarsi which are fuscous or dusky. The abdomen has the dorsal sutures 2, 3 and 4 yellowish. Wings hyaline, the stigma and veins brown, the closing vein of the areolet being pallid or subhyaline. The

metathorax is smooth but areolated, the lateral longitudinal carinæ being distinct from the spiracles, the pleural and two middle carinæ also distinct. The abdomen, except the first and second dorsal segments which are finely sculptured, is smooth and shining; the dorsal carinæ of the first segment extend almost to the apex of the segment.

Type.—Cat. No. 5677, U. S. Nat. Museum. From Sitka, July 16. One specimen.

Genus **Stenomærus** Förster.

STENOMÆRUS BOREALIS Ashmead.

Stenomærus borealis ASHMEAD, Fur Seals and Fur Seal Islands, iv, p. 338, 1899.

Type.—Cat. No. 4040, U. S. Nat. Museum. From Bering Island (Dr. L. Stejneger); Popof Island, Muir Inlet and Kukak Bay (Harriman Expedition); St. Paul Island and Unga Island (Fur Seal Commission).

Genus **Camarotops** Förster.

CAMAROTOPS KODIAKENSIS sp. nov.

Female.—Length 2.5 mm. Polished black, the face very sparsely microscopically punctate, the first dorsal segment of abdomen and the second segment except at apical third, strongly, irregularly, longitudinally aciculated; extreme superior margin of the frontal elevation testaceous; palpi and tegulæ white; mandibles testaceous; legs clear reddish-brown, the hind femora much swollen. Wings hyaline, the stigma and veins brown. Antennæ 24-jointed, brown, becoming black toward apex.

Type.—Cat. No. 5678, U. S. Nat. Museum. From Kodiak. One specimen.

Neuroteles americana, *N. liriodendri* and *Blephoctonus flavosus*, are erroneously placed by Davis in this genus; they belong in the genera in which they were originally placed.

Tribe **EXOCHINI**.

Genus **Triclistus** Förster.

TRICLISTUS CURVATOR (Fabricius).

Ichneumon curvator FABRICIUS, Ent. Syst., p. 179, 1775.

Exochus curvator GRAVENHORST, Ichn. Eur., II, p. 335, 1829.—STEPHENS, Illustr., VII, p. 265, 1828-46.—HOLMGREN, Svensk. Akad. Handl., p. 317, 1855.

? *Exochus fulvipes* CRESSON, Proc. Ent. Soc. Phila., III, p. 285, 1864.—CRESSON, Syn. Hym. N. Am., p. 213, 1887.

? *Exochus curvator* DAVIS, Trans. Am. Ent. Soc., XXIV, p. 213, 1897.

From Popof Island, July 8.

Genus **Metacælus** Förster.

METACÆLUS LÆVIS (Cresson).

Exochus lævis CRESSON, Proc. Ent. Soc. Phila., III, p. 286, 1864.—WALSH, Trans. St. Louis Acad. Sci., III, p. 93, 1873.—CRESSON, Syn. Hym. N. Am., p. 213, 1887.

Metacælus lævis DAVIS, Trans. Am. Ent. Soc., XXIV, p. 214, 1897.—ASHMEAD, Smith's Ins. New Jersey, p. 579, 1900.

Type in collection of the American Entomological Society. From Berg Bay, June 10; Popof Island, July 10, 12; Sitka, June 16; Virgin Bay, June 26; and Yakutat, June 26. A common species.

Subfamily *OPHIONINÆ*.Tribe *OPHIONINI*.Genus **Ophion** Gravenhorst.

OPHION BILINEATUM Say.

Ophion bilineatus SAY, Maclurian Lyc. Arts and Sci., I, p. 75, 1828.—SAY, Journ. Boston Soc. Nat. Hist., I, p. 248, 1835.—LECONTE'S Ed. Say's Works, I, p. 378, 1855.—NORTON, Proc. Ent. Soc. Phila., I, p. 358, 1863.—PROVANCHER, Fn. du Can. Hym., p. 351, 1883.—CRESSON, Syn. Hym. N. Am., p. 200, 1887.—ASHMEAD, Smith's Ins. New Jersey, p. 580, 1900.

From Sitka, June 16. Two females.

Genus **Enicospilus** Curtis.

ENICOSPILUS PURGATUS (Say).

Ophion purgatus SAY, Journ. Boston Soc. Nat. Hist., I, p. 239, 1835.—EMMONS, Nat. Hist. New York, v.—NORTON, Proc. Ent. Soc. Phila., I, p. 358, 1863.—PROVANCHER, Fn. du Can. Hym., p. 351, 1883.—CRESSON, Syn. Hym. N. Am., p. 200, 1887.

Ophion lateralis LEPELETIES, Hist. Natur. Hym., IV, p. 141, 1846.

Enicospilus purgatus ASHMEAD, Smith's Ins. New Jersey, p. 580, 1900.

From Fox Point, July 28. One female.

Tribe *ANOMALINI*.Genus **Atrometus** Förster.

ATROMETUS ALASKENSIS sp. nov.

Female.—Length 11 mm. Reddish-brown; occiput, a large spot on vertex enclosing the ocelli, prosternum and sides of pronotum, mesosternum and a streak on the mesopleura beneath the wings, metasternum and the suture at base of the metanotum, the depression across base of mesoscutellum, the antennæ, except scape beneath, two last dorsal abdominal segments, and the hind legs, except the apex of the

first tarsal joint and joints 2, 3 and 4, black (rarely reddish-brown with tips of tibiæ fuscous or black as in male); orbits, face below antennæ, cheeks, mandibles, scape beneath, lemon-yellow; the apex of joint 1 and joints 2 to 4 of hind tarsi yellowish-white; palpi and tegulæ white; front and middle legs reddish-yellow; wings hyaline, iridescent, the costæ and internal veins brown, the stigma yellowish.

Male.—Agrees well with the female, except in the usual sexual differences in the antennæ and abdomen, and in having the hind legs, except the tips of tibiæ and the tarsal joints yellowish-white, not black but reddish-brown, while the front and middle coxæ and trochanters are yellowish-white.

A single male supposed to be a variety of this species, agrees fairly well with the normal form, except that the temples and the thorax, except the mesonotum and the scutellum are wholly black.

Type.—Cat. No. 5679, U. S. Nat. Museum. From Sitka, June 16; Muir Inlet, June 11; Virgin Bay, June 26; Yakutat, June 21; and Kukak Bay, July 4.

Tribe *CAMPOPLIGINI*.

Genus *Campoplex* Gravenhorst.

CAMPOPLEX LATICINCTUS Cresson.

Campoplex laticinctus CRESSON, Proc. Ent. Soc. Phila., IV, p. 283, ♀, 1865.

—PROVANCHER, Fn. du Can. Hym., p. 362, 1883.—CRESSON, Syn. Hym. N. Am., p. 202, 1887.

Campoplex nigripes PROVANCHER, Le Nat. Can., VI, p. 145, 1874.

Type in collection of the American Entomological Society. From Kukak Bay, July 4; Pribilof Islands, July 12; Virgin Bay, July 20.

A common species, found throughout the Northern States, New York, White mountains in New Hampshire, Maine, Colorado, Kansas and Canada.

Genus *Zachresta* Förster.

ZACHRESTA POPOFENSIS sp. nov.

Male.—Length 7.5 mm. Black, coriaceous, the depressions at sides of the prothorax and the disk of the mesopleura lined; the mandibles and the legs, except the front and middle coxæ above, the hind coxæ entirely, first joint of their trochanters and the apex of the hind tibiæ and tarsi which are black, are red; the hind tibial spurs and annuli at base of tarsal joints 1 to 3 are, however, white; palpi and tegulæ yellowish-white. Wings hyaline, the stigma and veins brown-black; the areolet is petiolate, receiving the second recurrent nervure a little beyond its middle. Metathorax rather short, its posterior face

sharply oblique but with a small transverse quadrate basal area, the areola and petiolar areas being confluent and forming one large area; spiracles long-oval.

Type.—Cat. No. 5680, U. S. Nat. Museum. From Popof Island, July 10. One specimen.

ZACHRESTA KUKAKENSIS sp. nov.

Male.—Length 8 mm. Black, closely and distinctly punctate; mandibles ferruginous; palpi fuscous; tegulæ black; the legs, except a pale yellowish spot on front coxæ and trochanters, and the front femora beneath, their tibiæ entirely and the middle tibiæ, which are rufous, are black; the front and middle tarsi are dark fuscous, except narrowly at the sutures of the joints. Wings nearly hyaline, the stigma and veins dark brown, the arcolet petiolate, receiving the second recurrent nervure at the middle. Metathorax very short, obliquely sloping off from immediately back of the scutellum, without a basal area and without carinæ, except the pleural carinæ below the spiracles; spiracles long-oval.

Type.—Cat. No. 5681, U. S. Nat. Museum. From Kukak Bay, July 4. One specimen.

Genus *Phædroctonus* Förster.

PHÆDROCTONUS MINUTUS sp. nov.†

Female.—Length 3.5 mm. Black, opaque and very finely shagreened; scape and pedicel *beneath*, mandibles, palpi, tegulæ, front and middle coxæ and trochanters, the sutures and second joint of hind trochanters, an annulus at base of hind tibiæ and a broad band at their middle, and tibial spurs, yellowish-white; the hind legs otherwise black, the front and middle legs, except as noted, reddish-yellow; abdomen black, with the venter, hypopygium and the terminal dorsal segment, honey-yellow. Wings hyaline, the stigma and veins brown, the arcolet entirely absent, the marginal cell being very broad, the first abscissa of the radius being nearly two thirds the length of the second.

Type.—Cat. No. 5682, U. S. Nat. Museum. From Popof Island, July 9. One specimen.

Genus *Olesicampa* Förster.

OLESICAMPA ALASKENSIS sp. nov.

Male.—Length 7 to 7.5 mm. Black, closely punctate, and clothed with a glittering white pubescence, that on the face rather dense. Scape beneath, two spots on clypeus nearly confluent anteriorly,

mandibles, tegulæ, front coxæ beneath and at apex, their trochanters, and the apex of the first joint and the second joint entirely of middle trochanters, pale yellowish or yellowish-white; palpi white; coxæ and first joint of middle and hind trochanters, except as noted, black; rest of legs rufous. Wings hyaline, the costæ blackish, the stigma and internal veins brown, the areolet small, very oblique and longly petiolate, the second recurrent nervure being interstitial with its apex. The abdomen is black, with the apex of the second dorsal segment, segments 3, 4 and 5 entirely, and the venter, except the last segment, rufous.

Type.—Cat. No. 5683, U. S. Nat. Museum. From Juneau, June 25. One specimen.

Genus **Hypothereutes** Förster.

HYPOTHEREUTES ANNULIPES sp. nov.

Female.—Length 7 mm.; ovipositor less than one third the length of the abdomen. Black, opaque, finely coriaceous; mandibles, prothoracic scale, and the legs, except tips of hind femora, their tibiæ and tarsi rufous, tips of hind femora, their tibiæ, except a broad median annulus or a long spot outwardly which is white, and tarsi black; palpi and tegulæ yellowish-white. Wings subhyaline, the stigma and veins brown-black, the areolet minute, petiolate. Metathorax incompletely areolated, the carinæ remaining poorly defined, but with the areola and petiolar area complete.

Type.—Cat. No. 5684, U. S. Nat. Museum. From Yakutat, July 21; Kukak Bay, July 4. Two specimens.

Genus **Ischnoscopus** Förster.

ISCHNOSCOPUS YAKUTATENSIS sp. nov.

Female.—Length 6.5 mm. Black, very finely, closely punctate, the metathorax completely areolated; mandibles and legs, except coxæ, rufous; palpi, tegulæ and epitegulæ yellowish-white; abdomen black, with the venter pale yellowish, dorsal segments 2 and 3 at apex rufous, the rufous on the third obliquely broadened laterally towards base, dorsal segment 4 and beyond, rufous at the sides. Wings hyaline, the stigma and veins brown-black, the areolet not small, subpetiolate, receiving the second recurrent nervure a little before its middle.

Male.—Length 6 mm. Agrees well with the female, except that dorsal abdominal segments 2 to 5 at apex are rufous, and the rufous along the sides of segments 3 to 5 extend clear to the base.

Type.—Cat. No. 5685, U. S. Nat. Museum. From Yakutat, June 21. Two specimens.

Genus **Limnerium** Ashmead.

LIMNERIUM YAKUTATENSE sp. nov.

Female.—Length 6 mm. Black, finely opaquely shagreened, mandibles, labrum and legs, except coxæ and the first joint of hind trochanters, rufous; palpi and tegulæ yellowish, the epitegulæ white. Abdomen black, with the ventral segments more or less banded or spotted with white, the dorsal segments *laterally* more or less rufous or spotted with rufous, the third segment also with a rufous band at apex, usually narrowed medially and even sometimes interrupted medially. Wings hyaline, the stigma and veins brown black, the areolet rather large, petiolate receiving the second recurrent nervure before its middle.

Male.—Very similar to female except that the rufous spots on the sides of dorsal abdominal segments 3 and 4 are usually extended above and unite to form a band at apex of the segments; otherwise it is practically identical with the female.

Type.—Cat. No. 5686, U. S. Nat. Museum. From Yakutat, June 21. Many specimens.

This species, in color, imitates *Ischnoscopus yakutatensis* and could be easily confused with it.

Genus **Ameloctonus** Förster.

AMELOCTONUS POPOFENSIS sp. nov.

Female.—Length 5 mm. Black, opaque, finely coriaceous; mandibles, palpi, tegulæ, epitegulæ, apices of front coxæ, their trochanters and the middle trochanters, yellowish-white; coxæ and first joint of hind trochanters black; extreme tips of hind tibiæ and their tarsi fuscous; remainder of legs ferruginous. Wings hyaline, the stigma and veins brown, the areolet sessile, receiving the second recurrent nervure beyond its middle. Metathorax areolated, the areola elongate, narrowed and open behind.

Type.—Cat. No. 5687, U. S. Nat. Museum. From Popof Island, July 10.

Tribe *PANISCINI*.Genus **Paniscus** Gravenhorst.

PANISCUS ALASKENSIS sp. nov.

Male.—Length 10 mm. Head yellow, with purplish-brown eyes, and very much as in *Paniscus geminatus* Say, except that the ocelli are not placed on a black spot, and the lateral ocelli do not quite touch

the eye margin, as in that species. The thorax and abdomen are pale honey-yellow; a stripe on sides of prosternum, the lateral margins of the mesonotum, and a stripe on the parapsidal furrows behind, are yellowish-white; the apical transverse carina is indicated only laterally, being wholly obliterated medially, the surface of the metanotum before it being very finely, transversely aciculate, behind it polished and impunctate. Wings hyaline, the venation as in *P. geminatus*, the costal vein and the stigma yellow, the subcostal vein and the internal veins being brown or brown black. External claspers similar to those in *P. geminatus* but slightly narrower.

Type.—Cat. No. 5688, U. S. Nat. Museum. From Kukak Bay, July 4. Five specimens.

Tribe *MESOCHORINI*.

Genus *Mesochorus* Gravenhorst.

The three species belonging to this genus, found in Alaska, may be tabulated as follows:

1. Polished black.

All coxæ and legs pale yellowish or reddish-yellow.....2.

All coxæ mostly black, the front and middle coxæ usually pale at apex.

Legs honey-yellow, the apical two thirds of hind femora and the tips of their tibiæ fuscous; cheeks, clypeus anteriorly and the extreme apex of second dorsal segment of abdomen pale yellowish. Female.

K. kincaidi.

2. Face, clypeus, cheeks and lower part of temples yellowish-white.

Prothorax pale yellowish; abdomen black, with the apex of the second dorsal segment connected with a triangular median spot, a median line on the third and continued on to the fourth, pale yellowish.

Male.....*M. orca*.

Prothorax, except its sternum, black; abdomen black, with the venter and second dorsal suture white. Male.....*M. frontalis*.

MESOCHORUS KINCAIDI sp. nov.

Female.—Length 3 mm. Polished black; cheeks, anterior margin of the clypeus and the mandibles flavo-testaceous; pedicel and flagellum brown, the latter darker towards apex; palpi, tegulæ, ventral fold, the narrow membranous margins of dorsal abdominal segments 1 and 2, and the extreme apex of dorsal segment 2 yellowish-white; legs, except the middle and hind coxæ, apex of hind tibiæ, and tips of the joints of hind tarsi honey-yellow; middle and hind coxæ black, the

hind femora dusky, tips of hind tibiæ and tarsi fuscous. Wings hyaline, the stigma and veins brown. Antennæ 32-jointed, the first joint of the flagellum the longest, nearly as long as joints 2 and 3 united.

Type.—Cat. No. 5689, U. S. Nat. Museum. From Kukak Bay, July 4. One specimen.

MESOCHORUS ORCÆ sp. nov.

Male.—Length 4 mm. Polished black except as follows: The face below the antennæ, clypeus, cheeks, mandibles, scape and pedicel, prothorax, a band on the mesopleura *below*, front coxæ and trochanters, middle trochanters, ventral fold, the apex of the second dorsal abdominal segment connected with a triangular median spot and a median stripe on dorsal segments 3 and 4, pale yellowish or yellowish-white; legs, except as noted, reddish-yellow. Wings hyaline, the stigma yellowish-white, the costæ and internal veins brown.

Type.—Cat. No. 5690, U. S. Nat. Museum. From Orca, June 27. Two specimens.

MESOCHORUS FRONTALIS Ashmead.

Mesochorus frontalis ASHMEAD, *Fur Seals and Fur Seal Isl.*, IV, p. 336, ♂, 1899.

Type.—Cat. No. 4037, U. S. Nat. Museum. From Bering Island (Mr. Barrett-Hamilton); Pribilof Islands (Fur Seal Commission).

Tribe *PORIZONINI*.

Genus *Isurgus* Förster.

ISURGUS ALASKENSIS sp. nov.

Female.—Length 2.8 mm.; ovipositor longer than the abdomen. Black; mandibles and legs, except the coxæ, more or less of the trochanters and the hind legs almost entirely, rufous; hind legs sometimes wholly rufous.

Head, except cheeks and temples, opaque, finely coriaceous; thorax, except the parapsidal furrows and a quadrate depressed space on the mesonotum posteriorly, which are coriaceous and opaque, shining, the metathorax short and shining, although feebly wrinkled, the apical transverse carina distinct and connected with two close parallel carinæ on the middle of the metanotum. Wings hyaline, the stigma and veins brown.

Abdomen longly petiolate, the body compressed, smooth and shining.

Type.—Cat. No. 5691, U. S. Nat. Museum. From Popof Island, July 9, 12. Two specimens.

Tribe *PLECTISCINI*.*Catastenus* Förster.*CATASTENUS ALASKENSIS* sp. nov.

Female.—Length 3.5 to 4 mm.; ovipositor not longer than the petiole. Polished black, except the metathorax which is wrinkled and completely areolated, the first and second segments of the abdomen which are coriaceous and opaque and the third segment at base which is feebly sculptured; palpi yellowish; legs, except hind coxæ, rufous, the hind femora more or less dusky; abdomen with the apex of the second dorsal segment, the third entirely and the apex of the fourth, testaceous or yellowish; sometimes the apex of the fifth segment is yellowish.

The antennæ are 22-jointed, brown, and slightly and gradually thickened toward apex. Wings hyaline, the stigma and veins brown.

Male.—Agrees well with the female, except that the antennæ are 24-jointed, filiform and brown-black, the middle and hind coxæ are black, the hind femora brown-black, their tibiæ and tarsi subfuscous, while the abdomen has the apices of the segments yellow.

Type.—Cat. No. 5692, U. S. Nat. Museum. From St. Paul Island, July 10, 17.

CATASTENUS TRIFASCIATUS Ashmead.

Catastenus trifasciatus ASHMEAD, *Fur Seals and Fur Seal Isl.*, IV, p. 336, 1899.

Type.—Cat. No. 4038, U. S. Nat. Museum. From Bering Island (Dr. L. Stejneger); St. Paul Island (Fur Seal Commission).

Genus *Plectiscus* Gravenhorst.*PLECTISCUS ORCÆ* sp. nov.

Female.—Length 3 mm. Polished black; clypeus, scape and pedicel beneath, the ring-joint, mandibles, palpi, tegulæ, prosternum, the lower margin of the prothorax, legs entirely, the ventral fold, and the apices of dorsal abdominal segments 2 and 3 and base of third narrowly, pale yellowish. Wings hyaline, the stigma and veins brown. Antennæ 21-jointed, the flagellum brown. Metathorax with a strong transverse carina and with lateral carinæ, the areola oblong-quadrangle. Abdomen, except the petiole and the second segment at base, highly polished, impunctate, the petiole more than thrice longer than thick, opaque and strongly coriaceous, the second segment at base feebly sculptured.

Type.—Cat. No. 5731, U. S. Nat. Museum. From Orca, June 27.
One specimen.

Family **ALYSIIDÆ**.

Subfamily *ALYSIINÆ*.

Tribe *ALYSIINI*.

Genus **Alysia** Latreille.

ALYSIA MANDUCATOR (Panzer).

- Ichneumon manducator* PANZER, Fn. Ins. Germ., VI, p. 72, Pl. 4, 1799.—
THUNBERG, Bull. Acad. Sc., St. Petersburg, VIII, 1822.—THUNBERG,
Mém. Acad. Sc., St. Petersburg, IX, p. 346, 1824.—CUVIER, Règne
animal. Ed. 3^a, Ins., II, Pl. 112, f. 9, 1849.
- Bassus manducator* PANZER, Krit. Rev., II, p. 75, 1806.—NEES, Mag. Ges.,
Berlin, p. 202, 1814.
- Alysia stercoraria* LATREILLE, Hist. Nat., XIII, p. 177, 1805.—LAMARCK,
Hist. Nat. Anim. s. vert. Ed., 2^a, IV, p. 357, 1835.
- Bracon manducator* JURINE, Nouv. Méth. Hym., p. 118, ♀, 1807.—TRENTÉ-
POHN, Isis, p. 960, 1829.
- Cecheenus manducator* ILLIGER, in Rossi's Faun. Etrusca, Ed. 2^a, II, p. 54,
1807.—ILLIGER, Magaz. f. Insectenk., VI, p. 15, 1809.
- Alysia manducator* LATREILLE, Gen. Crust. et Ins., IV, p. 15, 1809.—LEPE-
LETIER, Encycl. Méth., X, p. 432, 1825.—CURTIS, Brit. Ent., III, p. 141,
1826.—BONCHÉ, Naturg. d. Forstins, p. 147, 1834.—HALIDAY, Ent.
Mag., I, p. 265, 1833; *idem*, V, p. 220, ♀ ♂, 1838, Pl. F, f. 1 and 28.—
ZETTERSTEDT, Ins. Lappon., I, p. 401, 1838.—BLANCHARD, Hist. Nat. Ins.,
III, p. 345, 1840.—WESTWOOD, Intro. Mod. Classif. Ins., II, Synop., p.
65, 1840.—CURTIS, Farm. Ins., p. 144.—GUÉRIN, Iconogr. règn. anim.,
p. 411, 1845.—RUTHE, Stettin. ent. Zeitg., XX, p. 319, 1859.—FÖRSTER,
Verh. naturh. Ver. preuss. Rheinl., XIX, p. 265, 1862.—VOLLENHOVEN,
Pinacogr., p. 23; Pl. 15, f. 2, ♀, f. 3, ♂, 1876.—MARSHALL, Trans. Ent.
Soc. London, p. 508; Pl. 11, f. 4, ♀, 1894.—MARSHALL, in André's
Spec. Hym. Eur., V, p. 376, 1894.—THOMSON, Opus. Ent. Fasc., 20, p.
2295, ♀ ♂, 1895.—DALLA TORRE, Cat. Hym., IV, p. 47, 1898.
- Alysia fossulata* PROVANCHER, Add. Fn. Hym., p. 391, ♀, 1888.—DALLA
TORRE, Cat. Hym., IV, p. 45, 1898.

From Belkofski, July 22.

This common European species is parasitic in the larvæ of various
Diptera. In Europe it has been bred from *Lucilia cesar* L., *Cyrto-
neara stabulans* Fall., and *Hydrotæa dentipes* Fabr.

Genus **Anarcha** Förster.

ANARCHA COXALIS sp. nov.

Male.—Length 3 mm. Polished black; mandibles, except teeth,
scape beneath, and the legs, except coxæ, rufo-testaceous; front coxæ
basally and the middle and hind coxæ black; tips of hind tibix and
their tarsi subfuscous; palpi, ring-joint of antennæ and tegulæ pale
yellowish. Wings hyaline, the large stigma and the veins brown.
Antennæ very long, 42-jointed. Metathorax opaque, rugulose and

areolated. Abdomen, except the first segment, polished black impunctate, the first segment longitudinally striate.

Type.—Cat. No. 5693, U. S. Nat. Museum. From Sitka, June 16. One specimen.

Tribe *ALLÆINI*.

Genus *Delocarpa* Förster.

DELOCARPA SITKENSIS sp. nov.

Female.—Length 2 mm. Polished black, the first segment of the abdomen, and the second towards base reddish-brown; mandibles red; legs rufo-testaceous, the femora and hind tibiæ toward apex and their tarsi dusky. Antennæ 17-jointed, the scape and pedicel brown, the flagellum black, the joints delicately fluted; the first joint of the flagellum is obconical, about thrice as long as thick, the following to the ninth are oblong but imperceptibly become shorter and shorter, those beyond to the last being quadrate or nearly so, scarcely longer than thick. Wings hyaline, the long linear stigma and the internal veins being light brown or brownish-yellow. Metathorax rather coarsely rugulose. Abdomen polished, impunctate, except the first segment which is longitudinally striate.

Type.—Cat. No. 5694, U. S. Nat. Museum. From Sitka, June 16. One specimen.

Subfamily *DACNUSINÆ*.

Genus *Rhizarcha* Förster.

RHIZARCHA HARRINGTONI sp. nov.

Male.—Length 4 mm. Head and thorax black, shining; scape, pedicel, abdomen except petiole, and the legs brownish-yellow, the dorsal abdominal segments with a fuscous tinge at the sutures, the hind tarsi and sheaths of the ovipositor fuscous; palpi whitish. Wings hyaline, the narrow stigma and the veins brown. Antennæ about 40-jointed, the flagellum black, the joints cylindrical, clothed with a short, rather dense pubescence. Mesonotum with a long median grooved line posteriorly. Metathorax rugulose, clothed with a rather dense yellowish pubescence. Abdomen, except as noted, brownish-yellow, polished, impunctate, the first segment black, rugulose.

Type.—Cat. No. 5695, U. S. Nat. Museum. From Juneau, July 25. One specimen.

Genus *Gyrocampa* Förster.

GYROCAMPA ALASKENSIS sp. nov.

Female.—Length 2 mm.; ovipositor not longer than the first joint of hind tarsi. Polished black; mandibles red; tegulæ and legs, ex-

cept as noted, dark rufous, the middle and hind coxæ black or fuscous, the trochanters, base of tibiæ and tarsi honey-yellow. Wings hyaline, the linear stigma and the internal veins brown. Antennæ 24-jointed, the scape and pedicel black, the ring-joint yellow, the flagellum brown-black. The mesonotum has a median grooved line posteriorly just in front of the scutellum; the scutellum has a transverse crenate furrow across its base; the mesopleura have a crenate fovea on their disk; the metathorax is coarsely rugose and rather densely pubescent, while the abdomen, except the first segment which is finely rugulose and pubescent, is smooth and polished.

Type.—Cat. No. 5696, U. S. Nat. Museum. From St. Paul Island, August 22 (Fur Seal Commission).

Genus **Liposcia** Förster.

LIPOSCIA DUBIOSA sp. nov.

(Pl. XI, fig. 1.)

Male.—Length 1.5 mm. Polished black; mandibles reddish; palpi white; tegulæ and legs, except the hind tibiæ and tarsi, brownish-yellow; the hind tibiæ, except an annulus at base, and the tarsi fuscous. Wings hyaline, the very narrow lanceolate stigma and the veins being brown. Antennæ long, 27-jointed, black, with the scape beneath and an annulus at the base of the first joint of the flagellum yellow. Mesonotum with a short median grooved line posteriorly, the fovea at base of scutellum divided into two divisions by a delicate median carina, the mesopleura with a smooth discal fovea a little behind the middle, while the metathorax is feebly wrinkled posteriorly and at sides but smooth and shining at base above. Abdomen, except the first segment, smooth and shining, the first segment rugulose and carinate.

Type.—Cat. No. 5697, U. S. Nat. Museum. From Unalaska. One specimen.

Family **BRACONIDÆ**.

Subfamily **APHIDIINÆ**.

Genus **Praon** Haliday.

PRAON ALASKENSIS sp. nov.

(Pl. XI, fig. 3.)

Male.—Length 2 mm. Polished black; mandibles testaceous; palpi and annulus at base of flagellum, yellowish-white; legs rufo-testa-

ceous, the front coxæ and trochanters beneath yellowish, the middle coxæ basally and the hind coxæ blackish. Antennæ 25-jointed, longer than the body, the joints of the flagellum about thrice as long as thick. Thorax with distinct parapsidal furrows, the metathorax feebly alutaceous but shining, the pleural carinæ indistinctly defined, the median carina wanting, the spiracles small and round. Wings hyaline, the costal vein, basal nervure and parastigma piceous black, the stigma and internal veins brown. The abdomen, except the first segments, is smooth, shining and impunctate; the first segment is a little longer than wide, shorter than the second, finely rugulose, especially towards base, and has distinct lateral carinæ.

Type.—Cat. No. 5698, U. S. Nat. Museum. From St. Paul Island, August 16 (Fur Seal Commission). Two specimens.

Genus *Aphidius* Nees.

TABLE OF SPECIES.

1. Males.4.
2. Females.

Antennæ less than 19-jointed.....3.
Antennæ 19-jointed.

Head and thorax black; mandibles and tegulæ pale yellowish; legs brownish-yellow; abdomen rufo-piceous, polished, the petiole black, finely rugulose.....*A. glacialis*.

3. Antennæ 16-jointed, the last joint very long, as long as joints 14 and 15 united.

Black; abdomen with its tip and the second dorsal segment at apex yellowish; legs black or piceous black, the sutures of trochanters, extreme tips of femora, an annulus at base of tibiæ and mandibles, honey-yellow; antennæ black, the first joint of flagellum not quite as long as the second, joints 13 to 15 about $1\frac{1}{2}$ times as long as thick.

A. frigidus.

Antennæ 15-jointed, the last joint shorter than joints 13 and 14 united.

Black; abdomen with the second and third dorsal segments rufo-piceous (rarely wholly black); legs brownish-yellow or flavo-testaceous, the hind coxæ blackish; mandibles and first four joints of antennæ yellowish or testaceous; first five joints of flagellum elongate, nearly six times as long as thick; joint 14 not quite twice as long as thick.

A. paulensis.

4. Antennæ 21-jointed, or less.....5.
 Antennæ 22-jointed.

Black; abdomen with the second dorsal segment rufo-piceous at apex; mandibles rufo-piceous; palpi fuscous; metanotum smooth, without a median carina, the apical transverse carina alone present.

A. propinquus.

5. Antennæ 18-jointed.....6.
 Antennæ 21-jointed.

Black; mandibles reddish; palpi blackish; metanotum smooth but with a median carina; legs mostly black, with an annulus at base of tibiæ and their extreme apices usually honey-yellow or testaceous.

A. frigidus.

6. Black; abdomen with the apex of the petiole and sometimes more or less of the second segment rufo-testaceous, more yellowish in the sutures; femora and tibiæ above, and especially the middle hind pairs, fuscous, the coxæ black or rufo-piceous; metanotum short, with a diamond-shaped areola.....*A. paulensis.*

APHIDIUS PROPINQUUS sp. nov.

Male.—Length 3.3 mm. Polished black; mandibles reddish; palpi fuscous; legs, except a reddish piceous tinge at the sutures of joints, entirely black; abdomen, except a reddish or rufo-piceous band at apex of the second dorsal segment black. Antennæ 22-jointed, the joints of the flagellum delicately fluted and not more than twice longer than thick. Metanotum smooth with only the apical transverse carina present. Wings hyaline, veins brown, stigma yellowish or pale within.

Type.—Cat. No. 5699, U. S. Nat. Museum. From St. Paul Island, August 8, 20 (Fur Seal Commission). Two specimens.

APHIDIUS GLACIALIS sp. nov.

Female.—Length 2.8 mm. Head and thorax black, smooth and shining; abdomen, except the first segment dark rufous or rufo-piceous; mandibles, mouth parts, annulus at base of flagellum, tegulæ, and the front coxæ and trochanters, pale yellowish; remainder of legs brownish-yellow, the basal joint of the middle tarsi scarcely longer than joints 2 and 3 united, the basal joint of hind tarsi nearly as long as all the other joints united.

The antennæ are 19-jointed, black, shorter than the body, the third joint being about four times as long as thick. Abdomen rufo-piceous, smooth and shining, except the first segment which is black, finely rugulose and fully thrice as long as thick.

Type.—Cat. No. 5700, U. S. Nat. Museum. From Juneau, July 25. One specimen.

Proc. Wash. Acad. Sci., May, 1902.

APHIDIUS FRIGIDUS sp. nov.

(Pl. XI, fig. 4.)

Female.—Length 3.5 mm. Polished black; abdomen with its apex or the sutures of the two apical segments and the apex of the second dorsal segments testaceous or yellowish, or sometimes the second and third segments testaceous; mandibles, tips of palpi joints, sutures of trochanters, knees and an annulus at base of flagellum, honey-yellow or yellowish. Wings hyaline, the stigma pale within, the outer margins and the internal veins brown.

The antennæ are 16-jointed and hardly two thirds the length of the body, the first three joints of the flagellum are subequal, a little more than thrice longer than thick. Metathorax smooth and areolated, the median carina being distinct. Abdomen elongate lanceolate, compressed and pointed towards apex, smooth and polished, except the first segment which is finely rugulose, nearly four times as long as thick and with the spiracles placed before the middle.

Male.—Differs principally in having the antennæ 21-jointed, the joints of the flagellum being much shorter, the first three joints hardly thrice as long as thick, while the abdomen is shorter, compressed from the apex of the second segment and nearly always entirely black.

Type.—Cat. No. 5701, U. S. Nat. Museum. From St. Paul Island, August 8 to 20 (Fur Seal Commission). Many specimens.

APHIDIUS PAULENSIS sp. nov.

Female.—Length 1.6 to 2 mm. Polished black; mandibles reddish; palpi and tegulæ whitish; first four joints of the antennæ and the legs brownish-yellow. Wings hyaline, the stigma lanceolate, pallid, the outer and internal veins brownish.

The antennæ are 15-jointed, brown-black from the fifth joint; the first three joints are about four times as long as thick, the following to the last, shorter, the last joint being shorter than joints 13 and 14 united. Thorax with the parapsidal furrows incomplete, only vaguely defined anteriorly, the metathorax short with a diamond-shaped areola. Abdomen depressed, petiolated and terminating in a distinct ovipositor, which is longer than the basal joint of the hind tarsi; the petiole is more than thrice longer than thick and finely wrinkled.

Male.—Differs in having the antennæ 18-jointed, black, except an annulus at base of the third joint, and in having the legs, except the sutures of trochanters, and the femora and tibiæ especially of the front and middle legs, *beneath*, which are rufo-testaceous, all black.

Type.—Cat. No. 5702, U. S. Nat. Museum. From St. Paul Island, August 15 to 20 (Fur Seal Commission). Nine specimens.

Subfamily *HELCONINÆ*.

Tribe *DIOSPILINI*.

Genus *Dyscoletes* Westwood.

DYSCOLETES ALASKENSIS sp. nov.

Male.—Length 3.2 mm. Polished black; mandibles, except teeth, and the legs, except front coxæ and hind tibiæ and tarsi, pale ferruginous; palpi, tegulæ and front coxæ yellowish; hind tibiæ, except an annulus at base, and their tarsi fuscous, the tips of the tarsal joints yellowish. Wings hyaline, the stigma and veins brown.

The antennæ are 33-jointed, very long, much longer than the body and, except the scape beneath which is more or less piceous, black. Thorax with the parapsidal furrows distinct anteriorly and terminating in a finely punctate depression before the base of the scutellum; the metathorax is shining but finely wrinkled and tricarinate—a median and two lateral carinæ. The abdomen is subcompressed at apex, polished black, the ventral fold testaceous, the first segment feebly wrinkled, especially laterally beyond the spiracles, which are rather large and placed before the middle, and with a delicate median carina on its apical portion.

Type.—Cat. No. 5703, U. S. Nat. Museum. From Popof Island.

Subfamily *CHELONINÆ*.

Genus *Chelonus* Jurine.

CHELONUS IRIDESCENS Cresson.

Chelonus iridescens CRESSON, Proc. Ent. Soc. Phila., IV, p. 294, 1865.—PROVANCHER, Fn. du Can. Hym., p. 532, 1883.—CRESSON, Syn. Hym. N. Am., p. 225, 1887.

Type in collection of the American Entomological Society. From Kukak Bay, July 4. Two specimens. Occurs also in Canada, Colorado, New Mexico and elsewhere in the United States.

Subfamily *MICROGASTERINÆ*.

Genus *Protapanteles* Ashmead.

PROTAPANTELES ALASKENSIS sp. nov.

Male and Female.—Length 3 mm. Black, smooth and impunctate; mandibles rufous; palpi pale yellowish; legs, except coxæ and as here-

after noted, honey-yellow, the coxæ black, the apices of hind femora and their tarsi fuscous or subfuscous, the tibial spurs and the first joint of hind tarsi at base, yellowish-white. Wings hyaline, the stigma and veins except the subcostal, median and submedian veins basally, brown.

The abdomen, except the membranous lateral margins of the first dorsal segment and a large translucent or semitranslucent spot on the second ventral segment, is black and shining; the plate of the first segment is long, narrow, and slightly narrowed towards apex; the second segment is shorter than the third, has two oblique furrows and its surface is feebly alutaceous, especially along the furrows.

Male.—Differs from the female principally in the color of the legs. The hind femora, base of middle femora and the apical half of the hind tibiæ and their tarsi are fuscous; otherwise, except in the sexual abdominal differences, it is scarcely separable from the female.

Type.—Cat. No. 5704, U. S. Nat. Museum. From Virgin Bay, June 26; Farragut Bay, June 5; Yakutat, June 21.

PROTAPANTELES GLACIALIS sp. nov.

Male.—Length 2.1 mm. Black; face and thorax above very finely punctulate, sericeous; palpi beneath yellowish, above fuscous; legs mostly black, the front trochanters beneath, their femora beneath and at apex, their tibiæ wholly, and their tarsi beneath, apices of middle femora, bases of their tibiæ, and the knees of hind legs, honey-yellow, or testaceous. Wings hyaline, the stigma and stigmal vein brown, the internal and basal veins pallid. The abdomen, except the lateral membranous margins of segments 1 and 2 which are brown, is black and shining; the plate of the first segment is oblong, nearly the same width throughout, alutaceous and subopaque; while the second segment is shorter than the third, has two oblique furrows and is finely aciculate.

Type.—Cat. No. 5705, U. S. Nat. Museum. From Muir Inlet, June 12. One specimen.

PROTAPANTELES ALTICOLA sp. nov.

Male and Female.—Length 2.6 to 3 mm. Black; mandibles ferruginous; palpi yellowish; legs, except the hind coxæ and last joint of tarsi, ferruginous, the hind coxæ black, the last joint of tarsi fuscous; sometimes there is a dusky or fuscous streak on the middle and hind femora *above*. Wings hyaline, the tegulæ yellowish, the stigma and veins brown. Head and thorax smooth or nearly so, at most with some sparse, microscopic punctures, the face with a median ridge, the

metathorax alutaceous, without trace of carinæ. The abdomen is much compressed towards apex, black and shining, with the lateral membranous margins of the first segment yellowish; the plate of the first segment is long, narrowed towards apex, fully thrice as long as wide at base; the second segment is shorter than the third, with two oblique furrows, the plate formed by the furrows being trapezoidal in outline and very delicately aciculate.

Male.—Differs from female in being longer and with longer antennæ, in having the apical half of the hind tibiæ and their tarsi fuscous, and in having the lateral margins of the first and second segments, and the third suture, yellowish.

Type.—Cat. No. 5706, U. S. Nat. Museum. From St. Paul Island, August 16 (Fur Seal Commission). Four specimens.

Genus *Apanteles* Förster.

APANTELES YAKUTATENSIS sp. nov.

Female.—Length 2.5 mm. Black; mandibles, except at base and the teeth, rufous; palpi yellowish; legs, except coxæ, first joint of trochanters, apices of hind femora, and their tarsi ferruginous; coxæ and first joint of trochanters black; apices of hind femora and their tarsi fuscous; middle and front tarsi above subfuscous. Wings hyaline, the stigma and apices of the costæ dark brown, the internal veins paler, the costal veins toward base yellowish, the tegulæ piceous black.

The head above is polished, impunctate, the face sparsely but distinctly punctate; thorax above, except a space laterally above and in front of the tegulæ, closely punctate; the scutellum is smooth or nearly so; the mesopleura on disk above and beyond the median impression are smooth and highly polished but anteriorly and below the middle they are finely punctate; while the metathorax is rather coarsely rugose, the median carina being almost entirely obliterated. The abdomen, except the first and the second segments which are rugulose, is smooth and polished; the third dorsal segment is somewhat shorter than the second.

Type.—Cat. No. 5707, U. S. Nat. Museum. From Yakutat, June 21. Two specimens.

Genus *Microplitis* Förster.

MICROPLITIS ALASKENSIS sp. nov.

Female.—Length 3.6 mm. Black, closely punctate; palpi yellow, with the basal joints black; legs ferruginous, with all coxæ and tro-

chanters black, except the second joint of trochanters, base of middle and hind femora, extreme apex of hind tibiæ and their tarsi; tegulæ piceous black. Wings hyaline, the costæ to near apex, a spot at base of stigma and most of the internal veins brownish-yellow, the apices of the costal veins, stigma and post-stigmal vein dark brown. Metathorax coarsely rugose, the pleural carinæ strongly elevated, the median carina distinct. The abdomen, except the first segment which is rugulose, and the second segment which is feebly alutaceous, with a broad median swelling, is smooth and polished.

Type.—Cat. No. 5708, U. S. Nat. Museum. From Juneau, July 25. One specimen.

Subfamily *ICHNEUTINÆ*.

Genus *Ichneutes* Nees.

ICHNEUTES REUNITOR Nees.

Ichneutes reunitor NEES, Mag. Ges. naturf. Fr. Berlin, VII, p. 276; Tom. 7, f. 5, 1813.—WESMAEL, Nouv. Mém. Acad. Sc. Bruxelles, XI, p. 156, 1838.—BLANCHARD, Hist. Nat. Inst., III, p. 335, 1840.—WESTWOOD, Intro. Mod. Class. Ins., II, Synop., p. 63, 1840.—RATZBURG, Ichn. d. Forstins., III, p. 69, 1852.—FÖRSTER, Verh. Naturh. Ver. pr. Rheinl. XIX, p. 255, 1862.—MARSHALL, Ent. Mo. Mag., XII, p. 195, 1876.—MARSHALL, Trans. Ent. Soc. London, p. 183, 1889.—MARSHALL, in André's Spec. Hym. Eur., V, p. 211, 1893.—THOMSON, Opus. Ent. Fasc., 20, p. 2214, 1895.—DALLA TORRE, Cat. Hym., IV, p. 88, 1898

From Popof Island, July 11. Two specimens.

Parasitic in the larvæ of saw-flies, belonging to the family Nematidæ, and is widely distributed over Europe from the Arctic Circle to the Mediterranean. Here first recorded from North America.

ICHNEUTES POPOFENSIS sp. nov.

Male.—Length 3 mm. Black, shining, and clothed with a sparse, glittering white pubescence; mandibles rufous, black basally; palpi and the legs, except the coxæ and the middle and hind trochanters which are black, pale ferruginous.

The antennæ are 27-jointed, as long as the body, slender toward tips, the third joint the longest, not quite as long as joints 4 and 5 united, joint 8 and joints beyond, a little more than twice longer than thick. Wings hyaline, the costæ, outer margins of parastigma and the stigma, brown black, the stigma within and the internal veins brownish-yellow; the first abscissa of the radius is hardly developed, not larger than the very short, second transverse cubitus, and leaving the second cubital cell subsessile. The metathorax is coarsely rugulose,

without an areola. The abdomen is elongate, the first segment long and narrowed towards base, shagreened, with a longitudinal median elevation, the dorsal carinæ only distinct basally, the second segment, except very feebly in the basal depressions, and the following segments being smooth and impunctate.

Type.—Cat. No. 5709, U. S. Nat. Museum. From Popof Island, July 9. One specimen.

ICHNEUTES ALASKENSIS sp. nov.

Male.—Length 4 mm. Resembles *I. popofensis* but the palpi are subfuscous, the antennæ shorter, 24-jointed, the legs darker, the middle femora basally, the hind femora, their tibiæ, except basally and beneath, and their tarsi being black or dark fuscous, the first abscissa of the radius is distinct, half the length of the first transverse cubitus, while the first and second abdominal segments are coarsely rugulose, the first segment being broad and having the dorsal carinæ distinct to at least the middle.

Type.—Cat. No. 5710, U. S. Nat. Museum. From Popof Island, July 11. One specimen.

Subfamily OPIINÆ.

Genus *Desmiostoma* Förster.

DESMIOSTOMA KUKAKENSE sp. nov.

Female.—Length 3 mm.; ovipositor very short, subexserted, the sheaths black. Polished black, impunctate; clypeus and mandibles rufous; palpi, pedicel narrowly at apex, tegulæ, and the legs, except the hind coxæ, pale brownish-yellow, the hind coxæ basally and posteriorly blackish. Wings hyaline, the lanceolate stigma and the veins light brownish.

The antennæ are longer than the body; the mesonotum has an elongate, median, crenate fovea posteriorly just in front of the scutellum, the parapsidal furrows not being defined except far anteriorly on the slope where they are deep and crenate; the scutellum has a transverse crenate furrow across its base; while the metathorax is rugulose without carinæ. Wings with the venation normal, the submedian cell longer than the median, the first recurrent nervure being almost interstitial with the first transverse cubitus, while the second cubital cell is elongate, the second abscissa of the radius being somewhat more than twice the length of the first. Abdomen long oval,

smooth and impunctate, except the first segment which is longitudinally striate.

Male.—Differs from female in having the antennæ longer, a faint median carina on the metathorax and in having the hind coxæ yellow, not black.

Type.—Cat. No. 5711, U. S. Nat. Museum. From Kukak Bay, July 4; Seldovia, July 21.

Subfamily *BRACONINÆ*.

Tribe *BRACONINI*.

Genus *Macrodyctium* Ashmead.

MACRODYCTIUM POLITUM sp. nov.

Female.—Length 3 mm.; ovipositor scarcely one third the length of the abdomen. Polished black, impunctate, except the second abdominal segment which has some longitudinal aciculations at its basal middle; mandibles rufous; palpi fuscous; second joint of trochanters, apical third of front femora and their tibiæ, and the middle and hind tibiæ basally honey-yellow. Wings hyaline, the stigma and veins brown, the tegulæ black.

Type.—Cat. No. 5712, U. S. Nat. Museum. From Kukak Bay, July 4. One specimen.

Subfamily *RHOGADINÆ*.

Tribe *EXOTHECUS*.

Genus *Exothecus* Wesmael.

EXOTHECUS ALASKENSIS sp. nov.

Female.—Length 2 mm.; ovipositor less than half the length of the abdomen. Polished black, impunctate, except the collar and the metathorax which are finely rugulose, opaque, and the first segment of abdomen which is longitudinally striate; remainder of abdomen smooth and shining, black, except dorsal segments 2 and 3 which, in certain lights, have a rufopiceous tinge; the palpi and a minute annulus at base of first joint of the flagellum are white or yellowish-white; tegulæ and legs brownish-yellow. Wings hyaline, the stigma lanceolate, pallid within, its outer margins and the internal veins being light brownish.

Type.—Cat. No. 5713, U. S. Nat. Museum. From Popof Island, July 10.

Tribe *RHOGADINII*.Genus *Rhogas* Nees.*RHOGAS HARRIMANI* sp. nov.

Male.—Length 7 mm. Black; an annulus at base of first joint of flagellum, the second dorsal abdominal segment, except narrowly at apex, and the legs, except the apices of hind femora, apical third of their tibiæ and their tarsi, ferruginous; palpi yellowish.

The antennæ are longer than the body; the first joint of the flagellum is the longest, the following joints subequal, all being longer than thick. The head and thorax are finely coriaceous and also punctate, the transverse depression on the pronotum with short elevated lineations, the parapsidal furrows distinct, the mesopleura with a large shining spot at the middle and posteriorly, the metathorax rugulose with distinct pleural and median carinæ, while the metapleura, except at margins, are highly polished. The abdomen is fully as long as the head and the thorax united, with dorsal segments 1 and 2 and base of 3, rugulose, the remainder of the third and the following segments being smooth and shining; segments 1 and 2 have also a longitudinal carina down the center. Wings hyaline, or at most only faintly tinged, the costal veins at apex and the stigma being brown-black, the internal veins light brown, the parastigma and costal and median veins toward their base being yellow; the second cubital cell is oblong and fully twice as long as the first abscissa of the radius, while the submedian cell is very much longer than the median.

Type.—Cat. No. 5714, U. S. Nat. Museum. From Fox Point, July 8. One specimen.

Suborder II. PHYTOPHAGA Latreille.

Superfamily IX. SIRICOIDEA Ashmead.

Family SIRICIDÆ.

Genus *Sirex* Linné.*SIREX FLAVICORNIS* Fabricius.

Sirex flavicornis FABRICIUS, Spec. Insect., I, p. 418, 1781.—FABRICIUS, Mant. Insect., I, p. 257, 1787.—GMELIN, Linné, Syst. Nat. Ed. 13^a, I, p. 2672, 1790.—FABRICIUS, Ent. Syst., II, p. 126, 1793.—FABRICIUS, Syst. Piez., p. 49, 1804.—DALLA TORRE, Cat. Hym., I, p. 385, 1894.—KONOW, Wien. ent. Zeitg., XVII, pp. 75-76, 1898.

Tremex flavicornis LEPELETIER, Encycl. Méth. Ins., x, p. 228, 1825.

Urocerus flavicornis PROVANCHER, Nat. Canad., x, p. 228, 1878.—PROVANCHER, Fn. ent. du Can. Hym., p. 239, 1883.—CRESSON, Syn. Hym. N. Am., p. 173, 1887.—HARRINGTON, Tr. Roy. Soc. Canada, pp. 138, 146, 1893.

From Yukon River; Nushagak River, August 14, 1882 (McKay); Wrangell (H. F. Wickham). This species is widely distributed over British Columbia, Canada and the United States. A single specimen was taken at Kluchefski, Kamchatka, in 1897, by Dr. L. Stejneger.

Superfamily X. **TENTHREDINOIDEA** Ashmead.

Family **LYDIDÆ**.

Genus **Itycorsia** Konow.

ITYCORSIA MARGINIVENTRIS (Cresson).

Lyda marginiventris CRESSON, Trans. Am. Ent. Soc., VIII, p. 29, 1880.—
CRESSON, Syn. Hym. N. Am., p. 170, 1887.

Pamphilius marginiventris KIRBY, List Hym. Brit. Mus., I, p. 345, 1882.—
DALLA TORRE, Cat. Hym., I, p. 433, 1894.

Lyda credita KINCAID, Proc. Wash. Acad. Sci., II, p. 344, 1900.

Type in collection of the American Entomological Society. From Sitka.

Genus **Cephaleia** Jurine.

CEPHALEIA NIGROPECTA (Cresson).

Lyda nigropectus CRESSON, Trans. Am. Ent. Soc., VIII, p. 32, 1880.—CRESSON,
Syn. Hym. N. Am., p. 171, 1887.

Pamphilius nigropectus KIRBY, List Hym., Brit. Mus., I, p. 347, 1882.—
DALLA TORRE, Cat. Hym., I, p. 435, 1894.

?*Canonydus nigropectus* KONOW, An. K. K. Hofmus. Wien., XII, p. 254, 1897.
Cephaleia nigropectus KINCAID, Proc. Wash. Acad. Sci., II, p. 344, 1900.

Type in collection of the American Entomological Society. From Sitka.

Genus **Bactroceros** Konow.

BACTROCEROS SITKENSIS Kincaid.

Bactroceros sitkensis KINCAID, Proc. Wash. Acad. Sci., II, p. 344, 1900.

Type.—Cat. No. 5280, U. S. Nat. Museum. From Sitka.

BACTROCEROS PALACHEI sp. nov.

Cephaleia sp. KINCAID, Proc. Wash. Acad. Sci., II, p. 344, 1900.

Female.—Length 11 mm. Head rufous with a blackish spot on middle of vertex enclosing the ocelli and extending as a narrow line back to the occiput; antennæ broken off after the third joint, the three joints remaining rufous; the clypeus, the cheeks, the mandibles, a short line along the inner margins of the lateral lobes of vertex, a broader line extending from summit of eyes backwards to the occiput, and a short line below it just back of the eyes, yellowish-white; su-

tures of gula black; palpi whitish with the last two joints of the maxillary palpi fuscous. Thorax black, with a spot at apex of scutellum, the upper hind angles of prothorax, the tegulæ, and a spot just in front of the insertion of front coxæ, yellowish-white; legs, except the extreme base of coxæ which is black, and the apex of the hind tibiæ and more or less of their tarsi which are reddish, ivory-white. Wings hyaline, with a very faint indistinct fuscous band across the disk below the stigma, the stigma, the costal, intercostal, lower branch of the subcostal, median and anal veins, yellow, rest of the veins brown. Abdomen reddish, with the first two segments, except medially, and the terminal ventral segment blackish.

Type.—Cat. No. 5741, U. S. Nat. Museum. From Kodiak, July 5 (C. Palache, collector).

Family SELANDRIIDÆ.

Subfamily BLENNOCAMPINÆ.

Genus *Fenusa* Leach.

FENUSA ALASKANA Kincaid.

Fenusa alaskana KINCAID, Proc. Wash. Acad. Sci., II, p. 345, 1900.

Type.—Cat. No. 5281, U. S. Nat. Museum. From Kukak Bay.

Genus *Erythraspides* Ashmead.

ERYTHRASPIDES ASHMEADII Kincaid.

Erythraspides ashmeadii KINCAID, Proc. Wash. Acad. Sci., II, p. 346, 1900.

Type.—Cat. No. 5282, U. S. Nat. Museum. From Sitka.

Genus *Monophadnus* Hartig.

MONOPHADNUS INSULARIS Kincaid.

Monophadnus insularis KINCAID, Proc. Wash. Acad. Sci., II, p. 346, 1900.

Type.—Cat. No. 5283, U. S. Nat. Museum. From Metlakatla.

Subfamily SELANDRIINÆ.

Paraselandria Ashmead.

PARASELANDRIA RUFIGASTRA Kincaid.

Paraselandria rufigastria KINCAID, Proc. Wash. Acad. Sci., II, p. 346, 1900.

Type.—Cat. No. 5284, U. S. Nat. Museum. From Kukak Bay.

Genus *Pæcilostomidea* Ashmead.

PÆCILOSTOMIDEA MACULATA (Norton).

- Harpiphorus maculatus* NORTON, Proc. Boston Soc. Nat. Hist., VIII, p. 157, 1861.—PROVANCHER, Add. Fn. Can. Hym., p. 348, 1888.—HARRINGTON, Ins. Life, II, pp. 227-228, 1890.
- Emphytus maculatus* RILEY, Prairie Farmer, May, 1867.—NORTON, Trans. Am. Ent. Soc., I, p. 232, 1867.—RILEY, Am. Ent., I, pp. 90-91, fig. 76, 1869.—NORTON, Trans. Am. Ent. Soc., IV, p. 80, 1872.—SAUNDERS, Fourth Rep. Ontario Ent. Soc., p. 18, 1873-74.—RILEY, Ninth Rep. Ins. Missouri, pp. 28-29, fig. 10, 1877.—THOMAS, Seventh Rep. Ins. Illinois, p. 111, 1877-78.—PROVANCHER, Nat. Can., X, p. 69, 1878.—FULLER, Amer. Entom., III, p. 109, fig. 36, 1880.—PROVANCHER, Fn. ent. du Can. Hym., p. 195, 1883.—THOMAS, Tenth Rep. Ins. Illinois, p. 68, 1883-84.—FORBES, Fourteenth Rep. Ins. Illinois, p. 77, 1884-85. CRESSON, Syn. Hym. N. Am., p. 160, 1887.
- Pæcilostomidea maculatus* ASHMEAD, Smith's Ins. New Jersey, p. 606, 1900.—KINCAID, Proc. Wash. Acad. Sci., II, p. 346, 1900.
From Sitka, Yakutat, Virgin Bay.

Family NEMATIDÆ.

Subfamily NEMATINÆ.

Genus *Pachynematus* Konow.

PACHYNEMATUS OCREATUS (Harrington).

- Nematus ocreatus* HARRINGTON, Can. Ent., XXI, p. 25, 1889.
- Pachynematus ocreatus* MARLATT, Techn. Ser., No. 3, U. S. Dept. Agric., p. 95, 1896.—KINCAID, Proc. Wash. Acad. Sci., II, p. 347, 1900.
- Co-type*.—Cat. No. 3488, U. S. Nat. Museum. From Sitka.

PACHYNEMATUS AFFINIS Marlatt.

- Pachynematus affinis* MARLATT, Techn. Ser., No. 3, U. S. Dept. Agric., p. 97, ♀♂, 1896.—KINCAID, Proc. Wash. Acad. Sci., II, p. 347, 1900.
- Type*.—Cat. No. 1943, U. S. Nat. Museum. From Popof Island.

PACHYNEMATUS ORONUS Kincaid.

- Pachynematus oronus* KINCAID, Proc. Wash. Acad. Sci., II, p. 347, 1900.
- Type*.—Cat. No. 5285, U. S. Nat. Museum. From Yakutat Bay.

PACHYNEMATUS PLEURICUS (Norton).

- Nematus pleuricus* NORTON, Trans. Am. Ent. Soc., I, p. 208, ♀, 1867.—CRESSON, Syn. Hym. N. Am., p. 159, 1887.—DALLA TORRE, Cat. Hym., I, p. 251, 1894.
- Pachynematus pleuricus* MARLATT, Techn. Ser., No. 3, U. S. Dept. Agric., p. 100, 1896.—KINCAID, Proc. Wash. Acad. Sci., II, p. 348, 1900.

Type.—Cat. No. 5286, U. S. Nat. Museum (male). From Kukak Bay.

PACHYNEMATUS ORARIUS Kincaid.

Pachynematus orarius KINCAID, Proc. Wash. Acad. Sci., II, p. 348, ♀, 1900.

Type.—Cat. No. 5287, U. S. Nat. Museum. From Kukak Bay; Sitka.

PACHYNEMATUS GOTARUS Kincaid.

Pachynematus gotarus KINCAID, Proc. Wash. Acad. Sci., II, p. 348, ♂, 1900.

Type.—Cat. No. 5288, U. S. Nat. Museum. From Popof Island.

Genus **Nematus** Jurine.

NEMATUS LONGICORNIS Eschscholtz.

Nematus longicornis ESCHSCHOLTZ, Entomogr., p. 95, 1822.—ESCHSCHOLTZ, Naturw. Abh. Dorpat, I, p. 149, 1843.—NORTON, Trans. Am. Ent. Soc., I, p. 202, 1867.—CRESSON, Syn. Hym. N. Am., p. 158, 1887.—DALLA TORRE, Cat. Hym., II, p. 235, 1894.

From Unalaska.

NEMATUS CRASSUS Eschscholtz.

Nematus crassus ESCHSCHOLTZ, Entomogr., p. 93, 1822.—ESCHSCHOLTZ, Naturw. Abh. Dorpat, I, p. 149, 1825.—NORTON, Trans. Am. Ent. Soc., I, p. 213, 1867.—CRESSON, Syn. Hym. N. Am., p. 158, 1887.

From Unalaska.

Genus **Pristiphora** Latreille.

PRISTIPHORA ORTINGA Kincaid.

Pristiphora ortinga KINCAID, Proc. Wash. Acad. Sci., II, p. 349, ♀, 1900.

Type.—Cat. No. 5290, U. S. Nat. Museum. From Kukak Bay.

PRISTIPHORA ANAKA Kincaid.

Pristiphora anaka KINCAID, Proc. Wash. Acad. Sci., II, p. 350, ♀, 1900.

Type.—Cat. No. 5291, U. S. Nat. Museum. From Kukak Bay.

PRESTIPHORA CIRCULARIS Kincaid.

Prestiphora circularis KINCAID, Proc. Wash. Acad. Sci., II, p. 350, ♀, 1900.

Type.—Cat. No. 5292, U. S. Nat. Museum. From Popof Island.

PRISTIPHORA BUCODA Kincaid.

Pristiphora bucoda KINCAID, Proc. Wash. Acad. Sci., II, p. 350, ♀, 1900.

Type.—Cat. No. 5289, U. S. Nat. Museum. From Berg Bay; Sitka.

PRISTIPHORA KÆBELEI Marlatt.

Pristiphora kæbelei MARLATT, Bull. No. 3, Tech. Ser. U. S. Dept. Agric., p. 119, ♀, 1896.—KINCAID, Proc. Wash. Acad. Sci., II, p. 351, 1900.

Type.—Cat. No. 1960, U. S. Nat. Museum. From State of Washington; Alaska; Kukak Bay.

PRISTIPHORA LENA Kincaid.

Pristiphora lena KINCAID, Proc. Wash. Acad. Sci., II, p. 351, ♂, 1900.

Type.—Cat. No. 5293, U. S. Nat. Museum. From Sitka.

Genus **Euura** Newman.

EUURA INSULARIS Kincaid.

Euura insularis KINCAID, Proc. Wash. Acad. Sci., II, p. 352, ♀♂, 1900.

Type.—Cat. No. 5302, U. S. Nat. Museum. From Popof Island.

Genus **Pontania** Costa.

PONTANIA TUNDRA Kincaid.

Pontania tundra KINCAID, Proc. Wash. Acad. Sci., II, p. 352, ♀♂, 1900.

Type.—Cat. No. 5296, U. S. Nat. Museum. From Popof Island.

PONTANIA POPOFIANA Kincaid.

Pontania popofiana KINCAID, Proc. Wash. Acad. Sci., p. 353, ♀♂, 1900.

Type.—Cat. No. 5294, U. S. Nat. Museum. From Popof Island.

PONTANIA UNGA Kincaid.

Pontania unga KINCAID, Proc. Wash. Acad. Sci., II, p. 354, ♀, 1900.

Type.—Cat. No. 5298, U. S. Nat. Museum. From Popof Island.

PONTANIA ORA Kincaid.

Pontania ora KINCAID, Proc. Wash. Acad. Sci., II, p. 354, ♀, 1900.

Type.—Cat. No. 5297, U. S. Nat. Museum. From Popof Island.

PONTANIA PENINSULARIS Kincaid.

Pontania peninsularis KINCAID, Proc. Wash. Acad. Sci., II, p. 354, ♀, 1900.

Type.—Cat. No. 5301, U. S. Nat. Museum. From Kukak Bay.

PONTANIA ISLANDICA Kincaid.

Pontania islandica KINCAID, Proc. Wash. Acad. Sci., II, p. 355, ♀, 1900.

Type.—Cat. No. 5299, U. S. Nat. Museum. From Popof Island.

PONTANIA GLINKA Kincaid.

Pontania glinka KINCAID, Proc. Wash. Acad. Sci., II, p. 355, ♀♂, 1900.

Type.—Cat. No. 5295, U. S. Nat. Museum. From Popof Island.

PONTANIA KUKAKIANA Kincaid.

Pontania kukakiana KINCAID, Proc. Wash. Acad. Sci., II, p. 356, ♀, 1900.

Type.—Cat. No. 5300, U. S. Nat. Museum. From Kukak Bay.

Genus **Pteronus** Jurine.

PTERONUS SHUMAGENSIS Kincaid.

Pteronus shumagensis KINCAID, Proc. Wash. Acad. Sci., II, p. 357, ♀, 1900.

Type.—Cat. No. 5303, U. S. Nat. Museum. From Popof Island.

PTERONUS ZEBRATUS Kincaid.

Pteronus zebratus KINCAID, Proc. Wash. Acad. Sci., II, p. 357, ♀, 1900.

Type.—Cat. No. 5305, U. S. Nat. Museum. From Yakutat.

PTERONUS RIVULARIS Kincaid.

Pteronus rivularis KINCAID, Proc. Wash. Acad. Sci., II, p. 358, ♂, 1900.

Type.—Cat. No. 5304, U. S. Nat. Museum. From Sitka.

Genus **Amauronematus** Konow.

AMAURONEMATUS ISOLATUS Kincaid.

Amauronematus isolatus KINCAID, Proc. Wash. Acad. Sci., II, p. 358, ♀, 1900.

Type.—Cat. No. 5306, U. S. Nat. Museum. From St. Paul Island.

Family **TENTHREDINIDÆ**.Subfamily *DOLERINÆ*.Genus **Dolerus** Jurine.

DOLERUS APRILIS (Norton).

Dosytheus aprilis NORTON, Proc. Boston Soc. Nat. Hist., VIII, p. 151, ♀♂, 1861.—CRESSON, Proc. Ent. Soc. Phila., IV, p. 243, 1865.—NORTON, Trans. Am. Ent. Soc., I, p. 236, 1867.—PROVANCHER, Nat. Canad., X, p. 71, 1878.—PROVANCHER, Fn. ent. du Can. Hym., p. 197, 1883.—CRESSON, Syn. Hym. N. Am., p. 161, 1887.—DALLA TORRE, Cat. Hym., I, p. 3, 1894.—ASHMEAD, Smith's Ins. New Jersey, p. 609, 1900.—KINCAID, Proc. Wash. Acad. Sci., II, p. 359, 1900.

From Orca, Virgin Bay, Yakutat, Kukak Bay.

DOLERUS ELDERI Kincaid.

Dolerus elderi KINCAID, Proc. Wash. Acad. Sci., II, p. 359, ♀♂, 1900.

Type.—Cat. No. 5307, U. S. Nat. Museum. From Popof Island, Kukak Bay.

DOLERUS SERICEUS Say.

Dolerus sericeus SAY, Keatings Narrat. Exp., II, App., p. 320, ♀♂, 1824.—LECONTE, Ed. Say., II, p. 214, 1859.—NORTON, Proc. Boston Soc. Nat. Hist., VIII, p. 154, 1861.—PROVANCHER, Natur. Canad., X, p. 71, 1878.—PROVANCHER, Fn. ent. du Can. Hym., p. 197, 1883.—CRESSON, Syn. Hym. N. Am., p. 161, 1887.—DALLA TORRE, Cat. Hym., I, p. 17, 1894.—ARTEMAN, Smith's Ins. New Jersey, p. 609, 1900.—KINCAID, Proc. Wash. Acad. Sci., II, p. 359, 1900.

From Yakutat, Berg Bay, Sitka, Virgin Bay, Kodiak.

DOLERUS SIMILIS (Norton).

Dosytheus similis NORTON, Proc. Boston Soc. Nat. Hist., VIII, p. 153, ♀, 1861.—NORTON, Trans. Amer. Ent. Soc., I, p. 238, 1867.—PROVANCHER, Nat. Can., X, p. 72, 1878.—PROVANCHER, Fn. ent. du Can. Hym., p. 198, 1883.—CRESSON, Syn. Hym. N. Am., p. 161, 1887.—DALLA TORRE, Cat. Hym., I, p. 171, 1894.—ASHMEAD, Smith's Ins. New Jersey, p. 609, 1900.

From Yukon River.

Subfamily *STRONGYLOGASTERINÆ*.Genus *Emphytus* Klug.*EMPHYTUS ANGUSTUS* Kincaid.

Emphytus angustus KINCAID, Proc. Wash. Acad. Sci., II, p. 360, ♂, 1900.

Type.—Cat. No. 5308, U. S. Nat. Museum. From Kukak Bay.

Subfamily *TENTHREDININÆ*.Genus *Pachyprotasis* Hartig.*PACHYPROTASIS NIGROFASCIATA* (Eschscholtz).

Tenthredo nigrofasciata ESCHSCHOLTZ, Entomogr., p. 96, 1822.—ESCHSCHOLTZ, Naturw. Abh. Dorpat, I, p. 148, 1823.—NORTON, Trans. Am. Ent. Soc., II, p. 241, 1869.—CRESSON, Syn. Hym. N. Am., p. 168, 1887.

Emphytus? nigrofasciatus KIRBY, List Hym. Brit. Mus., I, p. 204, 1882.—DALLA TORRE, Cat. Hym., I, p. 119, 1894.

Macrophya (Pachyprotasis) omega NORTON, Trans. Am. Ent. Soc., I, p. 280, ♀♂, 1867.

Pachyprotasis omega PROVANCHER, Nat. Can., X, p. 108, 1878.—PROVANCHER, Fn. ent. du Can. Hym., p. 210, 1883.—CRESSON, Syn. Hym. N. Am., p. 166, 1887.—DALLA TORRE, Cat. Hym., I, p. 43, 1894.

Pachyprotasis nigrofasciata KINCAID, Proc. Wash. Acad. Sci., II, p. 360, 1900.

From Unalaska, Popof Island, Unga, Virgin Bay.

Genus **Macrophya** Dahlbom.

MACROPHYA OREGONA Cresson.

Macrophya oregona CRESSON, Trans. Am. Ent. Soc., VIII, p. 19, ♀, 1880.—
CRESSON, Syn. Hym. N. Am., p. 166, 1887.—DALLA TORRE, Cat. Hym.,
I, p. 55, 1894.—KINCAID, Proc. Wash. Acad. Sci., II, p. 361, 1900.

Type in collection of the American Entomological Society. From
Seldovia.

Genus **Tenthredo** Linné.

TENTHREDO AURARIA Konow.

Tenthredo auraria KONOW, Ent. Nachr., xxv, p. 154, ♀, 1899.

From Wrangell.

TENTHREDO FERRUGINEIPES Cresson.

Tenthredo ferrugineipes CRESSON, Trans. Am. Ent. Soc., VIII, p. 22, ♀, 1880.
—CRESSON, Syn. Hym. N. Am., p. 168, 1887.—DALLA TORRE, Cat.
Hym., I, p. 91, 1894.—KINCAID, Proc. Wash. Acad. Sci., II, p. 361,
♀♂, 1900.

Type in collection of the American Entomological Society. From
Sitka, Virgin Bay, Seldovia, Kodiak, Kukak Bay, Popof Island.

TENTHREDO VARIPICTA Norton.

Tenthredo varipicta NORTON, Trans. Am. Ent. Soc., II, p. 234, ♀, 1868.—
CRESSON, Syn. Hym. N. Am., p. 169, 1887.—DALLA TORRE, Cat.
Hym., I, p. 106, 1894.—KINCAID, Proc. Wash. Acad. Sci. II, p. 361, 1900.

Type in collection of the American Entomological Society. From
Fox Point, Berg Bay, Sitka, Yakutat, Seldovia, Kodiak, Kukak Bay,
Popof Island.

TENTHREDO EVANSII (Harrington).

Tenthredopsis Evansii HARRINGTON, Can. Ent., XXI, p. 98, 1889.—DALLA
TORRE, Cat. Hym., I, p. 30, 1894.

Tenthredo Evansii KINCAID, Proc. Wash. Acad. Sci., II, p. 362, ♀♂, 1900.

Type in collection of W. H. Harrington, Ottawa, Canada. From
Sitka, Yakutat, Kodiak, Virgin Bay.

TENTHREDO LINEATA Provancher.

Tenthredo lineata PROVANCHER, Natural. Can., x, p. 198, ♀, 1878.—CRES-
SON, Trans. Am. Ent. Soc., VIII, p. 43, 1880.—PROVANCHER, Fn. ent.
Can. Hym., p. 224, 1883.—CRESSON, Syn. Hym. N. Am., p. 168,
1887.—DALLA TORRE, Cat. Hym., I, p. 95, 1894.—ASHMEAD, Smith's
Ins. New Jersey, p. 612, 1900.—KINCAID, Proc. Wash. Acad. Sci., II,
p. 362, 1900.

Type in Parliament Building, Quebec, Canada. From Sitka, Virgin
Bay, Gustavus Point, Seldovia.

Proc. Wash. Acad. Sci., May, 1902.

TENTHREDO FLAVOMARGINIS (Norton).

Allantus flavomarginis NORTON, Journ. Boston Soc. Nat. Hist., VII, p. 254, ♀, 1860.

Tenthredo flavomarginis NORTON, Trans. Am. Ent. Soc., II, p. 238, 1869.—CRESSON, Syn. Hym. N. Am., p. 168, 1887.—DALLA TORRE, Cat. Hym., I, p. 93, 1894.—ASHMEAD, Smith's Ins. New Jersey, p. 611, 1900.—KINCAID, Proc. Wash. Acad. Sci., II, p. 362, 1900.

Type in collection of the American Entomological Society. From Berg Bay, Yakutat, Seldovia.

TENTHREDO NIGRICOLLIS Kirby.

Tenthredo nigricollis KIRBY, List Hym. Brit. Mus., I, p. 308, ♀, pl. 12, f. 3, 1882.—CRESSON, Syn. Hym. N. Am., p. 168, 1887.—DALLA TORRE, Cat. Hym., I, p. 99, 1894.—KINCAID, Proc. Wash. Acad. Sci., II, p. 362, 1900.

? *Tenthredo semicomis* HARRINGTON, Can. Ent., XXI, p. 98, ♂, 1889.—DALLA TORRE, Cat. Hym., I, p. 104, 1894.

Type in British Museum. From Sitka, Seldovia, Kukak Bay.

TENTHREDO ERYTHROMERA Provancher.

Tenthredo erythromera PROVANCHER, Add. Fn. du Can. Hym., p. 13, ♀, 1885.—CRESSON, Syn. Hym. N. Am., p. 168, 1887.—DALLA TORRE, Cat. Hym., I, p. 90, 1894.—KINCAID, Proc. Wash. Acad. Sci., II, p. 363, 1900.

Type in Parliament Building, Quebec, Canada. From Sitka, Metlakatla, Muir Inlet, Seldovia, Kukak Bay, Yakutat, Kodiak.

TENTHREDO MELANOSOMA Harrington.

Tenthredo melanosoma HARRINGTON, Can. Ent., XXVI, p. 194, ♀, 1894.—KINCAID, Proc. Wash. Acad. Sci., II, p. 363, 1900.

Type in collection of W. H. Harrington, Ottawa, Canada. From Wrangell, Sitka, Seldovia, Yakutat, Kodiak.

TENTHREDO HARRIMANI Kincaid.

Tenthredo harrimani KINCAID, Proc. Wash. Acad. Sci., II, p. 363, ♀, 1900.

Type.—Cat. No. 5310, U. S. Nat. Museum. From Popof Island.

TENTHREDO DISSIMULANS Kincaid.

Tenthredo dissimulans KINCAID, Proc. Wash. Acad. Sci., II, p. 363, ♀♂, 1900.

Type.—Cat. No. 5312, U. S. Nat. Museum. From Popof Island, Kukak Bay.

TENTHREDO BIVITTATA Kincaid.

Tenthredo bivittata KINCAID, Proc. Wash. Acad. Sci., II, p. 364, ♀, 1900.

Type.—Cat. No. 5311, U. S. Nat. Museum. From Popof Island.

Genus *Allantus* Jurine.

ALLANTUS HERACLEI Kincaid.

Allantus heraclei KINCAID, Proc. Wash. Acad. Sci., II, p. 364, ♀, 1900.

Type.—Cat. No. 5309, U. S. Nat. Museum. ♂ From Popof Island.

Family CIMBICIDÆ.

Subfamily CIMBICINÆ.

Genus *Cimbex* Olivier.

CIMBEX AMERICANA Leach.

Tenthredo femorata ABBOT (*nec* Linné), Drawings Ins. of Georgia, XII, pl. 61, ♀, 1792.

Cimbex Americana LEACH, Zool. Miscell., III, p. 104, ♂, 1817.—LEPELETIER, Monogr. Tenthred., p. 33, 1823.—HARRIS, Treat. Ins. Inj. Veg. Mass., p. 374, 1841.—NORTON, Proc. Ent. Soc. Phila., I, pp. 201–202, 1862.—NORTON, Trans. Am. Ent. Soc., I, p. 40, ♀♂, 1867.—PROVANCHER, Natural Can., x, p. 16, f. 2, 1878.—PROVANCHER, Fn. ent. du Can. Hym., p. 177, f. 28, 1883.—RILEY, Rep. Agri. Dept., pp. 334–336, pl. 5, f. 1^{a-k}, 1884.—MINOT, Arch. Mikr. Anat., XVIII, p. 37 ff., pl. 7, 1886.—CRESSON, Syn. Hym. N. Am., p. 177, 1887.—WEBSTER, Ins. Life, II, pp. 228–230, f. 45, 1890.—PACKARD, Rep. U. S. Ent. Comm., v, p. 584, f. 194, 1890.—TOWNSEND, Can. Ent., XXIV, p. 126, 1892.—ALDRICH, Can. Ent., XXIV, p. 144, 1892.—DALLA TORRE, Cat. Hym., I, p. 369, 1894.—KINCAID, Proc. Wash. Acad. Sci., II, p. 365, 1900.

From Kodiak.

Genus *Trichiosoma* Leach.

TRICHIOSOMA TRIANGULUM Kirby.

Trichiosoma triangulum KIRBY, Faun. Bor. Amer., IV, p. 254, 1837.—NORTON, Proc. Ent. Soc. Phila., III, p. 5, 1864.—NORTON, Trans. Am. Ent. Soc., I, p. 43, ♀♂, 1867.—BETHUNE, Can. Ent., VIII, p. 158, 1875.—PROVANCHER, Natural Can., x, p. 17, 1878.—PROVANCHER, Fn. ent. du Can. Hym., p. 177, 1883.—CRESSON, Syn. Hym. N. Am., p. 156, 1887.—DALLA TORRE, Cat. Hym., I, p. 365, 1894.—ASHMEAD, Smith's Ins. New Jersey, p. 612, 1900.

Type in British Museum. From Nushagak River (Chas. W. McKay).

TRICHIOSOMA ALEUTIANUM Cresson.

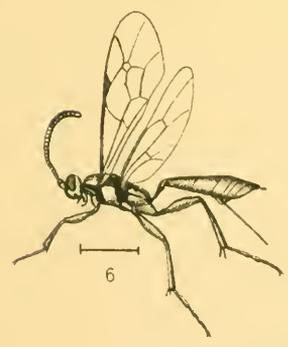
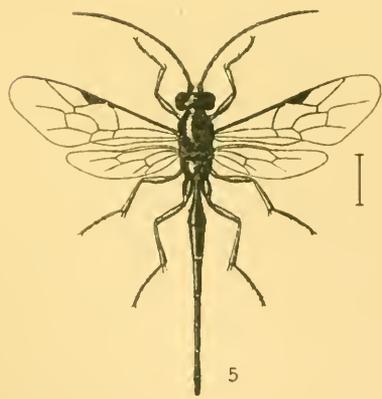
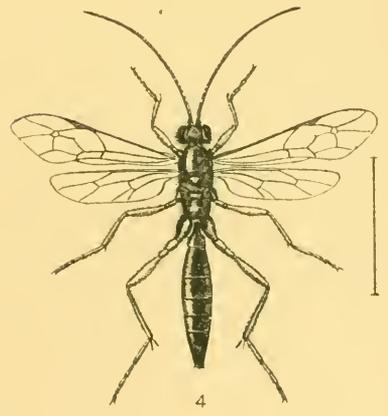
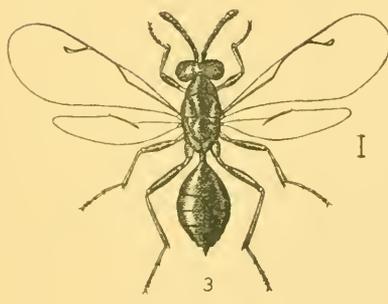
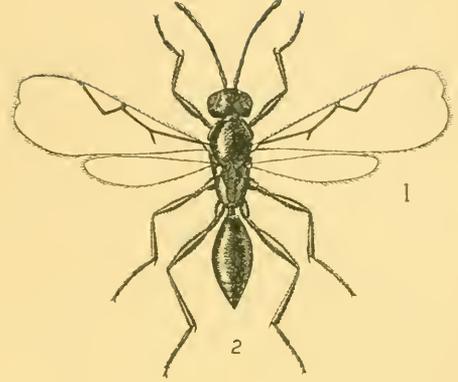
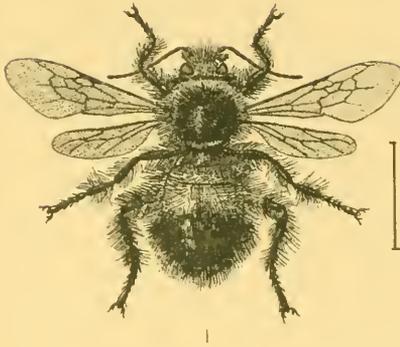
Trichiosoma aleutianum CRESSON, Trans. Am. Ent. Soc., VIII, p. I, ♀, 1880.—*Trichiosoma triangulum* var. *aleutianum* CRESSON, Syn. Hym. N. Am., p. 156, 1887.—DALLA TORRE, Cat. Hym., I, p. 366, 1894.—KINCAID, Proc. Wash. Acad. Sci., II, p. 365, 1900.

Type in collection of the American Entomological Society. From Aleutian Islands, Kukak Bay, Kodiak, Popof Island.

PLATE IX.

- FIG. 1. *Psithyrus kodiakensis* Ashm. ♂.
2. *Tetrarhapta alaskensis* Ashm. ♀.
3. *Terobia vulgaris* Ashm. ♀.
4. *Automalus nigropilosus* Ashm. ♂.
5. *Exolytus clypeatus* Ashm. ♀.
6. *Plectocryptus yakutatensis* Ashm. ♀.

The black hair-line at the side or beneath the figures represents the natural length of the specimen.



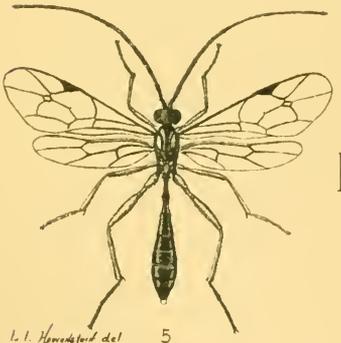
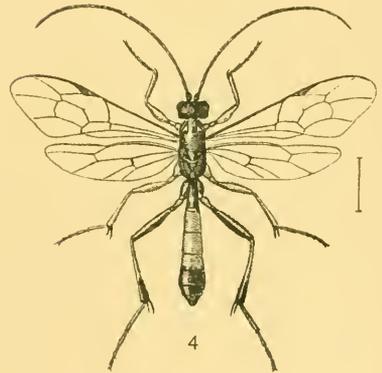
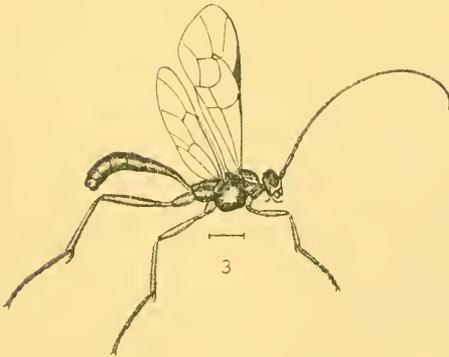
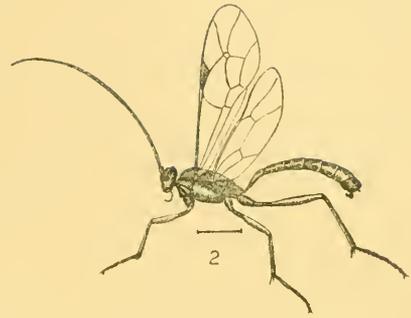
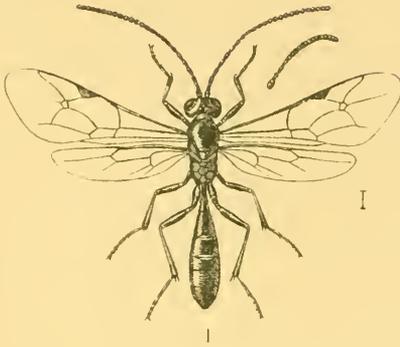
L. L. Howard, del.

Helwig & Co. Scars.

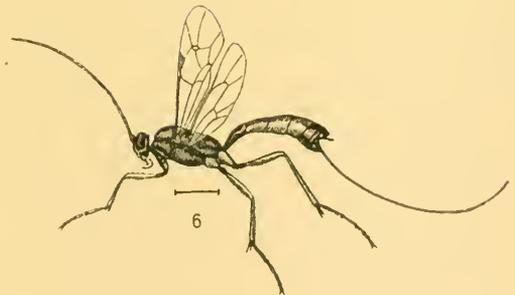
ALASKA HYMENOPTERA.

PLATE X.

- FIG. 1. *Bathymetis simillima* Ashm. ♂.
2. *Harrimaniella yakutatensis* Ashm. ♂
3. *Trevoria yakutatensis* Ashm.
4. *Hyposyntactus flavifrons* Ashm. ♂.
5. *Dallatorrea armata* Ashm. ♂.
6. *Pimplopterus alaskensis* Ashm. ♀.



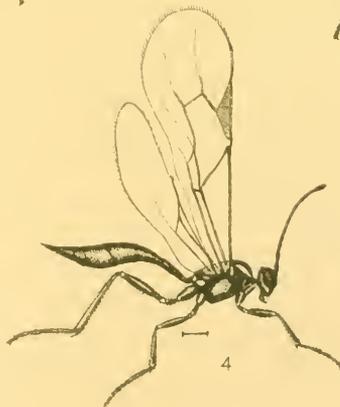
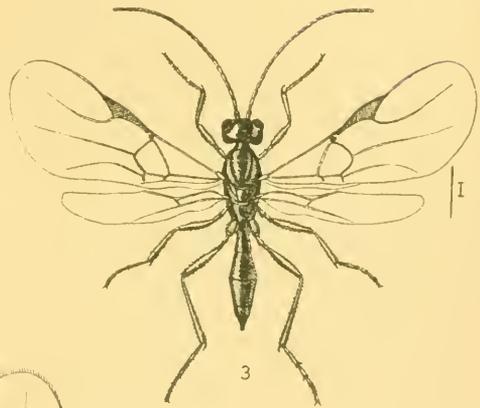
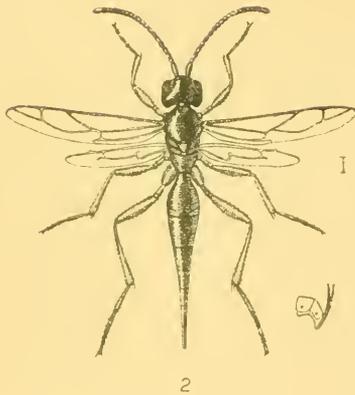
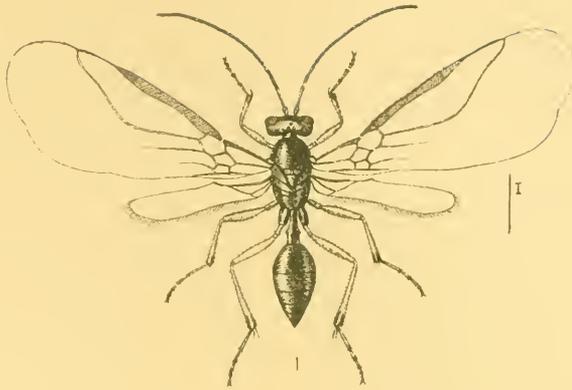
L. I. Howard del



Helicopy Co. Boston

PLATE XI.

- FIG. 1. *Liposcia dubiosa* Ashm. ♂.
2. *Synoplus brevipennis* Ashm. ♀.
3. *Praon alaskensis* Ashm. ♂.
4. *Aphidius frigidus* Ashm. ♀.



L. L. Howarth, del.

H. W. Hodge, coll.

ALASKA HYMENOPTERA.

INDEX

NOTE.—New genera and species in **black face** type.

- Aclastus* Förster 187
 rufipes 187
Aclista Förster 139
 californica Ashm. 139
Acrolyta Förster 186
 aciculata 186
 karlukensis 186
Ænoplex Förster 188
 rufipes 188
Algina Förster 188
 alaskensis 188
Allantus Jurine 263
 heraclei Kincaid 263
Allœini, Tribe 242
Allotriinæ, Subfam. 142
Alloxysta Förster 142
 alaskensis 142
Alysia Latreille 241
 manducator Panzer 241
Alysiidæ, Fam. 241
Alysiini, Tribe 241
Amauronematus Konow 259
 isolatus Kincaid 259
Ameloctonus Förster 237
 popofensis 237
Anarcha Förster 241
 coxalis 241
Andrena Latreille 131
 frigida Smith 131
Andrenidæ, Fam. 131
Anomalini, Tribe 233
Apanteles Förster 249
 yakutatensis 249
Aphidiinæ, Subfam. 243
Aphidius Nees 244
 frigidus 246
 glacialis 245
 paulensis 246
 propinquus 245
Apoidea, Superfam. I 123
Arachnophila Ashmead 134
 septentrionalis Kincaid 134
Asynocrita Förster 163
 species 163
Atmetus Förster 231
 insularis Ashmead 231
Atractodes Gravenhorst 169
 yakutatensis 169
Atrometus Förster 233
 alaskensis 233
Automalus Wesmæl 148
 nigropilosus 148
Bachia Förster 185
 nigra Ashmead 185
Bactroceros Konow 254
 palachei 254
 sitkensis Kincaid 254
Bassini, Tribe 224
Bassus Gravenhorst 224
 pulchripes Provancher 224
Bathymetis Förster 173
 bicolor 182
 confusa 180
 imitator 177
 nigricornis 177
 quadriceps 181
 rubrocincta 178
 simillima 179
 simulans 178
 simulator 181
 ungæ 180
Belytidæ, Fam. 137
Bioblapsis Förster 224
 tricincta 224
Blennocampinæ, Subfam. 255
Blepharipus Lepeletier 132
 ater Cresson 132
Bombidæ, Fam. 123
Bombus Latreille 123
 alaskensis 128
 californicus Smith 124
 couperi Cresson 126
 dimidiatus 129
 frigidus Smith 126
 gelidus Cresson 127
 juxtus Cresson 127
 kincaidii Cockerell 127
 mckayi 125
 melanopygus Nylander 128
 mixtuosus 128
 moderatus Cresson 123
 nearcticus Handlirsch 127
 neglectulus 124
 nevadensis Cresson 124
 oregonensis Cresson 126
 pleuralis Nylander 127
 polaris Curtis 127
 proximus Cresson 124
 prunellæ Cockerell 129

- Bombus Latreille—continued
 sitkensis Nylander 126
 sylvicola Kirby 127
 Braconidæ, Fam. 243
 Braconinæ, Subfam. 252
 Braconini, Tribe 252

 Calliphyrurus Förster 218
 affinis 221
 alaskensis 220
 clypeatus 220
 confusus 223
 frigidus 222
 glacialis 222
 kukakensis 222
 minor 221
 perplexus 222
 popofensis 221
 Camaratops Förster 232
 kodiakensis 232
 Campoplex Gravenhorst 234
 laticinctus Cresson 234
 Campoplugini, Tribe 234
 Catastenus Förster 240
 alaskensis 240
 trifasciatus Ashmead 240
 Centeterus Wesmæel 161
 dorsator 161
 Cephaleia Jurine 254
 nigropecta Cresson 254
 Ceraphronidæ, Fam. 140
 Chalcidoidea, Superfam. VII 143
 Cheloninæ, Subfam. 247
 Chelonus Jurine 247
 iridescens Cresson 247
 Chrysidæ, Fam. 135
 Cimbex Olivier 263
 americana Leach 263
 Cimbicidæ, Fam. 263
 Clytochrysus Morawitz 132
 gracillissimus Packard 132
 Cosmoconus Förster 215
 canadensis Provancher 215
 Crabronidæ, Fam. 131
 Crabroninæ, Subfam. 131
 Cratichneumon Thomson 156
 alaskensis 157
 confusus 158
 kodiakensis 157
 popofensis 159
 yakutatensis 157
 Cryptinæ, Subfam. 162
 Cryptini, Tribe 193
 Cryptoideus Ashmead 193
 sitkensis 193
 Cteniscini, Tribe 210
 Cteniscus Haliday 210
 clypeatus Cresson 211
 nigrofemoralis 211
 Ctenopelmini, Tribe 212
 Cubocephalus Ratzeburg 202
 alaskensis 203
 Cubocephalus Ratzeburg—continued
 atrocoxalis 203
 nigricomis 203
 Cynipoidea, Superfam. VI 141

 Dacnusinæ, Subfam. 242
 Dallatorrea 205
 armata 205
 Deleter Förster 229
 flavifrons 229
 kincaidi 229
 Delocarpa Förster 242
 sitkensis 242
 Desmlostoma Förster 251
 kukakense 251
 Diaborus Förster 212
 citrifrons 212
 sexmaculatus 212
 Diapriidæ, Fam. 140
 Diospilini, Tribe 247
 Dolerinæ, Subfam. 259
 Dolerus Jurine 259
 aprilis Norton 259
 elderi Kincaid 260
 sericeus Say 260
 similis Norton 260
 Dolichocrabro Ashmead 133
 wickhami 133
 Dyscoletes Westwood 247
 alaskensis 247

 Echthrodoxa Schmiedeknecht 199
 clypearia 199
 gelida Cresson 199
 Eclytus Holmgren 204
 yakutatensis 204
 Ectemnius Dahlbom 131
 parvulus Packard 131
 Elachistinæ, Subfam. 147
 Elachistus Spinola 147
 glacialis 147
 Emphytus Klug 260
 angustus Kincaid 260
 Enicospilus Curtis 233
 purgatus Say 233
 Enizemum Förster 226
 tibiale Cresson 226
 Epiurus Förster 200
 atrocoxalis 201
 bicoloripes 201
 Eriplatys Förster 162
 sitkensis 162
 Erromenus Holmgren 212
 annulipes 212
 Erythraspides Ashmead 255
 ashmeadii Kincaid 255
 Eucæla Westwood 142
 alaskensis 142
 Eucælinæ, Subfam. 141
 Eulophidæ, Fam. 146
 Eulophinæ, Subfam. 147
 Eulophus Geoffroy 147

- Eulophus* Geoffroy—continued
 kukakensis 147
Eumenidæ, Fam. 134
Eutelus Walker 145
 confusus 145
Euura Newman 258
 insularis Kincaid 258
Exochini, Tribe 232
Exolytus Holmgren 163
 alaskensis 167
 clypeatus 168
 insularis 168
 kincaidi 167
 niger Ashmead 166
 perplexus 165
 popofensis 166
 rubrocinctus 169
 sanctipauli 166
 seldoviæ 168
 ungæ 167
 ungensis 169
Exothecus Wesmæel 252
 alaskensis 252

Fenusia Leach 255
 alaskana Kincaid 255
Figitidæ, Fam. 141
Formica Linné 136
 neurufibaris Emery 136
Formicidæ, Fam. 136
Formicoidea, Superfam. IV 135

Gausocentrus Förster 206
Gemophaga Förster 223
 rufa 223
Glypta Gravenhorst 201
 kukakensis 201
 popofensis 201
Gyrocampa Förster 242
 alaskensis 242

Habromma Förster 188
 nigrum 188
Harrimaniella Ashmead 198
 kukakensis 198
Hedylus Förster 185
 crassicornis Ashmead 185
 species 185
Helconinæ, Subfam. 247
Hemitelini, Tribe 186
Himertosoma Schmiedeknecht 194
 schmiedeknechti 194
Holcostizus Förster 202
 yukonensis Ashmead 202
Homotropus Förster 226
 alaskensis 226
Hypocryptus Förster 206
 kodiakensis 208
 popofensis 208
 seldoviæ 209
 tibialis 209
 variegatipes 208

Hypoleptus Förster 227
 alaskens s 227
 glacialis 228
Hyposyntactus 217
 flavifrons 217
Hypotherutes Förster 236
 annulipes 236

Ichneumon Linné 149
 brevipennis Say 155
 cervulus 153
 glacialis 154
 imitator 151
 kincaidi 152
 kodiakensis 153
 popofensis 154
 simulator 153
 sitkensis 152
 wilsoni Cresson 155
Ichneumonidæ, Fam. 148
Ichneumonini, Tribe 148
Ichneumonoidea Superfam. VIII 148
Ichneutes Nees 250
 alaskensis 251
 popofensis 250
 reunitor Nees 250
Ichneutinæ, Subfam. 250
Ilapinastes Förster 190
 incertus 190
Ischnoscopus Förster 236
 yakutatensis 236
Isochresta Förster 190
 unicincta 190
Isurgus Förster 239
 alaskensis 239
Itycorsia Konow 254
 marginiventris Cresson 254

Joppini, Tribe 148

Lampronota Haliday 195]
 lugubris Cresson 195
Lasius Fabricius 136
 niger Linné 136
Leptothorax Mayr. 135
 yankee kincaidi 135
Limnerium Ashmead 237
 yakutatense 237
Liposcia Förster 243
 dubiosa 243
Lissonota Gravenhorst 197
 alaskensis 197
 ruficoxis Schmiedeknecht 197
Lissonotini, Tribe 194
Lyda 254
 marginiventris Cresson 254
 nigropectus Cresson 254
Lydidæ, Fam. 254
Lygocerus Förster 140
 alaskensis 140

Macrodyctium Ashmead 252

- Macrodyctium Ashmead—continued
 politum 252
 Macrophyta Dahlbom 261
 oregona Cresson 261
 Megaspilinæ, Subfam. 140
 Melanichneumon Thomson 155
 seldoviæ 155
 Mesochorini, Tribe 238
 Mesochorus Gravenhorst 238
 frontalis Ashmead 239
 kincaidi 238
 orcæ 239
 Mesolecius Holmgren 223
 aleutianus Cresson 224
 stejnegeri Ashmead 223
 Mesoleptini, Tribe 204
 Mesoleptus Gravenhorst 210
 unalaskæ 210
 Metacælus Förster 233
 lævis Cresson 233
 Microcryptus Thomson 184
 alaskensis 184
 trifasciatus 184
 Microgasterinæ, Subfam. 247
 Microplectron Förster 210
 alaskensis 210
 Microplitis Förster 249
 alaskensis 249
 Mimesa Shuckard 133
 propinqua Kincaid 133
 Miscogasteridæ, Fam. 144
 Monoblastus Hartig 213
 niger 213
 Monopadnus Hartig 255
 insularis Kincaid 255
 Myrmica Latreille 135
 lævinoides Nylander 135
 sabuleti lobifrons 135
 sulcinoides Emery 135
 Myrmicidæ, Fam. 135

 Nematidæ, Fam. 256
 Nematinae, Subfam. 256
 Nematus Jurine 257
 crassus Eschscholtz 257
 longicornis Eschscholtz 257
 Neuroteles Ratzeburg 228
 dubiosus 228

 Odontomerus Gravenhorst 202
 mellipes Say 202
 Odynerus Latreille 134
 albophaleratus Saussure 134
 Olesicampa Förster 235
 alaskensis 235
 Omalus Panzer 135
 sinuosus Say 135
 Ophion Gravenhorst 233
 bilineatum Say 233
 Ophioninæ, Subfam. 233
 Ophionini, Tribe 233
 Opiinæ, Subfam. 251

 Orthocentrini, Tribe 226
 Orthocentrus Gravenhorst 231
 nigritus 231

 Pachynematus Konow 256
 affinis Marlatt 256
 gotarus Kincaid 257
 ocreatus Harrington 256
 orarius Kincaid 257
 oronus Kincaid 256
 pleuricus Norton 256
 Pachyprotasis Hartig 260
 nigrofasciata Eschscholtz 260
 Paniscini, Tribe 237
 Paniscus Gravenhorst 237
 alaskensis 237
 Paraselandria Ashmead 255
 rufigastra Kincaid 255
 Passalæcus Shuckard 133
 cuspidatus Smith 133
 Pemphredonidæ, Fam. 133
 Pezomachini, Tribe 190
 Pezomachus Gravenhorst 192
 alaskensis Ashmead 193
 nigrellus 192
 obesus 193
 Phædroctonus Förster 235
 minutus 235
 Phænosemus Förster 231
 sitkensis 231
 Phæogenini, Tribe 161
 Philonygus Förster 189
 alaskensis 189
 glacialis 189
 Phthorina Förster 225
 borealis 225
 Phygadeuonini, Tribe 170
 Phytodietus Gravenhorst 195
 clypearius 195
 flavifrons 196
 Phytophaga, Suborder 253
 Pimpla Fabricius 200
 yakutatensis 200
 Pimplinæ, Subfam. 194
 Pimplini, Tribe 199
 Pimplopterus Ashmead 197
 alaskensis 198
 yakutatensis 197
 Platylabus Wesmæl 160
 californicus Cresson 161
 incabus Davis 160
 Plectiscini, Tribe 240
 Plectiscus Gravenhorst 240
 orcæ 240
 Plectocryptus Thomson 182
 popofensis 183
 yakutatensis 183
 Plesiognathus Förster 184
 rubrocinctus 184
 Pæcilostomidea Ashmead 256
 maculata Norton 256
 Polyblastus Förster 213

- Polyblastus Förster—continued
 glacialis 213
 Polyterus Förster 217
 sexcarinatus 217
 Pompilidæ, Fam. 134
 Pompilinæ, Subfam. 134
 Pontania Costa 258
 glinka Kincaid 259
 islandica Kincaid 258
 kukakiana Kincaid 259
 ora Kincaid 258
 peninsularis Kincaid 258
 popofiana Kincaid 258
 tundra Kincaid 258
 unga Kincaid 258
 Porizonini, Tribe 239
 Praon Haliday 243
 alaskensis 243
 Pristiphora Latreille 257
 anaka Kincaid 257
 bucoda Kincaid 257
 circularis Kincaid 257
 kæbelei Marlatt 258
 lena Kincaid 258
 ortinga Kincaid 257
 Probolus Wesmæel 160
 subdentatus 160
 Proctotrypes Latreille 136
 nigripes 136
 Proctotrypoidea, Superfam. V 136
 Promethes Förster 224
 unicinctus 224
 Protapanteles Ashmead 247
 alaskensis 247
 alticola 248
 glacialis 248
 Psithyridæ, Fam. 130
 Psithyrus Lepeletier 130
 insularis Smith 130
 kodiakensis 130
 Pteromalidæ, Fam. 145
 Pteronus Jurine 259
 rivularis Kincaid 259
 shumagensis Kincaid 259
 zebratus Kincaid 259

 Rhizarcha Förster 242
 harringtoni 242
 Rhogadinæ, Subfam. 252
 Rhogas Nees 252
 harrimani 252
 Rhyssa Holmgren 199
 alaskensis 199

 Scorpiorus Förster 214
 alaskensis 214
 niveicola 214
 Selandriidæ, Fam. 255
 Selandriinæ, Subfam. 255
 Sirex Linné 253
 flavicornis Fabr. 253

 Siricoidea, Superfam. IX 253
 Spanoctecnus Förster 204
 flavopictus 204
 Sphecoidea, Superfam. II 131
 Spilomicrus Westwood 140
 alaskensis 140
 Spinolia Förster 186
 minuta 186
 Stenichneumon Thomson 148
 unalaskæ 148
 Stenomærus Förster 232
 borealis 232
 Stibeutes Förster 170
 nigrita Ashmead 170
 Stiboscopus Förster 170
 alaskensis 171
 ferrugineus 173
 mandibularis 172
 sanctipauli 171
 sitkensis 172
 solitarius 172
 Stilpnini, Tribe 162
 Strongylogasterinæ, Subfam. 260
 Sychnoportus Förster 216
 longitarsis 216
 Synoplus Förster 226
 brevipennis 226
 pleuralis 226

 Tapinops Förster 230
 californicus Ashmead 230
 Tenthredinidæ, Fam. 259
 Tenthredininæ, Subfam. 260
 Tenthredinoidea, Superfam. X 254
 Tenthredo Linné 261
 auraria Konow 261
 bivittata Kincaid 262
 dissimulans Kincaid 262
 erythromera Provancher 262
 evansii Harrington 261
 ferrugineipes Cresson 261
 flavomarginis Norton 262
 harrimani Kincaid 262
 lineata Provancher 261
 melanosoma Harrington 262
 nigricollis Kirby 262
 varipicta Norton 261
 Terobia Förster 144
 vulgaris 144
 Tetrarhapta Förster 141
 alaskensis 141
 Tetrastichinæ, Subfam. 146
 Tetrastichus Haliday 146
 alaskensis 146
 anthracinus 146
 Thaumatotypus Förster 190
 alaskensis Ashmead 190
 Theroscopus Förster 191
 kukakensis 191
 popofensis 192
 rufipes 191
 Thestis Förster 187

- Thestis Förster—continued
 tricincta 187
 Thyreopinæ, Subfam. 132
 Thyreopus Latreille 132
 vicinus Cresson 132
 Tlemon Förster 216
 delicatus 216
 Torymidæ, Fam. 143
 Torymus Dalman 143
 cecidomyiæ Walker 143
 Trematopygus Holmgren 215
 kukakensis 215
 Trevoia Ashmead 196
 yakutatensis 196
 Trichiosoma Leach 263
 aleutianum Cresson 263
 triangulum Leach 263
 Triclistus Förster 232
 curvator Fabricius 232
 Tridyminæ, Subfam. 144
 Trophoctonus Förster 215
 insularis 215
 Tryphon Gravenhorst 215
 alaskensis 215
 Tryphoninæ, Subfam. 204
 Tryphonini, Tribe 215
 Vespa Linné 134
 borealis Kirby 134
 marginata Kirby 134
 Vespidæ, Fam. 134
 Vespoidea, Superfam. III 134
 Xestophya Förster 162
 nigripes 163
 polita 162
 Xoridini, Tribe 202
 Xylonomus Gravenhorst 204
 frigidus Cresson 204
 Zachresta Förster 234
 kukakensis 235
 popofensis 234
 Zelotypa Förster 137
 alaskensis 139
 borealis 138
 scutellata 137
 Zootrephes Förster 225
 insularis 225
 Zygota Förster 139
 americana Ashmead 139