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PAPERS FROM THE HARRIMAN ALASKA EXPEDITION.

XII.

ENTOMOLOGICAL RESULTS (6):

LEPIDOPTERA.

By Harrison G. Dyar.

The following species of Lepidoptera were collected by Professor Trevor Kincaid and other members of the Harriman Expedition, which visited various points on the coast and outlying islands of Alaska in the summer of 1899. In this connection the reader is referred to papers by Dr. Holland in the 'Entomological News,' Vol. XI, which treat of the Lepidoptera of the inland region.

Family PARNASSIIDÆ.

Parnassius smintheus Doubld. & Hew.

Parnassius smintheus, Doubld. & Hew, Gen. Diurn. Lep., pl. 4, 1847.

Six specimens: Kadiak, July 4, 5; Kukak Bay, July 5.

Family PAPILIONIDÆ.

Papilio machaon Linn. var. aliaska Scudd.

Papilio machaon Linn. var. aliaska Scudd., Pr. Bost. Soc. Nat. Hist., 12, 45, 1869.

One female: Fox Point.

Family NYMPHALIDÆ.

Brenthis myrina Cram.

Brenthis myrina CRAM., Pap. Exot. 2, 189, B. C., 1779.

Thirty-two examples of both sexes: Kukak Bay, July 5; Kadiak, July 20 (the latter somewhat worn).

Brenthis frigga Thunb. var. saga Staud.

Brenthis frigga Thunb., var. saga Staud., Stett. Ent. Zeit., 350, 1861.

Five examples: Popof Island, July 12-15.

Brenthis pales Schiff. var. alaskensis Holl.

Brenthis pales Schiff. var. alaskensis Holl, Ent. News, 11, 383, 1900.

One example: Mainland near Shumagin Islands (Mr. Palache).

Vanessa milberti Godt.

Vanessa milberti Godt., Enc. Meth., 9, 307, 1819.

Two examples: Fox Point.

Family AGAPETIDÆ.

Cœnonympha kodiak Edw.

Canonympha kodiak EDW., Trans. Am. Ent. Soc., 2, 375, 1869.

Seventeen examples: Kukak Bay, July 5; Kakiak, July 20.

The specimens vary considerably in color, some dark-gray, some partly ochraceous, and others with marked orange shading over disk of fore wings (var. *yukonensis* Holl.), scarcely distinguishable from *inornata* Edw. from Vancouver Island. The species is at best a local form of *C. typhon* Rott. of Europe.

Œneis semidea Say var. nigra Edw.

Œneis semidea SAY var. nigra EDW., Butt., 3, pl. 9, Chion., 1894.

One female: Kadiak, July 4.

This form, without a distinct band on hind wings (var. nigra Edw.), seems to be the prevailing one in Alaska. The U. S. National Museum has a male example from Davis Inlet (Turner).

Family PIERIDÆ.

Eurymus palæno Linn.

Eurymus palæno Linn., Syst. Nat., 2, 764, 1767.

Four examples, one a male: Kukak Bay, July 5; Kadiak, July 20. Rather smaller than the European palæno and the male has the marginal band a little narrower, but the females have the band as broad or broader than European females, thus forming connecting links to the inland Alaska form which Dr. Holland calls chippewa Edw. (Ent. News, XI, 418, 1900.)

Pieris napi Linn.

Pieris napi Linn., Faun. Suec., 271, 1761.

Twenty-two examples.

Var. bryoniæ Ochs.

One female: Muir Inlet, June 11.

Var. hulda Edw.

Eighteen examples: Kadiak, July 20; Cook Inlet, July 21; Kukak Bay, July 5; Juneau, July 25; Popof Island, July 13; mainland near Shumagin Islands, July (Mr. Palache).

Var. acadica Edw.?

Three examples: Kukak Bay, July 5.

Rather smaller than the figure of acadica Edw. and the gray dusting of secondaries more extensive.

Family LYCÆNIDÆ.

Chrysophanus dorcas Kirb.

Chrysophanus dorcas KIRB., Faun. Bor. Am., 4, 229, pl. 4, 1837.

Thirteen examples: Kadiak, July 20; Cook Inlet, July 21.

The specimens vary enough to easily cover Edwards' description of *florus*, which is thus seen to be simply a synonym of *dorcas* Kirb.

Family HESPERIDÆ.

Pamphila palæmon Pall.

Pamphila palæmon PALL., Reise 1, 471, 1771.

Five examples: Kukak Bay, July 5.

Family ARCTIIDÆ.

Platarctia parthenos Harr.

Platarctia parthenos HARR., Agassiz, Lake Sup., 390, 1850.

Three examples: Kadiak, July 5; Popof Island, July 13.

All very red, the wings and thorax strongly tinged with red, the spots of fore wings large and yellowish.

Platarctia subnebulosa Dyar.

Platarctia subnebulosa Dyar, Ent. News, 10, 130, 1899.

Two examples: Point Clarence, St. Paul Island.

Both females with the wings only partly expanded. One example is very red, the marks of fore wings reduced, leaving extensive yellow areas; the other has the normal markings, but blackish brown, not strongly reddened.

Nemeophila plantaginis Linn.

Nemeophila plantaginis LINN., Syst. Nat., 1, 501, 1758.

Twelve examples: Kadiak, July 1-20.

Var. petrosa Walk.

Nine examples.

Var. modesta Pack.

Three examples.

All the *petrosa* are males, all the *modesta* females, which is also the case with the specimens in the U. S. National Museum collection.

Family NOCTUIDÆ.

Noctua c-nigrum Linn.

Noctua c-nigrum Linn., Syst. Nat., 1, 576, 1758.

Eight examples: Popof Island, July 13-15; Kadiak, July 20.

Hadena basilinea Fab.

Hadena basilinea FAB., Mant. Ins., 2, 183, 1787.

One example: Sitka, June 16.

The example was submitted to Professor John B. Smith, who says:

A rubbed female not quite so reddish as in the normal examples; but, I believe it without question the same. It differs from the eastern finitma in the grayer, less contrasting maculation which is also less clearly written. From the normal European examples it seems to differ in being a little more powdery; but this may be due to the condition of the specimen.

Hadena pluviosa Walk.

Hadena pluviosa WALK., Cat. Brit. Mus. Lepid., 33, 725, 1865.

One example: Kukak Bay, July 4.

This example also was submitted to Professor Smith. He says:

One male in poor condition. This determination is open to considerable doubt, for the specimen is larger and darker than the Washington examples before me; but I find nothing else nearer, and do not feel justified in describing it as new.

Hadena vultuosa Grote.

Hadena vultuosa GROTE, Proc. Ac. Nat. Sci. Phil., 420, 1875.

Two examples; Sitka; Orca, June 27.

Hadena ducta Grote.

Hadena ducta Grote, Bull. Geol. Surv., 4, 176, 1878.

Five examples: Popof Island, July 9-15; Pyramid Harbor.

Hadena tenera Smith.

Professor Smith has prepared the following description of this new form:

Hadena tenera sp. nov.

Ground color of head, thorax and primaries a rusty, red brown. Collar a little darker, tipped with an indistinct, richer brown transverse line. Patagia somewhat smoky shaded. Dorsal tuftings distinct, rusty brown. Abdomen dull gray with distinct, rusty-brown dorsal tufts, and rusty, fine hair. Primaries with a narrow, black basal streak and a short black streak along the inner margin at the inner angle. Basal half line black, broken, geminate, included space more yellowish. Transverse anterior line geminate, black, even, inner portion partly lost; as a whole with a very even, not greatly marked outcurve. Transverse posterior line geminate on the costa, outer portion lost, inner narrow, black, lunulate, followed by a somewhat more yellow shading, only a little incurved below the cell. Subterminal line yellowish, somewhat diffuse, forming a small W on veins 3 and 4. A series of small, terminal lunules. Claviform moderate, concolorous, incompletely black margined, a black line extending from its tip to the transverse posterior line. Orbicular ovate, oblique, irregular, a little paler than the ground color. Reniform large broadly kidney-shaped, partly annulate in yellowish, inwardly margined with black scales. Secondaries whitish at base, shading to smoky, with an obscure, smoky, extra median line and a small discal spot. Beneath powdery reddish gray, with a powdery outer line and discal lunule; disc of primaries a little darker.

Expands 36 mm. = 1.44 inches.

Habitat.—Kukak Bay, Alaska, July 4, 1899.

One male in fair condition, save that the primaries are rubbed at the outer margin and have lost the fringes. The antennæ are distinctly serrate and the processes bristle tufted. The species is allied to and somewhat resembles a small *barnsii*. The thoracic vestiture is more dense than usual and somewhat loose, perhaps as a defect.

Type.—Cat. no. 4844, U. S. National Museum.

Hyppa rectilinea Esp.

Hyppa rectilinea Esp., Schmett. Abd. Nat., 1, 127, 1777.

Six examples: Kukak Bay, July 4.

Seems to correspond with the European species rather than with the eastern xylinoides Guen. or the western indistincta Smith.

Pachnobia carnea Thunb.

Pachnobia carnea Thunb., Mus. Nat. Ac. Ups. Diss., 4, 56, 72, f. 1, 1788.

Thirty-eight examples: Popof Island, July 10–15; Kukak Bay, July 4; Unga Island, July 21.

The specimens vary in color from reddish to gray. An example was submitted to Professor Smith for determination.

Pachnobia alaskæ Grote.

Pachnobia alaskæ Grote, Bull. Buff. Soc. Nat. Sci., 3, 84, 1876.

Five examples: Popof Island, July 12–13; St. Paul Island, August 7. One specimen is a female and the wings are not expanded. Named by Professor Smith.

Caradrina punctivena Smith.

Caradrina punctivena Smith, Trans. Am. Ent. Soc., 21, 77, 1894.

Three examples: Virgin Bay, June 25.

Professor Smith, on seeing the best specimen, remarked: "One very decent male. It is a little larger than the average specimens from Manitoba and British Columbia; but is otherwise practically the same. The nearest mate to it is an example from Laggan, British Columbia."

Ommatostola popofensis Smith.

As this proved an undescribed species, Professor Smith has made the following:

Ommatostola popofensis sp. nov.

Head, thorax and primaries dull luteous. Head a trifle deeper color, the clothing even. Thorax immaculate, vestiture dense, loose, neither collar nor patagia defined. Abdomen a paler shade of clay yellow, rather smoothly clothed, untufted. Primaries with a somewhat more reddish shade a little beyond the middle, enclosing and relieving the reniform. The latter is moderate in size, centrally constricted, upper portion not well defined; lower somewhat dilated, black filled, narrowly outlined in white. Transverse anterior line obsolete. Transverse posterior line traceable by the deeper shade and a few black scales on the veins. Subterminal line a little irregular, traceable by a narrow, very slightly darker preceding shade. Veins through terminal space black-marked; but irregularly so. Fringes dusky at tip. The orbicular spot is transversely oval, traceable with difficulty by a very slightly paler outline. Secondaries black, fringes vellow. Beneath pale luteous; primaries a little smoky on the disk, with a smoky outer line and obvious discal lumule; secondaries with a small discal dot.

Expands 35 mm. = 1.40 inches.

Habitat.—Popof Island, Alaska, July 15, 1899.

One female in good condition. The species is totally different in appearance from *lintneri*, yet seems to be fully congeneric with it. Its general appearance is hadeniform until the fine yet dense vestiture recalls some forms of Leucania.

Type.—Cat. no. 4843, U. S. National Museum.

Anarta lanuginosa Smith.

One example, which Professor Smith characterizes thus:

Anarta lanuginosa sp. nov.

Black and gray; primaries with a mossy green shade through the median space; secondaries straw yellow, with a broad black outer band and a black discal lunule. Head black with an admixture of white, especially prominent on the vertex. Collar gray tipped, above smoky blackish. Patagia gray edged, black vestiture of thoracic disc gray tipped posteriorly. Abdomen blackish, densely clothed with fine, yellow hair, through which the black ground appears smoky. Primaries with ornamentation well defined, the markings broken or incomplete. Basal space chiefly gray. Basal line black, single, curved toward the base. A curved black mark in the submedian interspace, above which are mossy scales. A black bar along the internal margin, beyond which are mossy scales to the transverse anterior line. This line single. broad, black, broken on the veins, only a little irregular, as a whole outwardly oblique. Transverse posterior line single, consisting of a series of black interspaceal lunules, a little drawn in below the cell. Subterminal space smoky or blackish on the costa, the dark shade narrowing abruptly and broken into black sagittate spots varying in size, which precede a very even, whitish subterminal line. Fringes black, tipped with white, cut with white on the veins, giving a neat, festooned appearance. Claviform moderate, incompletely outlined in black, filled with paler green and followed by a paler, mossy shading. Orbicular of moderate size, irregular, incompletely black margined, whitish, with a mossy overlay, the whitish shade extending along the median vein to the reniform. Reniform moderate in size, a little constricted, black margined, not sharply defined, whitish filled, with a smoky central shading. Secondaries with yellow fringes. Beneath pale yellow, with large black discal spots. Primaries with black subterminal band shading into a smoky terminal space. Secondaries with a broad marginal band; fringes yellow.

Expands 35 mm. = 1.40 inches.

Habitat.—Popof Island, Alaska, July 12, 1899.

This is the best marked species known to me, equalling *richardsoni* in size, with somewhat the same type of maculation. A single male in very good condition. The antennæ are distinctly serrated, the teeth furnished with tufts of bristles, so the member becomes brush-like.

Type.—Cat. no. 4845, U. S. National Museum.

Anarta etacta Smith.

One example, described by Professor Smith, at our request, as follows:

Anarta etacta sp. nov.

Head white with an admixture of smoky scales. Collar white inferiorly, then blackish, the tip gray. Patagia whitish, with a submarginal blackish line, edges gray. Thoracic disc smoky. Primaries dull gray, powdered with mossy green. The ordinary lines are white, marked by geminate blackish spots on the costa and edged with black

scales along their course. Basal line obvious, evenly bidentate. Transverse anterior line distinct, oblique, a little dentate on the veins to the submedian interspace, then with a long inward tooth on the internal vein, below which it curves outward to the inner margin. posterior line somewhat squarely exserted over the cell, then incurved so that it touches the lower edge of the reniform. Terminal space whitish with a mossy tinge, the subterminal line denticulate, defined only by the color contrast between terminal and subterminal spaces. A series of black terminal lunules. Fringes smoky, tipped with white, which is cut with smoky. Claviform moderate, outlined in pale mossy green. Orbicular round, of moderate size, annulate with white, which is edged with black, center of ground color. Reniform of good size, annulate with white, among which some green scales are intermixed; inwardly edged with black scales, center of ground color. A little heel extends backward from the reniform along the median vein for a short distance. Secondaries pale smoky, with blackish terminal lumules which are preceded by whitish. Fringes soiled whitish. Beneath smoky, secondaries a little paler, with a small discal spot.

Expands 36 mm. = 1.44 inches.

Habitat.—Kukak Bay, Alaska, July 4, 1899.

One female without antennæ, but otherwise in fair condition. The white markings on the dull gray ground are well defined and characteristic, the white terminal space adding to the contrast. It is probable that the amount of green powdering is variable and that, normally, there is more of it than is shown on the type.

Type.—Cat. no. 4845, U. S. National Museum.

Plusia hochenwarthi Hoch.

Plusia hochenwarthi Hoch., Act. Soc. Berol., 6, 337, 1785.

Two examples: Kukak Bay, July 4.

Plusia epsilon Ottol.

One example: Kadiak, July 20.

This was submitted to Dr. R. Ottolengui who sends us the following description:

Plusia epsilon sp. nov.

Head, thorax and primaries dull purplish with black shadows; thoracic edge of collar, patagia and tip of thoracic tuft of lighter shade. Transverse anterior line fairly straight, indistinct, purplish above the median vein, below the vein distinct, metallic golden, composed of two feeble outward curves, the upper longer than the lower, both bordered outwardly with black. The sign is metallic golden. Seen with the wings folded, that on the wing to the right represents the Greek character ε , while on the other wing, the sign being reversed, resembles the numeral 3. The sign touches the median vein at both extremities and, while apparently continuous with the transverse anterior line, really does not reach it. There is no dot, though this is an evanescent

character in some species. The subterminal line is geminate, waved, lighter at the outset, beginning with a hook on the costa and showing a few golden scales at the lower end, especially on the small tooth opposite the sign. The median space below the sign is the darkest part of the wing, the deepest black being immediately next to the sign. The subterminal line is black and shows distinctly against the paler shade between it and the fringes. It is sharply angulate and dentate. The two teeth at the center of the line are sharp, but near its anal angle there is no sharp tooth as in allied species, the angle being rounded. Fringes gray, cut with blackish. Orbicular indistinct, purplish, lined with black. Reniform upright, concolorous, outlined by faint metallic scales. Secondaries smoky yellowish basally with a wide darker outer border. Beneath, primaries smoky with yellowish discal spot, the white spots in costa and in fringes showing more distinctly than above. Secondaries much lighter.

Expanse 34 mm.

Habitat.—Alaska.

Type.—Cat. no. 5256, U. S. National Museum.

Hypena californica Behr.

Hypena californica BEHR., Trans. Am. Ent. Soc., 3, 23, 1870.

One example: Virgin Bay, Prince William Sound, June 25.

Professor Smith saw this specimen and said: "Does not differ in any notable particular from British Columbia examples. One ragged female."

Family GEOMETRIDÆ.

Mesoleuca variata Schiff.

Mesoleuca variata Schiff., Syst. verz. Wien. geg., 110, 1776.

Twelve specimens: Popof Island, July 12-15.

Determined by Rev. Dr. Hulst as a "small variety" of *Mesoleuca truncata* Hufn., but I cannot agree with this determination.

Mesoleuca lacustrata Guen.

Mesoleuca lacustrata Guen., Phal., 2, 395, 1857.

One example: Yakutat, June 21.

Named by Dr. Hulst; but it is distinctly different from Eastern examples of this species.

Petrophora montanata Borkh.

Petrophora montanata BORKH., Nat. Eur. Schmett., 5, 397, 1794.

One example, large: Popof Island, July 10. Sixteen examples: Popof Island, July 9–15; Kukak Bay, July 4.

One of the latter examples was submitted to Dr. Hulst, who pronounced it a very light variety of the same species; I would determine the species as *munitata*, not *montanata*.

Petrophora nemorella Hulst.

Petrophora nemorella Hulst, Trans. Amer. Ent. Soc., 23, 293, 1896.

Five examples: Yakutat, June 16; Popof Island, July 12–15; Kadiak, July 20; Saldovia, July 21. This will prove to be munitata also, I believe.

Petrophora borealis Hulst.

Petrophora borealis Hulst, Trans. Am. Ent. Soc., 23, 292, 1896.

Nine examples: Berg Bay, June 10; Sitka, June 16; Yakutat, June 16; Virgin Bay, June 25; Kukak Bay, July 4. Some of the specimens are remarkably close to *P. ferrugata* L.

Petrophora munitata Hübn.

Petrophora munitata HÜBN., Schmett. Eur., 346, 1803.

Two examples: Yakutat, June 16, 21.

Determined by Dr. Hulst, but wrongly, I think. The specimens more nearly resemble the Siberian *P. quadrifasciaria* Cl.

Venusia cambricaria Curt.

Venusia cambricaria Curt., Brit. Ent., pl. 759, 1839.

One example: Sitka, June 16.

Euchœca albovittata Guen.

Euchæca albovittata Guen., Phal., 2, 520, 1857.

One example: Sitka, June 16.

Hydriomene trifasciata Borkh.

Hydriomene trifasciata Borkh., Eur. Sch., 5, 308, 1794.

Four examples: Yakutat, June 16; Orca, June 21.

Tetracis hyperborea Hulst.

One example, which Dr. Hulst describes as follows:

Tetracis hyperborea sp. nov.

Expands 42 mm. Palpi bright ochre yellow; front ochre; summit and anterior part of thorax ochre yellow; thorax and abdomen rather light ochre, the latter somewhat fuscous stained; all wings light ochre more or less stained with fuscous; fore wings with basal line showing in three blackish spots, the largest costal, the next at middle of wing, the third at vein 1; just beyond the discal spot, which is very faint, is a broad blackish shading, nearly straight, and reaching across wing; an outer line of black spots on veins, these diffuse on their edges and running subparallel to outer margin to vein 2, then curved a little outwardly; a line of faint diffuse marginal spots; hind wings with outer line of black dots on the veins; discal spots present, blackish. Beneath as above, on fore wings the basal half more fuscous, discal spots

more distinct, middle band much less marked, outer line more distinct, the spots confluent; hind wings, discal spots very distinct, black; outer line of spots more distinct than above.

Virgin Bay, Prince William Sound, Alaska, June 25.

Type.—Cat. no. 4919, U. S. National Museum.

Eustroma silaceata Hübn.

Eustroma silaceata HÜBN., Vög. & Schmett., 100, 1793.

One example: Kukak Bay, July 4.

Submitted to Dr. Hulst, who called it a very light form of *Eustroma* atrocolorata Grt. & Rob., but obviously incorrectly.

Tephroclystis perfusca Hulst.

Tephroclystis perfusca Hulst, Can. Ent., 30, 116, 1898.

Four examples: Popof Island, July 9-15.

Determined by Dr. Hulst as a varietal form of this species.

Tephroclystis zygænidata Pack.

Tephroclystis zyganidata PACK., Mon. Geom., 51, 1876.

Four examples: Sitka, June 16; Yakutat, June 21.

This also is a varietal form, not the typical species, according to Dr. Hulst's determination.

Tephroclystis miserulata Grt.

Tephroclystis miserulata GRT., Proc. Ent. Soc. Phil., 2, 32, 1863.

Two examples: Popof Island, July 15.

Again a varietal form of the Atlantic coast species, according to Dr. Hulst, who examined a specimen.

Tephroclystis flebilis Hulst.

One example, which, being new, is described as follows by Dr. Hulst:

Tephroclystis flebilis sp. nov.

Expands 24 mm. Palpi front and antennæ dark fuscous; thorax fuscous in front, fuscous gray behind; abdomen gray, very light laterally; fore wings narrow, elongated, fuscous, darker, almost blackish fuscous narrowly along costa and broadly outwardly extending over marginal field; the black of costa broken as showing the beginning of cross lines, and broadened into a subquadrate spot within outer line; basal line scarcely evident; outer line broad, indeterminate, whitish; an outer scolloped dentate white line on outer field, parallel with margin; hind wings rather small, rounded, fuscous, the beginnings of dark cross lines showing along inner margin; marginal lines on all wings black, more or less broken. Beneath much as above, but with a rounded broad extra-discal line on hind wings.

Proc. Wash. Acad. Sci., December 1900.

Sitka, Alaska, June 16.

Type.—Cat. no. 4920, U. S. National Museum.

Eucymatoge grandis Hulst.

Eucymatoge grandis Hulst, Trans. Am. Ent. Soc., 23, 273, 1896.

One example: Sitka, June 16.

Named by Dr. Hulst.

Rheumaptera lugubrata Staud.

Rheumaptera lugubrata Staud., Cat. Lep. Eur., 189, 1871.

Twenty-four examples: Sitka, June 16; Kukak Bay, July 4.

Rheumaptera hastata Linn.

Rheumaptera hastata Linn., Syst Nat., 527, 1758.

Eighteen examples: Sitka, June 16; Metlakahtla, June 4; Yakutat, June 21; Kukak Bay, July 4; Kadiak, July; Popof Island, July 9–13; Fox Point, July 28.

Family PYRALIDÆ.

Pyrausta washingtonialis Grote.

Pyrausta washingtonialis GROTE, Bull. Geol. Surv., 6, 577, 1882.

Five examples: Sitka, June 16; Virgin Bay, June 25; Kukak Bay, July 4; Popof Island, July 13.

In some of the specimens the markings are nearly obliterated. We are indebted to Professor C. H. Fernald for the determination of a specimen.

Scoparia centuriella Schiff.

Scoparia centuriella Schiff., Wien. Verz., 319, 1776.

Nineteen examples: Popof Island, July 12 and 13.

Crambus labradoriensis Christ.

Crambus labradoriensis Christ., Ent. Zeit. Stett., 19, 314, 1856.

Four examples: Kukak Bay, July 1; Saldovia, July 21.

Crambus toparius Zell.

Crambus toparius Zell., Ent. Zeit. Stett., 155, 1866.

Four examples: Sitka, June 16.

Crambus interminellus Walk.

Crambus interminellus WALK., Cat. Brit. Mus., 27, 156, 1863.

Four examples: Yakutat, June 21; Popof Island, July 12 and 13; Saldovia, July 21.

Determined by Professor Fernald. Hampson makes this a synonym of trisectus Walk.

Laodamia fusca Haw.

Laodamia fusca HAW., Lep. Brit., 493, 1829.

Eight examples: Juneau, June 25; Kukak Bay, July 1.

Family PTEROPHORIDÆ.

Platyptilia cosmodactyla Hübn.

Platyptilia cosmodactyla Hübn., Samml. Eur. Schnett., 35-36, 1827.

Four examples: Sitka, June 16; Virgin Bay, June 25; Kadiak, July 20.

Determined by Professor Fernald.

Platyptilia petrodactyla Walk.

Platyptilia petrodactyla WALK., Cat. Brit. Mus., 30, 940, 1864.

Three examples: Popof Island, July 12, 13.

One specimen was submitted to Professor Fernald, but he was unable to recognize it. Another example, in somewhat better condition, seems referable here. The ground color of the wing is more ocherous than in Walsingham's figure, and the brown band is less oblique, being subparallel to the marginal band and approximate to it. There is a slight dot near base of fissure, one below end of costal stripe and one in center of cell; but the figure in general suggests this species, and it is stated that Walker's type is not in perfect condition.

Family SESIIDÆ.

Sesia culiciformis Linn.

Sesia culiciformis LINN., Syst. Nat., 493, 1758.

One example: Kukak Bay, July 1.

Sesia arctica Beut.

One example: Kadiak, July 20.

Determined as a new species and named as above by Mr. Wm. Beutenmüller, to whom it was submitted, and who favors us with the following description:

Sesia arctica Beutenmüller, sp. nov.

Male: Head, palpi and thorax entirely black. Abdomen black with a very narrow white band at the posterior edge of the second and fourth segments. Anal tuft black. Legs black with the hind tarsi dirty white. Fore wings transparent with black borders and a broad transverse mark. Hind wings transparent with a narrow black mar-

gin. Underside of fore wings washed with golden yellow, basally. Hind wings same as above. Expanse 20 mm.

Habitat.—Kadiak, Alaska, July 20, 1899.

Type (one male).—Cat. no. 5175, U. S. National Museum.

Somewhat allied to *Sesia rutilans* but has white bands on the abdomen instead of yellow ones as in that species. The palpi are wholly black, while in *rutilans* they are golden yellow and black.

A description of this species, without name, has been published by Mr. Beutenmüller.¹

Family TORTRICIDÆ.

Sciaphila argentana Clck.

Sciaphila argentana CLCK., Icones, 2, 14, 1759-64.

Four examples: Kukak Bay, July 4.

Sciaphila osseana Scop.

Sciaphila osseana Scop., Ent. Carn., 238, 1763.

Eight examples: Kukak Bay, July 4; Kadiak, July 20.

Determined by Professor Fernald.

Sciaphila mæschleriana Wocke.

Sciaphila mæschleriana Wocke, Stett. Ent. Zeit., 45, 1862.

Six examples: Popof Island, July 15.

Determined by Professor Fernald.

Sericoris bipartitana Clem.

Sericoris bipartitana CLEM., Proc. Ac. Nat. Sci. Phil., 346, 1860.

Five examples: Kukak Bay, July 4; Popof Island, July 10 to 12.

Phoxopteris kincaidiana Fern.

Ten examples: Metlakahtla, June 4; Sitka, June 16; Berg Bay, June 10; Muir Inlet, June 12.

Professor Fernald has kindly prepared the following description of this new form:

Phoxopteris kincaidiana sp. nov.

Expanse of wings 15 mm. Fore wings brownish white with a nearly triangular dark cinnamon brown dorsal spot extending from the base to the middle of the hind margin with the outer part oblique and ending in a rounded angle near the costal side of the cell. The outer and costal sides of the triangle are somewhat incurved. The oblique stripe from the middle of the costa extends about two thirds of the distance to the anal angle, then forms a right angle and extends to the apex, but is cut on its outer side beyond the end of the cell by two

¹ Can. Ent., 32, 208, 1900.

dark brown dashes and there is a dark brown dot near the angle of this stripe. The oblique stripe, a series of costal dots and three cross lines at the outer part of the wing, one of which is terminal, are dark cinnamon brown but much more indistinct than the dorsal spot. Fringe above the apex dark brown, elsewhere white at the base and pale fuscous beyond. Hind wing pale fuscous.

Described from one male in the collection of the National Museum, taken June 14, 1899, at Metlakahtla, Alaska, by Mr. T. Kincaid for

whom I take pleasure in naming this insect.

Type.—Cat. no. 4967, U. S. National Museum.

Tortrix fumiferana Clem.

Tortrix fumiferana CLEM., Proc. Ent. Soc. Phil., 5, 139, 1865.

One example: Sitka, June 16.

Professor Fernald remarks that the specimen is too poor for him to be certain of the identification.

Carpocapsa pomonella Linn.

Carpocapsa pomonella Linn., Syst. Nat., 538, 1758.

One example: Orca, June 15. 4 (On shipboard.)

Named by Professor Fernald.

Family TINEIDÆ.

The collection in this family was small, and the condition of the specimens is such that it has not been thought desirable to make them the types of new species. The generic determinations have been made by Mr. August Busck.

Argyrestia sp.

Four examples: Sitka, June 16; Popof Island, July 13 to 15.

Monopis sp.

One example: Popof Island, July 13.

Plutella sp.

One example: Sitka, June 16.

This appears to agree essentially with the type of duboisella Beut.

Schreckensteinia sp.

Two examples: Sitka, June 16, Yakutat, June 21.

Zelleria sp.

One example: Farragut Bay, June 5.

Choreutis occidentella Dyar.

Choreutis occidentella Dyar, Can. Ent., 32, 86, 1900.

One example: Sitka, June 16.