

coxa 20, femur + trochanter 48, tibia 44, tarsus 24 long. Bristles of anal wing 28 long. Anal lobes have one long bristle and two short spines. Rostral loop short, 120 long.

Pulvinaria amygdali, Ckll., 1896.—Treated with potash, light yellow brown; internal juice removed colourless, 400 long, 180 broad. Segments of the antennæ: (1) 20, (2) 16, (3) 24, (4) 16, (5) 16, (6) 28 long. Front leg: coxa 32, femur + trochanter 48, tibia 32, tarsus 28 long. Rostral loop short, 140 long. Anal lobe with one long bristle and two short spines.

Pulvinaria Ehrhorni, King, 1901.—Larva 520 long, 260 broad. Antennal joints: (1) 16, (2) 20, (3) 32, (4) 20, (5) 20, (6) 40 long. Bristles of anal lobe 340 long, the two spines 20 long. Rostral loop very stout, 240 long. Front leg: coxa 24, femur + trochanter 60, tarsus 52, tibia 44 long.

Pulvinaria viburni, King, 1901.—Body 520 long, 240 broad. Antennal joints: (1) 20, (2) 16, (3) 28, (4) 16, (5) 20, (6) 40. Front leg: coxa 28, femur + trochanter 72, tibia 68, tarsus 28 long. Hairs of anal ring 48 long, those of the anal tubercule 342 long, spines 20 long, rostral loop 188 long. All the above measurements are in micromillimeters.

AN ALASKAN MOSQUITO.

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Among some mosquitoes lately sent from Alaska is a species which, coming from the far north (65° N.), has the unique position of standing near three mosquitoes found in much warmer climates, *i. e.*, *Theobaldia annulata*, Shrank, found in Europe, Mexico and California, an Italian species of which Falbici says, "Fin ora fu trovata solamente a Macarèse ed a Pato," and *penetrans*, R. Desvoidy, found in France.

Theobaldia Alaskænsis, n. sp.—Female.—Head dark brown, covered with white curved scales, and dark brown forked scales on the occiput, with flat white scales on the sides, and extending down under the labium; a few brown bristles around and between the eyes; antennæ dark brown, heavy white pubescence and sparse brown verticils, first and second joints with some white flat scales, basal joint testaceous, with a few white flat scales on the median side;

October, 1906.

palpi dark brown, sparsely covered with white flat scales and a few hairs ; proboscis yellowish from base about two-thirds its length, the apical third dark brown, the whole sparsely covered with thin white flat scales ; the effect of the proboscis under the hand lens is not, however, of a band, the proximal part being merely of golden-brown tinge, and the distal part darker ; clypeus brown ; eyes dark blue-green.

Thorax dark brown ; prothoracic lobes with a few white curved scales ; mesonotum sparsely clothed with rather large white curved scales, and some brown bristles, which do not, however, form any ornamentation except for two tiny faint white submedian spots nearly midway of the mesothorax, which only show in rather perfect specimens ; when denuded there is a suggestion of a dark median line ; pleura dark brown, with white flat spatulate scales ; scutellum dark brown, the white curved scales being grouped distinctly on the lobes, the interlobular part naked ; eight long brown marginal bristles on mid and six on the side lobes, a few lighter bristles above ; metanotum brown.

Abdomen dark brown, with dark brown scales and white bands, mostly basal, but sometimes very slightly apical, and in some specimens develop into very narrow lateral spots, especially on the distal segments ; occasional white scales scattered through the brown ; second segment with a narrow median line, apical almost wholly white scaled ; apices and sides of segments rather profusely supplied with light-coloured hairs ; venter mostly white scaled.

Legs : Coxæ and trochanters all brown, with white scales ; femora dorsally brown, scaled with a sprinkling of white scales, ventrally white, a small light apical spot, but no ring as in *annulata* ; tibiæ and metatarsi also brown, sprinkled with white, with small light apices ; first and second tarsal joints in all the legs with narrow basal light (ochraceous) spots not always amounting to bands ; remainder of tarsi brown, except on the hind legs, where sometimes the base of 3rd and 4th joints have a few white scales, not noticeable with a hand-lens ; ungues large, simple and equal.

Wings brown ; costa, subcosta and first long veins heavily scaled with long truncate scales, mostly brown, but sprinkled with a few white scales ; these are also found on the stem of the fifth ; the second, third, fourth and sixth veins clothed with long, slender, brown scales ; lateral scales narrowly lanceolate, median truncate but slender, aggregated so as

to form four small but distinct spots, occurring at the root of the second, the bases of the fork cells, and at junction of cross veins; first submarginal cell about one-third longer and a trifle narrower than second posterior, both stems about one-half the length of the latter; cross-veins nearly of one length, and almost in a line; ventral scales long and slender; halteres, light stem, dark knobs.

Male.—Much as female; antennæ give banded appearance; verticels light brown; palpi as long or longer than proboscis, dark brown, with a light band at base of apical joint, plumes brown except at the light band, where they are yellowish; very marked contraction at the distal end of the second abdominal segment, giving a "wasp waist" effect; legs as in female, but the bands distinct and fairly wide, especially on the hind legs, where there is a narrow band on the third tarsal; in the fore and mid legs this joint has only a suggestion of a band; fourth joint brown; ungues large, unequal in fore and mid legs, the larger biserrate and the smaller uniserrate, in hind legs large, simple and equal.

Length, 10-11 mm. Habitat, Fort Egbert, Alaska. Taken May-June.

Type, No. 9959, U. S. N. M.

Described from five females and one male sent me by 1st Lieut. J. R. Bosley, Asst. Surg. U. S. Army, in two collections from Fort Egbert, Alaska.

It is closely related to both *annulata*, Shrank, *Falbici*, No., and *penetrans*, Desvoidy. Differs from the former in that it has only the tiny spot on the thorax; there is no band on the female palpus, and only one on the male; there is no ring on the femur, and the leg bands are much narrower and ochraceous rather than white.

It differs from *Falbici* also in the thoracic marking; the palpi are only white scaled; the median stripe on the second abdominal segment; the tarsal bands are basal only, and the mid ungues of the male have only one tooth on the smaller. It apparently reverses the colouring of *penetrans*, and has only four "maculis plus minusve distinctis."

It is possibly not out of place to state here that the specimens from San Francisco, Cal., which otherwise agree well with Theobald's description of *T. annulata*, Shrank, lack the mid band on the metatarsi, and that three, and sometimes even four, tarsal joints are minutely banded.

A FEW NEW COCCIDÆ, WITH NOTES.

BY EDW. M. EHRHORN, SAN FRANCISCO, CAL.

Orthezia Californica, sp. n.—Female about $4\frac{1}{2}$ mm. long, $3\frac{1}{2}$ mm. broad, and 2 mm. high. Body flat, very firm, and covered with thick lamellæ of a light brown colour. Margin beset with broad wax lamellæ, which grow larger caudad, ending in two, which form a shield-like process. There are three shield-like lamellæ on the anterior part of the dorsum; caudad of these is a deep carina, formed by two rows of lamellæ running parallel and ending at the caudal shield-like process. Antennæ and legs dark brown, beak quite stout. Female measures with egg-sac 5 mm. Egg-sac about as broad as long, and is square at caudal end, covering entire ventral abdomen. Colour white, formed of bands of white wax closely attached to each other. The caudal ends are of a light brown colour. Body of female after boiling in K. O. H. remains light brown, antennæ, legs and mouth-parts dark brown. Derm is covered with innumerable blunt, tube-like spinnerets. Antennæ 8-jointed, each joint with several short, stout spines. Joint 8 ends in an elongated glassy process. Joint 1 longest, joints 2 and 3 subequal and next in length, joints 6 and 7 subequal and shortest. Formula: 1 (2, 8), 3, 4, 5 (6, 7).

Measurements of antennal joints in μ : 1, 320; 2, 280; 3, 160; 4, 145; 5, 140; 6, 120; 7, 120; 8, 280. Legs very long and stout, with several rows of short, stout spines running longitudinally. Femur about twice as long as tarsus. Tibia with two stout spines. Claw slightly curved, with two stout spines. Measurements of middle leg in μ : Coxa, 300; trochanter and femur, 1,000; tibia, 740; tarsus, 440; claw, 120. Anal ring large, with 6 long stout hairs, about 260μ . Eggs lemon-yellow. Young larva covered with a dense white secretion, colour of body orange-yellow. Antennæ and legs light brown. Antennæ of 6 joints. Joint 6 longest, nearly twice as long as 2. Joints 3 and 5 equal, joint 4 shortest. Formula: 6, 1, 2 (3, 5), 4. Measurements in μ : 1, 100; 2, 80; 3, 60; 4, 40; 5, 60; 6, 150.

Habitat.—On *Bahia* sp., Mayfield, Santa Clara Co., California.

Kermes Rattani, sp. n.—Adult female globose, from 5 to 6 mm. in diameter, varying a little according to position on twig. Surface smooth, not shiny, nor hardly pubescent, sometimes waxy. Colour light brown, generally with four white stripes running parallel with segmentation. When seen through lens these stripes have numerous brown dots at