The allotype female is much paler throughout but presumably belongs to this species; the markings on the body as well as the wings are very pale but indicated.

Habnat.—Northwestern United States.

Holotype.—♂, Longmire Springs, Mt. Rainier, Washington, altitude 2,500 feet, July 18, 1919, (Dr. C. L. Fox.).

Allotype.—♀, Paradise Valley, Mt. Rainier, altitude 6,000–8,000 feet, August 5, 1919, (Dr. C. L. Fox.).

Paratypes.—Two ♂'s, Moscow, Idaho.

Type in the collection of the California Academy of Sciences.

Tipula pseudotruncorum bears a resemblance to the European *T. truncorum* Meigen, and was distributed under this name by Prof. Doane. What is apparently this same species has been recorded by Snodgrass (Trans. Am. Ent. Soc., Vol. 30, pp. 211, 212; 1904) as *T. truncorum*. A comparison with authentic specimens of *truncorum* received from my friend, Herr M. P. Riedel, shows that the two species are abundantly distinct.

NOTES ON THE COLEOPTERA WITH DESCRIPTIONS OF NEW SPECIES.

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***Cicindela spreta* Lec.** Several years ago I prepared a note on the capture of this form in Maine, but after some correspondence with the late Mr. Edward D. Harris it was laid aside. Further interesting facts regarding this much misunderstood insect were noted in his letters which should correct the impression given by several authors that it is closely related to *purpurea* Oliv. His father, T. W. Harris, some time prior to 1848, sent Dr. LeConte a specimen taken at Eastport, Maine, and which, according to Mr. Harris, is the unique type now in the LeConte collection at Cambridge, Mass., and bears his father's label.

The original description in the "Catalogue of the Geodephagous Coleoptera" (Ann. Lyc. Nat. Hist., 1848, p. 177) begins, "*Obscure nigro-aenea subviridescens,—*", and was probably made from the specimen in the LeConte collection, as it is a green insect of about the shade of those green forms of *purpurea* which sometimes pass for *spreti*, but having the complete *limbalis* markings. The figured *spreti* on the coloured plate XIII of the above work is a black insect, and it is referred to in the LeConte Revision of the Cicindelae of 1856 (Trans. Am. Phil. Soc. XI., p. 37) under *limbalis* (as a variety of *splendida*) as, "*Nigra. C. spreti* Lec. Ann. Lyc., 4, 177; tab. 13, fig. 7", and in a few lines below, "Eastport, Maine, Dr. Harris." In the Harris collection, Boston Museum of Natural History, is one specimen bearing an "Eastport, Me.," label and the manuscript number 1502, which is referred to in the Harris manuscript catalogue as, "*Cicindela Raiana* H. ms. *spreti* Lec. Ann. Lyc. N.Y. IV. 177. Eastport, Me., Dr. J. Ray, 1836." This is the specimen referred to by Mr. E. D. Harris in a letter to me as the "companion specimen" to the one in the LeConte collection. I examined this (Harris collection) specimen, which still bears the

old Harris label, and found it much darker than the type at Cambridge. It is an almost black insect with the faintest traces of green. It is marked like the type, and is almost exactly as the figure on Plate XIII of the work of 1848. Does it not seem probable that Dr. LeConte made the description from his green specimen, and in some way the figure was made from the black specimen of the Harris collection? This supposition will at least account for the dual colour rôle of *spretæ*.

In correspondence with Dr. LeConte, T. W. Harris expressed the opinion that *spretæ* was much nearer *limbalis* Klug. than *purpurea*, and that Dr. LeConte was in accord with him is shown by the Revision of 1856.

In 1900, Mr. E. D. Harris took a large series (about 100 specimens) of *limbalis* at Mt. Desert, Me., and, discovering several dark green ones among them, took one to Cambridge and placed it beside the type, and then to the Harris collection where he made a comparison with the "companion specimen." His conclusion was, "It is, to all intents, exactly the same thing. It is *limbalis*."

On June 24, 1909, I took a specimen of *spretæ* at Monmouth, Me., in a sparsely wooded pasture on the west shore of Lake Cobbosseecontee. It has been placed beside the type and found to be the same in every respect. Another specimen from Wales, Me., June 15, 1909, is very much like Mt. Desert *limbalis*, with reddish-cupreous shading and silky lustre. A specimen from Monmouth, June 25, 1905, is nearly intermediate between the other two, being a more clear green at the base of elytra and becoming gradually cupreous towards the apex, but without definite silky lustre.

From the above we have sufficient proof that *spretæ* Lec., a rather dark green insect (of about the shade of the green forms of *purpurea*) with *limbalis* markings, (humeral, post-humeral and ante-apical dots, sinuate median fasciæ, and apical lunules) is but a colour variation of *limbalis* Klug. as represented by the Mt. Desert specimens. Therefore, Dr. Walther Horn is in error in the Genera Insectorum in placing "*spretæ* Lec., 1848" as a "senile form" and *spretæ* Lec., 1856, as a "black form" of *purpurea* Oliv.

***Cicindela hentzi* Dej., var. *niveihamata*, n. var.** This interesting variation was taken at the Middlesex Fells Reservation in a road near the shore of Spot Pond in the town of Stoneham, Mass., July 26, 1903. It was found somewhat remote from the usual haunts of the species, although they frequently scatter from the ledges to the neighboring roads. The markings of this unique are formed by the extension of the apical lunules along the margin, including the ante-apical marginal spots, to and joining with the obliquely transverse median fasciæ; the result is a broad marginal band with sinuate inner edge terminating in a hook at the middle of each elytron. The median ante-apical dot has almost vanished and the humeral lunule is represented by a small humeral dot and a very faint sub-humeral one. The markings resemble those of the posterior half of the elytra of *C. schauippi* with the transverse fasciæ more oblique. In order to stimulate ambition and anticipation among those collectors who delight in aberrant forms this handsome little insect is duly christened as above.

***Pterostichus coruscus* Lec.** This species, which has hitherto been taken rarely along a railroad embankment through a swamp, was found in large numbers (over 100) under stones, logs and in debris along the shores of

the Charles River in Medfield, Mass., April 19, 1919. There had been a heavy rain which flooded the meadows where these little insects evidently abounded, and drove them to shelter along the river bank.

Elaphrus olivaceus Lec. Two specimens of this pretty swamp-loving species were taken at Monterey, Mass., July 9, 1919, in a dark, forbidding wood through which ran a small brook between low and muddy banks at the spot where they occurred. *E. cicatricosus* was also present at this place which was partly covered with dead branches; these did not improve the conditions under which they were taken by the usual method of treading about in the mud and keeping a close watch of the surface for any moving object.

Coccidula occidentalis Horn. A specimen was given me by Mr. H. M. Parshley, who took it at Orono, Maine, May 31, 1914, by sweeping in a meadow. It is almost exactly like several specimens from Edmonton, Alberta, taken by Mr. F. S. Carr, who, as usual, generously shared his catch with me. These were taken June 14 and 26, 1917. One of the characters given by Dr. Horn in his description of the species (Trans. Am. Ent. Soc. XXII, p. 114) is the black colour of the first two segments of the abdomen, these being yellow at the sides in *lepida* Lec. There are traces of yellow at the sides of the second segment on some of the Alberta specimens, and the Maine specimen shows a larger yellow area there. The habitat of the species is given by Horn as Wyoming to Vancouver.

A number of specimens of *C. lepida* were taken along a swollen brook in the debris washed down by the spring draining of a cranberry bog in Sherborn, Mass., May 23, 1908, and May 16, 1909. They could not be found on following years nor have they been taken elsewhere. The discal spot of the elytra in some of these specimens shows a tendency toward the cordiform shape of *occidentalis*, but there is no indication of a sutural stripe connecting it with the scutellar spot as in that species.

Buprestis sulcicollis Lec. In the "Review of the Genus Buprestis in North America," by Nicolay and Weiss (Jour. N. Y. Ent. Soc., Vol. XXVI) there appears the statement, on the authority of Dr. E. C. VanDyke, that the type "is not a brassy green insect as claimed by Casey, but of a uniform dull, coppery brown with a very slight greenish reflection." As I have examined the unique type four times, and on the last three occasions with special reference to the colour, I feel justified in recording that the statement gives an erroneous impression. With a good light on the specimen, Col. Casey's remarks (Studies in the American Buprestidæ), which are practically a copy of the original description, are correct. On a dark day the green is not so much in evidence, but if the sun is shining it is really a brilliant insect. It is especially green on the head and thorax, while the punctures between the rugæ of the elytral intervals are almost a golden green at the sides, becoming darker on the disk; the whole under side of the specimen is a bright brassy green. The only parts that are not green are the elytral costæ and the smooth places of the pronotum, which are a very dark bronze with greenish reflections. The appearance of the type is that of a wholly verdigris-green insect in which the colour is as fully and completely developed as in the type of *Chrysobothris verdigripennis*, and

some specimens of *Dicerca tuberculata*. My single specimen of this species is a bronze colour very similar to the dark forms of *Buprestis striata*, and is probably very near to the form *lateralis* Casey. The costæ are a greenish black, and the punctures along the striæ are a bright green set in the bright coppery rugæ of the intervals; it lacks the greenish shading of the type on the under side.

Chrysobothris orono, n. sp. Size and form of *verdigrispennis*. Black with the punctured areas of a grayish-green colour, beneath cupreous or bronzed with the prosternum, femora, and sutures of the abdomen greenish. Antennæ bright metallic green, last joint and the lobes of the preceding seven, black. Clypeus arcuately emarginate with sides rounded, front greenish, coarsely, densely punctured and pubescent with two small median callosities; eyes rather widely separated above.

Prothorax not quite twice as wide as long, slightly wider at base than at middle, briefly rounded and narrowed at apex, slightly sinuate at middle, and with a very small sinuation before the hind angles, which are rectangularly acute and not narrowed; median dorsal sulcus limited in front by strong angulate costæ, which broaden out at middle and disappear behind; a short sinuate callosity at middle on each side.

Elytra widest behind and sinuate in front of middle, more convex than *scabripennis*, sutural costæ entire from apex to basal fourth and more strongly elevated than any of the others which are indicated by flattened, smooth, black areas and lines, punctured areas not as well defined as in *scabripennis* and *verdigrispennis*, basal foveæ less evident.

Abdomen with sparse, shallow punctures and indistinct callosities, last ventral body semicircularly emarginate, last dorsal coarsely, sparsely punctured with a small, indistinct notch; prosternum not lobed, very densely pubescent and punctate, sides with coarse, sparse punctures and broad, interlacing, smooth spaces, the dense white pubescence extends along the median line on to the metasternum gradually becoming more sparse; front femora with a strong, serrulate, acute tooth; tibiæ with a large apical dilatation nearly one-third the length of the tibia, sinuate at the distal end, rising in an arc and terminating rather abruptly without sinuation; front and middle tibiæ strongly arcuate, hind tibiæ straight.

Length 14.5 mm., width 6 mm. at apical third.

The unique type is a male from Orono, Maine, July 4, 1908, in my collection. The species is dedicated to the Indian chief Orono, from whom the town where it was taken is named.

The species most nearly resembles *verdigrispennis* superficially, but is distinct by the dark antennal joints, the much different tibial dilatation, and the straight hind tibiæ. In the coloration of the dorsal surface and in the tibial dilatation it resembles *carinispennis*, but in no other respects. From *trinervia* it differs in the shape of the thorax, tibial dilatation, elytral sculpture, size and last dorsal segment of abdomen.

(To be continued.)