

Catalogue of COLEOPTERA from South Western Virginia.

BY GEO. H. HORN, M. D.

The accompanying list of species, prepared at the request of Prof. E. D. Cope, comprises all those collected by him and Prof. Leidy during an extended Geological exploration of the mountainous regions of several of the South-western Counties of Virginia. The object of the trip being one of some importance to Geological Science, the time devoted to Entomology was of necessity quite limited and the results consequently not large, sufficient it is hoped, to remind others while similarly exploring of what may be attained by a small occupation of leisure and the great gain to our knowledge of distribution by the aggregation of small collections from different regions of the country.

The opportunity now afforded will be made use of and several other interesting species described or noted, from regions not remote, though in neighboring States.

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| Cicindela unipunctata. | Amara avida. |
| rugifrons. | musculus. |
| punctulata. | Dicælus purpuratus. |
| rufiventris. | teter. |
| Omopron americanum. | Cratacanthus dubius. |
| Nebria pallipes. | Agonoderus lineola. |
| Carabus limbatus. | pallipes. |
| vinctus. | Anisodactylus rusticus. |
| Cychrus Andrewsii. | nigrita. |
| Ridingsii. | baltimorensis. |
| stenostomus. | Eurytrichus terminatus. |
| canadensis. | Harpalus faunus. |
| • Pasimachus elongatus. | compar. |
| Galerita Lecontei. | Bradycellus dichrous. |
| Casnonia pensylvanica. | lugubris. |
| Lebia bivittata. | Anophthalmus pusio, <i>n. sp.</i> |
| atriventris. | Bembidium inæquale. |
| axillaris. | Hydaticus basillaris. |
| Calathus gregarius. | Gyrinus <i>sp. indet.</i> |
| Platynus angustus. | Hydrophilus glaber. |
| melanarius. | Necrophorus velutinus. |
| sinuatus. | Silpha peltata. |
| punctiformis. | marginalis. |
| Evarthrus obsoletus. | Coproporus ventriculus. |
| Pterostichus honestus. | Conosoma crassum. |
| stygius. | Creophilus villosus. |
| lachrymosus. | Staphylinus badipes. |
| sustentus. | maculosus. |

- Staphylinus cinnamopterus.
 Philonthus cyanipennis.
 Cryptobium bicolor.
 badium.
 Lithocharis corticina.
 Hister merdarius.
 Scaphidium piceum.
 Phenolia grossa.
 Cychramus adustus.
 Clinidium conjungens.
 Catogenus rufus.
 Brontes dubius.
 Antherophagus ochraceus.
 Mycetophagus punctatus.
 flexuosus.
 Orphilus ater.
 Nosodendron unicolor.
 Psephenus Lecoutei.
 Ceruchus piceus.
 Onthophagus latebrosus.
 Aphodius fimetarius.
 Bolboceras faretus.
 Geotrupes splendidus.
 var miarophagus.
 Trox punctatus.
 Serica sericea.
 Lachnosterna marginalis.
 Anonmala varians.
 marginalis.
 Euryomia sepulchralis.
 fulgida.
 Osmoderma scabra.
 Trichius bibens.
 affinis.
 piger.
 Dicerca pugionata.
 Chalcophora virginica.
 Agrilus politus.
 Fornax cylindricollis.
 Adelocera avita.
 marmorata.
 Megapenthes limbalis.
 Monocepidius vespertinus.
 lividus.
 Ludius abruptus.
 Athous cucullatus.
 Corymbites divaricatus.
 crassus.
 Melanactes piceus.
 Ptilodactyla elaterina.
- Dictyoptera perfaceta.
 Calopteron typicum.
 Eros modestus.
 trilineatus.
 Lucidota atra.
 Photinus pyralis.
 angulatus.
 marginellus.
 decipiens.
 Telephorus luteicollis.
 Chauliognathus pensylvanicus.
 Elasmocerus terminatus.
 Thaneroclerus sanguineus.
 Cupes capitata.
 Centronopus calcaratus.
 Xylopinus saperdoides.
 Diaperis hydni.
 Uloma impressa.
 imberbis.
 Boletotherus cornutus.
 Platydemia americanum.
 Allecula nigrans.
 Arthromacra aenea.
 Anthicus Haldemani.
 Mordella 8-punctata.
 melæna.
 Lytta convolvuli.
 Rhynchites æreus.
 Attelabus bimaculatus.
 Cossonus *sp. indet.*
 Ithycerus curculionoides.
 Phytobius *sp. indet.*
 Anthomarus *sp. indet.*
 Sitones fepidus.
 Centrinus *sp. indet.*
 Cryptorhynchus *sp. indet.*
 Leptostylus macula.
 Liopus variegatus.
 Purpuricenus humeralis.
 Oberea tripunctata.
 myops.
 Eripus suturalis.
 Smodicum cucujiforme.
 Elaphidion villosum.
 Distenia undata.
 Typocerus sinuatus.
 Leptura rubrica.
 scalaris.
 attenuata.
 lineola.

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| Leptura cordifera. | Pachybrachys carbonaria. |
| canadensis. | Cryptocephalus guttulatus. |
| bicolor. | notatus. |
| luteicornis. | Phyllobrotica discoidea. |
| Saperda lateralis. | Disonycha pensylvanica. |
| Coelomera coryli. | Oedyonychus thoracica. |
| Chrysochus auratus. | Galeruca <i>sp. indet.</i> |
| Chrysomela pulchra. | Tinodaetyla <i>sp. indet.</i> |
| Metachroma <i>sp. undesc.</i> | Dacne heros. |
| Paria <i>sp.</i> | fasciata. |
| Chalcophana convexa. | Triplax unicolor. |
| Colaspis flavida. | Scymnus <i>sp. indet.</i> |

NECROPHILUS SUBTERRANEUS.—I mention this insect in the present paper merely to record its occurrence in our own country. In Europe, specimens are found, not very commonly however, under stones, in the soil or in the shell of dead Helices. Two specimens of this species from our own country have come under my observation, one, in the collection of Mr. Ulke of Washington, was found in the mountainous region of Eastern Tennessee, by Mr. Fuchs, a gentleman to whom science is indebted for many interesting discoveries, another of which will be described in the present paper. For the other specimen I am indebted to Johnson Petit, Esq., of Grimsby, C. W. I have no account of its habits.

ANOPHTHALMUS Sturm,

A. pusio, pale brownish-testaceous; head oval, slightly longer than broad, longitudinal impression faint, surface very finely alutaceous; thorax trapezoidal, slightly broader than long, feebly emarginate anteriorly, sides moderately rounded anteriorly, slightly sinuate posteriorly, base feebly bisinuate, and emarginate at middle, surface smooth, shining, with median longitudinal line and a broad impression within each hind angle, angles rectangular; elytra oval, sides moderately rounded, humeri distinct, obtuse, surface feebly striate and sparsely covered with suberect very short pubescence. Length .15 inch.

This species may be readily distinguished from any of our others by the form of thorax as well as by the pubescence covering the elytra and under surface of the body. The thorax is slightly broader than long, trapezoidal, narrower behind. The surface is less convex than any of the described species of our country, not only that of the thorax, but also of the elytra. The humeral angles of the elytra are well defined, and the bases of the elytra nearly transverse and not obliquely produced as in *Tellkampfi*. The head is relatively broader than in the

glabrous species, and the thorax scarcely broader than the head. In this species the mentum tooth becomes very broad and obtuse, approaching in this respect *Aphænops*, in which the mentum has no tooth. The upper surface of the body is provided with setæ, arising from punctures, those on the head being short; the thorax has one on each side about its middle, the elytra have three each, arranged in a row, one near the base, another median, and a third near the apex.

Science is indebted to E. D. Cope for this interesting addition to our fauna (being our smallest species) collected in Erhart's cave, Montgomery County, Virginia.

A. pubescens. pale testaceous, shining. head oval, attenuate anteriorly, finely alutaceous, and with two longitudinal, faintly impressed lines convex internally. Thorax moderately convex, glabrous, one-third broader than long, trapezoidal, narrower behind, sides broadly rounded, sinuate posteriorly, angles acute and prominent, a longitudinal median line and two basal impressions, anteriorly feebly emarginate, base slightly produced and emarginate at middle. Elytra oval, moderately convex, with striæ evanescent at the sides and apex, base broadly rounded, humeri distinct, obtuse, surface clothed with rather dense sub-erect pubescence, third stria with three setigerous punctures. Beneath finely and more sparsely pubescent. Length .23 inch.

Easily known by its pubescence, form of thorax, and very acute hind angles. The form of thorax is very nearly that of *Trechus rubens*. The pubescence covering the surface of the body is exceedingly fine in this and the preceding species, requiring a good lens for its detection.

Collected in Cave City cave, by Mr. Chas. Sonne. A single specimen in the cabinet of Dr. LeConte.

Some of the European Anophthalmi are said to be provided with eyes. Among the specimens I have been able to examine, none of ours have that reticulation and peculiar clearness of the side of the head thought to be an evidence of the presence of an organ of vision. The species in which the eyes (?) occur are not found in caves but under stones on the surface of the ground, and generally in dense damp forests.

In our collections, four species of *Anophthalmus* are found. For the convenience of students I append a table.

Glabrous species. Humeral angles of thorax obliquely rounded.

Thorax much longer than broad, angles rectangular.....**Telkampffii.**

Thorax slightly longer than broad, angles acute.....**Menetriesii.**

Pubescent species. Humeral angles obtuse.

Thorax convex, angles acute, prominent.....**pubescens.**

Thorax flattened, angles rectangular.....**pusio.**

A. MENETRIESII Motsch. = *angulatus* Lec.—The glabrous and pubescent species differ also from each other in the greater prolongation of the base of the elytra in the former, as well as by their greater elongation of form.

ANILLUS Duval.

A. fortis, testaceous, shining, sparsely covered with short pubescence, head very finely alutaceous and with a shallow longitudinal impression each side. Thorax trapezoidal, moderately convex, shining, and with a single setigerous puncture on each side, narrower behind, sides rounded, anteriorly feebly emarginate, base squarely truncate, angles rectangular; a slight median and well-defined transverse line, convex anteriorly, in front of basal margin. Elytra oval, moderately convex, surface very finely alutaceous, and with rows of rather coarse punctures, evanescent toward the apex, and on the sides; sides broadly rounded, humeri distinct, obtuse. Legs testaceous, finely pubescent. Length .08 inch.

In addition to the very fine pubescence sparsely scattered over nearly the whole body, the elytra have also long setæ arising from larger punctures, apparently placed in a manner similar to that seen in the species of *Aphænops* of Europe. As compared with *debilis*, this species is of larger size, more robust form, the thorax broader and less narrowed behind and more convex. The pubescence and sculpture of elytra are also important points of difference.

For my specimen of this species, I am indebted to Mr. Ulke. The specimens were collected by Mr. Fuchs in the mountainous regions of Eastern Tennessee.

ATINUS, n. gen.

I suggest this name for a genus of Pselaphidæ founded on the species described by Dr. Brendel in the *Proc. Ent. Soc. Phil.*, under the name of *Ctenistes monilicornis*. It differs from our other Pselaphidæ by the excessively short palpi. The labial palpi appear to be two-jointed, cylindrical, the last joint nearly twice longer than the first. The maxillary palpi are four-jointed, the first two short and cylindrical, the second being much narrower than the first at the junction, the last two are globular, the terminal joint being very much the larger and with a few setæ on its surface. Antennæ are about half the length of the insect, stout. Joint 1 cylindrical, equalling 2 and 3; 2—3 cylindrical, 4—8 globular, gradually shortening; 9—11 slightly broader and more cylindrical than the preceding, the last joint equalling the two preceding in length.

Whatever may be the affinities of this insect, it certainly is not a *Ctenistes*, while it appears to replace in our own fauna the *Chennium* or *Centrotoma* of the old world. There are no semblances of appendages such as are seen on the outer edges of the palpi of genera near *Ctenistes* and *Centrotoma*, nor is there any stout seta such as is found on the last joint of the palpus of *Tyrus*. In the present genus the palpi are so short as scarcely to exceed the mentum in length, and are consequently very difficult to define without dissection, a matter of no great ease in a Pselaphide. It is to be desired that sufficient specimens may be found to warrant the sacrifice of some of them.

Atinus monilicornis.

Ctenistes monilicornis, Brendel, Proc. Ent. Soc. Phil. 1866, p. 190.

Collected by Mr. Fuchs in the mountainous region of East Tennessee.

FUSTIGER FUCHSII, Brendel (loc. cit.)—Dr. Brendel seems willing to accord two *ocelli* to this insect, each containing *three* facets. Several specimens in my cabinet, and that of Dr. LeConte have failed to show any such structure even under the power of a quarter-inch objective. Dr. Brendel has without doubt been deceived by reflected light from prominent points of sculpture.