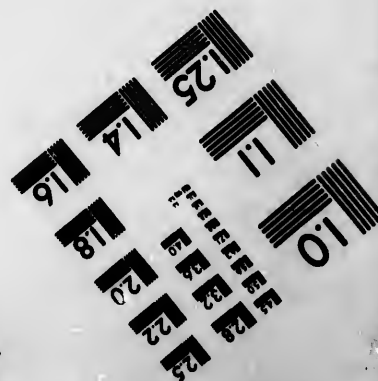
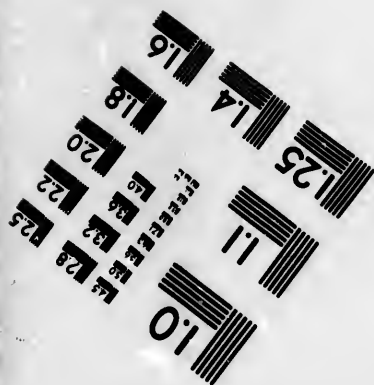
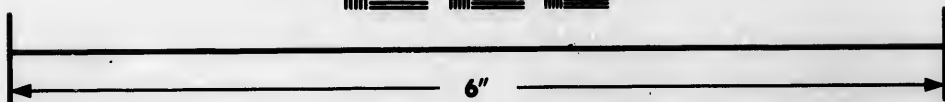
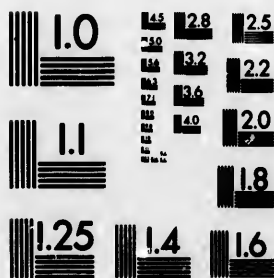


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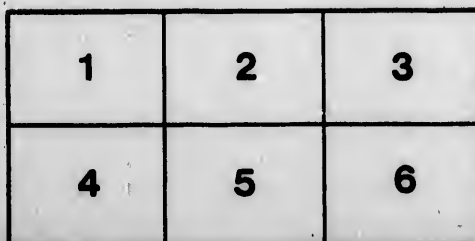
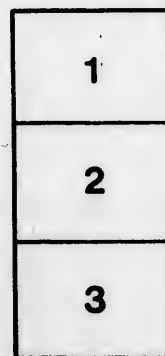
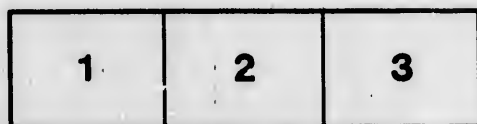
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LIST OF  
COLEOPTERA AND DIPTERA,

TAKEN AT

QUEBEC AND OTHER PARTS OF L. CANADA

BY

WILLIAM COUPER.

~~~~~  
From the Transactions of the Literary and Historical Society, Quebec, 1864.  
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PAPER V.—LIST OF COLEOPTERA AND DIPTERA  
TAKEN AT QUEBEC, AND OTHER PARTS  
OF LOWER CANADA.

By WILLIAM COUPER,

*Cor. Mem. Ent. Soc., Philad.; Nat. Hist. Soc., Montreal; Assistant Sec. Lit. &  
Hist. Soc., Quebec.*

[Presented to the Society 6th January, 1864.]

COLEOPTERA.

THE species with an \* occur also in the vicinity of Toronto, Upper Canada. Those described under genera, without specific names, do not appear in Melsheimer's or LeConte's catalogues, and are, therefore, supposed to be either obscure forms described by old authors or at present unknown to American entomologists. The species to which *n. s.* is attached are new.

CICINDELA *Lin.*

- longilabris* *Say.* *albilabris* *Kirby.* Taken at Lorette. June.  
\**sexguttata* *Fabr.* *violacea* *Fabr.* In the woods. July.  
\**vulgaris* *Say.* *obliquata* *Dej.* *tranquebarica* *Herbst.* Common.  
\**duodecimguttata* *Dej.* *proteus* *Kirby.* Quebec. August. Sandy roads.  
*hirticollis* *Say.* *albohirta* *Dej.* *unita* *Kollar.* *gravida* *Lec.*  
Common on sandy roads in August.

LORICERA *Latr.*

- \**pilicornis* *Latr.* Carab. *pilicornis* *Fabr.* In woods. July.  
Rare.

NEBRIA *Latr.*

- castenipes* *Lec.* *Helobia cast.* *Kirby.* Under stones near woodland brooks. June and July.

CALOSOMA *Fabr.*

- \*calidum *Fabr.* In fields. July and August. Common.  
 \*frigidum *Lec.* St. Louis road. Very rare. I have taken numerous specimens of this insect on the island opposite Toronto.

CARABUS *Linn.*

- serratus *Say.* lineatopunctatus *Dej.* In fields, under stones. July. Common.  
 Lapilayi *Leporte.* Under stones, &c. June and July. Uncommon.

BRACHINUS *Weber.*

- fumeus *Fabr.* librator. *Dej.* Quebec. Attracted by candle light. July. Very rare.

LEBIA *Latr.*

- \*viridis *Say.*; *Dej.* Taken on flowers. July.  
 pumila *Dej.* floricola *Harris.* On flowers. Uncommon.

CYMINDIS *Latr.*

- reflexa *Lec.* Uncommon.

CALATHUS *Bon.*

- gregarius *Dej.* Feronia greg. *Say.* Rare.

PLATYNUS *Bon.*

- picipennis *Lec.* Agonum pic. *Kirby.* Rare.  
 pusillus *Lec.* Anchus pusillus *Lec.* Rare.  
 sinuatus *Lec.* Anchomenus sin. *Dej.* Under bark of trees during summer.  
 chalceus *Lec.* Agonum chalceus *Dej.* Under stones. Uncommon.  
 \*cupripennis *Lec.* Agon. cupr. *Dej.* Feronia cupr. *Say.* Com.  
 \*octopunctatus *Lec.* Carabus oct. *Fabr.* Feronia oct. *Say.* Agonum oct. *Dej.* In fields. Uncommon.  
 placidus *Lec.* Feronia pl. *Say.* Ag. morosum *Dej.* Common.



PTEROSTICHUS *Bon.*

\**lucublandus* *Lec.* *Pœc.* *lucublandus* *Kirby.* (See *LeConte's* Catalogue for synonyms.) Common. It forms the second section *Pœcilus* *Bon.* under this family.

*stygius* *Lec.* *Feronia* *styg.* *Say.* *Fer. bisigillata* *Harris.* *Omœseus* *rugicollis* *Hald.* Under leaves in woods. Common.

\**luczotii* *Lec.* *Fer. lucz.* *Dej.* *Fer. oblongonotata* *Say.* Race a *sexpunctatus* (*Mann.*) *Pl. obtusangula* *Motsch.*

I have given the synonyms of this species, together with the form *sexpunctatus* (*Mann.*) which is considered as a race. It occurs rather common in fields near Quebec, and also at Owen Sound, U. C. I have not met with it at Toronto. It is placed by *LeConte* under *Platysma* *Bon.*, the eighth section of the family.

AMARA *Bon.*

*impuncticollis* *Say.* *Am. anthracina* *Hald.* *Am. difficillis* *Lec.* *Am. brunnipes* *Motsch.* Uncommon. July.

The following species is an addition to our fauna:—

Black, glossy, without dorsal punctures Three first joints of antennæ rufous, the remaining eight black: Elytra with eight striæ on each, and an abbreviated one on each side the scutellum: tibiæ tinged with rufous. Length  $\frac{5}{11}$  inch. Quebec. Uncommon.

CHLÆNIUS *Bon.*

\**sericeus* *Say.* *Car. ser.* *Forster.* var. *Chl. perviridis* *Lec.* Com.

\**tricolor* *Dej.* Common during summer.

ANISODACTYLUS *Dej.*

*ellipticus* *Lec.* Common. This insect is placed under the second section *Triplectrus* *Lec.*

HARPALUS *Latr.*

*herbivagus* *Say.* *Ophonus mutabilis* *Hald.* var. *H. proximus* *Lec.*

The two varieties are common at Quebec.

*viridiaeneus Beauv.* *viridis Say.* *assimilis Dej.* Two varieties of this insect occurs commonly at Quebec.

**STENOLOPHUS** *Dej.*

*humilis Dej.* This species is placed by Le Conte under the second section *Acupalpus Dej.*

**HALIPLUS** *Latr.*

*immaculicollis Harris.* *Americanus Aubé.* Common in ponds in the neighborhood of Quebec.

Of this genus I have also two species taken in company with the above. Both are twice the size of "*immaculicollis.*" The largest has the thorax yellow with a transverse oval black spot on the anterior margin behind the eyes.—The elytra are closely punctured, and possess the characteristic markings of the genus. The thorax of the other is yellow, but with a central black circular punctured spot on each side of the posterior margin, and the latter within the spots is also black. In this species the elytra are more coarsely, but less densely punctured.

**LACCOPHILUS** *Leach.*

*muculosus Say.* *Dytiscus mac. Germ.* Common in ponds during the summer.

**ANISOMERA** *Aubé.*

Two species from the neighborhood of Quebec are new to our insect fauna. I describe them in detail.

1. *Body* depressed, black, glossy. with minute scattered punctures: *scutellum* small triangular: *antennæ, palpi legs* and front of *head* of a dark chestnut color: anterior *tibiæ* spined: *tarsi* with ungues. Length  $\frac{3}{4}$  inch. Quebec, in ponds. Uncommon.
2. Depressed, black, but not so polished as the former: *Antennæ palpi, legs* and anterior margin of *elytra* dark chestnut. The *tibiæ* are spined, and the anterior *tarsi* provided with ungues. Length  $\frac{1}{2}$  inch. Quebec, in ponds. Uncommon.

COLYMBETES *Clairv.*

\**biguttulus* *Lec.* *Dytiscus* big. *Germ.* *Ilybius fonestralis* *Aubé*  
var. II. *pleuriticus* *Lec.* Common in ponds during  
summer.

*quadrinaculatus* (*Aubé*). In ponds, but not frequent.

ACILIUS *Leach.*

*fraternus* *Lec.* *Dytiscus* frat. *Harris.* Ac. *semisulcatus* *Aubé*.  
In ponds. Uncommon. August.

The ♀ has four finely granulated grooves occupying longitudinally the third part of elytra. Each groove shortens anteriorly towards the suture.

HYDROCHARIS *Lutr.*

*obtusatus* *Lec.* *Hydrophilus* ob. *Say.* Ponds. Uncommon.

NECROPHORUS *Fabr.*

*Melsheimeri* *Kirby.* Very rare.

*mortuorum* *Fabr.* *pygmaeus* *Kirby.* *crispetus* *Motsch.* Occasional during summer.

\**velutinus* *Fabr.* *tomentosus* *Weber.* This is also an occasional species.

NECRODES *Wilkin.*

\**surinamensis* *Fabr.* Common.

THANATOPHILUS *Leach.*

\**lapponica* *Herbst.* *caudata* *Say.* *tuberculata* *Germ.* *granigera*  
*Chev.* Common.

\**marginalis* *Fabr.* *noveboracensis* *Forster.* Common.

NECROPHILA *Kirby.*

\**peltata* *Lec.* *scarabaeus* pelt. *Catesby.* *Silpha americana* *Linna.*  
var. *Oiceoptoma terminatum* *Kirby.*  
var. *O. affine* *Kirby.*  
var. *O. Canadense* *Kirby.*

CREOPHILUS *Stephens.*

\**villosus Kirby.* *Staphylinus vill. Grav.* Uncommon.

LEISTOTROPHUS *Perty.*

\**cingulatus Kraatz.* *Staphylinus cing. Grav.* *S. chrysurus Kirby.*  
*S. speciosus Mann.* Rare.

Three species taken during last summer are still undetermined. The following descriptions may, in the meantime, serve to rank them as additions to our insect fauna:—

*Maxillary palpi* composed of three joints, the third moderately elongate: *antennæ* inserted at the anterior margin in front inside the mandibles, not strongly geniculate, 11-jointed: *head* as wide as thorax, flattened, densely punctured: *eyes* not elevated: *thorax* densely punctured.

They evidently belong to LeConte's Third sub-tribe XANTHOLINUS.

1. Black; antennæ ferruginous; femora, tibia and tarsi rufous. A smooth line from the anterior centre of the head, widening and elevated at the end of thorax, the latter with three large punctures on the margin: scutellum concave, margin smooth: abdomen margined, composed of six rings. Length  $\frac{1}{2}$  inch. Quebec. Uncommon.
2. Head steel-blue, polished; thorax purple, polished, with a longitudinal central smooth line: scutellum as in the former; Elytra same color as thorax, but the sutural margins are smooth, having a stria on each: anterior rings of abdomen pubescent at margins; apex steel-blue, beneath punctured. Length  $\frac{9}{10}$  inch. Quebec. Very rare.
3. Maxillary palpi rufous: antennæ, head and thorax dark rufous, the latter with a smooth longitudinal central line: scutellum black, margined and of same form as that last described: Elytra bright rufous, the sutural margins smooth and narrow: posterior margin of abdominal rings and the apex entirely rufous: tibiæ and tarsi rufous. Length  $\frac{9}{10}$  inch. Quebec. Very rare.

LATHROBIUM *Grav.*

puncticolle *Kirby.* July and August. Rare.

CRYPTOBIUM *Mann.*

\*bicolor *Er.* Lathrobium bic. *Grav.* August.

PÆDERUS *Grav.*

\*riparius *Fabr.* Sometimes common. In U. Canada this species congregates at the roots of trees in the fall, when they enter cavities under the bark, &c., and remain during winter.

OXYPORUS *Fabr.*

rufipennis *Lec.* In fungi. This is a new species lately described by Mr. LeConte. His insect came from the Western States.

PLATYSOMA *Leach.*

\*Lecontei (*Mars.*) This genus forms the fourth section under the family HISTRINI. It is found beneath bark of decayed trees.

IPS *Fabr.*

\*Dejeanii *Kirby.* sepulcharis *Randall.* Very common.

CUCUJUS *Fabr.*

\*clavipes *Fabr.* Under bark of trees. Rare

PEDIACUS *Shuckard.*

planus *Lec.* Sylvanus planus *Lec.* Under bark. Rare.

DERMESTES *Linn.*

\*lardarius *Linn.* Extremely common.

CYTILUS *Er.*

\*varius *Er.* Byrrhus varius *Fabr.* B. trivitatus *Mels.* var. B. alternatus *Say.* Common north of Beauport.

BYRRHUS *Linn.*

Kirbyi *Lec.* Occurs at Cape Diamond behind the Citadel. Not common.

Two additional species occur in the vicinity of the city, which are not yet determined.

PLATYCERUS *Geoffr.*

\*quercus *Sch.* Lucanus qu. *Weber.* Pl. securidans *Say.* Found at Lake St. Charles. August.

ONTHOPHAGUS *Latr.*

\*latebrosus *Strum.* Scarab. hecate *Panzer.* Uncommon.

TEUCHESTES *Muls.*

fossor *Fabr.* Scarabaeus foss. *Linn.* Common.

\*fimitarius *Ill.* Very common.

GEOTRUPES *Latr.*

egeriei *Germ.* Found in Agarics in woods. July. Rare.

\*excrementi *Say.* Rare.

HOPLIA *Ill.*

\*trifasciata *Say.* primaria *Burm.* helvola *Mels.* ♀ tristis *Mels.* Uncommon.

DICHELONYCHIA *Kirby.*

\*elongata *Fitch.* Melolontha elong. *Schönh.* Common in August.

PHYLLOPHAGA *Harris.*

\*quercina *Ku.* *Harris* Ins. Very common.

SERICA *McLeay.*

\*vespertina *Lec.* Melolontha vesp. *Schönh.* Omaloplia vesp. *Harris.* C. atricapilla *Kirby.* Very abundant in the woods in June and July.

OSMODERMA *Lep.*

\*scabra *Dej.* Trichius sc. *Beauv.* ♂ Gymnodus foveatus *Kirby.*  
♀ Gymnod. rugosus *Kirby.*

TETRAPIUS *Fabr.*

\**piger* *Fabr.* *Drummondè Gory.* *rotundicollis Kirby.* Common on flowers during midsummer.

DICERCA *Esch.*

\**divaricata Lec.* *Buprestis div. Say.* August. Rare.

ANCYLOCHIRA *Esch.*

*maculiventris Lec.* *Buprestis mac. Say.* *Bup. sexuotata Lap.* August. Rare.

MELANOPHILLA *Esch.*

\**longipes Gory.* *Buprestis long. Say.* *Ap. appendiculata Lap.* *Mel. immaculata Gory.*

This species is very common during the latter part of July. It elevates the elytra somewhat similarly to *Chrysobothris*, and it is also difficult to capture. Some years ago, when the cabinet factory of Messrs Jacques & Hay of Toronto was being consumed by fire, which happened just as this insect was appearing in its perfect state, the heat from the flames, in addition to the warmth of the day, irritated them to an extraordinary degree. Their bite became so troublesome to the spectators that many had to leave the immediate vicinity. The bite of this insect, under such circumstances, is like dropping hot sealing wax on the skin.

CHRYSOBOTHIRIS *Esch.*

*quadre impressa Lap.* Taken on fences. August.

CRYPTOHYPNUS *Esch.*

*abbreviatus Lec.* *El. silaceipes Germ.*

ELATER *Linn.*

*pedalis Caud.* *Ampedus ped. Germ.* *El. ursulus Mels.* Common under bark of trees.

*miniipennis Lec.* Common.

*rubricus Say.* *Ampedus conc. Germ.* Rare.

AGRIOTES *Esch.*

maneus *Lec.* Elater manc. *Say.* El. (Agr.) obscus *Harris.*  
Agr. truncatus *Mels.* Agr. striatulus *Mels.* August.  
Common.

fucosus *Lec.* var. collaris *Lec.* Very rare.

DOLOPIUS *Esch.*

pauper *Lec.* Uncommon.

MELANOTUS *Esch.*

decumanus *Er.* Uncommon.

sagittarius *Lec.* "

LIMONIUS *Esch.*

griseus *Cand.* Elater st. *Herbst.* El. armus *Say.* Gambrius  
arm. *Lec.* Very common.

CORYMBITES *Latr.*

cylindricornis *Germ.* Elater cylind *Herbst.* El. appressifrons. *Say.*  
♀ El. brevicornis *Say.* C. parallelopipedus *Germ.*  
Common.

aeripennis *Lec.* El. (Aphotistus) aer. *Kirby.* El. appropinquans  
*Rand.* Under bark of dead trees.

pulcher *Lec.* Very rare.

tarsalis *Lec.* Athous tars. *Mels.* Uncommon.

pyrrhos *Lec.* Elater pyrrh. *Herbst.* ♀ Athous pyrrhicus *Hald.*  
Ath. vagrans. *Mels.* Ath. æqualis *Mels.* Rare.

ASAPHES *Kirby.*

decoloratus *Lec.* Elater dec. *Say.* Rare.

DICTYOPTERA *Latr.*

perfaceta *Say.* substriata *Lec.* Rare.

EROS *Newm.*

\*coccinatus *Say.* Very rare. Found in pine swamps.

TELEPHORUS *Geoff.*

carolinus *Fabr.* Common. July.



HYDNOCERA *Newm.*

*curtipeennis Newm.* brachypterus *Kl. lineaticollis Spin.* Gomin woods. Rare.

NECROBIA *Latr.*

\**violaceus Fabr.* Found in dried bones, &c., during summer.

CURCULIO *Fabr.*

*pinicola n. s.*

Dusky ; completely punctured and covered with golden decumbent hairs, some of which are transverse on the thorax. Occurs on pines near Quebec.

*Body* underneath black ; the posterior section composed of three rings, the anterior one as wide as the two following. *Eyes* black, oval, transverse, a tuft of hair over each ; in some specimens the space behind and beneath the eyes is without many hairs, and presents only a ferruginous glossy punctured appearance : *rostrum* of equal width throughout, punctured, ferruginous, the lateral groove oblique : *antennae* composed of eight joints, (visible with the lens) the outer ones largely capitate ; the first clavate, and almost as long as the other eight ; the second joint is longer than the third, and the latter longer than the succeeding four which are equal ; but the basal capitate joint is distinct : *Thorax* much narrower than anterior part of body, slightly swelled at the sides, having short longitudinal and lateral polished elevated spaces, and densely covered with golden hairs : *scutellum* black and slightly elevated : *Elytra* covers the abdomen, each with nine rows of long deep impressions, and covered with distinct patches of golden hairs : *femora* clubbed, indented underneath : *tibiae* armed with a strong tooth at base : *tarsi* cushioned, and provided with *ungues*. Length  $\frac{5}{8}$  inch. Rare.

I have named this weevil in accordance with the only habitat in which it is found. Another species of the same size occurs in Western Canada but with marked differences of elytral characters.

**CRYOCEPHALUS** *Muls.*

\**rusticus* *Lin.* *obsoletum* *Rand.* Common. July. Pine-borer.  
*agrestis* *Kirby.* Common. Pine-borer.

**CALLIDIUM** *Fabr.*

\**violaceum* *Lin.* Common. Destructive to pines.

**CLYTUS** *Fabr.*

*hamatus* *Say.* Rare.

\**undulatus* *Say.* *undatus* *Kirby.* *Sayi* *Lap.* Common. Very destructive to fallen pines when the bark is allowed to remain on the tree.

*longipes* *Kirby.* Rare.

**CYRTOPHORUS** *Lec.*

*verrucosus* *Oliver.* July. Rare.

**MONOHAMMUS** *Latr.*

*confusor* *Kirby.* *maculosus* *Hald.* Common.

**ANÆREA** *Muls.*

*calcarata* *Say.* Very rare,

**COMPSIDEA** *Muls.*

\**tridentata* *Oliv.* Rare.

**SAPERDA** *Fabr.*

*candida* *Fabr.* *bivittata* *Say.* Very destructive to apple and pear trees in the neighborhood of Quebec.

**DESMOCERUS** *Serv.*

\**cyaneus* *Fabr.* *palliatu* *Forst.* Not common.

**RHAGIUM** *Fabr.*

\**lineatum* *Oliv.* In July. Under the bark of pine trees. Com.

EVODINUS *Lec.*

- \**monticola* *Randl.* Taken at Bay St. Catharines, mouth of River Saguenay.

ACMÆOPS *Lec.*

- \**proteus* *Kirby.* *Paehyta sublineata* *Hald.* Common in lumber yards.

STRANGALIA *Serv.*

- \**zebrata* *Fabr.* *zebra* *Oliv.* Very rare.

LEPTURA *Linn.*

- \**canadensis* *Oliv.* ♂ *tennicornis* *Hald.* Common.  
*erythroptera* *Kirby.* *cinnamoptera* *Hald.* Rare.  
 \**vittata* *Oliv.* *abbreviata* *Germ.* *semivittata* *Kirby.* Uncommon.  
 \**vagans* *Oliv.* *brevis* *Kirby.* Common about lumber wharves.  
*atrata* *Lec.* Found at Laval. Rare.  
*chrysocoma* *Kirby.* Quebec. Common on flowers during mid-summer.  
*montivagans* *n.s.* Black; head and thorax pubescent; antennæ black, slightly ferruginous; body beneath glossy. Taken at Bay St. Catharines, mouth of River Saguenay. July.

The specific characters appear in the elytral markings which are well developed in the ♀ and are as follows:—On a yellowish ground, black dentated marks occupy the shoulders, and a longitudinal oval spot on each side the suture behind the region of the scutellum,—the centre has a wide, black, irregular band, reaching (in the males) the suture, and the apex black, toothed anteriorly. The elytra are prolonged, exhibiting a large triangular space for the scutellum, which is not elevated. Length of ♂  $\frac{3}{4}$  and ♀  $\frac{1}{2}$  inch.

I have failed to discover the tree in which it goes through its stages, however, its name is applicable to its occurrence so far on the mountain regions of the Saguenay.

*quebecensis* *n. s.* Black; head and thorax densely and minutely punctured, the latter has a smooth, narrow, longitudinal line on its disc; labial palpi yellow: elytra densely and minutely punctured; anterior femoræ yellow beneath, black above,—2nd and 3rd yellow at the joint attached to the coxæ.

Quebec. Rare. Length of ♂  $\frac{1}{4}$  inch.

The ♀ of the above have the same characters excepting that the whole of the tibiæ and tarsi are yellow.

#### DONACIA *Fabr.*

*juncina* *n. s.* Head black, minutely punctured, with a short cavity between the eyes: thorax violet, punctured, with a longitudinal impressed centre, and the anterior angles tuberculate: Elytra violet, densely punctured in rows, having four central depressions: body and legs sparsely covered with white hairs. Length over  $\frac{1}{4}$  inch. Lake St. Charles, common.

#### GALERUCA *Geoffr.*

*guttulata* *Lec.* Common in July.

#### SYSTEMA *Chevr.*

*frontalis* *Fabr.* Common.

#### CALLIGRAPHIA *Chevr.*

*Philadelphica* *Linn.* Common.

\**multipunctata* *Say.* Common.

#### CHRYSOMELA *Linn.*

\**elegans* *Rogers.* Common.

#### EUMOLPUS *Fabr.*

\**auratus* *Fabr.* Gregarious on Dogbane.

#### GASTROPHYSA *Chevr.*

\**caeruleipennis* *Say.* *polygona* *Linn.* Common during midsummer.

HIPPODAMIA *Muls.*

*Lecontii Muls.* On thorn hedges. July. Rare.

\*13-punctata *Linn.* tibialis *Say.* Common.

\*parenthesis *Say.* tridens *Kirby.* Common.

COCCINELLA *Linn.*

*lacustris Lec.* tricuspis *Kirby.* On thorn hedges. Rare.

\*novemnotata *Herbst.* Common.

*transversoguttata Falderm.* 5-notata *Kirby.* Common.

\*bipunctata *Linn.* bioculata *Say.* Common.

MYSIA *Muls.*

\*15-punctata *Oliv.* mali *Say.* Uncommon.

CHILOCORUS *Leach.*

\*bivulnerus *Muls.* Common.

HELODES *Payk.*

*modesta Lec.* var. rare.

PENTHES *Fabr.*

*obliquata Fabr.* Not common. It is found under the bark of dead trees.

TENEBRIO *Linn.*

\*molitor *Linn.* Common.

UPIS *Fabr.*

\*ceramboides *Linn.* reticulatus *Say.* Common under the bark of dead trees.

BOLITOPHAGUS *Fabr.*

\*cornutus *Pz.* Found in boleti growing on trees.

PHELLOPSIS *Lec.*

*obcordatus Kirby.* Common in fungi.

MELANDRYA *Fabr.*

*striata Say.* thoracica *Mels.* var. *a.* bicolor *Mels.* var. *b.*

EMMESA *Newm.*

*connectens* *Newm.* Rare.

DIRCAEA *Fabr.*

*4-maculatus* *Say.* Very rare.

MELOE *Linn.*

*angusticollis* *Say.* Common on the potatoe vines.

EPICAUTA *Redtenbacher.*

*\*atrata* *Fabr.* *pensylvanica* *Geer.* *nigra* *Woodhouse.* Very common.

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 LIST OF DIPTERA.

Last summer, I collected Dipterous insects for the purpose of forwarding duplicates to Baron R. Osten Sacken of the Russian Legation in Washington, the only authority regarding this class of insects on the continent, who has kindly named many of them for me. The species that could not be determined were sent to Dr. H. Leow, Meseritz, Prussia, the highest living authority in Europe. The Baron states that "American Dipterology is not advanced enough as yet to make it possible" to determine all the species taken in this latitude. He says: "The *Muscidæ calypteræ* especially are in very bad condition, and will probably remain so for a very long time." In his last letter he adds: "If you can collect diptera, or if you are in a position to encourage others to do so, you will render a service to science. We want materials, especially from your Northern regions."

The following is the first dipterological list published in this Province :

*TIPULA* Linn.

*abdominalis* Say. *albilatus* Walk.. Common on the Gomin road during midsummer.

*GERANOMYIA* O. Sacken.

*rostrata* Say. Taken in the sweep-net Gomin Road.

*RHYPHUS* Latr.

*penestralis* Scop. Taken in woods Gomin road.

*LEPTIS* Fabr.

*Boscii* Macq. In the woods on St. Louis road.  
*proxima* Walker. Taken at Beauport.

*TETANOCERA* Dumer.

*valida* Lw.

*combinata* Lw.

*plumosa* Lw. In woods north of Quebec.

*SARGUS* Fabr.

*viridis* Say. Beauport. Common.

*TABANUS* Linn.

*lasiophthalmus* Macq.? Very common in July.

*BOMBYLIUS* Linn.

*fratellus* Wied. Common in sandy places in woods.

*LAPHRIA* Fabr.

*posticata* Say. In Gomin woods.

*ANTHRAX* Linn.

*fulvianus* Say. On flowers in the woods.

MERODON *Latr.*

*curvipes* *Wied.* *Polydonta bicolor* *Macq.* Lower St. Lawrence.

SYRPHUS *Linn.*

*quadratus* *Say.* Near the Montmorenci river.

ERISTALIS *Latr.*

*dimidiatus* *Wied.* Common on flowers in July.

*Bastardii* *Macq.* On flowers.

LAUXANIA *Latr.*

*lupulina* *Fabr.* Taken abundantly in the sweep-net.

*cylindricornis* *Fabr.* do. do.

TRYPETA *Meig.*

*sparsa* *Weid.* Taken commonly in the sweep net.

SCATOPHAGA *Latr.*

*stercoraria* *Linn.* Common everywhere.

DOLICHOPUS *Latr.*

*cuprinus* *Wied.* Very common.

TACHINA *Fabr.*

*vivida* *Harris.* (vid. *T. hirta* *Drury.*) Rare.

CONOPS *Linn.*

*sagittarius* *Say.* ? On flowers. Rare.

CORDYLURA *Fall.*

*bimaculata* *Lw.* Not common. Found on flowers.

VOLUCELLA *Geoffr.*

*basalis* *Say.* (Harr. coll.) "It is very like the European *Volucella plumata*"—O. S. In August. Common.

SYRITTA *St. Fargeau.*

*plipiens* *Linn.* Common on flowers. July.



ronce.

Although the list of diptera is small, I have still the hope of seeing a large addition made to it next summer, and I anxiously await the result of Dr. Leow's investigation of forms sent by me from this locality. The Canadian student of Diptera is strongly recommended to collect the following families, as it is probable that many of our species are new:—Tipulidæ; Tabanidæ; Dexidæ; Sarcophidæ; Myopidæ; Stratiomydæ; Adontomyia; Trypetidæ, Asilidæ; Tachinina.

Many Dipterous insects form galls or excrescences on various trees—the food of the larvæ being of vegetable character. It would therefore be conducive to natural science that such vegetable forms be collected for the purpose of discovering the insect architect. Two new galls were discovered in the vicinity of Quebec last summer—one a pretty leaf-gall of *Spiræa salicifolia*, the product of a *cecidomyia*, discovered by myself. The other an Aphis gall on White Spruce, discovered by the Rev. Mr. Brunett of Laval University. The writer would thankfully receive contributions of this nature.

Volucella

