

GENERIC CHARACTERS OF THE CHRYSOMELIDAE.

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XXI. Chrysomela. Last joint of palpi dilated.

XXII - XXIII. Doryphora. Last joint of palpi short, trinotate.

XXIV. Microcephala. Antennae apparently but nine jointed. Joints # 8-11 comate, forming elongate club.

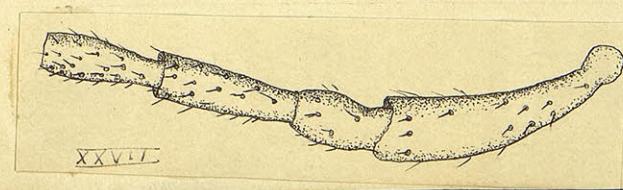
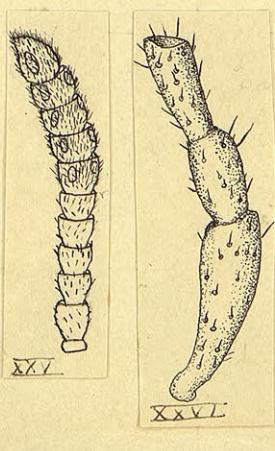
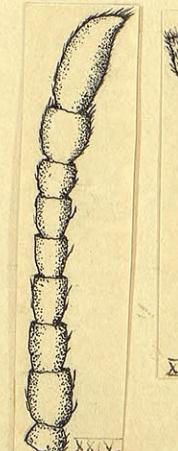
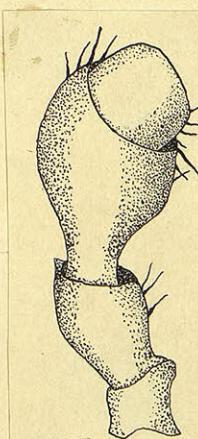
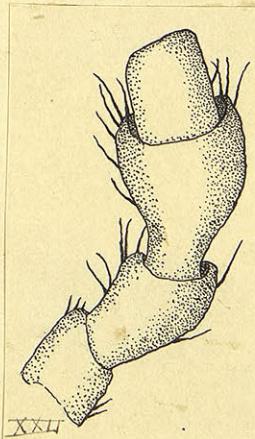
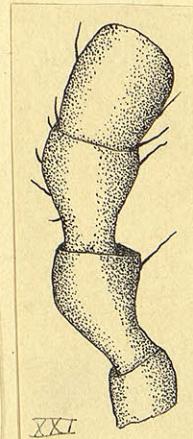
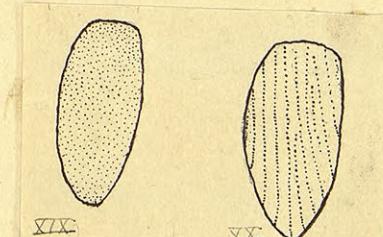
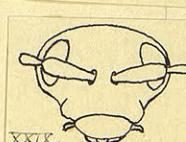
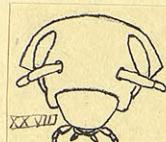
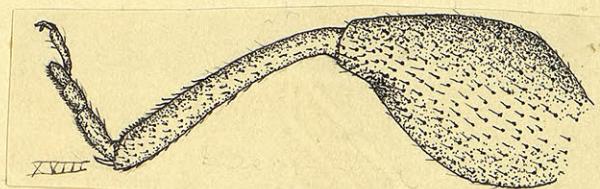
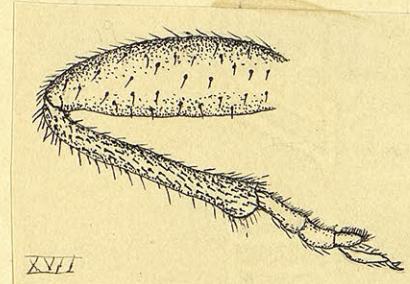
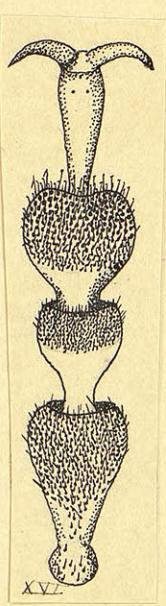
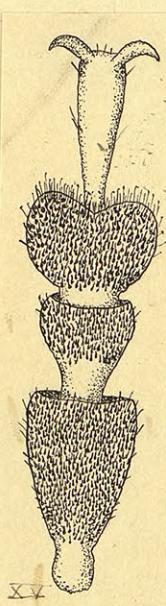
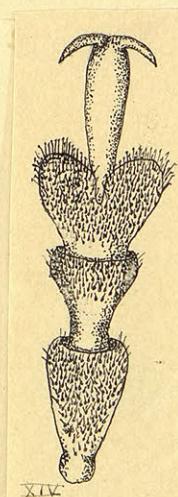
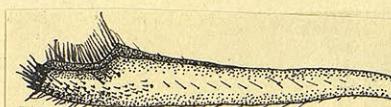
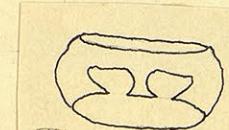
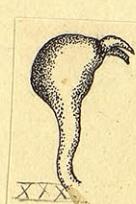
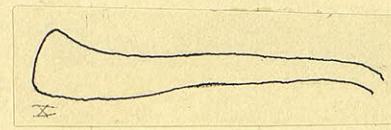
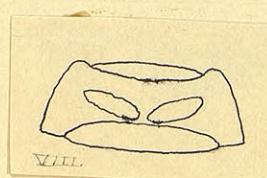
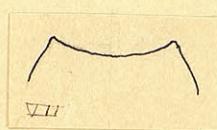
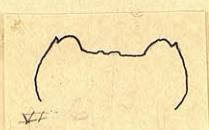
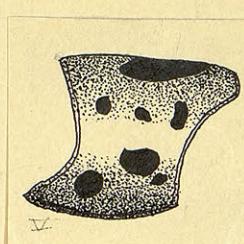
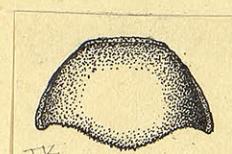
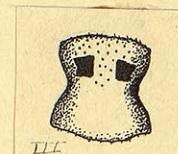
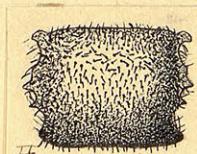
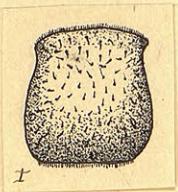
XXV. Odontota. Antennae distinctly 11-jointed

XXVI. Luperus. Antennae with 1st joint moderate in length.

XXVII. Berotana. Antennae with 1st joint long, 3^d longer than 4th.

XXVIII. Blepharida. Antennae distant.

XXIX. Haltica. Antennae approximate.



TRIBE I. DONACIINI.

The members of this tribe are graceful, active insects. The prominent head is narrowed behind the eyes. The eyes are entire. The antennae are close together and on the front before the eyes.

The legs are long and frequently the hind thighs are toothed. Sometimes the front and hind tibiae are distinctly spurred. The tarsal claws are simple and the front coxal cavities are closed.

The elytra are wider than the prothorax. Upon the elytra are ten rows of quadrate punctures. The epipleurae are narrow and indistinct.

The genera *Donacia* and *Haemonia* are the only members of this tribe.

The only ones in this tribe are separated by the characters of the feet. In the former the tarsi are dilated and spongy beneath, while in *Haemonia* the corresponding parts are narrow and glabrous.

TRIBE II. SAGRINI.

The genera of this tribe found in the tropics are large and splendidly colored. Those found here are small and dull of color.

The back of the head is not narrowed. The eyes entire and the epistoma is large and distinct. The antennae are filiform and rather far apart on the front in advance of the eyes.

The prothorax is no narrower than the head but the elytra are wider than the prothorax. The elytra are strongly punctured and are margined. The epipleurae are entire, narrow and distinct.

The middle and hind coxae are but narrowly separated. The tibiae have no spurs and the tarsi are dilated.

In this tribe are the genera, *Orsodaena*, *Zengophone*, *Syneta* and *Thricolema*.

In the Sagrini the generic distinctions are based on the separation of the

coxae, the form of their cavities, the shape and sculpture of the prothorax, the form of the eye and the character of the claws.

In other groups it will be noted that some of these characters have greater importance; in some cases serving as tribal rather than as generic distinctions.

TRIBE III. CRIOCERINI.

In this tribe the prothorax is not margined on the sides. A noticeable character is the strong transverse constriction which usually is found just behind the middle of the prothorax.

The elytra are regularly punctate-striate and the epipleurae are not definitely defined. The stout antennae are inserted at some distance apart in front of the eyes. The legs are short yet not stout. The middle and hind coxae are moderately separated and the front coxal cavities are closed. The claws are simple and approximate or even somewhat connate at the base.

This tribe is represented by but two genera, *Lema* and *Crioceris*.

The prothorax of *Lema* is constricted at the middle, while that of *Crioceris* is cylindric.

TRIBE IV. CLYTHRINI.

The members representing this tribe are stout of form with the prothorax and elytra closely joined. The head is large, with transverse eyes and short, serrate, widely separated antennae. In a few males the mandibles are large. The elytra are lobed on the sides.

The legs are short and stout, except in the few cases where the front legs of the male are elongated. The trochantin is large. Sometimes the front coxae are contiguous and in others separated by the prosternum, but the coxal cavities are closed.

Tribe IV is divided into three groups. *Clythrae*, *Megalostomes* and *Babiae*. Group *Clythrae* has but one genus, *Anomoea*. There are three genera in Group II, *Megalostomes*; they are *Euryscopa*, *Coscinoptera* and *Megalostomis*. Group *Babiae*

has three genera Babia, Sarinis and Urodera.

Here again are found other values given to characters. As in the preceding group the form of the eyes is of generic importance, but other characters are drawn from the development of the epiphlae, and the arrangement of the elytral punctures, and especially to be noted the position of the coxae.

TRIBE IV. CHLAMYDINI.

These are cylindrical insects of a dull metallic color and covered with large tuberosities.

The antennae are short, serrate and received in widely separated grooves at the sides of the proternum. The eyes are large and emarginate.

The legs can be drawn close to the body into cavities so that when at rest the insect appears like excrement of the caterpillar. The front coxal cavities are but narrowly closed behind and in front. The claws are appendiculate.

The prosternum is wide in front and narrow behind. It separates the small front coxae and reaches behind to the metasternum. The prothorax and elytra are closely fitted. The elytra have large lateral lobes. The scutellum is wider behind and is truncated with small anterior cusp fitting in a notch of the base of the prothorax. The pygidium is large. The first ventral segment is carinate and the fifth is large.

This tribe is represented by the genera Chlamys and Exema, in the separation of which the characters of the antennae are alone available; in Chlamys the serration begins with the fifth joint and in Exema with the sixth.

TRIBE VI. Cryptocephalini.

These insects have the prothorax and elytra so closely fitted as to give them a robust and compact form.

The eyes are large and somewhat emarginate and the antennae are widely separated and usually long and slender.

The legs are moderate in length, often the front ones are elongated with thickened thighs. Claws usually simple but sometimes appendiculate. The front coxae are round, not prominent and are entirely inclosed. The middle and hind coxae are widely separated. The prosternum and inter-coxal process are wide. The epipleurae are narrow and only moderately sinuate at the sides. The side pieces of the metathorax are large. The first and fifth ventral segment longer than the others. The elytra do not cover the pygidium.

In this tribe are the genera *Bassareus*, *Cryptocephalus*, *Griburius*, *Pachybrachys*, *Monachus*, *Diachus* and *Triachus*.

Again the shape of the tarsal claws is of generic value. The sculpture of the prothorax and the outline of the prothoracic flanks is made use of. The of the surface and the proportions of the prosternum are characters. The widening at the sixth or the seventh antennal joint separates two genera.

TRIBE VII. EUMOLPINI.

These insects are oblong, convex, rarely rounded or oval, sometimes they are spotted. The head is deflexed, the front wide and the eyes are more or less emarginate.

The antennae are filiform and slightly thickened externally. They are usually long and widely separated at the base.

The legs are moderate, the front ones being elongated in some species. The tarsi are broad and the third joint is deeply bilobed, while the claws are appendiculate or bifid. The front coxae are separated, globose and the cavities are closed.

The genera of this tribe are: *Trichotheca*, *Xanthonia*, *Fidia*, *Adoxus*, *Glyptoscelis*, *Myochrous*, *Chrysochus*, *Tymnes*, *Paria*, *Metachroma*, *Graphops*, *Chrysodina*, *Colaspis* and *Melaparia*.

Several genera of this group have distinct postocular lobes beneath. The sculpter and shape of the prothorax is of use. New properties appear in the distinctness of the proteral sutures beneath in the thighs whether simple or toothed, the sulcation and expansion of the tibiae, and the presence or absence of tibial

spurs. The presence of supraocular and frontal lines is noticed. The thickness toward the tip, and the length of the antennae as well as the proportion of the joints are of importance.

TRIBE VIII. CHRYSOMELINI.

The Chrysomelini are of medium size, oval, convex and rarely small. They are variegated according to the different genera.

The antennae are widely separated. They are not long and are moderately thickened toward the tip.

The palpi are frequently dilated at the tip and truncate.

The front coxae are transverse widely separated and the coxal cavities are closed or open depending upon the genera. The tibiae spurs are inconspicuous, usually the third joint is lobed, and the claws are variable in shape.

The side margin of the prothorax is well defined and the epipleurae are distinct. The five ventral segments are nearly equal.

This tribe is divided into five groups. Group I has the genus *Timarcha*, also group II has but one genus *Entomoscelis*.

In Chrysomelae Group III are these genera: *Prasocuris*, *Donyphora*, *Chrysomela*, *Plagiodesma*, *Gastroidea* and *Lima*. *Gonioctena* is the one genus in Group IV, as *Phyllodecta* is in group V.

The position of the coxal cavities, shape of the metasternum and tibiae and the character of the claws are needful to separate this tribe into groups. For the first time in the Chrysomelidae the shape of the third tarsal joint and the last joints of the palpi are of importance. As in the preceding tribes the sculpture of the prothorax and the tibial grooves are of a generic value.

TRIBE IX. GALERUCINI.

In consequence of the great number of insects belonging to this tribe they are of a variety of colors and shapes .The front of the head is generally carinate with a narrow ridge. The antennae are close together between the eyes, which are not emarginate and finely granulated.

Claws vary but are rarely simple. The prosternum is narrow or invisible between the prominent conical front coxae.

The prothorax is truncate or emarginate in front and margined on the sides. Scutel visible. The elytra are rarely shorter than the abdomen.

This tribe is divided into two sub-tribes. The genera in sub-tribe I are: Cerotoma, Andrector, Phyllobrotica, Phyllecthris, Luperus, Androlyperus, Scelolyperus, Agelastica, Metacycla, Monocesta, Diabrotica, Trirhabda, Adinsonia, Galeruc and Monoxia.

While the genera of sub-tribe II are: Blepharida, Hypolampsis, Phae-dromus, Pachyonychis, AEdionychis, Disonycha, Haltica, Lactica, Migraltica, Crepidodera, Cerataltica, Orthaltica, Systena, Luperaltica, Longitarsus, Glyptina, Aphona, Phyllotreta, Mantura, Podagraria, Sphaeroderma, Argopistes, Euplectroscelis, Chaetoenemia, Dibolia and Psylliodes.

The most important characters here is the hind thighs, whether shaped for walking or for leaping. The shape of the tarsal claws, extent of the epipleurae, proportion and number of the antennal joints, the sculpture of the tibiae, arrangement of the punctures of the elytra, length and breadth of the tarsal joints, are of great generic value in this tribe. In one genus the antennae of the male are deformed. For the second time in this order the joints of the palpi are taken into consideration .And for the first time the shape of the segments of the abdomen are noted. The impressions of the prothorax vary, also the position of the tibial spur. The front deflexed or not is of a minor importance.

TRIBE X. HISPINI.

This tribe is remarkable in that the anterior part of the head is prominent and the mouth is confined to the under surface of the head. The body is narrowed in front and is broad and truncate behind, making a wedge shape. It is without foliaceous margins.

The head is not covered by the prothorax, which is emarginate or truncate in front. The larvae forms from its excrement a tent like shelter.

The four genera of this tribe are: *Stenispa*, *Odontota*, *Microrhopala*, and *Stenopodium*.

In this tribe the width and shape of the third tarsal joint and the coarseness of the punctures of the elytra are important characters. The antennae of one genus while really eleven jointed appear as having but nine joints. The three joints form a club.

TRIBE XI. CASSIDINI.

The margins of the prothorax and elytra are expanded. Usually the head is concealed under the expanded margin of the prothorax. The side margin of the elytra and prothorax form an oval or nearly circular outline. *Porphyraspis*, *Physonota*, *Cassida*, *Coptocycla*, *Mesomphalia* and *Chelymorpha* are the genera belonging to this tribe.

In this last tribe the prothorax is round in front and quite conceals the head, in others the prothorax is less rounded and the head partially exposed, or the prothorax is imarginate in front and the head is visible. Also the character of the sides and base of the prothorax and the length of the antennae are of importance.

Tribe IX alone is divided into sub-tribes (*Galerucini* and *Halticini*).

These sub-tribes depend upon the shape of the hind thighs. In *Galerucini* sub-tribe I the hind thighs are slender for walking. While in *Halticini* the thighs are thickened, adapted for leaping.

Tribes IV and VIII and sub-tribes Halticini are divided into groups.

Under Tribe IV there are three groups Clythrae I, Megalostomes II, and Babiae III.

Tribe VIII has five groups Timarchae I, Entomoscelides II, Chrysomelae III, Gonioctermae IV, and Phyllodectae V.

Sub-tribe Halticini is divided into groups Blepharidae I, Monoplati II, AEdionyches III, Dison ychae IV, Halticae V, Lacticae VI, Crepidoderae VII, Aphthonae VIII, Arsipodes IX, Mucophilae X, Chaetocuemae XI, Diboliae XII, and Psylloides XIII.

Below I give the characters separating these groups.

An important character is found in the shape of the tarsal claws. Groups Clythrae, Megalostomes and Chrysomelae have simple claws. Group Babia has an appendiculate claw and Groups Gonioctenae, Phyllodectae and Blepharidae have a cleft claw. And groups Disonychae, Halticae, Lacticae, Crepidoderae, Chaetocnema, Diboliae and Psylliodes have either a simple or appendiculate claw, also Aphthonae, Arsepodes, Mucophilae.

The front coxae cavities of Timarchae, Entomoscelides, Crepidoderae, Monoplati, Blepharidae and Arsipodes are closed behind, while those of Disonychae, Halticae, Lacticae and Aphthona are open.

The front coxae are close together in Clythrae and separated in Megalostomes.

In the groups Monoplati and AEdionyches, the last joint of the hind tarsi is globosely inflated at the tip.

The distinction between Disonchae and Aphthona is that Disonychae are large, and the first joints of the hind tarsi are moderate in length, while Aphthonae are small and the first joints of the hind tarsi are long.

The tibiae of Gonioctenae are dilated and toothed while those of Phyllodectae are neither dilated nor toothed. Also the tibiae of Chaetocnema are toothed.

In Diboliae the spur of the hind tibia is large and emarginate, while that of Mniophilae, Crepidoderae, Lacticae, Halticae, Arsipodes, Disonychae and Aphthonae is simple.

Blepharidae is separated from groups 4 - 13 inclusive of tribe IX, by the antennae being distant at the base. Psylliodes have but ten joints in the antennae, and the hind tarsi are inserted at the outer side of the tibiae. In groups 4-12 inclusive the antennae are eleven jointed, and the hind tarsi are inserted at the end of the tibia.

The prothorax of Crepidoderae, Lacticae and Halticae have a transverse impression. The prothorax of Disonychae, Arsipodes, and Mniophilae have no impression. Lacticae and Halticae are distinguished by the impression of the prothorax in Lacticae being limited by a groove and that of Halticae not being limited.

The mesosternum is short and sometimes concealed in Mniophilae and long in Crepidoderae, Lacticae, Halticae, Arsipodes, Disonychae and Aphthonae.

Timarchae have a short metasternum and Entomoscelides a long one.

In separating genera some character may in one group entirely divide one genus from all of the others. While in another tribe this character may merely separate several genera from several others.

I have arranged the genera according to the characters which are thought to be of enough importance to be used as generic distinctions. The genus Phyllobrotica has no epipleurae. The epipleurae of the genera Phyllecthris, Leuperus, Trirhabda, Babia, Saxonis, Urodera, Androlyperus and Scelolyperus are not entire. While that of the genera Cerotoma, Andrector, Agelastica, Metacycla, Adimonia and Galeruca extends to the tip of the elytra.

The base of the prothorax in Bassareus, Cryptocephalus, Prasocuris, and Chrysodina is not margined, while that of the genera Griburius, Pachybrachys, Colaspis, Metaparia, Doryphora and Chrysomela is margined.

The shape of the claw whether simple, appendiculate or cleft is of much

use in separating the genera. In the genera *Thricolema*, *Bassareus*, *Euplectroscelis*, *Cryptocephalus*, *Griburius*, *Pachybrachys*, *Monoxia* the claws of the tarsi are simple or entire. The claws of the genera *Zeugophora*, *Chaetocuema*, *Cerotoma*, *Andrector*, *Phyllobrotica*, *Phyllecthris*, *Luperus*, *Monachus*, *Diachus* and *Triachus* are appendiculate. While the species of the genera *Syneta*, *Monocesta*, *Diabrotica*, *Trirhabda*, *Adimonia*, and *Galeruca* have an acutely toothed or cleft claw. The claws of *Thricolema* are of a generic value in that they are divergent.

I find that the character and arrangement of the punctures of the elytra is of considerable value in deciding the genus. In the genera *Euryscopa*, *Phaedromus*, *Chaetocnema*, *Hypolampsis*, *Glyptina*, *Mantura*, *Stenispa*, *Odontota*, *Crepidodera*, *Cerataltiae*, *Orthaltica*, *Systema* and *Luperaltica* the punctures are arranged in striae. The striae may become somewhat irregular near the scutell in the *Chaetocnema*. The punctures making the striae in genus *Stenispa* are fine, while of genus *Odontota* are coarse. The elytra are confusedly punctured in the genera *Coscinoptera* and *Micraltiae*. And uniformly in the genera *Pachyonyclais*, *Longitarsus* and *Podagnia*.

The middle and hind tibiae are toothed in the genera *Paria* and *Metachrous* but not in the genera *Chrysochus* and *Tymnes*. While in *Graphops* the hind tibia is not toothed. The spurs of the tibia of *Aphona* are at the outer angle, and on the inner angle of *Phyllotreta*.

The genus *Paria*, *Chrysochus*, *Monocesta*, *Aphona*, and *Phyllotreta* have a grooved tibiae though the grooves differ. As those of *Chrysochus* and *Monocesta* are deep, while the groove of *Phyllotreta* is but feeble. *Aphona* differs from the others in that the groove is bifurcate. The tibiae of the genera *Tymnes*, *Diabrotica*, *Trirhabda*, *Adimonia* and *Galeruca* are not sulcate.

The posterior of the prothorax has impressions in the genera *Monocesta*, *Crepidodera*, *Cerataltiae*, *Orthaltica*, *Micraltiae*, *Systema*, *Luperaltica*, *Euplectroscelis* and *Diabrotica*. The impression is limited by a basal plica in the genera *Crepidodera*, and *Cerataltiae* but is not limited in *Orthaltica*, *Micraltiae*,

Systema and *Luperaltica*. There are two deep impressions on the prothorax of the genus *Diabrotica*. There are no impression on the prothorax of the genera *Chaetocnema* and *Podagraria*.

The genera *Donacia*, *Stenispa*, *Odontoba* and *Microrhopala* have dilated tarsi, but the tarsi of the genera *Haemonia* and *Stenopodium* are narrow.

The coxal cavities are open behind in the genera *Syneta*, *Thricolema*, and *Galernca* and closed in *Zeugophora* and *Admonia*.

The prothorax is rounded in front in the genera *Physonota*, *Cassida*, *Coptocycle*, *Mesomphalia* and *Chelymorpha*, though less rounded in *Mesomphalia* and *Chelymorpha*. The genera *Glyptoscelis*, *Myochrous* and *Graphops* have a hairy body. while the bodies of genera *Paria*, *Chrysochus*, *Tymnes* and *Metachroma* is glabrous.

The sides of the prothorax in the genera *Glyptoscelis*, *Myochrous*, *Chrysocchus*, *Tymnes* and *Paria* are margined. But are not margined in *Fidia*, *Trichotheca*, *Xanthonia*, and *Adoxus*.

The third joint of the tarsi in *Doryphora* and *Chrysomela* is entire, while in *Plagiodesera*, *Prasocuris* and *Gastroidea* the joint is emarginate, and in genus *Lima* bilobed. The first joint of the tarsi is one half as long as the tibiae in the genera *Longitarsus* and *Glyptina*, while in the genera *Aphona* and *Phyllo-treta* the first joints of the tarsi are one third as long as the tibiae. The front coxae are separated in the genera *Orsodacnra* and *Androlyperus*, but are contiguous in the genera *Syneta*, *Cerotomia* and *Andrector*.

The epipleurae in the genus *Babia* is broad, in the genus *Saxinis* narrow, and very narrow in *Urodera*.

The sides of the prothorax are thickened in the genera *Plagiodesera*, *Gastroidea* and *Physonota*, but are not in *Lima*. The base of the prothorax of *Bassareus* and *Cryptocephalus* is irenulate, but is not in *Griburius* and *Pachybrachys*. The prothorax in the genera *Trichotheca*, *Xanthonia*, *Fidia*, *Adoxus*, *Glyptoscelis*, *Myochrous*, *Chrysochus*, *Tymnes* and *Paria* have distinct postocular lobes beneath.

The head of *Porphyraspis* is visible and only partially visible from beneath the prothorax in *Mesomphalia* and *Chelymorpha* while it is nearly concealed in *Physonota*, *Cassida* and *Coptocycla*.

The prosternum is longer than wide in *Diachus* and *Triachus*, while in *Monachus* it is wider than long.

The characters of the front of the head are varied and are used in separating the genera.

In the genera *Adoxus* and *Chrysodinia* there are no supraocular lines. While in *Graphops* and *Metachroma* these lines are present. The front is flat with median impressed lines in *Trirhabda*, but in *Diabrotica* it is flat and carinate. In *Monoxia* the front is narrow in *Sphaeroderma* deflexed and in *Argopistes* inflexed and convex.

The elytra also differ aside from arrangement of the punctures as in *Hypolampsis* they are pilose. Strongly punctured in *Orthaltica* and *Euplectroscelis* and finely in *Systema*. The elytra of the *Odontobae* are costate, but are smooth in the allied *Stenispa*. The elytra of the genera *Luperaltica* are nearly smooth.

The sides of the prothorax are toothed in the genera *Syneta* and *Myochrous*, The side with a tubercle in *Zengophora* and they are subangulated in *Thricolenia*.

The shape of the prothorax separated several genera. As the prothorax of the *Orsodacuae* are bell shaped. In the *Lema* the prothorax is constricted at the middle and emarginate in *Porphyraspis*. The prothorax of *Xanthomia* is transverse but is cylindrical in *Crioceris* and *Fidia*.

The species of *Zengophora* have emarginate eyes, while those of *Syneta* and *Thricolema* are entire. The eyes of the genera *Euryscopa* and *Coscinoptera* are oval, but those of *Megalostomis* are transverse.

The antennae of the genera *Chrysochus* and *Paria* are thickened toward the tip. *Diachus* is separated from *Triachus* in that the 6 - 11 joints of the antennae are wider and in *Triachus* the 7 - 11 joints are wider. A similar difference separates *Chlamys* and *Erema*. The antennae of *Chlamys* are serrate from the fifth joint, and of

Exema only from the sixth joint. In the male of Andrector the third and fourth joints are deformed, while in Cerotoma they are not.

The proportions in length of the different antennal joints are an aid in distinguishing a few genera. Antennae with the second joint shorter than the third is an important character of Colaspis and separates it from Metaparia whose antennae have joints 2-5 nearly equal and 6-11 wider and larger. Cerotoma and Andrector are genera having the first joint of the antennae long and the third joint longer than the fourth. While the first joint of the antennae is moderate in length in the genera Phyllobrotica, Phyllecthris, Luperus, Androlyperus, Scelolyperus, Agelastica and Metacycla. Antennae with the third joint longer than the fourth is a character of Longitarsus. And Glyptina has the third joint of the antennae equal to the fourth.

The antennae of genus Tymnes are long and filiform. The antennae of species of the genera Stenispa and Odontota are distinctly eleven jointed, while those of Microchopala are apparently but nine jointed, the joints 9-11 are connate, forming an elongated club.

A comparison is made between the antennae of Cerataltica and Crepidodera. Those of Cerataltica are stout and those of Crepidodera are slender. The antennae extend beyond the prothorax in Coptocycla but do not in Cassida. The sutures of the

The sutures of the prosternum are obsolete in the genera Xanthomia, Trichotheca and Fidia but are distinct in the genus Adoxus.

The thighs enter but once into the generic tables. They are toothed in the genus Trichotheca but are simple in the genera Xanthomia and Fidia.

The tip of the tibiae are expanded in the genus Glyptoscelis but are not in Myochrous. In Aphthona the tibiae are depressed at the tip, but are not in Phyllotreta.

The under side of the tarsi are spongy in the genus Donacia while in Haemonia they are glabrous.

The last ventral segment of the males of *Androlyperus* is impressed and the third and fourth have curved processes. The last ventral segments of *Sceliolyperus* are excavated and a mammilla is in the middle of the excavation.

In a few genera the maxillary palpi show characters of generic value. The last joints of the palpi are short and truncate in *Doryphora*. *Chrysomela* is distinct from *Doryphora* in that its last palpal joint is dilated. The three genera *Phyllecthus* *Luperus* and *Androlyperus* are separated by the shape of the last joint of the palpi. In *Phyllecthus* it is small and subulate. In *Luperus* conical and acute, and in *Androlyperus* it is longer.

In the genera *Phaedromus* and *Pachyonychis* the third joint of the palpus is not wider than the second. But in *Hypolampsis* it is wider.

The prothorax of *Mesomphalia* is rounded behind, in *Chelymorpha* it is bisinuate at the base. The front edge of the prothoracic flanks in genus *Bassareus* is sinuous or toothed, but are straight in *Cryptocephalus*.

The shape of the prosternum determines the genera *Griburius* and *Pachybrachys*. The prosternum is flat in front and depressed behind in *Griburius*, while in *Pachybrachys* it is feebly channelled.

The tip of the elytra are pliate and distorted in *Androlyperus*. The elytra of *Metacycle* are abbreviated, the abdomen is inflated and there are no wings.

The pygidium is perpendicularly deflexed in the genus *Monoxia*.

The margined prothorax is a tribal distinction in the first three tribes. In tribe VII it is of a high generic value, and is of less importance in tribes VI, VIII, XI., while in the other tribes it is not noticed.

Now in tribe IX group VII the character and arrangement of the punctures on the elytra is of first importance and yet in the same tribe but in groups VIII and IX, also tribes IV and X, these differences merely separate two genera.

The shape of the claws is generally considered an important character and is used as such in tribes IV, VI, VII, IX., and only is less important in tribe III.

The shape and position of the coxae is also a character of much importance. In tribes II, III and VIII it is of great ~~in~~ generic importance, in tribe IX it is of little value.

In the shape and extent of the epipleurae are found characters which in the same tribe differ in their value. In tribe IX the epipleurae is of considerable importance but is of less in tribe II and IX.

The shape and proportion of the antennal joints are as a rule of but small generic importance. This is found true in tribes V, VI, VII, IX, X, and XI, and is only of much importance in tribe IX.

The shape of the maxillary palpi is ever of minor importance as in tribes VIII and IX.

As has been noticed that characters of a high generic value in one tribe may be of minor value in another or often do not appear at all. Also that characters of a generic value may in other tribes be of tribal value. Also the combinations of the different characters vary much in the different genera.

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