A LIST OF THE COLEOPTERA OF THE SOUTHERN
CALIFORNIA ISLANDS, WITH NOTES AND
DESCRIPTIONS OF NEW SPECIES.

BY H. C. FALL, PASADENA, CAL.

Early in May of the present year (1897) the Pasadena Science Club sent three of its members on a month's general collecting trip to certain of the Santa Barbara islands lying off the coast of Southern California. While none of the members of the expedition were, strictly speaking, entomologists, a considerable experience in collecting, combined with some preliminary instruction, enabled them to devote intelligently a portion of their time to the collection of insects, more especially of the Coleoptera.

The islands visited were in the order named, Santa Barbara, San Nicolas, and San Clemente, distant respectively forty, sixty, and fifty miles from the nearest point on the mainland. Inasmuch as the entire material in Coleoptera, consisting of forty-six species and upward of one thousand specimens, has been submitted to me for study, it seems a fitting occasion for presenting as complete a list as possible of the coleopterological fauna of the entire group of islands, from Santa Cruz to Guadalupe.

To Eastern collectors it may seem a matter for wonderment that so interesting a field should so long remain, entomologically speaking, practically unexplored; yet it must be remembered that entomologists are here exceedingly few and far between, and the islands are, with the exception, for the past few years, of Catalina, nearly or quite uninhabited and not conveniently accessible. Every now and then, to be sure, an Eastern man appears with bottles and net, but to him the whole vast region is a terra incognita. Mountain and desert and valley offer opportunities without number; he takes the goods the gods provide and troubles not himself about possibilities in lands hull down in the Pacific. And so it happens that the few beetles recorded from the islands we owe to the kindness of one or another of the botanists or ornithologists who have at long intervals found their way there.

It is believed by those best competent to judge that these islands are the summits of a submerged mountain range forming a part of the mainland, or at least connected with it as a peninsula, until after the beginning of the Quaternary Period, when it was separated and broken

up into islands by subsidence. The close similarity between the flora and fauna of Guadalupe and California has several times been cited in support of this view and seems in itself almost conclusive.

As far as I can learn from the literature at hand, the following fifteen species of Coleoptera are all that were described or reported from the islands up to 1875 :

From Santa Cruz—*Asaphes tumescens*, *Malthodes laticollis*, *Phobetus comatus*, *Ernobius debilis*, *Helops Bachei*; from Santa Catalina—*Pristoscelis punctipennis* and *P. pedalis*; from San Clemente—*Coniontis lata*, *Eusattus robustus*, *Eulabis grossa*, *Amara insularis*; from Santa Barbara—*Eleodes scabripennis*, *Cibdelis Bachei* and *Meloe barbara*. *Pristoscelis ænescens* is said to be "from the islands off Santa Barbara," and it is more than probable that the same reading should be applied to the three preceding species. Nearly if not all the above named species were taken either by C. M. Bache or Dr. J. G. Cooper and given to Dr. Leconte, by whom they were described (1861-1866), with the exception of *Amara insularis*, which was described by Dr. Horn in 1875.

In 1875, Dr. Edward Palmer brought from the Guadalupe Islands the following twenty-three species, which were enumerated by Dr. Horn, Trans. Am. Ent. Soc., V., 1876 :

<i>Calosoma semilæve</i> , Lec.	<i>Trogosita virescens</i> , Fab.
" <i>Palmeri</i> , Horn.	<i>Saprinus lugens</i> , Er.
<i>Bembidium striola</i> , Lec.	<i>Cardiophorus luridipes</i> , Cand.
<i>Amara insignis</i> , Dej.	<i>Pristoscelis pedalis</i> , Lec.
" <i>californica</i> , Dej.	<i>Necrobia rufipes</i> , Fab.
<i>Platynus maculicollis</i> , Dej.	<i>Cænonycha socialis</i> , Horn.
<i>Calathus obscurus</i> , Lec.	<i>Atimia dorsalis</i> , Lec.
<i>Tachycellus nebulosus</i> , Lec.	<i>Cœlotaxis muricata</i> , Horn.
<i>Anisodactylus piceus</i> , Mén.	" <i>punctata</i> , Horn.
<i>Anisotarsus flebilis</i> , Lec.	<i>Conibius seriatus</i> , Lec.
<i>Necrophorus nigrita</i> , Mann.	<i>Helops Bachei</i> , Lec., var.
<i>Dermestes vulpinus</i> , Fab.	

In an appendix to the annual report of the Chief of Engineers for 1876, Dr. Leconte gives a list of species taken in So. California the previous year by the expedition for geographical survey under Lieut. Geo. M. Wheeler, among which are the following seventeen species from the island of Santa Cruz :

Omophron dentatum, Lec.	Tropisternus californicus, Lec.
Bembidium transversale, Dej.	Hydrocharis glaucus, Lec.
Calathus ruficollis, Dej., var.	Carpophilus pallipennis, Say.
Platynus brunneomarginatus, Mann.	Polycaon Stoutii, Lec.
Pterostichus lætulus, Dej.	Phlæodes diabolicus, Lec.
Amara californica, Dej.	Coniontis viatica, Esch.
Anisodactylus consobrinus, Lec.	" subpubescens, Lec.
Hippodamia vittigera, Mann.	Cratidus osculans, Lec.
Dermestes talpinus, Mann.	

In 1892 — Zoe, Vol. III., p. 262 — Mr. F. A. Seavey gives a short list of insects taken by him on Santa Catalina in August of that year. This list includes fourteen species of Coleoptera, of which three — *Balaninus obtusus*, *Pristoscelis quadricollis* and *Anthonomus canus* — are quite surely incorrectly determined and will not be included in the following list.

During parts of July and August, 1892 and 1894, about four weeks in the aggregate was spent by the writer on Catalina. The island was then very dry and collecting was rather unremunerative. Nevertheless upward of one hundred species were added to previous records.

To these must be added more than thirty species out of seventy-five taken by Dr. Gustav Eisen on Santa Rosa during May of the present year; a few taken on Catalina by Dr. A. Fenyès, of Pasadena, at about the same time; and finally, about half of the forty-six species collected by the expedition alluded to at the beginning of this article. The material collected by them is of especial interest inasmuch as it is probable that no insects have before been brought from either Santa Barbara or San Nicolas—the most remote of all the islands of the Santa Barbara group—and but four beetles from San Clemente. The catch of Dr. Eisen on Santa Rosa is of nearly equal interest for similar reasons. The following abbreviations are used in the subjoined list:

B. Santa Barbara.	G. Guadalupe.
Ca. Santa Catalina.	N. San Nicolas.
Cl. San Clemente.	R. Santa Rosa.
Cz. Santa Cruz.	

* Species hitherto recorded from same island.

† Species not known to occur on mainland.

- Cicindela oregona*, Lec. R.
Omophron dentatum, Lec. Cz.* R.
Cychrus mimus, Horn. Ca.
Calosoma semilæve, Lec. G.* R.
† " *Palmeri*, Horn. G.*
Dyschirius gibbipennis, Lec. R.
Schizogenius depressus, Lec. Ca.
Bembidium transversale, Dej. Cz.
* R.
Bembidium striola, Lec. Ca. G.*
" *platynoides*, Haywd. R.
" *indistinctum*, Dej. R.
" *ephippiger*, Lec. R.
" *iridescent*, Lec. Ca.
Tachys vittiger, Lec. Ca.
" *sp. nov.*? Cl.
Pterostichus Isabellæ, Lec. Ca. Cl.
" *Menetriesii*, Mots. R.
" *lætulus*, Lec. Cz.* R.
" *sp. indet.* R.
Amara insignis, Dej. G.* Ca.* R.
† " *insularis*, Horn. Cl.* N. B.
" *californica*, Dej. G.* Cz.* R.
Calathus ruficollis, Dej. Ca. Cz.*
" *obscurus*, Lec. G.* R.?
Platynus brunneomarginatus, Mann.
Ca.* Cz.* R.
Platynus funebris, Lec. Ca.
" *maculicollis*, Dej. G.* R.
" *variolatus*, Lec. Ca.
Brachynus carinulatus, Mots.? Ca.
Chlænius obsoletus, Lec. Ca.
Agonoderus lineola, Fab. R.
Stenolophus limbalis, Lec. Ca.
Bradycellus rupestris, Say. Ca.
" *californicus*, Lec. R.
Tachycellus nebulosus, Lec. G.*
" *nitidus*, Dej. Ca. R.
Anisodactylus dilatatus, Dej. R.
" *piceus*, Mén. G.* R.
Anisodactylus consobrinus, Lec.
Ca. Cz.* R.
Anisodactylus californicus, Dej.
Ca. R.
Anisotarsus flebilis, Lec. G.*
Deronectes striatellus, Lec. R.
Hydroporus vilis, Lec. Ca. R.
Agabinus glabrellus, Mots. Ca.
Agabus lugens, Lec. R.
Ochthebius discretus, Lec. Ca.
Tropisternus ellipticus, Lec. Ca.
Tropisternus californicus, Lec. Ca.
* Cz.*
Hydrocharis glaucus, Lec. Cz.* R.
Chætarthria nigrella, Lec. Ca.
Laccophilus ellipticus, Lec. Ca. R.
Cymbiodyta dorsalis, Mots. Ca. R.
Cercyon luniger, Mann. Ca.
Necrophorus guttula, Mots. Cl.
Necrophorus nigritus, Mann. G.*
Cl. R.
Silpha ramosa, Say. R.
" *lapponica*, Hbst. R.
Aleochara bimaculata, Grav. Ca. Cl.
" *sulcicollis*, Mann. R.
Polistoma arenaria, Csy. Ca. B.
Heterothops californicus, Lec. Ca.
Creophilus villosus, Grav. Ca. Cl.
Hadrotes crassus, Mann. R.
Philonthus longicornis, Steph. Ca.
" *nigritulus*, Grav. Ca.
" *Lecontei*, Horn. R.
Actobius puncticeps, Horn. Ca.
Cafius canescens, Mann. N.
" *lithocharinus*, Lec. R.
" *luteipennis*, Horn. R.

- Cafius sulcicollis*, Lec. R.
 " *opacus*, Lec. Ca.
Lathrobium jacobinum, Lec. R.
Caloderma reductum, Csy. Ca.
 " *mobile*, Csy. Ca.
 " sp. Ca.
Tachyporus californicus, Horn. Ca. R.
Pseudopsis, sp. Ca.
Haploderus flavipennis, Csy. Ca.
Apocellus analis, Lec. Ca.
Hippodamia vittigera, Mann. Cz.*
Hippodamia ambigua, Lec. Ca.*
 Cl. R.
Hippodamia convergens, Guér. Ca.*
Coccinella, v. *californica*, Mann. Ca. Cl. N. R.
Cycloneda oculata, Fab. Ca.
 " *sanguinea*, Linn. Ca.*
Psyllobora, v. *tædata*, Lec. Ca.*
Chilocorus bivulnerus, Muls. Ca.*
Cryptognatha catalinæ, Horn. Ca. Cl.
Hyperaspis lateralis, Muls. Ca.*
Scymnus guttulatus, Lec. Ca.
 " *nebulosus*, Lec. Ca.
 " *cervicalis*, Muls. Ca.
 " *marginicollis*, Mann. Ca.
 " *ardelio*, Horf. Ca. Cl.
Cephaloscymnus occidentalis, Horn. Ca.
Cephaloscymnus ornatus, Horn. Ca.
Rhizobius lophanthæ, Blaisd. Cl.
Aphorista morosa, Lec. R.
Cryptophagus, sp. Ca. Cl.
Atomaria, sp. R.
Dermestes marmoratus, Say. Ca. Cl. N. R.
Dermestes Mannerheimii, Lec. Cl. N. B. R.
Dermestes talpinus, Mann. Cz.*
 " *tristis*, n., sp. R.
 " *vulpinus*, Fab. G.*
Trogoderma sternale, Jayne. Ca.
Hololepta vicina, Lec. Ca.
Saprinus interstitialis, Lec. Ca.
 " *lugens*, Er. Cl. N. B. G.* R.
 " *fimbriatus*, Lec. Ca.
 " *vitiosus*, Lec. Ca.*
 " *lubricus*, Lec. Ca. Cl. R.
 " sp. near *laridus*. Ca.
Cercus sericans, Lec. Ca.
Carpophilus pallipennis, Say. Ca.* Cz.* Cl.
Coninomus fulvipennis, Mann. Ca.
Corticaria distinguenda, Com. Ca. Cl.
Corticaria, sp. Ca.
Trogosita virescens, Fab. G.*
Dryops productus, Lec. Ca.
Cardiophorus luridipes, Cand. G.*
Melanotus variolatus, Lec. Ca.
Asaphes tumescens, Lec. Cz.*
Acmmødera connexa, Lec. R.
Telephorus notatus, Mann., var. Ca.
Malthodes laticollis, Lec. Cz.*
Collops cribrosus, Lec. R.
Endeodes abdominalis, Lec. Ca.
 † " sp. Ca.
 " sp. R.
Malachius, sp. nov.? R.
 † *Attalus subfasciatus*, n. sp. Cl.
Pristoscelis ænescens, Lec. B.* R.
 " *punctipennis*, Lec. Ca.*
Pristoscelis pedalis, Lec. Ca.* G.* Cl.

- Listrus*, sp. Cl. R.
 † *Dasytes*, sp. nov. Ca.
 † " sp. nov. Cl.
Eschatocrepis constrictus, Lec. Ca.
Cymatodera ovipennis, Lec. Ca.
 " *angustata*, Spin. R.
Necrobia rufipes, Fab. G. * Ca.
 Cl. R.
Necrobia ruficollis, Fab. Cl.
 † *Ernobius debilis*, Lec. Cz. *
 † *Oligomerus*? n. sp. Ca.
Trypopytus tenuilineata, Horn. Ca.
Hemiptychus obsoletus, Lec.? Ca.
Eucratocerus Hornii, Lec. Ca.
Sinoxylon declive, Lec. N.
Polycaon Stoutii, Lec. Cz. *
Cis, sp. Ca.
Cœnonycha rotundata, Lec. Ca.
 † " *socialis*, Horn. G. *
Phobetus comatus, Lec. Ca. Cz. * R.
Cyclocephala villosa, Burm. Ca.
Phymatodes juglandis, Leng? R.
Oeme gracilis, Lec. Ca.
Romaleum simplicicolle, Hald. Ca.
Megobrium Edwardsii, Lec. R. *
Xylotrechus oblitteratus, Lec. Ca.
Atimia dorsalis, Lec. G. *
Ipochus fasciatus, Lec. Ca.
Pachybrachys, sp. Ca.
 " sp. Ca.
Diachus auratus, Fab. Ca. Cl. R.
 † *Colaspidea subvittata*, n.sp. Ca. Cl.
Diabrotica soror, Lec. Ca. *
Monoxia puncticollis, Say. R.
Phyllotreta pusilla, Horn. Ca.
Bruchus pauperculus, Lec. Ca.
Eurymetopon convexicolle, Lec. Ca.
Phlœodes diabolicus, Lec. Cz. *
- Nyctoporis carinata*, Lec. Ca. R.
Coniontis elliptica, Csy. Ca. R.
 † " *lata*, Lec. Cl. * B. R.
 † *Coniontis lata*, var. *insularis*, Csy.
 Cz. * R.
Coniontis viatica, Lec. Cz. *
Coniontis subpubescens, Lec. Ca.
 Cz. *
 † *Cœlotaxis punctulata*, Horn. G. *
 † " *muricata*, Horn. G. *
 † " *angustula*, Csy. G. *
 † *Cœlus pacificus*, n. sp. N. R.
 † " *remotus*, n. sp. Cl.
 † *Eusattus robustus*, Lec. Cl. *
 " *politus*, Horn. R.
Eleodes quadricollis, Esch. Ca.
 " *dentipes*, Esch. Cl. N. R.
 " *scabripennis*, Lec. B. * R.
 † *Eulabis grossa*, Lec. Cl. * N. B.
 " *pubescens*, Lec. Ca.
 " *obscura*, Lec. R.
Amphidora littoralis, Esch. Ca. R.
Cratidus osculans, Lec. Cz. * R.
Cibdelis Bachei, Lec. B. *
Blapstinus rufipes, Csy. Ca.
 " *brevicollis*, Lec.? R.
Conibius seriatus, Lec. G. *
Notibius sulcatus, Lec. Cl.
 † *Helops Bachei*, Lec. R.
 † " " var. G. *
 " sp. Ca.
Hymenorus infuscatus, Csy. Ca.
Isomira variabilis, Horn. Cl.
Pentaria nubila, Lec. Ca.
Anaspis collaris, Lec. Ca.
Mordellistena, sp. Ca.
 " sp. Ca.
Notoxus constrictus, Csy. Ca.

Anthicus californicus, Laf.	Ca. Cl.	Apion antennatum, Sm.	Ca.
" sp.	Ca. Cl.	" ædorhynchum, Lec.	Ca.
† Meloe barbara, Lec.	B, *	Cleonus basalis, n. sp.	Cl.
" sp.	Ca.	Smicronyx, sp.	R.
Rhynchites aureus, Lec.	Cl.	Anthonomus pauperculus, Lec.	Ca.
" sp. nov.?	Ca.	Tychius, n. sp.	N.
Trigonoscuta pilosa, Mots.	Cl. R.	Balaninus occidentis, Csy.	Ca.
Sciopithes setosus, Csy. var.	Cl.	Sphenophorus vomerinus, Lec.	R.

Concerning the value of certain names upon which there is a disagreement among authorities I am unable to offer any very well founded opinion. I am, however, inclined to doubt the validity of *Cryptognatha catalinae*, Horn, and *Cælotaxis angustula*, Casey; and on the other hand it seems probable that *Conibius guadalupensis*, Casey, is a good species and not a form of *seriatus* as recorded by Dr. Horn.

Tachys, sp.—Two specimens from Clemente are closely allied to *corax*, Lec., but seem distinct by the obviously less transverse thorax.

Amara insularis, Horn.—Very abundant on all the islands visited by the Pasadena party. I saw no signs of it on Catalina in midsummer, though the dried remains of *insignis* were common enough.

Agabinus glabrellus, Mots.—Not rare on Catalina. Very scarce on the mainland in the streams in the mountain canons.

Cercyon luniger, Mann.—A small number found in decaying seaweed on Catalina; *fimbriatum*, which may be found by thousands along the opposite coast, has not yet been detected.

Hippodamia ambigua, Lec.—Specimens from Santa Rosa might with equal propriety be placed with *convergens*. Unless some other character than thoracic markings can be discovered to separate these two so-called species they cannot be held as distinct. They constantly occur together everywhere in South California, and intermediate forms are frequent.

Rhizobius lophanthæ.—It is certain that this beetle is an importation from Australia, but it seems very probable that the pioneers were not introduced as advertised. How it first got here is a mystery, but it is surely here to stay, and is now quite as much at home as any of our native Scymni. Although already widely distributed in California, its occurrence on an island so distant and so rarely visited as San Clemente was, to say the least, unexpected.

Aphorista morosa.—According to Mr. Ricksecker this and *lata* are.

sexes of the same species, the latter being the female. *Morosa* is in my experience much more commonly met with in So. California than *lata*.

Endeodes.—The species of this genus are among the most curious of the Coleoptera inhabiting the California sea beaches. They are to be found most frequently in April and May running about on the sand, or concealed under rubbish or driftwood so common in such situations. The two undetermined species are represented by one specimen each. That from Catalina was taken by me in July, and is quite surely nondescript, differing from our described species by the very minute elytra, as well as in coloration. The Santa Rosa example is almost entirely black, and is possibly a colour variety of *collaris*.

Phobetus comatus.—There is a very confusing amount of variation exhibited by specimens of this species from various localities in the State. Specimens taken by myself on Catalina, of small size, subimpunctate thorax with hind angles entirely wanting, seem quite distinct when compared with a series from Fresno county, of larger size, different colour, rather closely punctate thorax with distinct hind angles. I have, however, seen intermediate forms, and it would be unsafe to make a division without a large series from diverse localities. The name *testaceus* was originally given by Leconte to specimens from Santa Cruz Island, and it may possibly have to be revived.

Xylotrechus obliterated.—A fine series of this beautiful longicorn was taken by Dr. Fenyes on Catalina. All the specimens found were males, the females being indeed very rarely taken. The species occurs on willows.

Ipochus fasciatus.—This occurs rather plentifully on Catalina under the bark and on the branches of dead *Rhus laurina* (or *R. integrifolia*). The form, size, sculpture and markings vary greatly, often in a series taken from the same tree.

Balaninus occidentis, Casey.—This species has heretofore been confounded with *uniformis*, but is abundantly distinct. It is common enough on Catalina, but much less so on the mainland, frequenting several species of oaks.

A certain small species taken on Santa Catalina by myself in 1894, and again found on Clemente this year, has not been included in the list for the simple reason that its affinities are not yet sufficiently clear to admit of placing it even in a family sense. Two of our specialists to whom specimens have been sent have ventured opinions that are quite at variance; the case is therefore postponed for further hearing.

It is not unlikely that a few species have been overlooked in the preparation of the preceding list, but it is hoped that any such omission may not seriously impair its usefulness as a foundation on which to base any future reports on the Coleoptera of these islands.

It need scarcely be said that the 226 species enumerated here can represent but a fraction of the entire coleopterological fauna.

The following species, it is believed, are now made known for the first time. There are surely a number of other undescribed species, but their description would involve far more study than can now be devoted to them.

Cælus pacificus, n sp.—Broadly oblong, elliptical, moderately convex, piceous black, surface polished. Epistoma broadly sinuate, antennæ with three-jointed club. Prothorax equal in width to the elytra, a little more than twice as wide as the length at the middle, widest immediately before the base, sides rather feebly arcuate and strongly convergent, moderately densely evenly punctate throughout. Elytra twice as long as the thorax along the median line, not longer than wide, equally densely but more finely punctate than the thorax, the punctures not in the least asperate on the disk, and only very feebly so on the declivity and along the margin. Process of first tarsal joint extending under the next three.

Length, 7 mm.; width, 5 mm.

Very distinct from any of our described species by the conspicuously long prothorax, and from all but the next in the almost entire lack of elytral asperities. The marginal fringe of hairs on the prothorax is noticeably shorter and finer than in any of our mainland species. Described from a single example of unknown sex taken on San Nicolas, May 24. Since the above description was written I have seen numerous examples in the material collected by Dr. Eisen on Santa Rosa. With the exception of some variation in size these differ in no noteworthy respect from the San Nicolas type.

Cælus remotus, n sp.—Very convex, piceous black, legs and elytra brown. Epistoma broadly sinuate, antennal club four-jointed. Prothorax similar in outline to *pacificus*, but shorter; surface subopaque, densely coarsely punctate. Elytra shining, densely finely punctate, without trace of asperities. Process of first tarsal joint extending beneath the next two.

Length, 6.5–7 mm.; width, 4–4.5 mm.

The above brief description is sufficient to characterize this some-

what remarkable species, of which a single pair was taken (June 3) on San Clemente.

The marginal fringe is longer than in *pacificus*, but thinner than usual.

Both the above described species were found under rubbish at a distance from the shore, and have probably the habits of *Coniontis* and *Cœlotaxis* rather than those of the other members of the genus. This might indeed be safely inferred from the less developed marginal hairs and lack of elytral asperities, which have an undoubted connection with the habits possessed by the mainland species of burrowing in loose sand. Whether we have here a change from the ancestral mode of life, due to a change of environment, or whether, as seems to me more likely, the burrowing habit is of recent development and the island species are the surviving representatives of an earlier type, is an interesting question.

Cleonus basalis, n. sp. — Moderately stout, integuments black, polished. Beak three-fourths as long as the prothorax, not dilated at tip, rather thinly clothed above and beneath with short cinereous hairs, sides glabrous, above subcarinate in basal two-thirds, rather coarsely punctate throughout. Prothorax as long as wide, sides very slightly convergent, apex feebly constricted, basal lobe angulate, surface very closely densely punctate, feebly carinate in apical half, deeply excavate behind. Vestiture condensed in four narrow vittæ; the two dorsal approximate in front, posteriorly divergent and incomplete; the lateral vittæ dislocated at the apical constriction. Elytra barely twice as long as wide, humeri rounded, tips separately rounded and scarcely acuminate; striæ composed of large, closely-placed punctures; intervals scarcely wider than the punctures, especially on the disk; base strongly impressed each side, leaving the base of the third and to a less degree that of the sixth interval strongly tumid. The third, fourth, fifth and outer three intervals are so thinly clothed as to appear glabrous; the first is, however, very finely pubescent throughout, as is the seventh behind the middle. The dark areas contain a few small spots of condensed hairs, and there is a larger conspicuous spot at the base of the second interval. Lower surface and legs as usual. The third joint of hind tarsi is small, but obviously wider than the second.

Length, 10 mm.; width, 3.5 mm.

Hab.—San Clemente.

The single male above described must evidently be placed near

quadrilineatus by Casey's table — Coleop. Not., III., p. 186 — but the deep basal excavations of the thorax and elytra, as well as the dense punctuation of the former, clearly separate them. The ocular lobes are moderately well developed in *basalis*, and are said to be wanting in *quadrilineatus*.

Attalus subfasciatus, n. sp.—Very small, narrow, depressed, black, thorax with sides behind and base narrowly testaceous, elytra with a slightly antemedian pale fascia which is interrupted at the suture. Head broad, antennæ slender, not in the least serrate, reaching the middle of the elytra (♀), or as long as the entire body (♂), the four basal joints pale. Thorax narrowed behind, of the same form as in *Endeodes*. Elytra parallel (♂), or posteriorly dilated (♀). The pubescence consists as usual of very short semi-erect hairs, with longer erect darker hairs sparsely placed.

Length, 1.5–2 mm.

Hab. — San Clemente.

Described from one ♂ and eight ♀s. A very peculiar little species, differing in antennal structure, form of thorax and style of elytral coloration from all other species in our fauna. It may for the present be placed next to *lobulatus* in which there is a faint indication of the present form of thorax.

Colaspidea subvittata, n. sp.—Piceous, with more or less distinct greenish-bronze lustre; legs, more especially tibiæ and tarsi, rufescent. Sides of prothorax not strongly rounded, punctuation moderately close, a little coarser on the elytra. Pubescence long (for the genus), recumbent, distinctly subvittate on the elytra in fresh examples. Length, 3.5–4.5 mm. Found abundantly by me on Catalina, also brought from Clemente. There is practically no variation except in size in the large number of specimens examined. The mainland species, on the contrary, exhibit a bewildering amount of variation in size, colour, punctuation, and even in form. One variety of varicolor is of nearly the same colour, but the pubescence is erect and the thorax more strongly rounded at the sides. The pubescence is much more easily removable in *subvittata* than in any of the other species, and the vittate arrangement is scarcely evident except in very fresh examples. In the males the antennæ are somewhat longer and all the tarsi moderately dilated—characters common to all the species of the genus.

Dermestes tristis, n. sp.—Length, .22–.26 inch. Elongate convex, parallel, black, clothed above with black pubescence, with a sprinkling of paler hairs on the prothorax, and rarely mottled with cinereous hairs on the elytra. Scutellum densely clothed with ochreous hairs, usually forming the only relief to the sombre aspect of the upper surface. Thorax not very obtusely rounded in front, anterior portion of lateral margin invisible from above, sides uniformly rounded, slightly sinuate before the front angles, which are distinct and only slightly obtuse. Surface of thorax densely, more coarsely punctate than usual. Beneath clothed as usual with dense white pubescence, with lateral series of black spots; prevailing colour of last ventral whitish; legs annulated with white. Males with median pits on third and fourth ventrals, tarsi clothed beneath with spinous hairs. Occurs in various parts of maritime So. California, and on Santa Rosa Island.

One of our smallest species, perhaps most nearly resembling *talpinus*. The latter is, however, more robust, with ochreous and gray mottlings on the elytra, sides of thorax more strongly rounded near the base, and pubescent male tarsi.

It seems not to have been noticed that in a considerable number of our species of *Dermestes* the front and middle tarsi of the male are rather densely pubescent beneath. The character is an important one and enables us to establish the distinctness of *Mannerheimii*, which has never looked right as a variety of *marmoratus*. These last named species may then be thus compared:

MARMORATUS.—Size large (.40–.45 in.), elytra mottled with ochreous and cinereous hairs, tarsi spinous beneath in both sexes.

MANNERHEIMII.—Size smaller (.24–.32 in.), elytra mottled with cinereous only, front and middle tarsi (♂) pubescent beneath.

HEPIALUS QUADRIGUTTATUS, Grote.—This large salmon-pink variety was taken this year near Metis, P.Q. Messrs. L. Reford and E. Brainerd, of Montreal, chanced one day to pick up the wing of a specimen on a little dry area in a swamp several miles from Metis. They returned to the village for a lantern, and then tramped back again. Their industry was rewarded by the capture of two specimens. They saw five others, and report that the moths appeared about nine o'clock p.m., and flew in a zigzag horizontally, not up and down like *H. thule*. This species has been taken in Ontario by Mr. Elcome, at Peterborough, and at Roach's Point, Lake Simcoe.