# ON THE INSECTS COLLECTED BY DOCTOR ABBOTT ON THE SEYCHELLES, ALDABRA, GLORIOSO, AND PROVI-DENCE ISLANDS, WITH DESCRIPTIONS OF NINE NEW SPECIES OF COLEOPTERA.

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THE INSECTS collected by Doctor W. L. Abbott on the Seychelles in 1890 and on his excursions to Aldabra, Glorioso, and Providence islands in 1893, while not numerous in species are of unusual interest on account of their geographical distribution. The writer has paid particular attention to the study of the Coleoptera, but it seems advisable to mention also the insects of the other orders, although all of these have not been specifically identified. Doctor W. J. Holland has already reported upon the Lepidoptera.<sup>1</sup>

#### INSECTS FROM SEYCHELLES ISLANDS.

#### LEPIDOPTERA.

Eight species of butterflies and nine species of moths are reported upon by Doctor Holland as collected by Doctor Abbott on these islands. Of the moths, one is described as new and the other eight have a wide distribution. Of the butterflies, three are peculiar to the islands (one described by Doctor Holland), two occur also on Madagascar, two on the African continent, and one species in the East Indies.

Mr. Charles Alluand collected, in 1893, 67 species of Lepidoptera, on which L'Abbé de Joannis reports<sup>2</sup> that 80 per cent. is also found on Madagascar, 60 to 65 per cent. in southeastern Africa, 45 per cent. in India, and 20 to 25 per cent. in the Mediterranean region. This paper has unfortunately been overlooked by Doctor Holland, who has redescribed Atella philiberti of Joannis as A. scychellarum.

### ORTHOPTERA.

Doctor Abbott collected three imagoes and two nymphs of a splendid leaf insect, *Phyllium gelonus*, Gray. Two other species of the genus are recorded from the Seychelles. The distribution of this family of insects

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<sup>&</sup>lt;sup>1</sup>Proc. U. S. Nat. Mus., XVIII, No. 1064, pp. 265-273,

<sup>&</sup>lt;sup>2</sup> Bull. Soc. Ent. France, 1893, p. 51.

on the Seychelles and Mascarene islands, India, and Malay Archipelago, as far as New Caledonia, Fiji Islands, and the New Hebrides, has furnished one of the strongest arguments for the former existence of the hypothetical continent Lemuria. The males can hardly fly, and the females not at all.

#### HYMENOPTERA

Polistes sp., Eumenes sp., Apis mellifica, Xylocopa sp., Megachile sp., Larra sp., Sphegida, two species, and Pimpla sp., all from Mahé Island.

#### HOMOPTERA.

A species of *Cicada*, very much resembling *Tettigia orni*, from Europe, but smaller.

#### COLEOPTERA.

Only three or four species of Coleoptera were known from the Seychelles as late as the year 1891, but in that year Doctor Fairmaire recorded fifteen species, collected by Père Philibert.

From March to May, 1892. Mr. Charles Alluand made a thorough search for the insects generally, and Coleoptera in particular. Of this latter order he collected about one hundred and fifty species, and remarks that these islands, considering their place under the equator and being abundantly covered with woods, are the poorest in insects of any in the world. He also considers the relation to the Indo-Malayan fauna and favors the probable existence of the continent Lemuria. Doctor Abbott collected the following seven species, one of which seems to have escaped description:

### 1. AGRYPNUS INSULARIS, Fairmaire.

Agrypnus insularis, FAIRMAIRE, Bull. Soc. Ent. France, LX, 1891. p. 70.

This species which was collected in six examples on the Mahé Island by Doctor Abbott is peculiar to the Seychelles, and, although the genus is well represented in Africa, its nearest allied species known is from the Philippine Islands. Another species of the genus, *A. fuscipes*, Fabricins, also occurs here and extends to continental Africa and the East Indies.

## 2. PARASTASIA COQUERELI, Fairmaire.

Parastasia coquereli, FAIRMAIRE, Ann. Soc. Ent. France, 4 ser., IX, 1869, p. 789.

The most interesting species of the lot, belonging to a genus from the Indo Malayan region. Doctor Abbott collected one example on the Mahé Island, where Doctor Fairmaire's type also was obtained.

### 3. ADORETUS UMBROSUS, Fabricius.

Melolontha umbrosa, FABRICIUS, Ent. Syst., I, Pt. 2, p. 169.

This species is recorded from Bourbon, Ile de France, Senegal, Java, Sumatra, and Philippine Islands. One example was collected on Mahé Island and another one on Glorioso Island.

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#### 4. ORYCTES MONOCEROS, Olivier.

Scarabaus monoceros, OLIVIER, Ent., I, Pt. 3, p. 37.

Of this large Dynastid beetle Doctor Abbott brought three examples from Mahé Island and four from Doros Island of the Amirantes group. It is a species of wide range on the African continent, and was originally described from Senegal. The genus occurs in the Old World, and the largest species are from Africa and Madagascar.

#### 5. XYSTROCERA GLOBOSA, Olivier.

Cerambix globosus, OLIVIER, Ent., IV, p. 27. Callidium rittatum, FABRICIUS, Ent. Syst. I. Pt. 2, p. 323.

This is a widely distributed longicorn beetle, recorded from Senegal, Ile de France, Madagascar, Comore Islands, and the East Indies. Doctor Abbott collected one example on Mahé Island.

### 6. COPTOPS BIDENS, Fabricius.

Lamia bidens, FABRICIUS, Syst. Ent., p. 177. Lamia wdificator, FABRICIUS, Ent. Syst., I, Pt. 2, p. 275. Lamia villica, OLIVIER, Encycl. Meth., VII, p. 468.

Another longicorn of wide distribution. It occurs in East Africa, on Madagascar, all the islands of the vicinity, and in the East Indies. Doctor Abbott collected three examples on Flat Island.

### 7. CRATOPUS GRISEOVESTITUS, new species.

Robust, uniformly piceous, densely covered with small grayish-white scales. Antenna pubescent, rather stout; scape reaching the hind margin of the eye; first and second joint of the funicle subequal, onehalf longer than broad; third to seventh beadlike, slightly increasing in width; club tomentose, as long as the last five joints together, terminal joint the longest, acuminate at apex. Eyes rather large, longitudinally oval, feebly convex. Rostrum quadrangular, flat above, with distinct lateral carinæ, starting from the frontal margin of the eyes at their middle and diverging toward apex. Front with a short impressed fovea between the eyes. Thorax broader than long, strongly rounded at the sides, broadly constricted at apex; disk coarsely granulate. Scutellum semioval, with deuse white scales. Elytra one-half broader than thorax, squarely truncate at base, slightly wider behind the middle, conjointly shortly acuminate at apex; humeri oblique, obtuse; disk rather strongly punctate in regular strike; strike, except the marginal, not impressed; intervals flat, less coarsely, sparsely punctate, slightly granulate at base; the scaly pubescence forming numerous white dots. Ventral surface sparsely punctate, sides of thorax scaly, median part and abdomen pubescent. Legs short, stout, pubescent, not sealy. Femora feebly incrassate, the anterior pair with acute tooth. Anterior tibiae nearly straight, feebly dentate within. Tarsi with first joint slightly longer than second, third moderately dilated. Claws connate

at base, divergent at apex. Length, 10 to 11 mm. Nine examples from Mahé Island.

Type.-No. 576, U.S.N.M.

*Cratopus* is a genus of Cyphides, allied to the West Indian genus *Lachnopus* by the prolonged anterior legs and robust femora, but differing by the claws being connate at base and thorax truncate, not bisinuate behind. Numerous species are described from Bourbon and He de France, and a few from India and South Africa.

### INSECTS FROM ALDABRA ISLAND.

The only insects from Aldabra Island that I can find recorded are a few Coleoptera by Doctor Fairmaire.<sup>1</sup> He enumerates five species: *Cicindela trilunaris*, Klug, var.; *Opatrinus insularis*, Mulsant; *Gonocephalus micaus*, Germar; *Heteroderes complanatus*, Klug and *Cassida decolorata*, Boheman, with var. *lutea*, all of which were previously known from Madagascar. The only new species he describes is *Cratopus viridisparsus*. As will be seen by the list below, the coleopterous fauna of the island is raised to twelve species through the collection of Doctor Abbott, who has published some very interesting notes on this and Glorioso Island.<sup>2</sup>

After I furnished the footnote<sup>3</sup> for this paper, additional material was received by the National Museum, as is shown by comparison with the report on the Lepidoptera<sup>4</sup> by Doctor Holland, who records thirteen species, two of which he described as new, from this island.<sup>5</sup>

The additional material includes two species of Hemiptera—*Dysder*cus sp., and *Harpactor* sp., and raises the number of Coleoptera to seven, as follows:

### 1. ERETES STICTICUS, Linnæus.

This water beetle has about the same geographical distribution as the butterfly, *Diadema misippus*, is likewise rare in the warmer parts of America, including Galapagos Islands, and abundant in the Old World through Africa and southern Asia to Japan. Doctor Sharp remarks, in his monograph of the family Dytiscide, that this species occurs in a larger number of islands than any other Dytiscid. It varies considerably in size and markings, but is remarkably constant in structural characters throughout its range. Twelve species of the genus have been described, of which Doctor Sharp has united ten under the above name, but the two Australian forms he considers as distinct under the name *E. australis*, Erichson. The only example collected by Doctor Abbott on the Aldabra is a female of small size, dark color, and distinct maculation on the thorax.

<sup>&</sup>lt;sup>1</sup>Bull, Soc. Ent. France, LXV, 1896, p. 222.

<sup>&</sup>lt;sup>2</sup> Proc. U. S. Nat. Mus., XVI, pp. 759-764.

<sup>&</sup>lt;sup>3</sup> Loe. cit., p. 762.

<sup>&</sup>lt;sup>4</sup> Proc. U. S. Nat. Mus., XVIII, No. 1064, pp. 265-273.

The types of Doctor Holland's species, *Teracolus aldabrensis*, are from Mahé Island, but there are seven cotypes from Aldabra.

#### 2. CYBISTER TRIPUNCTATUS, Olivier.

This species belongs to the most highly developed group of carnivorous water beetles, where the limit of the species is rather opinionative. As Doctor Sharp, in his monograph mentioned above, has restricted it, its range is very wide, from Senegal to the Cape, and along the east coast of Africa to South Europe, and through southern Asia to China and Japan in the north, and over the whole of Australasia to Australia. *C. cinctus*, Sharp, its representative on Madagasear, he doubtfully considers a distinct species. He reviews carefully the races and generalizes them into four principal ones: (1) An Asiatic form also occurring in Australia, (2) an Archipelagic form from Malay Archipelago, occurring also on Bourbon and fle de France, (3) a sporadic form on the Philippine islands and certain parts of Malay Archipelago, and (4) an African form. Examples of the last were collected by the Chanler-Hæhnel expedition on the Tana River. They are large, oval, with broad yellow margin, exactly similar to others before me from the Cape and Loanda.

The six examples collected by Doctor Abbott on Aldabra are all small, ovate, and with narrow margin, exactly like a large series from Japan before me. Thus, it is remarkable to see that the Asiatic variety. occurs here, while the large broad Archipelagic form is recorded from Bourbon and He de France.

### 3. PHÆOCHROUS INSULARIS, new species.

Ovate, convex, above piceous black, margin ciliate with long rufous hairs; ventral surface and legs rufocastaneous, rufohirsute. Head finely punctulate, abruptly and strongly constricted a little before the eyes. Clypeus continuous with the front, sides distinctly margined, slightly convergent; apex subtruncate. Labrum strongly transverse, coarsely punctate, broadly emarginate. Thorax at base twice broader than long, surrounded with an entire margin; sides not deplanate, arcuately narrowed to the apex; anterior angles acute, posterior angles reetangular, with rounded apex; base broadly sinuate on each side; disk sparsely and finely punctulate, nearly smooth at the middle. Scutellum oblong, sparsely punctate. Elytra at base not broader than thorax, arcuately widened and broadest behind the middle; sides not explanate; apices separately rounded; disk moderately finely, diffusedly punctate; sutural stria impressed but the others indistinct. Anterior tibia tridentate, serrulate even between the teeth; upper tooth small, the two apical teeth long, recurved. Length, 8 to 9 mm.

Male: Tarsi incrassate, claws broadly appendiculate at base.

Type.-No. 581, U.S.N.M.

Doctor Abbott collected one male and three females of this Scarabæid on Aldabra Island. It resembles in form P. *beccarii*, Harold, from tropical East Africa, but is much smaller. The margins are not explanate and the sculpture is different. A moderate number of

species of this genus are described from Africa, Madagascar. East Indies to Philippine Islands and Australia. They probably live, like our species of Trox, on decaying animal substances.

### 4. OXYTHYREA ALDABRENSIS, new species.

Slender, shining, glabrous above, very sparsely setose beneath, entirely black, with antenna and palpi ferruginous. Clypens strongly margined, slightly emarginate, finely punctate. Front and vertex coarsely punctate, the latter with three smooth spaces, arranged transversely. Thorax very narrow; sides feebly rounded, almost subangulate at middle, strongly convergent toward apex; posterior angles very obtuse, nearly rounded; base broadly rounded, with emarginations obsolete; disk coarsely punctate, with six impressed white patches: two on each side-margin, very large, nearly reaching the angles, separated just in front of middle, making the posterior ones twice as large as the others; two longitudinally lumulate spots in front of scutellum, more widely apart than in allied continental species. In one specimen there is another pair of smaller spots in front of these. Scutellum glabrous, sharply acuminate. Elytra ontlined as in O. marginalis, Swarz, but the stria are not impressed, except the two nearest the suture behind the middle. The intervals are nearly smooth, not depressed, and the white patches are less numerous and much larger. There are three pairs of small sutural spots, two larger spots inside and behind the humeral callus, sometimes connected, and the inner one sometimes connected with the median sutural, forming an oblique band. The transverse marginal spot behind the middle is very large, extending inward to the third stria and has a posterior elongate marginal spot as an appendix; apical spot large, transverse. Pygidium nearly semicircular, with a few annular scratches on the middle, each side covered with a triangular niveous patch. Ventral surface sparsely punctate with a large square niveous patch on the sides of metasternum, an oblong one on its episternon, and another one on the side margin of the coxa. A row of transverse spots each side on the abdomen, not marginal, as in many allied species, but at the middle of each segment, sometimes absent. No trace of spine on fifth ventral segment. Proportion of legs, tibial armature, and claws as in marginalis, Swarz. Length, 9 mm.; width, 4, 5 mm. Four examples.

Type.-No. 577, U.S.N.M.

This nice little species is allied to *O. marginalis*, Swarz, from South Africa, but is much smaller, more slender, and altogether differently maculate. The genus is represented by numerons forms over the whole of Africa, Arabia, Syria, and Europe, extending to east Siberia.

### 5. MICROTHYREA ALDABRENSIS, new species.

Less robust, very shining, glabrous above, entirely black, with large impressed niveous patches with a rosy tint. Clypens as in *M. amabilis*, Schaum, but deeply emarginate at apex. Front rather sparsely punc-

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tate; vertex smooth at middle. Thorax short, with the sides only slightly converging from base to middle, then strongly arcuate to apex; posterior angles obtuse; base broadly arcuate, scarcely truncate at middle, and slightly sinuate each side; disk sparsely and minutely punctate with six large rounded patches: two pairs marginal, the posterior one oblong, larger, and two smaller rounded basal spots in the normal position; one specimen has an additional pair on the disk, but very small. Scutellum smooth, acute. Elytra outlined as in M. amabilis, but the stria are not impressed, the punctures are nearly obsolete in the scutellar region, and the white patches are smaller. There are on each side three sutural spots, rather small, a small spot above and another beneath the humeral callus; three marginal spots, the anterior two large, a large apical and some irregular smaller spots. The pygidium is transversely strigose at middle and has a large round niveous patch each side. Metasternum smooth and polished at middle, with a large quadrangular niveous patch, covering the sides. Hind coxæ strigose, with a round spot at side margin. Ventral segments strigose at the sides, with a transverse row of punctures on the middle of each, fifth with an obtuse tooth at the lateral posterior margin, sixth subtruncate. Legs as in amabilis, the anterior femora densely fimbriate. Length, 11.5 mm.; width, 7 mm. Three female examples.

Type.-No. 578, U.S.N.M.

This species is very distinct from *amabilis*, Swarz, and allied forms of the African continent by the characters given above. The genus *Microthyreus* has been erected for certain African species, formerly included in *Oxythyrea*, that show strongly developed sexual characters in the male. That the above described female belongs to the genus is inferred from the fact that the fifth abdominal segment has marginal spines.

### 6. LEPTOCERA ALDABRENSIS, new species.

Elongate, black, with impressed longitudinal bands on thorax and elytra, covered with a very dense, white, silky pubescence. Antennæ piceous, as long as the body, very sparsely pubescent, slender; first joint stout, clavate, strongly curvate; third joint nearly as long as fourth and fifth together. Head broader than thorax, densely pubescent; antennal tubercles and a spot on vertex glabrous; palpi small, last joint slender, slightly and obliquely truncate at apex. Thorax cylindrical, feebly constricted at each end, deeply punctate, opaque, with four longitudinal vitta. Elytra dark green, at base broader than thorax, slightly narrowed behind; apices squarely truncate; disk somewhat depressed, coarsely punctate in regular strike, interrupted by the impressed white vitta; sutural vitta entire, a discal vitta from base to middle, somewhat directed toward the suture; a second discal vitta on the posterior half, connected at apex with the sutural, extending somewhat beyond the middle in front; subhumeral vitta short. Ventral surface densely pubescent, side margin of metasternum and middle of

abdomen glabrous and smooth. Legs red, femora strongly elavate, finely pubescent. Tarsi infuscate, broad, short; first joint of hind tarsi somewhat longer than the second. Length, 9.5 mm. One example from Aldabra Island.

Type.-No. 579. U.S.N.M.

This species is nearly allied to Glaueites (Leptocera) lineaticollis, Fairmaire, from Madagascar, but is distinct by the piceous antennae, stronger punctuation of thorax and a different arrangement of the pubescent lines on the elytra. Two other species of the genus are described from Madagasear, one of which also occurs on Ile de France.

### 7. CRATOPUS VIRIDISPARSUS, Fairmaire.

Cratopus viridisparsus, FAIRMAIRE, Bull. Soc. Ent. France, LXV, 1896 p. 222.

This is the only beetle recorded from Aldabra by Doctor Fairmaire that was also collected there by Doctor Abbott. Two examples were obtained. I have had a manuscript description of it for the last two years and barely escaped making a synonym before going to press.

### INSECTS FROM GLORIOSO ISLAND.

The insects collected by Doctor Abbott on this little island are as follows:

### LEPIDOPTERA.

Two species of butterflies and three of moths, all of wide distribution. (Reported upon by Doetor Holland.)

#### NEUROPTERA.

Two species of Myrmeleon and one of Palpares.

#### DIPTERA.

Three species: Asilus, Tabanus, and Myodina.

#### HYMENOPTERA.

Four species: Eumenes Megachile, and Sphegida, two species. Three of these were also collected on Mahé Island.

### HEMIPTERA.

Nezara viridula, Linnaus, a cosmopolitan species, and Leptoglossus membranarius, Fabricius. The latter species is common on Madagascar.

#### HOMOPTERA.

A large Vieada, closely allied to the South African Platypleura limbata, Fabricius, but the fore wings are more densely maculate.

### COLEOPTERA.

Five species, of which three are here described as new. One is previously described from the Seychelles, and the remaining one is of wide distribution in Africa and Malayan Archipelago.

### 1. LUCIOLA ABBOTTI, new species.

Elongate, parallel, feebly shining, finely pubescent, bright ferruginous; head with antennæ and palpi, elytra, tibiæ and tarsi black. Antennæ short, not reaching to middle of body, nearly filiform, densely setose; first joint ferruginous beneath, as long as the fourth; third slightly longer than fourth; fourth to tenth slightly decreasing in length. Thorax nearly twice broader than long, somewhat narrowed in front; side margin feebly rounded, reflexed: posterior angles rounded; apex margined, feebly bisinuate; base more distinctly bisinuate, strongly margined, deeply impressed each side of middle; disk finely and densely punctate, deplanate at the sides, deeply canaliculate at the middle. Seutellum brownish red, obtuse at apex. Elytra-slightly broader than thorax, separately rounded at apex, very densely and finely rugosopunctate; suture elevated and three obsolete carinæ each side.

Male: Abdomen with fourth and fifth segments pale, the fourth emarginate at middle, the fifth strongly constricted and produced in a large lobe; last dorsal segment triangularly emarginate. Length, 10 mm.

*Type.*—No. 580, U.S.N.M.

One single example, a male, was taken on Glorioso Island. It agrees in color and many other characters with *L. transversicollis*, Fairmaire, described from Sainte-Marie-de-Madagascar, Mahé, and Mayotte, but Doctor Fairmaire's species has the third ventral segment pale and the posterior angles of thorax nearly rectangular. The genus is of wide distribution in the Old and New World.

### 2. PERISSOSOMA ÆNESCENS, Waterhouse.

Perissosoma anescens, WATERHOUSE, Ann. Nat. Hist., 4 ser., XV, 1875, p. 415.

Four examples of this very peculiar Melolonthid, of doubtful systematic position, were collected by Doctor Abbott on Glorioso Island. They agree exactly with Doctor Waterhouse's description, the type of which was from the Seychelles.

### 3. ADORETUS UMBROSUS, Fabricius.

Melolontha umbrosa, FABRICIUS, Ent. Syst., I, Pt. 2, p. 169.

For remarks on this species, see notes under *Adoretus umbrosus*, Fabricius, from the Seychelles Islands, page 696.

# 4. OXYTHYREA ABBOTTI, new species.

Robust, shining, glabrous above, very sparsely pubescent beneath, dark castaneous, including antennæ and legs; occiput and disk of thorax black. Clypeus shorter than in *O. marginalis*, Swarz, scarcely narrowed at apex, feebly rounded on the sides; distinctly but slightly emarginate at apex, densely and finely punctate; margins slightly depressed. Front immaculate, less densely but more strongly punc-

tate, with irregular, smooth median line. Thorax broadest at base, very strongly narrowed toward apex; sides colored exactly as the disk, broadly rounded before middle, distinctly sinuate before the hind angles, which are rectangular, with obtuse apex; base broadly rounded, with very slight indication of emargination on each side and in front of scutellum; disk sparsely but rather deeply punctate over the whole surface, with eight impressed niveous spots-the two largest are marginal, one at the middle and one in front, connected at the margin; the basal and discal pair in the normal position, as in O. marginalis; one of the specimens has still another pair of spots, though very small, on the disk near the apex, as in some specimens of O. marginalis. Scutellum smooth, large, sharply acuminate. Elytra outlined as in marginalis. but the strike are less impressed, all coarsely punctate; intervals nearly smooth, varying in width, but none of them depressed, obsoletely strigose at apex; the niveous spots are six or seven each side-an elongate spot near apex of scutellum, a small round one behind the humeral callus, a large transverse spot just behind the middle of margin; in one specimen a small oblique one on the disk inside: two spots just before apical callus, the one marginal, the other one near suture, the apical spot touching the margin behind. Pygidium semicircular, with annular punctures, transversely strigose at base, and on each side a large niveous spot. Ventral surface punctate, with a large transverse niveous patch covering the sides of metasternum and its episternum. Abdomen with small round spots at the sides: fifth segment withont any trace of spines. Proportion of the legs and anterior tibia as in marginalis. Anterior femora with longer, grayish-white ciliation. Length, 11 mm.; width, 6.5 mm. Two examples.

Type.—No. 582, U.S.N.M.

This species has the form of *O. marginalis*, Swarz, from South Africa, but is larger, stouter, and very different in the arrangement of the niveous patches.

# 5. CRATOPUS ABBOTTI, new species.

Elongate, broader behind, couvex. black. shining, sparsely covered with small rounded metallic green scales above; antennæ and legs rufous. Antennæ slender, sparsely pubescent; scape very long, reaching the margin of thorax, slightly clavate and curvate; first joint of funicle a little longer than the second, both elongate; third to seventh short, equal in length, slightly increasing in width; club fusiform, densely tomentose, as long as the last four joints of the funicle together, distinctly annulate, the three joints equally long. Rostrum shorter than the head, cylindrical, convex above, sparsely punctate, each puncture with a scale. Eyes large, longitudinally oval, feebly prominent. Head slightly constricted behind the eyes, sparsely punctate and scaly, scales denser and forming a longitudinal vitta beneath the eyes. Thorax slightly transverse, truncate before and behind, strongly narrowed and constricted at apex, feebly rounded on the sides behind, coarsely, reticuNO. 1119.

lately punctate, the punctures densely scaly at bottom; scales more dense on the inflexed sides and spreading upon the anterior coxa. Sentellum small, glabrous, smooth. Elytra at base nearly twice broader than thorax, broadest behind the middle, acutely produced at apex; humeri obliquely truncate; side margin serrate toward apex; disk coarsely striatopunctate; punctures transverse, densely squamose at the bottom; intervals narrow, smooth; the two or three marginal striae deeply impressed, rugose at base. Side pieces of meso and meta thorax and sides of the two first abdominal segments densely squamose; median line of ventral surface nearly smooth, sparsely pubescent. Legs not scaly, sparsely pubescent, the median pair short, the posterior pair longer and the anterior longest; all femora incrassate, but the anterior most strongly, with a small acute tooth beyond the middle; anterior tibiæ slightly curvate, acutely denticulate on the inner side. Tarsi hairy above, without any trace of scales; first joint slightly longer than second; third very wide; claws large, connate at base, divergent at apex. Length, 10 to 12 mm. Three examples from Glorioso Island.

Type.-No. 583, U.S.N.M.

This species comes very near *C. parcesquamosus*, Fairmaire, from the Seychelles, but differs in the sculpture and particularly in the tarsi, that are cœruleo-squamose above in Doctor Fairmaire's species.

### INSECTS FROM PROVIDENCE ISLAND.

This island, located about midway between the north end of Madagascar and the Seychelles, is apparently very meager in insect life. Doctor Abbott brought home only three species, one butterfly and one moth—both of which also occur on the African continent and the Seychelles—and the single beetle described below, which is nearest allied to the *Microthyrea aldabrensis* from Aldabra Island.

### MICROTHYREA PROVIDENCIÆ, new species.

Moderately robust, shining, glabrous above, with impressed niveous spots, sparsely hirsute beneath. Clypens formed as in *M. amabilis*, Schaum, but more narrowed and more deeply emarginate at apex. Sides of thorax sinuate behind the middle, areuately narrowed in front; posterior angles subrectangular; base broadly rounded with obsolete emarginations; disk finely and sparsely punctate, more densely at apex, with six small, round niveous spots; one pair at the front angles, a larger pair marginal behind the middle and one pair in front of scutellum in the normal position. Scutellum large, acuminate, with a few punctures. Elytra outlined and sculptured exactly as in *M. amabilis*, but the niveous spots are much smaller; on each side are three sutural spots, one above and another one behind the humeral umbone, two larger and one smaller (posterior) marginal spots, and a transverse apical spot. An additional spot occurs on the disk inside the anterior

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marginal. Pygidium elevated at middle and concentrically strigose, at apex transversely aciculate with subtruncate margin; a smaller niveous spot each side. Ventral surface hairy; metasternum coarsely but sparsely punctate, broadly niveous at the sides; hind coxe partly strigose; abdominal segments coarsely punctate in transverse rows, strigose at side margin; fifth with an obtuse spine at the lateral posterior margin, sixth covered at the sides, seventh truncate. Legs hairy, aciculate; anterior femora densely fimbriate; posterior femora and tibiæ strongly incrassate (male), the former curvate; exterior claw of front tarsi very long, incrassate at middle, and contorted. Length, 11 mm.; width, 7 mm. Two males from Providence Island. *Type.*—No. 584, U.S.N.M.