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flanks, while the lower segment of the limbs is nearly white. The tail, too, is shorter and white below, instead of uniformly dusky.

It is thus obvious that in respect of colour the Bonin deer comes much nearer to the Formosan than it does to the dusky Philippine sambar (I have not a specimen of the larger Luzon sambar with which to compare it). Accordingly, for all I can say to the contrary, it may be an imported breed of the Formosan sambar, dwarfed by the small area of its habitat. But as there is no evidence of this, it may be provisionally regarded as a distinct island race under the name of *Cervus (Rusa) unicolor boninensis*, with the female skull in the British Museum as the type.

LIH.—On the South-African Curculionidæ of the Genus *Cossonus*, *Clairv.* By GUY A. K. MARSHALL, F.Z.S.

THE genus *Cossonus* has practically a world-wide distribution, but, as at present known, is better represented in America than anywhere else. Only eight species have hitherto been recorded from Southern Africa, and six more are described in the present paper. But even with this increase it seems probable that the number of South-African species might readily be doubled when the area is more thoroughly worked. The timber-belts of the Transkei and Pondoland, the yellow-wood forests of Natal, the heavily wooded regions which adjoin the eastern littoral from Zululand northward into the tropics, are all practically virgin ground for the coleopterist, and when adequately explored will doubtless yield many new forms.

These insects seem, as a rule, to be but poorly represented in collections, for unless specially searched for they are not likely to be met with by the casual collector. All our species with whose habits I am acquainted live under the bark of decaying trees; but they seem to require damp surroundings, and thus in the drier parts of the country they are only to be found in trees which are subject to moist decay, such as *Euphorbias* and a few soft-wooded species like the *Erythras*. In these latter I have only found them when the trees were being killed by the attacks of certain Longicorn or Buprestid larvæ, the *Cossoni* being usually found in the moist decaying matter left in the tracks of these larvæ just beneath the bark. With them also occur a few other Curculionidæ, such as

Corynemerus, *Phlaeophagus*, &c., as well as various Nitidulidæ, Staphylinidæ, and some dipterous larvæ. These in turn attract the predaceous Histeridæ of such genera as *Hololepta*, *Pachycærus*, *Placodes*, and *Epicchinus*, which doubtless prey on the *Cossoni* as well as on the other insects.

It will probably be found that most of the species have a fairly wide distribution. This is certainly the case with *C. abscissus*, Boh., which ranges from Algoa Bay to the Equator and across the continent to Camerun. *C. suturalis*, Boh., has also been found both in Natal and on the Congo, but has not hitherto been recorded from any intermediate localities.

Synoptic Key for the South-African Species of Cossonus.

1. (24.) Rostrum more or less strongly dilated in the apical half.
2. (7.) Intervals on elytra bearing rows of punctures.
3. (4.) Prothorax very deeply incised near apex, bipartite; the intervals near the suture carinate, much narrower than the striae 1. *C. abscissus*, Boh.
4. (3.) Prothorax simply constricted near apex, not incised; the intervals near the suture plane, as broad as the striae.
5. (6.) Prothorax without any discal impressions or a central carina; rostrum very gradually dilated from base to apex .. 2. *C. Sheppardi*, sp. n.
6. (6.) Prothorax with a distinct carina and a longitudinal basal impression on each side of it; rostrum suddenly and very strongly dilated at apex 3. *C. carinicollis*, [Fähr.
7. (2.) Intervals on elytra impunctate.
8. (21.) Prothorax distinctly impressed or carinate on the disk.
9. (20.) Rostrum without any central furrow above.
10. (19.) Elytra with only 9 complete striae and a short subhumeral one; the central impression on prothorax not interrupted transversely.
11. (14.) Prothorax with the smooth discal areas finely and sparsely punctured.
12. (13.) Prothorax subpyriform, the sides gradually dilated from apex to beyond middle; metasternum evenly but sparsely punctured 4. *C. africanus*, Boh.
13. (12.) Prothorax subquadrate, the sides rapidly dilated from apex to before middle, thus forming a distinct shoulder; metasternum with a large central impunctate area 5. *C. incivilis*, Fähr.

14. (11.) Prothorax with the smooth discal areas impunctate.
15. (18.) Forehead with a distinct central fovea; central carina of prothorax very narrow, obsolete or incomplete.
16. (17.) Forehead with a shallow transverse impression; thoracic impression narrower, deeper, more sharply V-shaped, and without a central carina; elytra black.
17. (16.) Forehead without a transverse impression; thoracic impression broader and shallower, and with an irregular central carina; elytra ferruginous brown, with the suture and lateral margins black 6. *C. transvaalensis*, [sp. n.]
18. (15.) Forehead with no central fovea; central carina of prothorax complete, broad and impunctate..... 7. *C. suturalis*, Boh.
19. (10.) Elytra with 10 complete striae; the central impression on prothorax transversely interrupted about middle [sp. n.]
20. (9.) Rostrum with a central furrow at base . 9. *C. chirindensis*,
21. (8.) Prothorax plane and smooth, without a carina or any distinct impressions; body much depressed. 10. *C. elongatulus*, F.
22. (23.) Rostrum longer than head and only slightly dilated; head short, subconical; elytra with 9 shallow striae, the intervals being broad and plane . 11. *C. glabricollis*, Boh.
23. (22.) Rostrum shorter than head and broadly dilated; head elongate, subquadrate; elytra with 10 deep striae, the intervals narrow and subcarinate 12. *C. complanatus*, [sp. n.]
24. (1.) Rostrum subcylindrical, not dilated at apex. [sp. n.]
25. (26.) Rostrum impunctate dorsally; central impression on prothorax at base only, the median carina indistinct anteriorly. 13. *C. immeritus*, [Fähr.]
26. (25.) Rostrum punctate dorsally; central impression on prothorax reaching from base to apex, the median carina distinct throughout 14. *C. scrobicollis*, [sp. n.]

1. *Cossonus abscissus*, Boh.

Cossonus abscissus, Boh. Schön. Gen. Curc. iv. p. 1036 (1838); Gerst. Wieg. Arch. 1871, i. p. 75.

Long. $5\frac{1}{2}$ –7, lat. $1\frac{1}{4}$ –2 mm.

Head subconical, obsoletely punctate on vertex, forehead strongly punctured and with a broad central impression containing a deep round fovea; eyes slightly prominent. *Rostrum* stout, about as long as broad, scarcely curved, strongly dilated from base to apex; upper surface with a central impression (continued from forehead) at the base only, plane

anteriorly, with distinct confluent punctuation and occasionally a faint central carina; antennæ inserted about middle, piceous. *Prothorax* bipartite, longer than broad, apex truncate and much narrower than base, which is deeply bisinuate; a very deep constriction near apex; the posterior portion slightly convex, evenly set with large deep punctures and with an obsolete median carina; the anterior portion somewhat raised and much less coarsely punctured; colour dull black, bare. *Elytra* separately rounded at base, a little broader than prothorax at shoulders, which are sloping, sides subparallel to beyond middle; upper surface slightly convex, with only eight complete striæ, containing rows of very large and deep foveolæ, the third and fourth rows each divided into two at base by narrow carinæ extending only a short distance, the intervals very narrow, each with a row of indistinct and distant punctures bearing minute setæ, which can only be perceived with difficulty; colour dull black. *Legs* closely punctured and with sparse pale pubescence, femora black, tibiæ and tarsi piceous.

CAPE COLONY: Algoa Bay (*Dr. H. Brauns*); NATAL: Malvern (*C. N. Barker*); TRANSVAAL: Leydenburg (*Dr. J. W. B. Gunning*); MASHONALAND: Victoria.

TYPE missing; in Ecklon and Zeyher's collection.

This species may be readily recognized from all its South-African congeners by the structure of the thorax. The only specimen I have taken was found under the bark of a large dead acacia. The species has been recorded by Faust from Camerun and by Gerstaecker from Arusha in German East Africa. Some specimens are covered with a fine earthy indumentum, which can be made to scale off; it is not quite clear whether this is a natural covering or merely adventitious.

2. *Cossonus Sheppardi*, sp. n.

Long. 5-6, lat. $1\frac{1}{3}$ - $1\frac{1}{2}$ mm.

Head subconical, almost impunctate on vertex, forehead closely and coarsely punctured and with a small central fovea, each puncture being filled with a short, depressed, scale-like, white seta; eyes prominent. *Rostrum* stout, about as long as head, scarcely curved, gradually dilated from base to apex; upper surface plane, with punctures and setæ similar to those on forehead; antennæ ferruginous, inserted in front of middle. *Prothorax* longer than broad, apex truncate, base faintly bisinuate, sides slightly rounded, broadest rather behind middle and strongly constricted near apex; upper surface slightly convex, without any central furrow or

carina, evenly set with large shallow punctures, each containing a very short white seta; colour dull black. *Elytra* subtruncate at base, a little broader than prothorax at shoulders, which are rounded, sides subparallel to beyond middle; upper surface somewhat convex, with ten complete striæ containing deep closely-set punctures, the intervals plane, as broad as the striæ near the suture, but those between the third and fourth striæ and between the fifth and sixth are very narrow and uneven, so that the punctures in these striæ are respectively approximated and often irregular or even more or less confused together (TYPE form); the broader intervals have each a row of small but distinct and close punctures bearing minute depressed white setæ; colour dull black. *Legs* punctate, with scattered depressed white setæ, piccos, with the tarsi ferruginous.

PORTUGUESE E. AFRICA: Beira (*P. A. Sheppard*).

TYPE in the British Museum.

Allied to *C. abscissus*, Boh., from which it differs, however, in many characters. Its nearest ally is *C. torridus*, Boh., from Senegal, but the latter, which is a more robust insect, has its rostrum very strongly and quadrangularly dilated at the apex and with a low central carina; the thoracic constriction is similar, but the basal margin is more deeply bisinuate, and the intervals on the elytra are much more coarsely punctured.

I have much pleasure in dedicating this species to Mr. P. A. Sheppard, of Beira, to whom I am indebted for much valuable material from that hitherto unworked locality.

3. *Cossonus carinicornis*, Fähr.

Cossonus carinicornis, Fähr. Öfv. K. Vet.-Akad. Förh. 1871, p. 284.

Long. 5-8, lat. $1\frac{1}{2}$ - $2\frac{1}{2}$ mm.

Head subconical, closely and strongly punctured; forehead with a deep central fovea; eyes slightly prominent. *Rostrum* rather longer than head, parallel-sided to about middle, thence abruptly and quadrangularly dilated; upper surface plane, closely and distinctly punctured, but with a variable impunctate median line or patch; antennæ inserted near apex. *Prothorax* scarcely longer than broad, apex truncate and much narrower than base, which is slightly bisinuate, sides moderately rounded, broadest at middle, slightly constricted at apex, posterior angles with a very small acute projection; upper surface almost plane, closely and distinctly punctured throughout, and with a smooth central carina, which has a broad shallow impression on each side at base; colour black

or ferruginous, with carina and margins black. *Elytra* a little broader than prothorax at shoulders, which are sloping, base subtruncate, sides parallel to beyond middle; upper surface slightly convex, with ten complete broad striae containing rows of large deep punctures, the intervals narrow, subconvex, minutely punctulate; colour either black or ferruginous, with the suture and margins black or entirely ferruginous. *Legs* comparatively long, closely punctulate and sparsely pubescent, varying in colour from black to ferruginous.

NATAL: Durban.

TYPE in the Stockholm Museum.

Much the largest of our South-African species and with no near ally.

4. *Cossonus africanus*, Boh.

Cossonus africanus, Boh. Schön. Gen. Curc. viii. 2, p. 272 (1845).

Long. $4-1\frac{1}{2}$, lat. $1\frac{1}{4}-1\frac{1}{2}$ mm.

Head subconical, vertex impunctate, forehead finely punctured and with a distinct fovea; eyes slightly prominent. *Rostrum* scarcely longer than head, narrow and subcylindrical at base, strongly and quadrangularly dilated in the apical half; upper surface smooth, flattened towards apex, with fine scattered punctuation; antennæ stout, ferruginous. *Prothorax* about as long as broad, apex truncate, much narrower than base, which is lightly bisinuate, sides slightly rounded, and gradually dilated from apex to just behind middle, apex with a slight constriction; upper surface somewhat convex, with a distinct central carina and a shallow longitudinal impression on each side of it; the punctures are close and deep near the carina, becoming finer on the disk and stronger again towards the sides; colour black, shining. *Elytra* separately rounded at base, a little broader than prothorax at shoulders, which are roundedly prominent, sides parallel to beyond middle; upper surface slightly convex, with 9 complete fine striae containing rows of small closely-set punctures, the intervals comparatively broad, almost plane, impunctate, but faintly coriaceous; colour black, moderately shining. *Legs* piceous, bare, finely punctate; tibiæ and tarsi ferruginous.

CAPE OF GOOD HOPE (*Wahlberg*), Cape Town (*A. Raffray*).

TYPE in the Stockholm Museum.

The punctuation of the discal areas of the prothorax is variable, being much closer and more distinct in some specimens. These latter are thus not unlike very small

examples of *C. elongatulus*, F., in general appearance; but the rostral structure of that species is very different and the elytra are more deeply striate.

5. *Cossonus incivilis*, Fähr.

Cossonus incivilis, Fähr. Œfv. K. Vet.-Akad. Förh. 1871, p. 286.

Long. 4-4½, lat. 1½-1¾ mm.

Head subconical, impunctate on vertex, forehead punctulate and with a variable central fovea; eyes rather large, slightly prominent. *Rostrum* about as long as head, narrowing gradually from base to middle, thence broadly and quadrangularly dilated to apex; upper surface even, closely and finely punctured; antennæ short and stout, ferruginous, inserted in front of middle. *Prothorax* rather longer than broad, apex truncate and much narrower than base, which is strongly bisinuate, sides slightly rounded, broadest about middle, faintly constricted at apex; upper surface slightly convex, with a strong central impression, narrow from near apex to middle, thence broadly and triangularly dilated to base, the anterior part being usually shallow; the impression is strongly punctured and contains a very narrow undulating carina, the disk smooth and with very fine sparse punctuation, beyond which the sides are deeply and coarsely punctured; colour black, shining. *Elytra* separately rounded at base, very little broader than prothorax at shoulders, which are sloping, sides parallel to beyond middle; upper surface moderately convex, with nine complete strongly punctured striæ, which are very deep near the suture, but become shallower laterally, intervals almost as broad as striæ, convex and impunctate; colour black, shining. *Legs* short, piceous, bare, and absolutely punctured, tarsi paler.

NATAL: Verulam, Umgeni; MASHONALAND: Salisbury.

TYPE in the Stockholm Museum.

The typical specimens taken by Wahlberg in "Caffraria" are apparently immature, all my own examples being of a shining black colour. The species in general form and sculpture is allied to *suturalis*, Boh., and *transvaalensis*, Mshl., but it is distinctly more convex, the rostrum is much more dilated and more evidently punctured above, and the thoracic impression is of a different shape.

In Natal I found this insect in decaying Euphorbias, and at Salisbury under the rotting bark of what is locally known as the "cabbage-tree."

6. *Cossonus transvaalensis*, sp. n.

Long. $3\frac{1}{2}$, lat. 1 mm.

Head subconical, black, shining, impunctate, with a distinct shallow transverse impression behind the eyes; forehead with a small central fovea; eyes slightly prominent. *Rostrum* about as long as head, moderately curved, cylindrical at base, thence gradually dilated and flattened towards apex, upper surface with very fine faint punctuation, the sides coarsely punctured; antennæ ferruginous, inserted about middle. *Prothorax* a little longer than broad, sides slightly rounded, broadest about middle, constricted near apex, base bisinuate; upper surface plane, with a deep, sharply defined, V-shaped central impression, which is filled with coarse punctures and has no distinct central carina; discal area impunctate, the sides closely and deeply punctured; colour black, glabrous. *Elytra* rounded at base and scarcely broader than the thorax, shoulders rounded, sides parallel to beyond middle; upper surface slightly convex, scarcely striate except close to base, but with nine complete rows of deep separate punctures, which are smaller apically and laterally, the intervals plane and impunctate; colour black, shining, glabrous. *Legs* picceous, obsoletely punctured.

TRANSVAAL.

TYPE in the British Museum.

Nearly allied structurally to *C. suturalis*, Boh., but the present species is a distinctly narrower and slightly more convex insect, and, in addition to the characters mentioned in the key, it may be distinguished by the coarser punctuation of the rostrum and the difference in the striation of the elytra.

7. *Cossonus suturalis*, Boh.

Cossonus suturalis, Boh. Schön. Gen. Curc. iv. p. 1033 (1838).

Long. 4-5, lat. $1-1\frac{1}{2}$ mm.

Head subconical, black, glabrous, minutely punctured, and with a deep oblong fovea on forehead; eyes slightly prominent. *Rostrum* about as long as head, very little curved, sides subparallel at base, apical half with a slight quadrangular dilatation; upper surface impunctate, the sides faintly punctured; antennæ ferruginous, inserted well in front of middle. *Prothorax* a little longer than broad, sides slightly rounded, broadest behind middle, apex distinctly constricted, base gently bisinuate; upper surface depressed, with a broad central impression, gradually dilated from near apex to base and filled throughout with large confluent punctures, except

for a smooth central line of variable width; discal area impunctate, the sides closely and strongly punctured; colour black, glabrous. *Elytra* subtruncate at base and scarcely broader than thorax, shoulders slightly prominent, the sides very gradually narrowed from base to apex; upper surface depressed, with nine complete strongly punctured striae, which are deep and crenato-punctate on disk, but very shallow laterally, the intervals plane but narrow and impunctate; colour ferruginous brown, with the suture and apex broadly, the lateral margins narrowly black. *Legs* black, shining, obsoletely punctured, tarsi piceous.

NATAL: Durban, Verulam.

TYPE in the Stockholm Museum.

A common species occurring in some numbers under the rotting bark of several soft-wood trees, and especially the Kafir boom (*Erythrina caffra*). Also recorded from the Congo by Faust.

8. *Cossonus umzila*, sp. n.

Long. $3\frac{1}{2}$ –4, lat. $1-1\frac{1}{2}$ mm.

Head subconical, vertex impunctate; forehead closely and finely punctured, but without any central fovea; eyes prominent. *Rostrum* longer than head, subcylindrical at base, distinctly though not broadly dilated in the apical half; upper surface convex, shining black, with extremely fine punctuation; antennae inserted near apex, ferruginous. *Prothorax* scarcely longer than broad, apex truncate, base bisinuate, sides subparallel to about middle, thence rapidly narrowed to apex, where there is a slight constriction; upper surface plane, with a broad, deep, triangular impression extending from the apical constriction to base, the impression being rugosely punctured and containing a broad impunctate carina throughout; the portions of the disk adjoining the central impression are quite smooth and impunctate, but the sides are very coarsely punctured; shining black, bare. *Elytra* separately rounded at base, a trifle broader than prothorax at shoulders, which are sloping, sides subparallel to beyond middle; upper surface plane, subdepressed, with nine deep strongly punctured striae, the tenth stria being subhumeral and much abbreviated, the intervals narrow, carinate, and impunctate. *Legs* piceous black, shining, bare, impunctate; tarsi ferruginous.

S.E. MASHONALAND: Chirinda Forest.

TYPE in the British Museum.

9. *Cossonus chirindensis*, sp. n.

Long. $5\frac{1}{2}$, lat. $1\frac{1}{4}$ – $1\frac{1}{2}$ mm.

Head subconical, impunctate on vertex; forehead finely punctured and with a deep elongate fovea; eyes prominent. *Rostrum* scarcely longer than head, sinuate laterally in the middle, broadly and subquadrangularly dilated at apex; upper surface closely and finely punctured, almost plane apically; antennæ ferruginous, inserted quite close to apex. *Prothorax* broader than long, apex truncate, much narrower than base, which is bisinuate; sides subparallel to about middle, then gradually narrowed to apex, where there is a slight constriction; upper surface almost plane, very finely punctured on the disk, but coarsely so towards the sides, with a shallow longitudinal impression close to apex containing an ill-defined central carina, with a few large punctures on each side of it, and a much deeper trapezoidal impression at base, which is rugosely punctured and contains a distinct narrow carina, the two impressions being separated by a narrow smooth space; colour uniform light testaceous brown. *Elytra* separately rounded at base, broader than the prothorax at shoulders, which are roundedly prominent, sides subparallel to beyond middle; upper surface plane, with ten complete, deep, and strongly punctured striae, the intervals being narrow, convex, and impunctate; colour uniform testaceous brown, a little darker than the prothorax. *Legs* testaceous, bare, and finely punctured.

S.E. MASHONALAND: Chirinda Forest.

TYPE in the British Museum.

This species, as also *C. umzila*, I captured flying in the daytime along shady paths in the dense forest.

10. *Cossonus elongatulus*, Fab.

Cureidlo elongatulus, Fab. Ent. Syst., Suppl. p. 168.

Cossonus elongatulus, Boh. Schön. Gen. Cure. iv. p. 1022 (1837).

Long. $3\frac{1}{2}$ – $6\frac{1}{2}$, lat. 1–2 mm.

Head subconical, piceous, shining, impunctate on vertex; forehead with fine scattered punctures; eyes slightly prominent. *Rostrum* stout, a little shorter than head, broad and flattened; sides parallel in the basal half and with a slight quadrangular dilatation at apex, black or ferruginous, shining, deeply punctured, and with a broad central furrow, which ascends the forehead, but is abbreviated anteriorly; antennæ stout, ferruginous. *Prothorax* longer than broad, apex truncate, much narrower than base, which is subbisinuate,

sides gently rounded, broadest about middle, rapidly narrowing towards apex, where there is a slight constriction; upper surface almost plane, deeply and closely punctured, with a slightly raised smooth central line and a faint longitudinal impression on each side of it; colour entirely black or ferruginous, with the sides and under surface sometimes blackish. *Elytra* subtruncate at base, a little broader than the prothorax at shoulders, which are subrectangular, sides parallel to beyond middle; upper surface almost plane, with deep and strongly punctured striae, the intervals narrow and impunctate; colour entirely black or ferruginous, the suture and lateral margins being more or less infuscate. *Leys* short, rather slender, with faint scattered punctuation, black or ferruginous, with the knees rather darker.

CAPE OF GOOD HOPE (*teste* Boheman); S.E. MASHONALAND: Chirinda Forest.

I am not aware of the existence of Fabricius's type of this species; but the specimens upon which Boheman founded his description are in the Stockholm Museum.

Boheman also records the insect from India and Mauritius.

With the exception of *C. abscissus*, Boh., which differs widely in other respects, this is the only South-African species with a furrow on the upper surface of the rostrum.

11. *Cossonus glabricollis*, Boh.

Cossonus glabricollis, Boh. *op. cit.* iv. p. 1034 (1833).

Long. 4, lat. $1\frac{1}{2}$ mm.

Head conical, shining, impunctate, with a minute fovea on forehead and slightly constricted behind the eyes, which are subdepressed. *Rostrum* longer than head, curved, subcylindrical at base, slightly and quadrangularly dilated apically; smooth, shining, and almost impunctate; antennae comparatively long, ferruginous, inserted in front of middle. *Prothorax* broadest at base, gradually narrowed till close to apex, where there is a slight constriction, apex truncate, base bisinuate, posterior angles with a minute sharp projection; upper surface plane, smooth, shining black, impunctate, except for two irregular central rows of fine punctures (sometimes partly obsolete). *Elytra* separately rounded at base, a trifle broader than prothorax at shoulders, which are roundedly prominent, sides parallel to beyond middle; upper surface depressed, with nine complete fine shallow striae containing regular rows of small distant punctures, which are faint near the suture and become gradually stronger laterally,

the intervals broad, plane, and impunctate; colour shining black. *Legs* black, shining, impunctate; tarsi ferruginous.

NATAL: Malvern.

TYPE in the Stockholm Museum.

This does not appear to be a common insect, and I have taken it only under the bark of rotten Kafir booms (*Erythrina caffra*).

12. *Cossonus complanatus*, sp. n.

Long. 5, lat. $1\frac{1}{2}$ mm.

Head elongate, subquadrate, constricted near base, with very fine scattered punctuation and a minute fovea on forehead; eyes somewhat prominent. *Rostrum* rather shorter than the head, strongly and quadrangularly dilated from middle to apex, upper surface almost plane and with the punctuation rather stronger and closer than on the head; antennæ ferruginous, inserted close to apex. *Prothorax* a trifle longer than broad, apex truncate and much narrower than base, which is bisinuate, sides slightly rounded, broadest behind middle, gradually narrowed anteriorly, and with a constriction at apex; upper surface plane, much depressed, with fine scattered punctuation, having an impunctate central line, on each side of which there is near the base a very faint longitudinal impression containing rather deeper punctures, posterior angles with a minute sharp projection; colour black, shining. *Elytra* strongly depressed, jointly rounded at base, a little broader than prothorax at the shoulders, which are roundedly prominent, sides parallel to far beyond middle; upper surface plane, with ten complete deep striæ containing rows of distinct closely-set punctures, the intervals narrow, plane, and impunctate; colour piceous black, shining. *Legs* black, bare, finely punctulate; tarsi piceous.

NATAL: Malvern.

TYPE in the British Museum.

I have seen only a single example of this very distinct species, which I captured flying at sundown in August 1897. Its extremely depressed form will at once distinguish it from all other South-African species, its nearest ally in this respect being *glabricollis*, Boh. These two species are the only ones in which the prothorax is smooth and without any distinct carina or other sculpturing. From *glabricollis* the present species may be further distinguished by its much shorter and broader rostrum, differently shaped head, and by the deeper and closer striation of the elytra.

13. *Cossonus immeritus*, Fähr.*Cossonus immeritus*, Fähr. (Efv. Vet.-Ak. Förh. 1871, p. 286).Long. $4\frac{3}{5}$ –5, lat. $1\frac{2}{5}$ – $1\frac{3}{5}$ mm.

Head shortly conical, impunctate; forehead with a central fovea; eyes slightly prominent. *Rostrum* nearly twice as long as head, stout, parallel-sided, slightly curved, punctate on the sides, but glabrous dorsally; antennae stout, ferruginous. *Prothorax* about as long as broad, apex truncate, much narrower than base, which is bisinuate, sides subparallel from base to beyond middle, narrowed anteriorly, and with a faint constriction at apex; upper surface slightly convex, with deep subremote punctuation and a median basal impression; the central carina scarcely noticeable, except in the basal impression; colour black, bare, shining. *Elytra* a little broader than prothorax at the shoulders, which are roundedly prominent, sides parallel to beyond middle; upper surface slightly convex, with ten complete deep and strongly punctured striae, the intervals convex and impunctate; colour black, glabrous. *Legs* black, impunctate, tarsi ferruginous.

CAFFRARIA (teste Fähræus).

TYPE in the Stockholm Museum.

14. *Cossonus scrobicollis*, sp. n.Long. 4– $4\frac{1}{2}$, lat. $1\frac{3}{4}$ mm.

Head conical, vertex impunctate; forehead punctulate and with a central fovea; eyes subdepressed. *Rostrum* longer than head, curved, subcylindrical, and not dilated at apex; punctuation distinct at base, but becoming much finer apically; antennae inserted at middle, short, stout, ferruginous. *Prothorax* as long as broad, apex truncate and much narrower than base, which is strongly bisinuate, sides but little rounded, slightly constricted behind apex, broadest about middle; upper surface somewhat convex, closely and very coarsely punctured throughout, and with a deep triangular central impression, broadening from apex to base, the impression itself rugosely punctured and containing a complete smooth carina. *Elytra* separately rounded at base, a little broader than prothorax at shoulders, which are obtusely prominent, sides parallel to beyond middle; upper surface moderately convex, with ten deep very strongly punctured striae, which are hardly shallower laterally (except the tenth, which is faint), the intervals narrow, subcarinate, and impunctate. *Legs* piceous, shining, finely punctulate; tarsi ferruginous.

NATAL: Verulam; PORTUGUESE E. AFRICA: Beira (*P. A. Sheppard*).

TYPE in the British Museum.

In addition to the characters mentioned in the key, this species may be distinguished from its only near ally, *C. immeritus*, Fähr., by the following points:—the shorter rostrum; the closer punctuation of the thorax, which is often longitudinally scrobiculate; the broader and more deeply punctured striæ on the elytra; and the narrower subcarinate intervals.

This species was found under the bark of rotten *Euphorbia* trees.

LIV.—*Ten-legged Pycnogonids, with Remarks on the Classification of the Pycnogonida*. By LEON J. COLE.

IN a recent paper published in this Journal by T. V. Hodgson (1904), Biologist to the National Antarctic Expedition, appears a description of a most interesting Pycnogonid taken during the stay of the 'Discovery' in winter-quarters in McMurdo Bay. It differs from the ordinary members of the group in possessing five pairs instead of the usual number of four pairs of walking or "ambulatory" legs. In other respects it is very close to the well-known genus *Nymphon*. Hodgson considers that this remarkable animal should be regarded as representing a new genus as well as a new species, and has proposed for it the name *Pentanympyon antarcticum*. That it is not a fortuitous or "freak" variation is pretty well shown by the fact that in all twenty-eight individuals were taken, both males and females. They were found inhabiting water from 12 to 125 fathoms in depth.

Hodgson believes that "the presence of a fifth pair of legs [is] a character which separates it from all Pycnogonids hitherto known"; but as early as 1837 Edgits (1837) published a description of a Pycnogonid with a fifth pair of walking-legs from the South Shetland Islands, and gave to it the name *Decolopoda australis*—a fact which seems never to have come to the attention of workers on the group since that time. Edgits gives a very good description and illustration of the species—much better than the average at that early date,—though the figures do not seem to agree in all details with the description. He states that the entire animal was of a bright scarlet colour, and so figures it; and