

REVISION OF THE AMYCTERIDES.

PART IV. *Sclerorhinus* [Section ii.]. [COLEOPTERA].

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(Continued from p.718.)

SECTION ii.

Ventral segments with a strong, hirsute, median vitta in the male; less marked in the female.

Group ii.—Fifth interstice strongly, generally closely, tuberculate; third interstices approximated on the declivity; intermediate tibiae simple. Type of group, *S. sabulosus* MacL.

This group includes a number of the finest species in the genus. The headquarters of the group are in South Australia, whence it spreads into the Mallee-districts in the north-west of Victoria, and to the Murchison District, in West Australia. The group is represented in Central Australia by a number of species closely related, *inter se*, and constituting a distinct Subgroup, of which *S. convexus* Sloane, is the type.

The species are large, and of an elongate, subparallel form, the prothorax being strongly ampliate. The elytra are tuberculate, but the tubercles vary in size and form, from mere subobsolete elevations along the interstices, to small but definite, or large and conical, tubercles. As a rule, the arrangement is regular, the third, fifth, and sixth interstices being generally more or less closely tuberculate; in *S. Elderi* and one or two others, however, the tubercles are large and separate, even on the fifth interstice. The approximation of the third elytral interstices on the declivity is characteristic, though not confined to the group; it is more pronounced in the female. The structure of the ventral surface is also characteristic of the group. The median vitta projects strongly beyond the plane of the segments, which are concave or subconcave on either side of the vitta, and marked by more or less constant depressions, more particularly on the apical segments.

Many of the species approach each other closely and are difficult to separate. At the same time, I think that, with the exception of *S. arenosus*, which is a synonym of *S. sabulosus*, and possibly of *S. Goudiei*, which, perhaps, is only entitled to be regarded as a variety of *S. sabulosus*, all the described species are distinct. It is possible that I may have allowed too much for variation in the cases of *S. molestus* and *S. Elderi*, both of which have distinct "forms."

The elytral sculpture of *S. convexus* and its allies is at variance with that of the other species of the group. The striae are more or less strongly foveate, and the interstices subcostiform and broken up into nodulose elevations, having little of the tuberculate character of the other species, excepting about the declivity.

Table of Species, Group ii.

Subgroup A. Elytral tubercles rounded or conical.

1(20). Anterior femora with median ridge beneath.

2(15). Fifth interstice closely tuberculate throughout, tubercles small.

3(8). Tubercles black.

4(5). Sides of prothorax with granules obsolete below protuberance of disc. *S. sabulosus* Macl.

5(4). Sides of prothorax granulate to coxæ.

6(7). Elytral tubercles very small, granuliform. *S. Dixoni* Ferg.

7(6). Elytral tubercles noticeably larger and more conical. *S. Goudiei* Ferg.

8(3). Tubercles reddish.

9(10). Clothing dense, ferruginous. *S. molestus* Pasc.

10(9). Clothing less dense.

11(12). Tubercles of second interstice not noticeably larger than those of third interstice.

12(11). Tubercles of second interstice closely placed. *S. occidentalis* Sl.

13(14). Tubercles of second interstice fewer and more distantly placed. *S. angustipennis* Sl.

14(13). Tubercles of second interstice distinctly larger than those of third interstice. *S. Browni*, n.sp.

15(2). Fifth interstice with strong, but separate, tubercles.

16(17). Tubercles black. *S. laticollis* Macl.; *S. molossus* Pasc.

17(16). Tubercles reddish.

18(19). Prothoracic granules large. *S. Elderi* Sl.

19(18). Prothoracic granules smaller, form narrower. *S. angustior*, n.sp.

20(1). Anterior femora not ridged beneath. *S. amycteroides* Ferg.

Subgroup B. Elytral sculpture consisting of irregular foveæ and subcostiform interstices, divided into elongate, flattened elevations.

21(22). Outline of elytra in the female much narrowed to apex... *S. noctis* Sl.

22(21). Not as in *S. noctis*.

23(26). Elytra convex.

24(25). Elevations on the second and fourth interstices not much fewer than on the other interstices *S. convexus* Sl.

25(24). Elevations on the second and fourth noticeably fewer than on the other interstices..... *S. Spenceri* Ferg., var.

26(23). Elytra depressed along the middle. *S. insignis* Sl.

SCLERORINUS SABULOSUS Macl.

Macleay, *loc. cit.*, p.322; *S. arenosus* Macl., *loc. cit.*, p.322.

♂. Large, elongate, subparallel. Black; densely clothed with brownish, and with light yellow setæ; ventral vitta light yellow.

Head convex. Rostrum broad, dorsal surface broad; external ridges prominent, thick, not extending up head; median carina appearing as a narrow lævigata line, widening out in front, feebly raised. Eyes ovate. Prothorax (7 × 8 mm.) rather strongly dilatate in front of middle; apex gently rounded above, with definite but rather small ocular lobes; granules depressed, especially in the centre. Sides with granules obsolete except above, and obsolescent in front. Elytra (16 × 9.5 mm.) robust, base emarginate, humeri noduliform; punctures shallow, in regular rows, subtended by small granules; interstices tuberculate; second with one or two; third and fourth each with a continuous row of small tubercles, rounded at base, rather larger and conical on or about declivity, about twenty-five in each row, third interstices approximated on declivity; fourth without tubercles; sixth with a continuous row of thirteen, similar to row on fifth interstice. Beneath, rather rugosely punctured; apical ventral segment grooved in the middle, with the oblique impressions rather indefinite. Anterior femora ridged beneath.

♀. Shorter than ♂, with the prothorax less dilatate, and more rounded; elytra shorter, with the row of tubercles broken in the middle, presenting the appearance of a badly set fracture. Tubercle-index: 1, 22, 0, 21, 12.

Dimensions: ♂, 26 × 9.5 mm.; ♀, 21.5 × 9 mm.

Hab.—South Australia. Type in Australian Museum.

I cannot separate *S. arenosus* from this species; under the name-label of *S. arenosus* in the Australian Museum, are two females, certainly conspecific, one of which has dark setæ, and the other light. In all respects, these agree with the type-female of *S. sabulosus*.

S. Dixoni Ferg., and *S. Goudiei* Ferg., are very closely allied, but I think worthy of separate names. The points of distinction between them were fully discussed when they were described.

SCLERORINUS MOLESTUS Pasc.

Pascoe, Journ. Linn. Soc., xii., 1873, p.9.

♂. Elongate, subparallel, large. Black, elytral tubercles diluted with red; densely clothed with silaceous squames, except on tubercles; median ventral vitta reddish-brown.

Head convex, continued on into rostrum, sometimes a slight transverse impression at junction; external rostral ridges continued on up the head. Rostrum shallowly excavate; external ridges prominent, thick, parallel; median carina narrow, little raised, not continued up forehead; sublateral sulci rather narrow, with a deeper depression at base. Eyes subovate. Prothorax (8×8.5 mm.) widely dilatate; apical margin rounded above, with moderately distinct ocular lobes; subapical transverse impression moderately strongly marked; median and sublateral impressions feeble or absent; closely set with small, round, slightly depressed granules, rather smaller in the centre. Sides with very small, distant granules, absent on posterior portion. Elytra (16×8.5 mm.) elongate, subparallel, very little widened posteriorly; base widely emarginate, humeri noduliform; punctures shallow, obscured by clothing, the intrastrial granules small, inconspicuous; sutural interstice with a row of fine granules, thickened towards the base, hardly traceable apically; second with a few small, slightly depressed, granuliform tubercles, not reaching base nor extending down declivity; third interstices approximated on declivity, each with a continuous row of small tubercles, closely set, rounded and slightly depressed towards base, slightly more pro-

minent and subconical on declivity; fourth with a few tubercles, similar to those on second, or without tubercles; fifth and sixth interstices each with a continuous row similar to third. Sides with vertical, little prominent rugæ. Beneath, with a median ridge clothed by the median vitta, fifth segment deeply longitudinally grooved on either side of vitta; apical segments with fine, somewhat asperate, setigerous granules. Anterior femora ridged beneath.

♀. Similar to ♂; prothorax less dilatate; convex beneath, with feebler vitta.

Dimensions: ♂, 26×8.5 mm.; ♀, 25×8 mm. Another ♂ measures 21×6.5 mm.

Hab.—South Australia: Eucla, Nullabor Plains, Eyre's Sandpatch.

The above description was drawn up from two specimens which were compared, for me, with the type, in the British Museum, by Mr. K. G. Blair. In his letter, Mr. Blair writes, "type has more swollen thorax of 5, but granules of elytra like those of 6." In a long series of this species which I have examined, great differences were noticeable in the number of the elytral tubercles; there was also some difference in the size of the tubercles; and, in one or two, the elytra were not subparallel, but narrowed towards the apex.

The following tabulation will indicate the great differences in the number of the tubercles.

Specimen.		Number of tubercles on interstices.				
		2.	3.	4.	5.	6.
♂.Eyre's Sandpatch	...	7-9	21-20	4-7	20	15
♂.No locality	...	6	17-18	3-5	14	14-12
♂.Nullabor Plains	...	2	21-20	0	19	13-12
♂.Eyre's Sandpatch	...	6	23-25	0	23-24	10
♂.Nullabor Plains	...	5	18-16	0	16-18	12-13
♀.Eyre's Sandpatch	...	4	17	2	18-19	12
♀.Eucla	...	7-8	23-22	0	23-20	14
♀.Eucla(?)	..	3-5	21	0	19-22	9*

*Tubercles only traceable in apical half.

In cases where the number of tubercles on the two sides varies, the number on the right side is given first.

SCLERORINUS BROWNI, n.sp.

♂. Large, robust, elongate, subparallel. Black, elytral tubercles feebly diluted with red; moderately densely clothed with minute, dingy-brown subsquamosity; median vitta tawny-brown; setæ dark.

Head convex, almost in same plane above as rostrum, feebly depressed in front at bases of the rostral foveæ. Eyes suboval. Rostrum little excavate, the external ridges very feebly convex in profile, subparallel, continued up head for a short distance, somewhat thickened internally about middle, sparsely setigero-punctate; median carina distinct, narrower than the external ridges, impunctate, separated from head by a punctiform depression, thence continued as a narrow, non-carinate, lævigata line; sublateral sulci shallow, with deeper basal foveæ. Prothorax (6×7 mm.) moderately widely dilated on the sides; apical margin rounded, very feebly produced above, ocular lobes large; disc convex from side to side, with a rather indistinct, subapical impression, and a feeble impression at the latero-basal angle, median impression hardly traceable; closely set with small, discrete, somewhat depressed granules, smaller in the centre, and fewer along the position of the sublateral vittæ; sides with granules obsolescent, except above. Elytra (15×8 mm.) robust, gently rounded on the sides; base feebly emarginate, humeral angles slightly noduliform; seriate punctures small, shallow, slightly transverse, traceable with difficulty, the intrastrial granules small, subobsolete; interstices tuberculate, sutural with small granules, larger and distinct at base, becoming obsolete towards apex; second interstice with four, moderately large, slightly elongate, somewhat depressed tubercles, about middle; third interstices approximated on the declivity, with a continuous row of about twenty-five, small, granuliform tubercles, never becoming conical, extending from base to apex, smaller than those on second interstice; fourth without tubercles; fifth with a row of twenty-five, similar to third; sixth with a row of ten, slightly larger, and more separated, than those of third and fifth, but smaller than those of second, not extending to base. Sides with tubercles

somewhat depressed, sometimes confluent vertically. Ventral segments longitudinally impressed on either side of median vitta, impressions indistinct on third and fourth segments, deep on apical segment. Anterior femora with a distinct ridge on the undersurface, in the outer half. Legs simple.

♀. Broader, more robust than male; elytral tubercles more distinctly red. Head more convex, with deeper, frontal depressions; rostral ridges broader, sulci and foveæ deeper. Prothorax less dilatate. Elytra broader, with more pronounced humeral angles, and more evident intrastrial granules; the tubercles on the third and fifth interstices transverse or else duplicated (except on declivity). The undersurface convex, with a feeble, interrupted vitta on the last three segments; longitudinal impressions feeble. *Dimensions*: ♂, 22×8 ; ♀, 24×10 mm.

Hab.—Western Australia: Yalgoo (H. W. Brown). Type in Coll. Ferguson.

Though closely related to *S. occidentalis* Sloane, this species can be readily distinguished by the distinctly larger tubercles on the second interstice. In both *S. occidentalis* Sl., and *S. angustipennis* Sl., the tubercles on the second are not noticeably larger than those on the other interstices.

The clothing is only distinguishable under the lens; to the naked eyes, the species appears destitute of clothing.

SCLERORINUS LATICOLLIS MacL.

Macleay, *loc. cit.*, p. 326.

♂. Elongate, suboblongate, large. Black, subnitid; without clothing above; median ventral vitta black.

Head convex, bi-impressed in front. Rostrum short, thick, external ridges subparallel, thick, continued back on to head; median carina distinct, moderately broad, not continued up head, a narrow linear puncture at point of junction. Eyes small, ovate. Prothorax (5.5×7 mm.) very widely dilatate, widest in front of middle; disc closely set with moderately large, rounded granules, largest around central granules, which are slightly smaller, and along

subapical impression. Sides granulate. Elytra (11.5×6.5 mm.), elongate, subparallel, base feebly emarginate, humeral tubercle moderately prominent, out-turned; seriate punctures shallow, hard to define, interrupted by tubercles, intrastrial granules distinctly prominent. Interstices tuberculate, tubercles moderately large, rounded, somewhat elongate at base, conical towards apex; second with four to six tubercles, separate, not extending to base nor down declivity; third interstices approximated on declivity, with a continuous row of fourteen or fifteen tubercles, from base to apex; fourth with four or five, non-contiguous tubercles; fifth with ten from humeral angle down declivity, sub-contiguous, the line interrupted in places; sixth with seven to nine, close together, more outwardly directed. Sides with interstices tuberculate, the tubercles close together, rounded, little prominent. Beneath, sparsely setigero-punctate; an oblique impression on each side of median vitta, extending over the two basal segments; other segments with more indefinite; middle of abdomen raised along vitta. Anterior femora ridged beneath. ♂ *Dimensions*: 19×6.5 mm.

♀. Differs in the somewhat less dilatate prothorax, and in the convex abdomen, the apical segment of which bears a subquadrate impression at the apex.

Hab.—Western Australia. Type in Australian Museum.

A thoroughly distinct species, most nearly related to *S. Elderi* Sl., and *S. molossus* Pasc., the former of which has reddish tubercles, and is otherwise different.

SCLERORINUS MOLOSSUS Pasc.

Talaurinus id. Pascoe, Journ. Linn. Soc. xii., 1873. p.13.

♀. Elongate-ovate, convex, robust. Black, subnitid; without sign of clothing; setæ very small, black.

Head strongly rounded, separately so from rostrum, sparingly setigero-punctate. Rostrum wide, shallowly excavate; external ridges rounded, feebly convex, sparingly setigero-punctate, not continued on to head; median carina present, obsolescent in front, a small, punctiform depression at junction with head; basal foveæ

rather indefinite. Eyes rotundate. Prothorax (6×7 mm.) subrotundate, disc rather strongly convex; disc closely and evenly covered with hemispherical granules; sides granulate. Elytra (13.5×9 mm.) ovate; apex rather strongly rounded; base emarginate, humeral angles produced, tuberculiform; suture with fine granules, thickened at base; second interstice with seven tubercles; third with fourteen; fourth with five; fifth with twelve; sixth with nine; tubercles flattened basally, becoming conical posteriorly. Sides rugosely granulate. Ventral segments feebly maculate with brownish; fifth segment with a feeble, apical impression. *Dimensions*: ♀, 20×9 mm.

Hab.—Western Australia.

The above description was drawn up, some time ago, from a specimen compared with the type, which was kindly sent for examination by the British Museum authorities. I now regret not having noted several features which might have proved useful in differentiating this species from its allies. The black colour of the tubercles would associate *S. molossus* with *S. laticollis* MacL., but my recollection is that it was more closely allied to *S. Elderi*. I have a specimen, which, at the time, I identified as a variety of *S. molossus*, and which has the tubercles distinctly reddish. This specimen is readily separated from *S. Elderi* by the sides of the prothorax, which are granulate down to the coxæ. Compared with *S. laticollis*, this specimen has a more convex prothorax, and a broader rostrum; as, however, my specimens are of different sexes, they are hardly comparable.

S. molossus, though described as a *Talaurinus*, is certainly a *Sclerorinus*.

SCLERORINUS ANGUSTIOR, n.sp.

♂. Closely allied to *S. Elderi* Sl., but narrower. Black, the elytral tubercles diluted with red; moderately densely clothed with minute, obscure, brownish squames; median vitta a rich dark brown.

Head convex, feebly bi-impressed in front, hardly carinate. Rostrum about as wide as head, little excavate above; external

ridges very feebly convergent towards base; median carina rather broad, not greatly raised; sublateral sulci moderately broad, shallow, slighter deeper at base. Prothorax (5.5×6.5 mm.) moderately dilatate on sides, subangulate slightly in front of middle; ocular lobes rather feeble; subapical constriction present, not deeply impressed; disc convex, closely set with small, unisetigerous, somewhat depressed granules; sides with granules obsolete, except above. Elytra (13×7 mm.) very feebly rounded on the sides; base gently emarginate, the humeral angles noduliform; seriate punctures small, shallow, indefinite, intrastrial granules small, hardly traceable, except by setæ; interstices rather strongly tuberculate, sutural with small granules not traceable beyond middle; second interstice with three to five, moderately large tubercles, separate, slightly elongate, not reaching base, nor extending down declivity; third with a row of eleven or twelve separate tubercles, extending from base almost to apex, strongly rounded towards base, the last four or five more prominent and conical; fourth with two near the middle; fifth with a row of nine or ten, separate tubercles, the last two or three conical; sixth with a row of nine, more closely set. Sides with tubercles moderately large, somewhat depressed, sometimes confluent vertically. Ventral segments longitudinally impressed on each side, the impressions deeper on the fifth segment. Anterior femora ridged beneath; legs simple. *Dimensions*: ♂, 22×7 mm.

Hab.—Western Australia. Type in Coll. Ferguson.

Three specimens are under examination, labelled "Whitlock, C. French." I am uncertain whether Whitlock is the name of a place, or of the collector from whom Mr. French received them.

The species is closely allied to *S. Elderi* Sl., of which it might be more properly considered a subspecies. It may be distinguished by its smaller, narrower form; and by the smaller, more depressed, prothoracic granules.

As in other species of this group, the number of tubercles on each interstice is variable, even on the two sides of the same specimen. The numbers given in the description are those of the

type, the relative numbers in the three specimens are shown below:—

		Interstices.				
		2.	3.	4.	5.	6.
(1). Type ...	3-5	11-12	2	9-10	9	
(2). ...	6	10	5-6	8-10	10	{ Tubercles slightly smaller; intra-strial granules more evident.
(3). ...	4-5	9-10	2-3	9-10	8	

Other species belonging to Group ii.

S. Dixoni Ferg.—Victoria: Ouyen, Kow Plains.

S. Goudiei Ferg.—Victoria: Birchip.

S. occidentalis Sl.—W.A.: Upper Murchison (type), Kellerberrin.

S. angustipennis Sl.—W.A.: Frazer Range (type): South-West Australia. Two specimens, in my collection, labelled S.W. Australia, are larger than the types and more elongate; I do not think they are specifically distinct.

S. Elderi Sl.—The range of this variable species is from South Australia to the Murchison in Western Australia. I have records of the following localities: Everard Range (type), Fowler's Bay, Streaky Bay, Ouldea, Gawler Ranges, Overland Railway (20 miles E. of Kycherling Soak), Cue (Murchison District).

S. amycteroides Ferg.—Victoria: Portland.

S. noctis Sl.—Central Australia: Barrow Range.

S. convexus Sl.—Central Australia: McDonnell Ranges.

S. convexus Sl., var. *Spenceri* Ferg.—Central Australia: Ouldea to Talarinna, Deering Creek, Hermannsburg.

S. insignis Sl.—Central Australia (Elder Expedition).

Group iii.

Fifth interstice continuously tuberculate; third interstices not approximated on the declivity; middle tibiæ simple.

This group has been formed for the reception of a few species which occur along the highlands of Queensland and New South Wales. Two other species have been included—*S. bubalus* from Tasmania, Victoria, and South Australia; and *S. dilaticollis* from Victoria—which present the above characters, but which differ in

other respects from the other members of the group. *S. horridus* also possesses the main characters of this group, but is so different in many respects, that I have not included it, but treated it as an anomalous species.

I have seen a large number of specimens from different localities in New South Wales, which belong to this group, but which were mostly represented by single specimens. They showed considerable variation, *inter se*, and from any of the described species. I have not had sufficient material, however, to determine the range of variation, and have, therefore, described only the most outstanding forms. I think, however, that the group will be found to be a much larger one, when the mountain-ranges, particularly in the southern portions of New South Wales, have been properly worked.

A species, that occurs commonly on the Blue Mountains, has been identified by Macleay as *S. elongatus* Bohem.

Table of species, Group iii.

- 1(4). Prothorax finely granulate.
- 2(3). Elytral tubercles little larger than the prothoracic granules....
.....*S. bubalus* Oliv.
- 3(2). Elytral tubercles much larger than the prothoracic granules....
.....*S. dilaticollis* Macl.
- 4(1). Prothorax more coarsely granulate.
- 5(12). Elytral tubercles in continuous series on most of the interstices.
- 6(7). Tubercles transversely conjoined on the fifth and sixth inter-
stices; elytra separately mucronate.....*S. apicalis* Macl.
- 7(6). Tubercles not as in *S. apicalis*.
- 8(9). Ventral vitta yellowish-brown.....*S. Stutchburyi* Macl.
- 9(8). Ventral vitta black.
- 10(11). Elytral striæ evident, at least the two inner ones...*S. aterrimus*, n. sp.
- 11(12). Elytral striæ hardly, if at all, traceable....*S. elongatus* Bohem.(?).
- 12(5). Elytral tubercles well developed, but separate, on all the in-
terstices.....*S. verrucosus* Macl.

SCLERORINUS BUBALUS Oliv.

Olivier, Ent. v., 83, p. 399, t. 25, f. 354; *Amycterus morosus* Boisd., Voyage Astrolabe, ii., 1835, p. 386; Ferguson, Proc. Linn. Soc. N.S. Wales, 1911, p. 152.

As I have recently fully described the type of *A. morosus* Boisd., a further description is unnecessary here.

Specimens in my collection from Victoria(?), differ somewhat from Tasmanian specimens; and may, perhaps, belong to a distinct species. I hesitate to describe them as distinct, as Tasmanian species appear to vary somewhat. They differ principally in the almost obliterate sculpture; in one male, the prothoracic granules are almost obsolete; in another, they are more distinct; in both, the elytral tubercles are small and almost obsolete, and the punctures are hardly traceable. The specimens of a Tasmanian series before me(5) show some variation in the size of the tubercles, and one male has them almost as small as in the supposed Victorian specimens; a female is also hardly separable from a Victorian(?) female. These specimens, I attribute to Victoria principally because they were received from Mr. C. French, of Melbourne. I have, however, seen undoubted Victorian and South Australia specimens which I attributed to *S. bubalus*.

SCLERORINUS DILATICOLLIS MacL.

Macleay, *loc. cit.*, 1865, p. 258.

♂. Elongate-ovate, of medium size. Black; clothing reduced to minute muddy-coloured squames in depressions, ventral vitta black.

Head convex, slightly impressed in front, on each side of median line. Rostrum short, external ridges parallel, not continued along head; median carina prominent, about as wide as external ridges; sublateral sulci rather deep. Prothorax (3.5×4.25 mm.) widely dilatate, subangulate on sides, rather strongly narrowed before base, postero-lateral angles subrectangular; ocular lobes distinct; subapical impression well marked, median line moderately distinctly impressed posteriorly; closely set with small, rounded granules. Sides not granulate. Elytra (8×4.5 mm.) elongate, little widened posteriorly; base gently emarginate, humeral angles out-turned, tuberculiform; seriate punctures small, shallow, rather indistinct, intrastrial ridges slightly raised, granuliform, but not prominent; interstices two and four not raised, and without tubercles; sutural interstice strongly raised, and costiform at base;

third interstice with large, prominent tubercles, about ten in number, but variable in both number and position, extending from base down declivity, or ending before declivity; fifth with a continuous row of closely-set tubercles, smaller than on third, rounded at base, conical posteriorly; sixth with a similar row, commencing rather far from base. Sides vertically rugose, tubercles obsolete. Beneath, with a deep, oblique impression on either side of base of median vitta, and fainter impressions on other segments. Anterior femora with a moderately distinct ridge beneath; intermediate tibiae simple.

♀. More ovate; undersurface convex, fifth segment very feebly depressed at apex.

Dimensions: ♂, 14×4.5 ; ♀, 15×6 mm.

Hab.—Victoria, Melbourne. Type in Macleay Museum.

Redescribed from specimens in my own collection. This species is very variable in size, and in the degree of tuberculation of the elytra. Some of the specimens I have seen, were hardly larger than *S. bubalus*, to which the species is most closely allied, but the elytral tubercles are always larger than in that species.

Two specimens from Caulfield (Melbourne) in the National Museum, Melbourne, differ in having tubercles on the second and fourth interstices; they may belong to a new species; at present, I regard them as a variety.

SCLERORINUS APICALIS MacL.

Macleay, *loc. cit.*, p. 260.

♀. Elongate-ovate. Size moderate. Black; rather densely clothed in depressions with brownish squames; median ventral vitta yellowish.

Head convex, forehead very feebly bi-impressed in front. Rostrum rather strongly excavate in front; the external ridges strongly developed, slightly sinuate, the median carina conspicuous, rather broader than the external ridges; sublateral sulci rather narrow, deep. Eyes subrotundate. Prothorax (4.5×5 mm.) evenly rounded on sides; subapical and median impressions indefinite; closely set with small, rounded granules, rather larger than in

S. dilaticollis, the granules becoming obsolescent on the sides, towards the coxæ. Elytra (10×6 mm.) moderately produced to apex, each elytron with a strong, sharp mucro at apex; base gently emarginate, humeral angle with a strong, rounded tubercle; punctures shallow, towards sides confluent laterally, and arranged in a series of transverse grooves, suture raised, costiform at base, elsewhere with a row of small granules; second interstice with two or three moderately large, isolated tubercles; third with five similar ones from base to above declivity; fourth with no tubercles; fifth and sixth, and lateral interstices with tubercles small, and joined across by the intrastrial ridges to form a series of parallel, transverse rugæ separated by deep sulci; this transverse arrangement also faintly traceable across the declivity. Undersurface of type obscured by gum. *Dimensions*: ♀, 16×6 mm.

Hab.—New South Wales(?). Type in Macleay Museum.

The only specimen I have ever seen of this interesting and distinct species, is the type. Probably the mucronation is a sexual character; but, apart from this, the transverse rugæ render the species easy of identification.

SCLERORINUS STUTCHBURYI MacL.

Macleay, *loc. cit.*, p. 264.

♀. Elongate-ovate. Black; with scanty, minute, brown squames in depressions.

Head strongly convex, front feebly bi-impressed. Rostrum wide, dorsal surface much narrower than total width; external ridges prominent, thick, slightly convergent basally, and running on to head for a short distance; median carina evident, but slightly less prominent, not extending on to head. Eyes small, rotundate. Prothorax (4×4.75 mm.) widest in front of middle, not greatly ampliate, rather strongly transversely convex; subapical impression rather indefinite; moderately closely set with rather large, non-contiguous, rounded tubercles, obsolete on the sides. Elytra (9.5×6 mm.) not greatly widened posteriorly; base moderately emarginate, humeri noduliform, out-turned; punctures shallow, not definite towards the sides, tending to be confluent laterally, this

tendency more marked on the sides; intrastrial granules distinct. Interstices tuberculate; sutural costiform at base, elsewhere with fine granules; second with seven, rather large tubercles, elongate towards base, more raised and conical posteriorly, extending from near base down declivity; third with a similar row of eight, from base down on to declivity; fourth with no tubercles; fifth with a continuous row of smaller tubercles, somewhat transverse, and about thirteen in number; sixth with eleven, similar tubercles. Sides with vertical rugæ separated by depressions, not so marked as in *S. apicalis*. *Dimensions*: ♀, 15 × 6 mm.

Hab.—Queensland. Type in Australian Museum.

This species may be readily distinguished from the other members of the group by the colour of the median, ventral vitta. The tubercles on the fifth interstice are somewhat irregular; in a specimen, in my own collection, they are almost absent on one elytron.

I believe the type came from Queensland, but do not know from what locality. There is a specimen, which I refer to this species, in my own collection, from Tamworth, N.S.W.

SCLERORINUS ATERRIMUS, sp.n.

♂. Elongate, subparallel. Black, subnitid, legs diluted with red; clothing practically absent; median, ventral vitta black; setæ black.

Head separated from rostrum above by a slight constriction; external rostral ridges continued back into forehead; median line rather feebly subcarinate. Rostrum with external ridges slightly convex in profile, somewhat sinuate as viewed from above; median carina strong, narrow, separated from head by a deep puncture; sublateral sulci broad and deep, especially at base. Eyes ovate. Prothorax (4 × 4.5 mm.) widest anteriorly to middle, subangulate at sides; ocular lobes not very prominent; disc with rather large, rounded granules, variable in size, moderately closely set; sides with granules obsolete. Elytra (10 × 5 mm.) elongate, subparallel; base emarginate, humeri noduliform; with rows of small punctures, each subtended by a small, setigerous granule, the inner two rows regular, the outer rows confused and broken by the

tubercles; interstices with strong, conical tubercles, suture with a few obsolete granules at base; second interstices with two or three isolated tubercles; third with a more continuous row of ten, more closely set, extending almost to apex; fourth with one or none; fifth with a continuous row of ten closely placed tubercles; sixth with nine, not reaching to base; the tubercles of the fifth and sixth interstices conical, slightly smaller than those of third, and not transverse. Sides with punctures more regular, the interstices with subobsolete tubercles. Beneath, with scattered, setigerous punctures; apical segment concave, not excavate, the posterior and lateral borders raised. Anterior femora with a well developed ridge beneath; tibiæ simple. *Dimensions*: ♂, 17×5 mm.

Hab.—New South Wales, Mt. Kosciusko (Dr. A. Jefferis Turner). Type in Coll. Ferguson.

Close to the species identified by Macleay as *S. elongatus* Germ., but narrower, with much more evident elytral punctures. Possibly an extended series, from intermediate localities, would link the two species up, but, at present, I do not think it can be regarded as conspecific with the Blue Mountain species.

SCLERORINUS ELONGATUS Bohem.

Bohemann, Schönh., Gen. Curc., vii.(1), 1843, p. 58.

This species has been referred, and I believe correctly so, to *Sclerorinus*, by Macleay, who, moreover, identified it with an insect which occurs on the Blue Mountains, N.S.W.

An examination of the description enables me to assign the species with tolerable certainty to Group iii. The description of the abdomen, “. . . medio longitudinaliter dense atro-pubescent” would apply only to *S. inconstans*, *S. alpicola*, one or two members of Group i., and Group iii. The species not belonging to Group iii., can all, I think, be excluded. Of the species contained in Group iii., *S. bubalus*, *S. dilaticollis*, and *S. Stutchburyi* can confidently be excluded; and I do not think that it is likely to prove to be *S. apicalis* or *S. verrucosus*.

Until the type can be examined, I think it wisest to accept Macleay's identification as being correct, particularly as this insect

agrees fairly closely with Bohemann's description. It is closely allied to *S. aterrimus* Ferg., but differs principally in the elytra wanting the regular, striate punctures, these punctures being almost obsolete in the Blue Mountain species. As Bohemann describes the elytra as "vix striato-punctata," I do not think that *S. aterrimus* can be identical with *S. elongatus*, though it may prove merely a variety.

Some time ago, Mr. K. G. Blair, of the British Museum, sent me, for examination, a specimen of *S. verrucosus* bearing the following label—"agrees with specimen in British Museum named *elongatus* Germar; compared with Hope's specimen referred to by Schönherr. I have not found this specimen, the only *elongatus* in Hope's Collection being an *Acantholophus*, "*elongatus* mihi" in Hope's writing."

Bohemann states that he received his specimens from Germar and Hope.

Germar, in his *Insects of Adelaide* (Linn. Ent. iii., p. 217), shortly redescribes *S. elongatus*, and states—"Specimen a Schönherr e museo nostro descriptum, squamis detritis, tuberculisque paullo crassioribus ob hoc nunc allato recedit. Striga villosa pectoris abdominisque atra, quam signum maris credam, pariter colore ferrugineo differt." This leaves a suspicion that, either Germar, or more probably Bohemann, had mixed up two species; or that possibly Bohemann's description was based on Hope's specimen. Certainly, among many species, I have never found a South Australian species agreeing with Bohemann's description.

SCLERORINUS VERRUCOSUS MacL.

Macleay, *loc. cit.*, p. 262.

♀. Elongate-ovate. Black; sparsely clothed with minute, dingy-brown squamosity in depressions; median vitta yellow.

Head strongly convex, separately so from rostrum; forehead feebly bi-impressed, the median line lævigata, not raised, with a small puncture at junction with rostrum, and one above. Rostrum broad, little excavate; dorsal surface considerably narrower than total width of rostrum; external ridges subparallel, not continued

upon head, median carina strong, about as broad as external ridges; sublateral sulci rather shallow, deeper at base. Prothorax (4×5 mm.) subangulate on sides, widest in front of middle; subapical impression rather indefinite; moderately closely set with large, rounded, slightly depressed tubercles, varying slightly in size, and irregularly placed; sides not granulate. Elytra (10×6 mm.) not greatly widened posteriorly; base rather strongly emarginate; humeri with a rather large, projecting tubercle; punctures not traceable; interstices with strong, conical or subconical tubercles; sutural with a row of fine, distant granules; second with a row of eight tubercles, set at even distances, less than the length of a tubercle, extending from near base down on to declivity; third with a similar row of ten from base down on to declivity; fourth with six, not reaching base, nor extending down declivity; fifth with twelve, slightly smaller, subconical, out-turned; sixth with thirteen, slightly smaller and less conical. Sides with strong, vertical ridges, separated by deep furrows, the ridges running up on to, and including the tubercles of the sixth interstice. Beneath, convex; ventral segments with irregular impressions on each side; fifth with a shallow, transverse impression near apex. *Dimensions*: ♀, 16×6 mm.

Hab.—New South Wales. Type in Macleay Museum.

Though closely allied to *S. elongatus* Bohem.(?), this species may be readily identified by the tubercles on each interstice being well separated from one another. I have a male, which was taken, I believe, at Blackheath, on the Blue Mountains, and which I refer, with slight doubt, to this species. It has the ventral vitta black. Probably this species has a wider range inland, as I once took, at Wellington, the remains of a *Sclerorinus*, which appeared to be *S. verrucosus*.

Group iv.

Fifth elytral interstice tuberculate throughout; intermediate tibiae with a strong, subapical emargination.

Though but few in number, the species of this Group are very homogeneous in their general type of structure. The Group is, I

think, more closely related to the *Stutchburyi*-group than to the following one, though the notched tibiæ are present in such species as *S. tuberculosus* and *S. Germari*.

In many of the species, the elytral interstices are costiform in character, the costæ, however, often resolving into their component tubercles. The Group corresponds, therefore, to Group 4 in Macleay's subdivision of the genus.

The species are distributed over the southern tablelands in New South Wales, extending from the Murray, to at least as far north as Mudgee.

In addition to the species described by Macleay, three of the early described species appear to belong to this group. *Amycterus Kirbyi* Guérin is almost certainly founded on *S. subcostatus* Macl. I regard Guérin's name, however, as preoccupied by *Phalidura Kirbyi* W. S. Macleay, the two genera being then, as indeed they really are, considered to be synonymous, notwithstanding that the two species are now placed in different genera. The description of *Amycterus dolens* Boisd., would apply to a number of species of this group; and *S. subsequens* Macl., has been sent to me from the British Museum as *S. dolens* Boisd. Until the type can be located, and authoritatively examined, I think it best to treat Boisdual's species as non-existent. *S. Hopei* Bohem., is quite possibly a grey-clothed species, widely distributed on the western slopes of the tableland, from Koorawatha to Mulwala on the Murray. Specimens have been sent to Stockholm for comparison with Bohemann's type; in the meantime, I have redescribed the species as *S. Hopei* Bohem.(?).

S. vermiculatus Macl., I regard as a synonym of *S. subcostatus* Macl.; and *S. interruptus* Macl., as a synonym of *S. subsequens* Macl.

I have added one new species, *S. subcarinatus*, to the Group.

Table of Species, Group iv.

1(8).Clothing scanty, except on sides.

2(5).Prothoracic granules obsolete or subobsolete in middle, often confluent.

3(4).Elytral interstices strongly raised, generally costiform (excepting sometimes the second and fourth).....*S. subcostatus* Macl.

- 4(3). Elytral interstices less strongly raised, less costiform, the component tubercles smaller, granuliform. *S. squalidus* MacI.
 5(2). Prothoracic granules distinct, rounded.
 6(7). Elytral interstices with the tubercles, as a rule, distinctly separate. *S. subsequens* MacI.
 7(6). Elytral interstices continuous, crenulate. *S. subcarinatus*, n.sp.
 8(1). Clothing dense, light greyish-brown *S. Hopei* Bohem.(?).

SCLERORINUS SUBCOSTATUS MacI.

Macleay, *loc. cit.*, p. 258; *S. vermiculatus* MacI., *l.c.*, p. 261;
 (?) *Amycterus Kirbyi* Guérin, Voy. Coquille, ii.(2), 1830, p. 121.

♂. Size moderately large, elongate, robust. Black; practically without clothing above; with yellow pubescence clothing the sides of the prothorax, the basal portion of the sides of the elytra, and the sternal segments; median vitta ochreous-yellow; legs sparsely clothed with yellow; setæ black.

Head convex. Rostrum little excavate; external ridges subparallel; median carina moderately prominent, a deep puncture present at junction with head; sublateral sulci shallow, with a deep basal fovea. Prothorax (5.5 × 6.5 mm.) subangulate, dilatate on sides, widest in front of middle; ocular lobes moderately large; subapical impression moderately strongly marked, median line shallowly impressed; set with low, semiconfluent granules, almost or completely obsolete in centre, more rounded and distinct at lateral angles; sides non-granulate. Elytra (11 × 7 mm.) not greatly widened posteriorly; base gently emarginate, humeral angles rather strongly marked, out-turned; with regular rows of moderately large, open, foveiform impressions, the intrastrial granules feeble; interstices costiform, the first, third, fifth, and sixth strongly raised; the second and fourth less strongly or not at all raised; third interstice the most strongly raised, somewhat crenulate on upper surface, showing a tendency to split up into elongated tubercles posteriorly; fifth crenulate-costate, sometimes split into its component tubercles; sixth composed of elongate, closely set tubercles; lateral interstices with tubercles obsolete. Undersurface with basal, ventral segments flattened or feebly depressed in middle, the other segments gently convex from side to side.

Anterior femora not ridged beneath; intermediate tibiae with a strong subapical emargination; posterior tibiae with a feebler emargination.

♀. More ovate than the male; convex beneath, without median vitta, the ventral segments feebly maculate with yellow, the fifth segment with a feeble transverse impression at extreme apex; intermediate and posterior tibiae feebly emarginate.

Dimensions: ♂, 18×7 ; ♀, 16×6.5 mm.

Hab.—New South Wales: Goulburn, Taralga, Lockyersleigh, Bathurst, Molong, Wingelo, Braidwood. Type in Macleay Museum.

This species has probably a wide range over the southern tablelands. It is very variable in regard to the elytral sculpture, particularly in the costiform character of the interstices. The above description was drawn up from specimens in my own collection, as access could not be had to the types in the Macleay Museum. I have, however, examined these on several occasions, and can find no valid reason for separating *S. vermiculatus* from *S. subcostatus*. This species is almost certainly the *Amycterus Kirbyi* of Guérin, but, for reasons mentioned elsewhere, I regard this name as preoccupied.

The specimens from Molong should, possibly, be regarded as a new species; but they are so closely allied to *S. subcostatus*, that I do not care to separate them.

SCLERORINUS SQUALIDUS MacL.

Macleay, *loc. cit.*, p.261.

♂. Elongate-ovate, relatively broad. Black; without clothing above, metasternum and sides of ventral segments with small patches of fulvous; median, ventral vitta fulvous. Setae light golden-brown.

Head running into rostrum without interruption, forehead feebly flattened, feebly bi-impressed in front; median line lævigata. Rostrum wide, dorsal surface wide; median carina narrow, rather feebly raised; sulci broad, shallow, with a deeper, subtriangular fovea at base. Prothorax (4.5×5.5 mm.) transverse, subdilata,te,

widest in front of middle; apical margin feebly sinuate in the middle above, with prominent, ocular lobes; median line feebly impressed; granules rugose, irregularly arranged, often confluent, obliterate in the centre, more distinct and rounded towards the sides; sides without granules. Elytra (11×7 mm.) rather broad, gradually widened posteriorly; base gently emarginate, humeri prominent, not projecting; seriate punctures open, shallow, each subtended by a distinct setigerous granule. Sutural interstice with a continuous row of granules; second interstice with about eight, narrow, small, elongate tubercles, hardly larger than the intrastrial granules, each bearing a seta at extremity; third with a continuous row of seventeen, similar, elongate tubercles, joined together to make the interstice subcostiform; fourth with six, similar to second; fifth with a row of about eighteen, similar to third, but more rounded; sixth with a similar row of sixteen. Sides with interstices with small, flattened, granuliform tubercles. Beneath, flattened over ventral segments, without notable impressions, fifth segment very shallowly depressed in middle, the depression obscured by the vitta. Intermediate tibiae emarginate on the inner side subapically. Anterior femora not ridged.

♀. Differs in having the intrastrial granules smaller, and the third and fifth more definitely costiform. It differs also in being convex beneath, and in having simple legs.

Dimensions: ♂, 17×7 ; ♀, 16×6.5 mm.

Hab.—New South Wales: Lambing Flat (Young), Harden. Type in Macleay Museum.

The specimens from Harden differ slightly from the type in the elytral interstices; but the species is somewhat variable in this respect, no two specimens, that I have seen, being quite alike. The setae are also of a darker colour. I think that this is probably also a variable character.

SCLERORINUS SUBSEQUENS MacL.

Macleay, *loc. cit.*, p.263; (?)*S. interruptus* MacL., *loc. cit.*, p.263.

Type ♀. Elongate-ovate. Black; devoid of clothing; setae light brown.

Head convex, bi-impressed in front. Rostrum little excavate; external ridges conspicuous, running back on to head, with a slight constriction at point of junction; median carina narrow, slightly less prominent, and much narrower than the external ridges, not extending on to head; sublateral sulci shallow, with a deeper, foveiform depression at base. Prothorax (4.25×5.25 mm.) widest a little in front of middle, ocular lobes moderately prominent; closely set with moderately large granules (or tubercles), slightly confluent, or subconfluent, near centre, rounded, and separate towards sides, median line with few granules. Sides with a few obsolete granules above and in front. Elytra (10.5×7 mm.) ovate, gradually widened posteriorly; base feebly emarginate, humeral angles nodulose, out-turned; seriate punctures small, intrastrial ridges setigerous, hardly definitely granulate. Interstices tuberculate: sutural narrow, somewhat raised and costiform; second with six, narrow, elongate tubercles, the basal four connected and costiform; third costiform, composed of elongate, narrow tubercles, connected together, and becoming separate and feebly conical on the declivity; fourth with one or two, small, elongate tubercles; fifth with a continuous row of sixteen, small, rounded tubercles, closely set but not costiform; sixth with a similar row of twelve. Beneath, convex. Intermediate tibiae with a shallow, subapical emargination. *Dimensions*: ♀, 16×7 mm.

Hab.—New South Wales: Mudgee. Type in Australian Museum.

The above description was drawn up from the type in the Australian Museum. The type of *S. interruptus* MacL., also a female, in the same collection, was examined on the same occasion, and the following notes made:

♀. Smaller than *S. subsequens*; head and rostrum similar; prothorax (3.5×4.5 mm.) with granules slightly less prominent, rounded. Elytra (9×6 mm.) with punctures shallower; second interstice with four or five, isolated tubercles, shorter and more raised, not at all costiform; third with about nine tubercles, the basal five connected, forming an irregular costa; fourth without tubercles; fifth with twelve tubercles, more elongate than in *S.*

subsequens, connected together, costiform; sixth with a similar row of eleven. Beneath, as in *S. subsequens*. *Dimensions*: ♀, 14×6 mm.

Hab.—Mudgee.

Despite the apparent difference in the elytral tubercles, I am inclined to regard the two specimens as belonging to but one species. There are, in the Australian Museum, and in my own collection, specimens which are intermediate between the two types in their elytral sculpture. There are specimens in my own collection from Tarana, which I attribute, with some slight doubt, to *S. subsequens*; the females are much alike, but a male is much more coarsely tuberculate than any Mudgee specimens, especially when compared with a male from Mudgee, which seems to be the same as *S. interruptus*. There is also some doubt as to whether the Australian Museum specimen of *S. interruptus* is actually the type. Macleay gives the measurements as $8 \times 3\frac{1}{4}$ lines, but the Australian Museum specimen measures only 7×3 lines, though agreeing in other respects with the description. Tentatively, I propose to sink *S. interruptus* under *S. subsequens*, retaining the latter name, although the former is described before the latter on the same page.

SCLERORINUS DOLENS Boisd.

Boisduval, Voy. Astrolabe, ii., 1835, p.376; Macleay, *loc. cit.*, p.264.

The description of the elytra leaves no doubt that this species is a member of Group iv. As the prothorax is described as "confertim granulato," the species is evidently different from *S. subcostatus* Macl., or *S. squalidus* Macl. The description of the elytral interstices may well be quoted:—"On voit sur chacune d'elles sept côles élevées, interrompues, comme rongées, moins distinctes sur les flancs qu'en dessus. Les intervalles sont ponctués irrégulièrement et occupés par des points élevés, confluent parfois et disposés sans ordre." This description would apply almost equally well to *S. subsequens* and *S. subcarinatus*. A specimen sent out from the British Museum, for examination,

under the name of "*dolens*, Boisd.(?)," proved to be a specimen of *S. subsequens*.

While I think it likely that this synonymy will prove correct, I do not think it advisable, at present, to sink Macleay's name for Boisdual's.

SCLERORINUS SUBCARINATUS, n.sp.

♂. Elongate, ovate; of median size. Black, opaque; without clothing above, save for a few minute scales in depressions; with conspicuous patches of golden-yellow pubescence on the sides of the prothorax, the metasternum, and first abdominal segment; with a bright golden-brown median vitta, and a few, long, black setae intermingled. Setae black.

Head continuous with rostrum above; the external, rostral ridges continued back on to head, but not carinate, with a narrow, median line free from setae, but not raised, elsewhere strongly nigrosetose. Rostrum little excavate, external ridges subparallel; median carina raised, not very prominent, separated from head by a small fovea; sublateral sulci rather shallow, deeper, foveiform at base. Prothorax (5×5.5 mm.) moderately strongly rounded at sides; apical margin lightly sinuate above, with prominent, ocular lobes; disc closely set with small, rather depressed granules, frequently subconfluent, but nowhere obsolete, except immediately along anterior margin; sides only granulate above. Elytra (10.5×6.5 mm.) rather strongly rounded on sides; base moderately deeply emarginate, humeri prominent, noduliform; disc rather deeply striate, with small, open punctures in striae, each subtended by a seta; interstices raised, costiform, narrower than the striae, edge very obsoletely serrate, serrations more definitely granuliform on the more lateral interstices, and on the declivity, each with a long, decumbent seta. Sides with closely set, rounded, depressed granules on the interstices, the latter not costate. Beneath, flattened. Anterior femora not ridged; middle and posterior tibiae with a deep, subapical emargination.

♀. Similar to ♂, more ovate; sculpture similar, but elytral, intrastrial granules distinct; beneath, convex, the median vitta

much feebler, not hirsute, tibiae with much feebler emarginations.

Dimensions: ♂, 17×6.5 ; ♀, 17×7.5 mm.

Hab.—N.S.W.: Grenfell (T. G. Sloane and E. W. Ferguson).
Type in Coll. Ferguson.

I do not think that this species can be confused with any previously described one. *S. subsequens* is its nearest ally, but differs in the rather larger, prothoracic granules, and in the elytral sculpture, to some extent. It is, of course, possible that *S. dolens* Boisd., may prove to be this species.

Group v.

Fifth interstice typically tuberculate only at the base, or more feebly tuberculate than on the other interstices.

The species constituting this Group may be further subdivided into four Subgroups.

Subgroup A contains the more typical species of the Group, and comprises a number of closely allied species often difficult to separate, in many cases, leading into one another. *S. longus*, *S. vestitus*, and *S. Stewarti* are undoubtedly closely allied, but I have regarded them as distinct; *S. tæniatus* Pasc., is a synonym of *S. Stewarti* Macl. *S. pilularius* Macl., is closely allied to *S. sublineatus* Macl., and *S. alpicola* Ferg., to *S. inconstans* Lea.

Subgroup B contains but a single, named species, *S. exilis*. I have specimens of it from Widgiewa and Condobolin; but the specimens from the latter place differ in some respects, and might be regarded as distinct, or, at least, as a variety.

The Subgroup has the tubercles on the elytra all separated, and they are present at intervals all along the fifth interstice. On this account, it might be thought advisable to remove this species from the Group, but it is, in other respects, so closely allied to the other members, that I have not thought it necessary.

In Subgroup C, the tubercles are closely set on the third and sixth interstices, and few or absent on the others. The third interstices are also approximated on the declivity. So far, only two species fall into this Subgroup, *S. biordinatus* Macl., and *S. Blackburni* Ferg., found on opposite sides of Spencer's Gulf.

Subgroup C.—Third and sixth interstices alone strongly and closely tuberculate; third interstices approximated on the declivity.

11(12). Elytra with conspicuous, white vittæ.....*S. biordinatus* Macl.

12(11). Elytral clothing darker; tubercles larger.....*S. Blackburni* Ferg.

Subgroup D.—Intermediate tibiæ with deep, subapical emargination.

13(16). Tubercles large, conspicuous.

14(15). Intrastrial granules conspicuous.....*S. tuberculosus* Macl.

15(14). Intrastrial granules obsolete*S. Queenslandicus*, n.sp.

16(13). Tubercles small, granuliform.

17(20). Elytra not mucronate in the female.

18(19). Prothoracic granules elongate, subobsolete.....*S. Germari* Macl.

19(18). Prothoracic granules discrete, rounded.....*S. parvulus* Macl.

20(17). Elytra separately mucronate at apex in the female.....

.....*S. mucronipennis* Ferg.

SCLERORINUS LONGUS Macl.

Macleay, *loc. cit.*, p.258.

♂. Elongate-elliptical; size large. Black; densely clothed with light grey subsquamosity; beneath, with greyish-yellow clothing at sides, and with a light golden-brown, median vitta.

Head not quite in the same plane with rostrum above; the external, rostral ridges continued back to above eyes; median line bare in front, hardly carinate. Rostrum short, rather narrow across the external ridges, these parallel; median carina distinct; sublateral sulci shallow, deeper at base. Eyes rotundate, Prothorax (5.5 × 6.5 mm.) subdilatate on sides, widest in front of middle; apical margin rounded above, with moderately prominent, ocular lobes. Disc with a moderately distinct, subapical impression; with median and sublateral lines free from granules, hardly impressed: granules variable in size, small, with a few larger ones about subapical impression, and a few near the base, the granules rather distantly placed. Sides sparsely granulate above, and in front. Elytra (12.5 × 7.5 mm.) subelliptical, gently rounded on sides; base feebly emarginate. Seriate punctures small, in somewhat flexuous lines, distorted by the tubercles; intrastrial granules small, not at all conspicuous; interstices tuberculate, sutural with a few, small, rounded tubercles at base, rapidly deteriorating into widely separated granules, not traceable much beyond

the middle; second interstice with four, widely separated, sub-conical tubercles, not reaching base, nor apex; third with a row of nine, from base to half-way down declivity, tubercles separate, smaller near base, otherwise as on second interstice; fourth with one or two near middle; fifth with a moderately large, humeral tubercle, followed by a few, small granules, becoming obsolete and not traceable; sixth with a row of about seven, moderately distantly placed, smaller than on other interstices (except the fifth), not reaching base. Sides with three rows of small, rounded granules, the uppermost reaching to base, the middle to a level with the basal end of the sixth interstice, and the lowest much finer, only traceable posteriorly. Apical, ventral segment concave on either side of median vitta. Legs simple. *Dimensions*: ♂, 20×7.5 mm.

Hab.—South Australia [exact locality uncertain]. Type in Macleay Museum.

SCLERORINUS VESTITUS Macl.

Macleay, *op. cit.*, 1866, p.323.

Close to *S. longus*, narrower, more elongate. Black; clothing dense, brownish; prothorax with traces of a median vitta; elytra with an interrupted, greyish vitta internal to third interstice, and a broader, interrupted, sublateral one; sides with light, almost white, clothing, extending over the whole side of prothorax, and along the lower half of the side of the elytra; clothing beneath greyish, punctate with black spots; median vitta golden-brown.

Head and rostrum much as in *S. longus*. Prothorax (5×6 mm.) subdilatate, with subapical constriction less distinct; granules larger than in *S. longus*, varying in size, with larger ones in front of, and behind centre of disc. Elytra (12×6.5 mm.) more elongate; seriate punctures as in *S. longus*; tubercles variable in size in different specimens; sutural interstice with semiconfluent, rounded tubercles at base, hardly traceable beyond middle; second with about six, rounded at base, conical nearer apex; third with ten or eleven, similar to those of second, extending down de-

clivity; fourth with three or four about centre; fifth with a small humeral tubercle, followed by a row of others, variable in number and position, generally obsolete after the shoulder, in type(?) eight in number, nearly reaching declivity; sixth with about ten, small, conical tubercles, more closely placed than in *S. longus*. Otherwise as in that species.

♀. More ovate than ♂; convex beneath, with the median vitta less marked.

Dimensions: ♂, 19×6.5 ; ♀, 20×8 mm.

Hab.—South Australia: Flinders Range, Gawler Ranges—Victoria: Birchip, Sea Lake, Murray River.

Described from a pair in the Macleay Museum, which agree with Macleay's description, and are probably his types. The male, however, has the fifth interstice more tuberculate than in any other specimen I have seen. The size of the tubercles varies; in some specimens they are larger than in *S. longus*, in others they are smaller. The number of tubercles on each interstice also varies considerably.

The specimen standing over the label *S. mucronatus* MacL., in the Macleay Museum, belongs to this species, but does not agree with the description of *S. mucronatus*.

SCLERORINUS STEWARTI MacL.

Macleay, *op. cit.*, 1865, p.252; *S. tæniatus* Pasc., Journ. Linn. Soc., 1873, p.8.

♀. Elongate, elliptical-ovate. Black; densely clothed with brown squamosity; prothorax indistinctly trivittate; each elytron trivittate, an incomplete vitta along each side of suture at the base, a vitta internal to third interstice, and a broader vitta along each side of disc; sides of prothorax and lower portion of sides of elytra also with lighter clothing; below, densely clothed with light grey, and with a reddish-brown, median vitta.

Head and rostrum as in *S. longus*. Prothorax (5×6 mm.) subangulate, dilatate; subapical impression well marked; moderately closely granulate, granules small, slightly larger about constriction, and in the middle near the base, absent or fewer and

smaller along vittæ. Elytra (13×8 mm.) with the interstices slightly raised, tuberculate; tubercles small, much smaller than in *S. longus* or *S. vestitus*, slightly elongate, subconical posteriorly; second with six from about middle down declivity; third with a subcontinuous row of about eleven; fourth with four, spaced-out over middle portion; fifth with humeral tubercle followed by three small tubercles, and a row of granules barely traceable through the clothing; sixth with a row of fourteen, very small tubercles, rather closely placed, subconical. Sides with interstices granulate. Beneath, convex. *Dimensions*: ♀, 20×8 mm.

Hab.—"Stewart's Land, Central Australia." Type in Macleay Museum.—South Australia: Blinman—New South Wales: Darling River (Coll. Lea).

The last three species are all closely related, so that it is somewhat questionable whether they are more than subspecies; I think it well, however, to retain the three names. All the species vary much in size, and also in the number and size of the tubercles, particularly those on the elytra; in some specimens of *S. longus*, the tubercles are larger than in some specimens of *S. vestitus*, but the reverse is common; and I have seen larger tubercles in *S. vestitus* than in the other two species. The colour of the clothing is dependable, except in the case of abraded specimens; *S. longus* has uniform light clothing, *S. vestitus* and *S. Stewarti* are more darkly clothed, and have each elytron trivittate, apart from the colour. *S. longus* may be distinguished by the prothoracic tubercles more widely separated, and also by the fewer and more widely separated tubercles on the sixth, elytral interstice. *S. Stewarti* has the elytral tubercles much smaller than in the other two, and has more numerous, and more closely placed tubercles on the sixth interstice.

S. longus occurs in South Australia, but I am ignorant of its exact habitat. *S. vestitus* occurs in the Flinders Ranges, South Australia, and in the Mallee-districts of Victoria. There appear to be slight differences between the eastern and western specimens, but not definable ones. *S. Stewarti* occurs inland in South

Australia; probably its habitat will be found to extend from the Lake Eyre Basin to, at least, the Darling River. I have a specimen from Condobolin, which I cannot separate from *S. Stewarti*, and there is another in the Australian Museum from Mossgiel. *S. tæniatus* Pasc., is certainly synonymous with *S. Stewarti*. I have a specimen which was compared with Pascoe's type by Mr. Blair, who writes that it is smaller than the type; but the specimen is a small one, as compared with the type of *S. Stewarti*.

SCLERORINUS SUBLINEATUS Germar.

Germar, Linn. Entom., iii., p.217; *S. marginatus* Pasc., *loc. cit.*, p.9.

♂. Moderately large, elongate, subparallel, relatively narrow. Black; densely clothed with ochreous-brown squamosity; head trivittate with white, the median vitta bifurcate on the rostrum; prothorax trivittate; elytra with a broad vitta along each side of disc, and an obscure vitta, more marked posteriorly, along suture; sides of rostrum, prothorax, and elytra vittate with white, on prothorax clothing almost the whole side, on elytra extending along lower border; sternal and abdominal segments maculate with white laterally, median vitta reddish-brown, the space between the median vitta and the lateral maculae bare; legs with moderately dense, white clothing, with small, black spots. Setae dark.

Profile of head and rostrum slightly undulate at junction; external, rostral ridges continued back along head for some distance; median carina present as a narrow, lævigata line, extending for a short distance on to head, not greatly raised. Prothorax (4×5 mm.) moderately dilatate, widest in front of middle; subapical impression moderately distinct, median and sublateral vittae free from granules, but not definitely depressed; elsewhere set with small granules, widely separated, obscured by clothing in the middle, slightly larger along the subapical impression and basally. Sides with a few, scattered, subobsolete granules. Elytra (12×5.5 mm.) elongate; base feebly emarginate; seriate

punctures small, indefinite, the granules little evident, obscured by clothing; sutural interstice with fine granules, the other interstices tuberculate; second somewhat raised, with a few, small, isolated tubercles, subconical and more prominent posteriorly, not reaching base, but extending almost to apex; third with a row of widely separated tubercles from base to edge of declivity; fourth with a few not reaching base, nor extending down declivity; fifth with a humeral tubercle and one or two small ones behind it, thence represented by a row of small granules, sixth with a more continuous row, subconical, larger posteriorly. Sides with small, regular, granuliform tubercles on the upper two interstices only. Undersurface deeply longitudinally furrowed on either side of base of median vitta. Anterior femora not ridged beneath; third joint of anterior tarsi somewhat asymmetrical.

♀. Differs from the male in its more ovate form, and convex, ventral surface.

Dimensions: ♂, 17.5×5.5 : ♀, 17.5×7 mm.

Hab.—South Australia: Adelaide, Moonta, Peterborough, Blanchetown, Balaklava—Victoria: Sea Lake, Melbourne.

In ascribing the name *sublineatus* to the above species, I am following Macleay's identification, I think, however, it is correct, as it agrees with Germar's description, and is, moreover, one of the commonest species of *Sclerorinus* in South Australia.

Of *S. marginatus* Pasc., I have seen a cotype, sent out from the British Museum for examination.

The species, besides being one of the commonest, is one of the most variable, in size, relative width, and clothing.

SCLERORINUS PILULARIUS MacL.

Macleay, *op cit.*, 1866, p.324.

♂. Elongate-ovate. Black; clothing dense, varying in colour from cinereous to ochreous and dark brown; head with narrow, supraorbital vitta, and a broad, median vitta, extending on to rostrum, of a yellowish-brown; prothorax very feebly trivittate; elytra with an interrupted vitta along third interstice, and a broad vitta along lateral margin, of a whitish colour or lighter

than the predominant colour of the clothing; sides of prothorax and elytra with greyish-white along lower border; sides of sternal and abdominal segments clothed with greyish-white; median vitta reddish-brown.

Head and rostrum in same plane above; external, rostral ridges subparallel, extending on to head; median carina narrow, little raised, showing as a fine, lævigata line through clothing; sub-lateral sulci moderately broad, basal foveæ concealed by clothing. Prothorax (4×5 mm.) subdilatate on sides; ocular lobes moderately prominent; subapical impression rather indefinite, median line slightly impressed; granules small, slightly larger than in *S. sublineatus*, and rather more closely set, but not contiguous; sides with smaller granules. Elytra (12×7 mm.) broader and more rounded on the sides than in *S. sublineatus*; base gently emarginate, humeral angles noduliform; seriate punctures shallow, indefinite, intrastrial granules moderately prominent, but concealed by clothing: interstices tuberculate, tubercles small, about the same in size and arrangement as in *S. sublineatus*; second with a few isolated tubercles; third with a continuous row of about fifteen, becoming more spaced-out posteriorly, and extending down declivity; fourth with a few isolated tubercles; fifth with humeral tubercle followed by three or four smaller ones, and then by a row of granules; sixth with a moderately closely-set row of tubercles, not reaching base. Sides with interstices set with depressed, granuliform tubercles. Undersurface as in *S. sublineatus*. Anterior femora feebly ridged beneath; tibiæ not notched. *Dimensions*: ♂, 18×7 mm.

♀. Differs in being more ovate, with the ventral surface more convex.

Hab.—S.A.: Flinders Range, Tarcoola, Ouldea, Wilgena, Musgrave Range.

Described from specimens in my own collection. Though closely allied to *S. sublineatus*, I think the present species is undoubtedly distinct. It is a broader, more ovate species, and, apart from other differences, this will always separate the males, the females being less easily distinguished. The clothing is

different, but, in this respect, both species show considerable variation. The clothing on the rostrum, however, appears to be constant; in *S. pilularius* it is yellow, contrasting with the almost snowy-white clothing of *S. sublineatus*. *S. pilularius* appears to replace *S. sublineatus* in the western portions of South Australia. I am uncertain whether the types are in the Australian or in the Macleay Museum.

SCLERORINUS EXILIS Macleay.

Macleay, *loc. cit.*, p.245; *S. angustatus* Maccl., *l.c.*, p.246.

Elongate, elliptical. Black, tubercles reddish; densely clothed with dark brown; head, prothorax, and elytra conspicuously trivittate with white, the median vitta bifurcated on the rostrum; sides of prothorax and elytra vittate with white along lower border; undersurface with scattered, yellow pubescence, and with a strong, median, golden, hirsute vitta.

Head convex, forehead very slightly depressed in front, not carinate. Rostrum moderately short; external ridges subparallel, somewhat out-turned at base; median carina narrow, little elevated; sublateral sulci broad, shallow, deeper at base. Prothorax (5×6 mm.) moderately strongly rounded on the sides, apical margin gently rounded above, with moderately prominent, ocular lobes; subapical impression distinct; median line not impressed; set with small, but rather conspicuous, distinctly separated granules; sides not granulate, except above. Elytra (14×7 mm.) subelliptical; base gently emarginate, humeral angles distinct, set with a small tubercle; seriate punctures moderately distinct, each subtended by a small, setigerous granule; interstices with isolated tubercles, rounded near base, becoming conical posteriorly; suture with a row of fine granules, larger at base; second with a comparatively few, isolated tubercles, from near base to edge of declivity; third with more numerous tubercles, extending from base to apex; fourth with a few tubercles near middle; fifth with isolated tubercles extending from humeral angle to edge of declivity, sixth with tubercles more closely set with outwardly-projecting, conical tubercles, not reaching to base. Sides with

tubercles depressed, granuliform. Undersurface with a somewhat ill-defined but deep furrow on either side of median vitta at base; fifth segment with an oblique, longitudinal depression on either side, extending on to fourth segment. Anterior femora not ridged beneath; tibiæ simple; anterior tarsi with third joint, and, to a less extent, the second, asymmetrical, the inner portion broader and more expanded than the outer.

♀. Differs in its more robust form, convex undersurface, the fifth segment with a shallow, transverse, apical impression, less hirsute vitta, and in the simple tarsi.

Dimensions: ♂, 22×7 ; ♀, 21×7.5 mm.

Hab —N.S.W.: Lower Murrumbidgee (Macleay), Widgiewa (T. G. Sloane). Type in Macleay Museum.

Described from specimens in my own collection. I have included this species in Group v., although the tubercles are present at intervals along the whole length of the fifth interstice. In general appearance, however, it is more closely related to the species of this Group than to any other. It will be noted that, in almost all the Groups, there are species presenting this peculiarity; and Macleay placed them together in his third aggregate. In all cases, however, the general appearance and other details of sculpture show the true affinities. I refer specimens from Condobolin, with some doubt, to this species; they differ somewhat in the colour of the clothing, in the more sparsely granulate prothorax, and, to a slight extent, in the elytral sculpture. The species is variable in size, and *S. angustatus* seems to me only a small male, although the setæ on the prothorax are of a paler colour.

SCLERORINUS BIORDINATUS MacL.

Macleay, *op. cit.*, 1866, p.326.

♂. Large, elongate, subparallel. Black; densely clothed with ochreous-brown squames; head trivittate with lighter golden-brown, median vitta bifurcate on front and rostrum; prothorax trivittate with greyish-white; elytra quadrivittate with greyish-white, a narrow vitta internal to third interstice, a broader vitta

along lateral margin; sides broadly vittate along lower edge with white; median ventral vitta golden-brown.

Head with a rather broad ridge on either side of upper surface, continuous with external, rostral ridges; median line of forehead lævigata, hardly carinate. Rostrum short, little excavate, the external ridges subparallel; median carina narrow, but prominent; sublateral sulci broad, shallow, with a deeper fovea at base. Prothorax (5.5×6.5 mm.) widely dilatate, subangulate on sides, roughly hexagonal in shape, widest slightly in front of middle; ocular lobes not prominent; disc with a distinct, subapical impression, most evident near sides, mesial line not impressed; set with rather small, round, discrete granules, absent along vittæ; sides without granules, except above. Elytra (14×7 mm.) elongate, little widened posteriorly; base evenly emarginate, humeral angles tuberculiform; seriate punctures small, shallow, attendant granules small and inconspicuous; interstices three and six with a continuous row of closely-set, conical tubercles extending from base (in sixth, not quite reaching base) to half-way down declivity, the third interstices slightly approximated on declivity; second interstice with one or two isolated tubercles, or without any; fourth with none; fifth with two conjoined tubercles at base, forming the humeral tubercle. Sides with upper interstice nodulose, the other interstices without tubercles or granules. Undersurface with a longitudinal furrow on either side of median vitta at base; fifth segment slightly rugulose on either side of ventral vitta. Anterior femora with a ridge on outer half of undersurface; tibiæ not notched.

♀. Differs from the male in its ovate form, and in its strongly convex, ventral surface, with feebler, ventral vitta; the fifth segment bears a shallow, median impression at apex.

Dimensions: ♂, 20×7 ; ♀, 19×7 mm.

Hab.—S.A.: Yorke Peninsula. Type in Macleay Museum.

Described from specimens in my own collection. With the exception of *S. Blackburni*, which has larger prothoracic and elytral tubercles, I know of no species with which the present one could be confused. Though Macleay placed this species

among those having the fourth (*i.e.*, the fifth) interstice continuously tuberculate, he was certainly in error, as this interstice is only tuberculate at the humeral angle. The contrast of the black tubercles against the brown clothing relieved by the white vittæ, renders this species one of the most beautiful in the genus.

SCLERORINUS GERMARI MacL.

Macleay, *op. cit.*, 1866, p.325.

♂. Small, elongate, subparallel. Black; densely clothed with brownish subpubescence, vittate with grey; head trivittate, median vitta bifurcate on rostrum; prothorax trivittate; elytra with an interrupted vitta along side of disc, and another along third interstice; sides of sternal and ventral segments clothed with white; median vitta dark golden-brown, segments sparsely clothed with whitish pubescence between vitta and lateral patches.

Head slightly depressed in front, median line bare in front, but not carinate. External rostral ridges parallel, not continued on to head; median carina bare, not appreciably raised; sublateral sulci rather narrow, deepened posteriorly. Prothorax (3.5×4.5 mm.) rather widely dilatate on sides; set with small, moderately closely placed granules, smaller and almost obsolete over centre of disc; sides granulate. Elytra (9×5 mm.) little rounded on the sides; base gently emarginate; seriate punctures rather wide, obscured by clothing, intrastrial granules not traceable through clothing; interstices very feebly raised, tuberculate, tubercles small, subconical towards apex; second interstice with two or three, not reaching base, nor extending down declivity; third interstices slightly approximated on declivity, tubercles obscured by clothing, about ten on each, extending from base to down declivity; fourth with one or two; fifth with a moderately distinct humeral tubercle, and a short row rapidly diminishing in size, followed by a few, isolated tubercles; sixth with a continuous row of small tubercles, outwardly directed, not reaching base. Sides with interstices granulate. Undersurface with ventral segments flat. Anterior femora feebly ridged beneath; intermediate tarsi with a strong subapical emargination.

♀. Differs in being somewhat more ovate; elytra not mucronate; ventral surface convex; tibiae simple.

Dimensions: ♂, 14 × 5; ♀, 12 × 5 mm.

Hab.—S.A.: Port Lincoln. Probably widely distributed in South Australia.

Described from specimens in my own collection. It is somewhat uncertain whether the Australian Museum or the Macleay Museum possesses the type of the species, as it is represented in both collections.

I have elsewhere noted the occurrence of what I regard as varieties of this species; some of these may probably prove distinct. Of present described species, this can be confused only with *S. parvulus* (see under that species), and *S. mucronipennis*. The latter is distinguished by the mucronation of the elytra of the female. The notched tibiae, *inter alia*, will distinguish it from *S. albovittatus*, which it somewhat resembles.

SCLERORINUS PARVULUS MacL.

Macleay, *op. cit.*, 1865, p.260.

This species is hardly distinct from *S. Germari*, except in the granulation of the prothorax. In *S. parvulus*, the granules are evenly rounded, and not obsolete in the centre. I am unwilling to sink *S. Germari*, which is the later name, until certain that the differences are merely varietal and not specific. I have seen specimens, which I attribute to *S. parvulus*, from the vicinity of Adelaide, if I remember correctly.

It may be noted, that I regard the Macleay Museum specimen as the type; in the Australian Museum, there are two specimens labelled *S. parvulus*; one is a small specimen of *S. horridus*, and the other is probably so also, but it is too dirty for determination.

SCLERORINUS TUBERCULOSUS MacL.

Macleay, *op. cit.*, p.256; (?)*S. mucronatus* MacL., *l.c.*, p.255.

♂. Size moderately large; elongate-ovate. Black; with rather sparse, brownish subpubescence in depressions; median, ventral vitta dull golden-yellow.

Head moderately strongly ridged on either side in front, with a feeble, median, lævigata carina. Rostrum little excavate; external ridges thick, slightly convergent to base; median carina prominent; sublateral sulci moderately broad, foveate at base. Prothorax (4.5×5.5 mm.) rather widely dilatate, widest in front of middle; subapical and median impressions moderately distinct; closely set with moderately large, rounded granules, larger along subapical impression and behind middle; sides granulate. Elytra (10×6 mm.) moderately and evenly widened posteriorly; base emarginate, humeral angles tuberculiform, produced anteriorly; disc with seriate punctures shallow but moderately distinct, subtended by small but evident, setigerous granules; interstices with large, strong tubercles, somewhat elongate towards base, conical towards apex of elytra; second interstice with a few about middle; third with a continuous row, about nine in number, from base to half-way down declivity; fourth with one or two; fifth with the humeral tubercle followed by a few, small tubercles, rapidly degenerating into granules; sixth with a regular row of closely set tubercles, about twelve in number, smaller than on other interstices, conical posteriorly and outwardly projecting. Sides with interstices granulate. Beneath, with segments flat. Anterior femora feebly ridged on outer half of undersurface; intermediate tibiae with a strong, subapical emargination; posterior tibiae more feebly emarginate; anterior tarsi symmetrical.

♀. More ovate than male, ventral segments convex, intermediate tibiae simple.

Dimensions: ♂, 16×6 ; ♀, 16×6 mm.

Hab.—Victoria. Type in Macleay Museum.

Described from specimens in my own collection. The species varies somewhat in size, but I can detect no other difference between the extremes. The presence of the subapical notch on the intermediate tibiae would ally this species with *S. Germari*, from which the larger size and sombre clothing will readily separate it. *S. Queenslandicus*, which is also closely allied, is a somewhat shorter, more ovate species, with fewer tubercles, and inconspicuous, intrastrial granules.

S. mucronatus MacL., I place, with some doubt, under *S. tuberculosus*. The type has been misplaced, as, on the name-label in the Macleay Museum, is a large specimen of *S. vestitus*, which does not agree with the size or description given by Macleay. Close to it in the collection, however, is a specimen which fits Macleay's description very closely, and I think it is probably Macleay's type. Compared with female specimens of *S. tuberculosus*, it differs only in the presence of a strong mucro on each side of the apex. I am unable to say whether this feature is constant or individual; but, in the allied species, *S. mucronipennis*, such a feature is constant in the female. Until further specimens are procured, I place it under *S. tuberculosus*.

SCLERORINUS QUEENSLANDICUS, n.sp.

♂. Of moderate size; elongate-ovate. Black; densely clothed with cinnamon-brown subsquamosity; median, ventral vitta bright reddish-yellow. Setæ dark.

Head convex, traversed by three lines, the prolongations of the rostral ridges, these extending not quite to vertex, the median much narrower than the lateral ones. Rostrum little excavate; external ridges slightly convergent basally; median carina narrow, a small puncture present at junction with head; sublateral sulci long, shallow. Head and rostrum densely clothed except on ridges, these bare except for a few setæ. Prothorax (4×4 mm.) little widened; apical margin lightly sinuous above, with a moderately marked, postocular emargination; subapical constriction indistinct, median line not impressed. Disc set with isolated, rather large granules, much smaller along median and sublateral lines; sides granulate, most evidently above. Elytra (9×6 mm.) gently widened on sides; base gently emarginate, very lightly bisinuate, humeral angles marked by a small tubercle. Disc with seriate punctures shallow, obscured by clothing, the intrastrial granules hardly evident; interstices remotely tuberculate, tubercles comparatively large, black, subnitid, the posterior ones obtusely subconical, not spinose; second interstice with six tubercles, extending down declivity; third with four, not extending down declivity; fourth with three or four, not

reaching base, nor extending down declivity; fifth with tubercles much smaller, about seven in number, closer together about shoulder, becoming more spaced-out and smaller posteriorly; sixth with a row of nine, rather closely set, larger than on fifth, but smaller than on the other interstices. Sides with interstices closely set with small, obtuse tubercles. Beneath, with a median, hirsute vitta extending from metasternum to apex; fifth segment with a subquadrate depression, more or less obscured by the median vitta. Intermediate tibiae with a strong, subapical notch.

♀. Similar to ♂, but more robust and ovate; tubercle-index 3, 6, 0, 9, 7; beneath, convex, median vitta much less dense, not hirsute, subsetose. Internal tibiae with notch much feebler.

Dimensions: ♂, 14×6 ; ♀, 14×6.5 mm.

Hab.—Queensland: Upper Logan River, Warwick. Type in Queensland Museum.

Several specimens of this species, sent from the Queensland Museum, are under examination. The type is an exceptionally well clothed specimen, most of the others being more or less abraded. The tubercles on the elytra vary in number, and are sometimes present on the declivity in the second and third interstices and sometimes not. The tubercle-indices of two other females may be given: ♀, 5, 6, 1, 11, 8; ♀, 6, 6, 3, 8, 11.

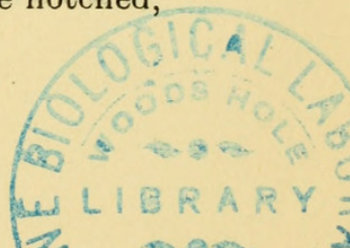
Two males in the National Museum, Melbourne, probably represent a variety of this species; they are narrower; in one, the fifth interstice has no tubercles, except the humeral one; and, in the other, a few, very small, separated tubercles. They are labelled (?) West Australia.

The character of the fifth interstice appears to associate this species with *S. tuberculosus*, rather than with the *subcostatus*-group, in which the fifth interstice is strongly and closely tuberculate.

SCLERORINUS MELICEPS Pasc.

Pascoe, Journ. Linn. Soc., 1873, p.10.

This species is almost certainly a true *Sclerorinus*, and probably a member of Group v. I have seen no insect that I can associate with the name. The intermediate tibiae are notched,



and it is possibly allied to *S. Queenslandicus*, which has similar tibiae. It is not the latter species, however, as a specimen of *S. Queenslandicus* was sent to the British Museum, and compared with the type of *S. meliceps* by Mr. K. G. Blair.

It is just possible that *S. meliceps* may be a *Talaurinus* allied to *T. pallidus* MacL., the members of the *pallidus*-group having notched tibiae, and a variable rostrum, in some cases, e.g., *T. Gayndahensis*, approaching that of *Sclerorinus*.

Hab.—Queensland : Rockhampton.

Other Species belonging to Group v.

S. inconstans Lea.—N.S.W.: Mt. Kosciusko.

S. alpicola Ferg.—Vic.: Mt. Baldy, Victorian Alps.

S. Blackburni Ferg.—S.A.: Cleve.

S. mucronipennis Ferg.—Vic.: Nelson.

SCLERORINUS HORRIDUS MacL.

Macleay, *loc. cit.*, p.256.

♂. Elongate-ovate, size moderately small. Black ; densely clothed with dark brown and pale cinereous; head and prothorax trivittate with the lighter-coloured clothing, elytra variably clothed, as a rule, the light clothing predominating; sides more or less clothed with cinereous; undersurface with moderately long, cinereous pubescence, forming median and lateral vittæ, and clothing greater part of fifth segment, the intervals between the vittæ with dark brown clothing.

Head convex, median line lævigata in front. Rostrum short, little excavate ; external ridges slightly convergent to base; median carina moderately broad; sublateral sulci of moderate width, with a deeper fovea at base. Prothorax (3.5×4.5 mm.) rather strongly dilatate, subangulate in middle of sides; ocular lobes rather prominent; subapical impression moderately well marked; set with small, rounded, well-separated granules, absent along mesial line and over sublateral vittæ, except in middle. Sides with scattered granules, obsolete towards coxæ. Elytra (8×5.5 mm.) moderately strongly widened to behind middle;

base feebly emarginate, humeral angles marked, but not produced; seriate punctures rather large, open, foveiform, the intra-strial granules obscured by clothing; interstices tuberculate, tubercles variable in size in different specimens, all much of the same size in the same specimen, all the interstices, as a rule, closely and evenly tuberculate, the tubercles more separated on the declivity. Sides with small, round, flattened tubercles, obsolete on lower interstices. Ventral segments flattened, basal segments not longitudinally grooved. Anterior femora without ridge beneath; tibiae not notched; anterior tarsi with third joint feebly asymmetrical. *Dimensions*: ♂, 18×5.5 mm.

♀. Rather more ovate, undersurface convex.

Hab.—S.A.: Fowler Bay, Port Lincoln, Ardrossan, Blanchetown, Moonta, Terowie.

Described from a series of specimens in my own collection, which have been compared with the type in the Macleay Museum.

The species is one of the most variable in the whole genus in size, colour, and tuberculation. In some specimens, the clothing is almost entirely of a cinereous colour; in others, the dark colour predominates; as a rule, on the elytra, the lateral margins have a broad, cinereous vitta; and the rest of the surface is maculate, to a greater or less extent, with this colour, so that the dark areas appear as macules on a light ground. In some specimens, the light colour is of a reddish-ochraceous tint; while many specimens appear to be caked with a coloured meal.

The tubercles vary much in size; as a rule, all the interstices are closely tuberculate, but the tubercles on the second may be distinctly more separated.

The ventral clothing, while vittate in character, has not the strong, hirsute structure of the other vittate species; in some, the median vitta is rather darker than the lateral ones.

The even tuberculation of the fifth interstice would associate this species with Group iii., but it has an entirely different facies, and the ventral clothing is very different. I prefer to place it at the end of the genus, as an anomalous species.

SCLERORINUS RIVERINÆ MacI.

Macleay, *loc. cit.*, p.246; *S. alternus* MacI., *l.c.*, p.247.

♂. Narrow, elongate. Black; densely clothed with dark brown subsquamosity, vittate with lighter, varying from grey to silvery; head trivittate, the median vitta light brown with a grey centre, subdivided by a median, lævigata line, the two portions diverging on rostrum; prothorax trivittate; elytra with lighter clothing irregularly distributed along lateral margins, about declivity, and forming a narrow line along suture; sides with greyish or silvery clothing along interstices; undersurface maculate with greyish-yellow in the centre, and with grey at the sides of each segment; legs rather densely clothed with white, irrorate with black spots.

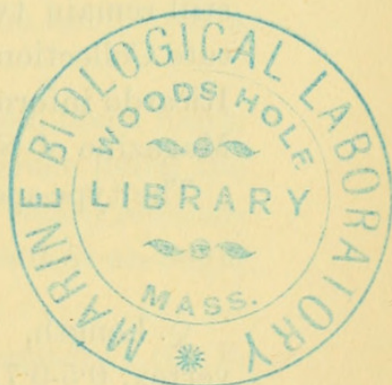
Head convex, separated from rostrum above by a slight, transverse impression; median line lævigata. Rostrum little excavate; external ridges little raised, subparallel; median area elongately triangular in shape, not depressed nor definitely carinate, sides of area concealed by clothing of vitta; basal foveæ shallow, inconspicuous, elongately triangular. Prothorax (3×3.5 mm.) gently rounded on sides, not dilatate; apical margin rounded above, with moderately distinct, ocular lobes; subapical impression distinct; median and sublateral vittæ free from granules, but not evidently impressed; elsewhere set with small, rounded, discrete granules; sides also granulate. Elytra (8×4.5 mm.) elongate, little widened on the sides; base almost truncate, humeral angles marked by a small, outwardly projecting tubercle; seriate punctures small, shallow, intrastrial granules inconspicuous; sutural interstice with a row of separate granules; second and fourth with a few, distantly separated tubercles, not extending to base or declivity, small but larger than on the other interstices; third and fifth each with a continuous row of small tubercles, rounded near the base, becoming larger, more separate, and conical towards apex, extending down declivity; sixth with a somewhat similar row, but with the tubercles rather farther apart, and not extending to base. Sides with granules obsolete. Undersurface with ventral segments flattened; fifth feebly rugosely punctate. Anterior femora not ridged beneath; tibiæ and tarsi simple.

♀. Larger, more ovate; convex beneath.

Dimensions: ♂, 13×4.5 ; ♀, 14.5×6 mm.

Hab.—N.S.W.: Wagga, Deniliquin, Mulwala—Vic.: Birchip. Type in Macleay Museum. Described from specimens in my own collection.

Specimens from Birchip, in my own collection, vary somewhat from the above description. The male has the sides of the median area slightly raised at base; and the median area slightly depressed, and with a longitudinal, impressed line in the centre; the third interstice is biserially granulate in the middle. The female has the sides of the median area more definitely raised, the centre not being depressed; the elytra are tuberculate in single series. I have grave doubts as to whether this species should be allowed to remain in *Sclerorinus*; the median area is not definitely carinate, though it appears through the clothing as a lævigate line; the internal ridges are not traceable, unless the feeble elevations, at the base of the median area, in the Birchip specimens, represent such. The undersurface, moreover, is not channelled at the apex, as in one Section of *Sclerorinus*; nor does it possess a hirsute, median vitta, as in the other Section. On the other hand, it appears related to no species of *Talaurinus* known to me. For the present, I prefer to regard it as an aberrant species of *Sclerorinus*. *S. alternus* was founded on an abraded specimen of the same species.





Ferguson, Eustace William. 1916. "Revision of the Amycterides. Part iv. Sclerorinus [Section ii.]. [Coleoptera]." *Proceedings of the Linnean Society of New South Wales* 40, 759–805. <https://doi.org/10.5962/bhl.part.18893>.

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