



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

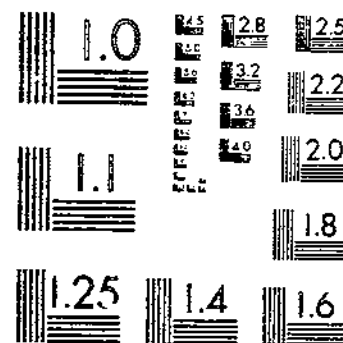
*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

TB 1602 (1980) USDA TECHNICAL BULLETINS UPDATA
A TAXONOMIC STUDY OF THE NEW WORLD GENUS STICHTOPTYCHUS FALL
WHITE, R. E. 1 OF 1

START



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

P 630.
1653-1

ST

A TAXONOMIC STUDY OF THE NEW WORLD GENUS STICHTOPTYCHUS FALL (COLEOPTERA: ANOBIIDAE)

LOS ANGELES PUBLIC LIBRARY

FEB 25 1980



UNITED STATES
DEPARTMENT OF
AGRICULTURE

TECHNICAL
BULLETIN
NUMBER 1602

PREPARED BY
SCIENCE AND
EDUCATION
ADMINISTRATION

ABSTRACT

White, R. E. 1980. A taxonomic study of the New World genus *Stichtoptychus* Fall (Coleoptera: Anobiidae). U.S. Department of Agriculture, Technical Bulletin No. 1602, 35 pp.

In this revisionary study, 44 species are included; most are from South America. Twenty-four are described as new; 11 species described by their authors in the wrong genus are placed here in their correct genus; there are 2 new synonyms. This bulletin includes historical background, biology, morphology, species groups, a key, and species descriptions. The 22 illustrations show lateral views of 7 species and diagnostic characters.

KEYWORDS: Coleoptera: Anobiidae, *Stichtoptychus*, taxonomic revision, new species, American.

A TAXONOMIC STUDY OF THE NEW WORLD GENUS STICHTOPTYCHUS FALL (COLEOPTERA: ANOBIIDAE)

By Richard E. White



UNITED STATES
DEPARTMENT OF
AGRICULTURE

TECHNICAL
BULLETIN
NUMBER 1602

PREPARED BY
SCIENCE AND
EDUCATION
ADMINISTRATION

ACKNOWLEDGMENTS

The following persons deserve my thanks for loaning specimens or for other assistance: S. Vanin, Zoological Museum of the University of São Paulo, Brazil (ZMSP); E. Becker, Canadian National Collection, Ottawa (CNCI); H. Howden, Howden collection, Ottawa (HAHC); R. Acciavatti, Acciavatti collection, Delaware, Ohio (AC); J. Menier and Mme. A. Bons, Museum National d'Histoire Naturelle, Paris (MNHP); J. Solervicens, Universidad de Chile, Valparaiso (UC); A. Willink, Instituto Miguel Lillo, Argentina (IML); and C. M. F. von Hayek, British Museum of Natural History, London (BMNH).

CONTENTS

	Page
History	1
Biology	1
Morphology	1
Taxonomic characters	2
Species groups	3
Key to species	3
Genus <i>Stichtoptychus</i> Fall	6
Species descriptions	6
Literature cited	32
Index to species	35

A Taxonomic Study of the New World Genus *Stichtoptychus* Fall (Coleoptera: Anobiidae)

By RICHARD E. WHITE¹

I examined about 120 specimens of *Stichtoptychus* during this study and here recognize 44 species, 24 of which are described as new. This is an incomplete sample, and much remains to be done before this genus is well known.

A trip to the Museum National d'Histoire Naturelle in Paris allowed me to examine many American species of Anobiidae described by Maurice Pic, who named more species of Central

and South American Anobiidae than any other author. In this bulletin, I transfer 10 of his species to *Stichtoptychus*; 8 of them were described in *Catorama* Guérin-Ménéville, 1 in *Calymmaderus* Solier, and 1 in *Priotoma* Gorham. I designate lectotypes for Pic species where no specimen in his collection was clearly labeled as type. A species described by Gorham in *Mirosternus* Sharp, *M. substriatus*, is transferred to *Stichtoptychus*.

HISTORY

Stichtoptychus was erected by Fall (1905, p. 258)² for a single species from Texas, *S. agonus*, which was described as new. Spilman (1971) described *S. mexambrus*, a fossil species from Mexico found in late Oligocene to early Miocene deposits of amber. White (1974) in a work on the Dorcatominae and

Tricoryninae of Chile described four new species and transferred four species, three of them from *Calymmaderus* and one from *Catorama*, to *Stichtoptychus*. Español (1976) described as new *S. basilewskyi* from the Galápagos; it is not included here.

BIOLOGY

There is no information on the habits of species of *Stichtoptychus*, but the genus is a member of the subfamily Dorcatominae. Larvae of some species of

this subfamily bore in dead wood, branches, twigs, or vines of various plants; others bore in fungi, including woody fungi, mushrooms, and puffballs.

MORPHOLOGY

General.—Body in dorsal view oval to robust, often nearly cylindrical, 1.5–2.3 times as long as wide. Surfaces usually with 2 sizes of punctures, sometimes (most often head and elytra) with punctures of 1 size; surfaces sometimes finely granulate. Pubescence appressed, usually fine,

moderate in density and not obscuring surface sculpture, infrequently dense and obscuring surface; in most species regular in direction; in some swirled and reflective, thus producing light and dark patches; pubescence infrequently extremely short, sparse, and difficult to detect. Ground color red brown to dark brown, infrequently nearly black.

Head.—Eyes small to large, separated by 1.3–3.7 times vertical diameter of eye, usually bulging, infrequently flattened. Antenna of 11 segments; 1st segment large, arcuate, 2d through 8th small, 2d

¹ Systematic Entomology Laboratory, Science and Education Administration, c/o U.S. National Museum of Natural History (USNM), Washington, D.C. 20560.

² The year in *italic* after authors' names refers to Literature Cited, p. 32.

longer than wide, 3d triangular, 4th through 8th transverse; 9th through 11th segments much enlarged, together much longer than all preceding united; 9th and 10th subtriangular, 11th more or less spindle shaped. Last segments of maxillary and labial palpi subtriangular, infrequently subquadrate, outer margin of each straight to sinuate, or even notched. Ventral surface distinctly excavated, receiving antennae in retraction.

Dorsal surface.—Pronotum evenly rounded to side or bluntly produced before posterior angle, sometimes slightly bulging or slightly flattened immediately above lateral margin; lateral margin distinct, complete. surface beneath margin visible during retraction. Scutellum moderate in size, triangular. Elytron striate, striae of lineate punctures or impressed grooves, often with lateral 2 or 3 striae of grooves and discal striae of punctures, some species with 10 more or less distinct striae, others with only 2 or 3 distinct lateral striae and with discal striae obsolete to absent; humerus distinct; lateral margin notched for hindlegs.

Ventral surface.—Prosternum much reduced, very narrow, strongly transverse; front coxae narrowly separated, flattened, concealed by retracted head. Mesosternum depressed, concealed during body retraction; middle coxae widely separated. Metasternum with a broad lobe at middle of anterior margin, lateral parts delimited posteriorly by tarsal grooves, usually with a fovea near base of lobe, metasternum longitudinally, shallowly

grooved at center; metepisternum narrow, nearly parallel sided, widest posteriorly. Abdomen of 5 distinct segments, 1st segment distinctly grooved each side of middle and receiving hindlegs; 5th segment longest, 2d next in length, 3d and 4th subequal, 1st shortest; sutures more or less distinct throughout, arcuate to sinuate or bisinuate (sometimes strongly so). Front and middle tibiae with outer face not grooved.

Male genitalia.—Lateral lobes nearly always curved inwardly, often apex of a lateral lobe bearing toelike process or processes, palplike process of lateral lobe arcuate, narrow to much broadened; median lobe very broad, apex often membranous, near middle with external, distinctly sclerotized processes.

Length.—1.9–5.2 mm.

The male genitalia exhibit characters of the median lobe and lateral lobes that appear to be distinctive for a species (see figs. 8–12). The male genitalia of seven species of *Stichtoptychus* have been illustrated (White, 1974). In this bulletin I have included illustrations of five other species.

The external sclerotized processes of the median lobe of the male genitalia have counterparts among the Anobiidae only in certain species of *Protheca* LeConte, as far as I know. In one species (*elegans*, fig. 10) these processes join closely with the lateral lobes. *S. elegans* and an undescribed species of *Protheca* are the only anobiids in which I have seen articulation of the median lobe with the lateral lobes.

TAXONOMIC CHARACTERS

A terminal palpal segment of either the maxillary or the labial palpus is subtriangular and its form often varies from one species to another. Consequently, a description of the margins and angles of a segment is useful. I name these margins and angles in sequence as follows: While looking at an attached palpal segment that is extended forward, one sees that the mesal margin is nearest the midline of the head, then outward from there are the mesal angle, distal margin, distal angle, and finally back toward the base of the palpus is the basal margin.

Since the nature of the punctation on body surfaces is generally consistent for a species and varies between species, references to punctation are frequent in the descriptions. Body surfaces often bear

a dual system of punctures, with large, rimmed punctures distinct from small, pointlike punctures. In some species these large punctures are small and approach the size of the small ones, or in some species the large punctures intergrade in size with the small ones. When the latter condition occurs, I refer to the punctation as being obscurely dual. When I refer to the punctures as not being dual, then there are small punctures only and no large ones.

Examination of the metasternal lobe of those species that were represented by numerous specimens has shown their lobe is consistent in form. Since many of the species included in this study are represented by single or a few specimens, I cannot state whether the metasternal lobe is consistent in

its form (and possibly diagnostic) for all species. In future work on this genus when larger series are available, illustrations of the metasternal lobe may

prove very useful. The complexity of this structure will make describing it difficult. For examples of the lobe, see figures 17 and 18.

SPECIES GROUPS

Stichtoptychus species fall into seven clearly definable groups. Most of the following descriptions of these groups are directly comparable; I have not attempted a phylogenetic arrangement. Three species with no obvious affinities are unplaced, namely *brevicollis*, *elongatus*, and *subpubescens*.

(1) Fulgidus group — *alocobregmus*, *diversistriatus*, *fulgidus*. Large, 4.0–4.8 mm long; body in lateral view moderately elongate to elongate, over 2 times as long as high; surfaces shiny, nearly glabrous; eyes large to moderate in size; pronotum at side not produced before hindangle, nearly evenly convex; elytral striae indicated more or less throughout; last segment of maxillary and labial palpi each with distal margin inwardly arcuate.

(2) Minutus group — *concaus*, *germaini*, *incisus*, *minutus*, *obsoletus*. Moderate, 2.7–4.0 mm long; body in lateral view elongate, over 2 times as long as high; eyes medium to small in size; pronotum bluntly produced before hindangle; discal elytral striae impressed apically, weak to absent basally; last segment of maxillary and labial palpi each with distal margin inwardly arcuate.

(3) Ornamentus group — *ornamentus*, *platyops*. Small to moderate, 2.3–2.7 mm long; body in lateral view stout, up to 2 times as long as high; eyes small, modified, located laterally on head as opposed to normal anterolateral location; pronotum at side convex to broadly, weakly concave; 2 lateral elytral striae distinctly impressed, discal striae more or less weak; last segment of maxillary and labial palpi with distal margin of each sinuate to nearly straight across.

(4) Parvus group — *arcuatus*, *griseus*, *megaloops*, *parvus*, *rubidus*. Small, 1.9–2.5 mm long; body in lateral view stout, up to 2 times as long as high; eyes large to medium in size; pro-

notum at side nearly evenly convex, lateral margin more or less distinctly recurved; elytral striae indicated nearly throughout; last segment of maxillary and labial palpi with distal margin of each straight, arcuate, notched, or sinuate.

(5) Coactus group — *agonus*, *aurantiacus*, *coactus*, *decorus*, *elegans*, *depressus*, *fulvopubens*, *holosericeus*, *peruvianus*, *presuturalis*, *punctatus*, *substriatus*, *surrufus*, *tijucanus*, *verdensis*, *vitatus*, *volutus*. Moderate, 2.6–4.0 mm long; body in lateral view stout, up to 2 times as long as high; eyes large to medium in size; pronotum at side nearly evenly convex to nearly flat, lateral margin more or less distinctly recurved; elytral striae distinct at sides, indicated nearly throughout on disk; last segment of maxillary and labial palpi with distal margin of each arcuate, sinuate, or notched.

(6) Granulosus group — *granulosus*, *homalus*, *obscurus*, *ocellatus*, *pubiventris*, *temivittatus*. Medium to large, 2.7–4.6 mm long; body elongate in lateral view, over 2 times as long as high; surfaces often more or less granulate; eye size medium to small; pronotum at side more or less evenly convex, lateral margin weakly recurved; elytral striae strongest at sides, indicated throughout; last segment of maxillary and labial palpi with distal margin of each arcuate, sinuate, or notched.

(7) Productus group — *dufaui*, *mexicanus*, *productus*. Moderate, 2.8–3.9 mm long; body in lateral view elongate to moderately stout, about 2 times as long as high; eyes large to medium in size; pronotum at side weakly convex to nearly flat, produced ventrally and with lateral margin smoothly continuous with anterior margin; elytral striae distinct at sides, indicated throughout to nearly throughout on disk; last segment of maxillary and labial palpi with distal margin of each inwardly arcuate.

KEY TO SPECIES

1. Dorsal surface nearly hairless, shiny, hairs so short and sparse as to be difficult to detect, separated by a distance greater than length of a hair 2
- Dorsal surface pubescent, shiny or not, hairs separated by less than length of a hair .. 4

- 2 (1). All 10 elytral striae distinctly impressed in apical half of an elytron (fig. 16);
Puerto Rico *fulgidus*, n. sp.
Only 3 elytral striae distinctly impressed in apical half of an elytron (fig. 19);
Brazil, Paraguay 3
- 3 (2). Groove weak and shallow over eye, deeper and broader over antennal insertion,
grooves on front separated by width of clypeus; punctures of metasternal lobe
denser than those on remainder of metasternum *alocobregmus*, n. sp.
Groove over eye uniform in depth throughout, grooves on front separated by
more than width of clypeus; punctures of metasternal lobe no denser than those on
remainder of metasternum; (fig. 2) *diversestriatus* (Pic)
- 4 (1). Pronotum at side with distinct lateral margin and bluntly produced from hind-
angle to anterior margin (fig. 5); Chile 5
Pronotum at side with distinct lateral margin but not bluntly produced; various
localities 9
- 5 (4). Elytron on apical half with 3 or 4 more or less distinct striae; about 2.7 mm
long *minutus* (Solier)
Elytron on apical half with 10 more or less distinct striae; 2.9-3.7 mm long 6
- 6 (5). Elytra with discal striae distinct in apical third, obsolete near middle of elytra,
absent at base; (fig. 5) *obsoletus* White
Elytra with discal striae distinct to or nearly to base 7
- 7 (6). Male with 5th abdominal segment bearing a deep, circular depression, remainder of
abdomen normal *concavus* White
Male with abdomen longitudinally depressed at middle (fig. 17) or not modified 8
- 8 (7). Male abdomen at middle distinctly, longitudinally depressed (fig. 14), sutures 3 and
4 anteriorly arcuate at center; pronotum indented behind eye *incisus* White
Male abdomen at middle not or slightly depressed, sutures 3 and 4 not or slightly
arcuate; pronotum not indented *germaini* (Pic)
- 9 (4). Pubescence of elytra clearly alternating in direction at least in part and producing
more or less distinct light and dark patches (see figs. 4 and 7) 10
Pubescence of elytra usually regular in direction, sometimes inclined or weakly
swirled, but lacking distinct light and dark patches 23
- 10 (9). Pronotum at extreme side granulate (fig. 13) 11
Pronotum at extreme side punctate (fig. 15) 14
- 11 (10). Elytron apically with 6-10 distinctly impressed striae 12
Elytron apically with 1, 2, or 3 distinctly impressed striae 13
- 12 (11). Eyes small, separated by 2.4-2.8 times vertical diameter of an eye; head
finely granulate *ocellatus*, n. sp.
Eyes large, separated by 1.7 times vertical diameter of an eye; head finely punc-
tate *fulvopubens* (Pic)
- 13 (11). Dorsal surface with 2 or 3 patches of swirled pubescence; Venezuela, Colombia *coactus*, n. sp.
Dorsal surface with no fewer than 10 patches of swirled pubescence; southern
Brazil *verdensis* (Pic)
- 14 (10). Elytral pubescence bicolored in addition to light and dark patches 15
Elytral pubescence of 1 color 16
- 15 (14). Elytral pubescence mostly light yellow but with a large, triangular, basal orange
area; Panama *aurantiacus*, n. sp.
Elytral pubescence predominantly reddish and with short, narrow, light-yellow
vittae (fig. 7); Peru; (fig. 15) *elegans*, n. sp.
- 16 (14). Elytron with no more than 2 or 3 swirled patches of pubescence 17
Elytron with more than 3 swirled patches of pubescence 18
- 17 (16). Punctures of elytral striae small, elongated, running together, obscured; southeastern
Brazil *tijucanus* (Pic)
Punctures of elytral striae large, not elongated, discrete, distinct; Colombia
..... *punctatus*, n. sp.
- 18 (16). Anterior margin of eye forming a right angle (fig. 22); pubescence shaggy;
Peru *ornamentus*, n. sp.
Anterior margin of eye not forming a right angle; pubescence semishaggy to
silky; various localities 19
- 19 (18). Body more oval, 1.6 times as long as wide; pubescence semishaggy;
length 2.0 mm; Brazil *arcuatus*, n. sp.
Body more elongate, about 1.7-1.8 times as long as wide; pubescence smooth, silky;
length 2.6-3.1 mm; Colombia, Venezuela, Costa Rica 20

- 20 (19). Elytron with many more than 5 patches of swirled pubescence; Colombia, Brazil 21
 Elytron with no more than 5 patches of swirled pubescence; Venezuela, Colombia,
 Costa Rica 22
- 21 (20). Abdomen modified (male only?), lateral margin continuous with suture 4, 5th segment
 appearing as a pygidium *holosericeus* (Pic)
 Abdomen not modified as above *decorus*, n. sp.
- 22 (20). Eyes larger, separated by 1.3-1.5 times vertical diameter of an eye; last segment of
 maxillary palpus with outer margin broadly notched; Venezuela, Colom-
 bia *coactus*, n. sp.
 Eyes smaller, separated by 1.5-1.7 times vertical diameter of an eye; last
 segment of maxillary palpus with outer margin broadly arcuate; Costa
 Rica *volutus*, n. sp.
- 23 (9). Eye anteriorly produced and flattened, surface at right angles to front of head (fig.
 20); length 2.3 mm; Peru *platyops*, n. sp.
 Eye not as above; length 1.9-5.2 mm; various localities 24
- 24 (23). Elytral surface feebly shiny to nearly lusterless because of distinct, fine,
 dense granulation 25
 Elytral surface moderately to distinctly shiny, usually punctate, sometimes weakly
 granulate 26
- 25 (24). Pronotum at side produced ventrally; body stouter (fig. 6); groove over eye deep,
 wide (fig. 21); Mexico *productus*, n. sp.
 Pronotum at side not produced ventrally; body less stout; groove over eye less deep,
 narrow; Chile *granulosus* (Pic)
- 26 (24). Four to 10 elytral striae distinctly impressed apically 27
 Usually 2 or 3 elytral striae distinctly impressed apically, others weakly impres-
 sed, of punctures only, or absent 33
- 27 (26). Side of pronotum with dual punctation, i.e., with small, dotlike punctures and larger,
 rimmed punctures; Mexico, Caribbean 28
 Side of pronotum not punctate, but granulate; Chile 29
- 28 (27). Large punctures of head indistinct, regular throughout; 4.0-4.5 mm long;
 Guadeloupe, Dominica *dufaui* (Pic)
 Large punctures of head distinct, much smaller and sparser on vertex; 3.2 mm
 long; Mexico *mexicanus* (Pic)
- 29 (27). Eyes very small, separated by 3.3-3.7 times vertical diameter of an eye 30
 Eyes larger, separated by 1.7-2.7 times vertical diameter of an eye 31
- 30 (29). Body reddish brown; length 3.3 mm *tenuivittatus*, n. sp.
 Body very dark brown, nearly black; length 4.5 mm *obscurus*, n. sp.
- 31 (29). Eyes large, separated by 1.7 times vertical diameter of an eye; metasternal
 pubescence golden, noticeably densest posteriorly at middle *pubiventris*, n. sp.
 Eyes smaller, separated by 2.0-2.7 times vertical diameter of an eye; metasternal
 pubescence not as above 32
- 32 (31). Granules at side of pronotum smaller and sparser, separated on an average by
 more than diameter of a granule *brevicollis* (Solier)
 Granules at side of pronotum larger and denser, separated by less than diam-
 eter of a granule *homalus* White
- 33 (26). Side of pronotum granulate-punctate or simply granulate, granules always distinct 34
 Side of pronotum punctate, sometimes with weak indication of granules 36
- 34 (33). Larger and more elongate, 3.3-3.8 mm long, body 1.8-1.9 times as long as
 wide *surrufus*, n. sp.
 Smaller, less elongate, 2.2-3.1 mm long, body 1.50-1.75 times as long as wide 35
- 35 (34). Head between eyes evenly convex; eyes larger, separated by 1.6-2.0 times vertical
 diameter of an eye; Brazil *vittatus*, n. sp.
 Head between eyes bluntly produced, not evenly convex; eyes smaller, separated
 by 2.4 times vertical diameter of an eye; Peru *peruvianus* (Pic)
- 36 (33). Large and elongate, length 4.2-5.2 mm, body 2.0-2.3 times as long as wide; (fig.
 1) *elongatus*, n. sp.
 Smaller, less elongate, length 2.0-4.0 mm, body less than 2 times as long as wide 37
- 37 (36). Larger, length 3.0-4.0 mm; Colombia, Brazil, U.S.A. 38
 Smaller, length 2.0-2.4 mm; Brazil, Peru 42

- 38 (37). Pronotum at side immediately above lateral margin weakly bulging; 5th abdominal segment depressed *depressus*, n. sp.
 Pronotum at side flat to weakly, broadly convex; 5th abdominal segment not depressed 39
- 39 (38). Metasternum at side with large punctures weak to absent; Colombia *substriatus* (Gorham)
 Metasternum at side with large punctures distinct; Brazil, U.S.A. 40
- 40 (39). Elytral disk with striae very obscure *subpubescens* (Pic)
 Elytral disk with striae clearly indicated 41
- 41 (40). Eyes large, separated by 1.4 times vertical diameter of an eye; Brazil - *presuturalis* (Pic)
 Eyes small, separated by 2.3 times vertical diameter of an eye; Texas *agonus* Fall
- 42 (37). Eyes large, separated by 1.3 times vertical diameter of an eye; elytral apex paler in hue than remainder *megalops*, n. sp.
 Eyes smaller, separated by 1.7-2.3 times vertical diameter of an eye; elytral apex not as above 43
- 43 (42). Fovea behind metasternal lobe nearly attaining middle of metasternum --- *parvus*, n. sp.
 Fovea behind metasternal lobe distant from middle of metasternum 44
- 44 (43). Eyes larger, separated by 1.7-1.9 times vertical diameter of an eye; body dark brown; Brazil; (fig. 3) *griseus*, n. sp.
 Eyes smaller, separated by 2.1-2.3 times vertical diameter of an eye; body red brown; Peru *rubidus*, n. sp.

Genus STICHTOPTYCHUS Fall

Stichtoptychus Fall, 1905, p. 258; Pic, 1912, p. 71; Leng, 1920, p. 243; Arnett, 1962, p. 574; Spilman, 1971, p. 87; Español, 1973, p. 56; White, 1974, p. 228; Español, 1976, p. 310.
 Type-species: *Stichtoptychus agonus* Fall, by monotypy.

Diagnosis.—Pubescence appressed; head beneath distinctly excavated, receiving antennae; elytron striate, at least at side, at extreme side notched for hindleg; metasternum anteriorly at

middle with a broad lobe, lobe delimited posteriorly by tarsal grooves (figs. 17, 18); metepisternum nearly parallel sided.

This combination of characters will separate this genus from all others of the subfamily Dorcatominae.

The species treatments are arranged alphabetically so that a particular species description can be readily located.

SPECIES DESCRIPTIONS

Stichtoptychus agonus Fall

Stichtoptychus agonus Fall, 1905, p. 258; Pic, 1912, p. 71; Leng, 1920, p. 243; Arnett, 1962, p. 574; Spilman, 1971, p. 87; Español, 1973, p. 56; White, 1974, p. 228.

General.—Body about 1.7 times as long as wide; elytral sides in basal half subparallel. Pubescence on dorsum short, moderately dense, appressed, with slight sheen in bright light, not swirled. Body brown; dorsal surface moderately shiny, ventral surface and head more shiny.

Head.—Front nearly evenly convex throughout; punctation dense, dual, on a nearly smooth surface; with a deep, distinct groove from over eye to over antennal base; eyes medium in size, separated by about 2 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, distal margin broadly notched; last segment of labial pal-

pus subtriangular, a little longer than wide, distal margin weakly sinuate.

Dorsal surface.—Pronotal disk with dense, dual punctation, large punctures about 4-5 times diameter of a small puncture; surface at side convex, punctation very dense, dual, large punctures often coalescing, separated on an average by much less than diameter of a puncture. Elytral disk with (in addition to punctures of striae) dense, dual punctation, large punctures each about 3-4 times diameter of a small puncture, latter very dense; at side with 2 distinct, impressed striae, most strongly impressed apically, nearly attaining base; a third stria formed of large, deep punctures nearly attaining base, fading near middle of elytron; with 7 additional striae of shallow, lineate punctures, striae most distinct apically, not attaining base.

Ventral surface.—Metasternum with dual punc-

tation, large punctures variable, largest, densest anteriorly at side, often coalescing there. Abdominal sutures 2, 3, and 4 clearly bisinuate; punctation distinctly dual; abdomen nearly evenly convex throughout; 5th segment granulate apically.

Length.—3.6 mm.

Type.—This description is from a cotype (USNM No. 21116, hereby designated as lectotype) from Brownsville, Tex., and collected by C. H. Townsend.

Discussion.—Fall (1905, p. 258) referred to specimens in addition to the one collected by Townsend. The Fall collection was deposited in the Museum of Comparative Zoology (Harvard University), but in an examination of that collection I did not find specimens of *agonus*.

Stichtoptychus alocobregmus, new species

(Fig. 8)

General.—Body a little over 1.8 times as long as wide; elytral sides subparallel in basal half. Dorsum apparently glabrous, actually with extremely short, sparse hairs that are separated by much more than length of a hair, detectable only on close examination. Body very dark brown with reddish evident, some areas nearly black; nearly all surfaces distinctly shiny.

Head.—Front strongly, nearly evenly convex, not depressed near eyes; with fine punctation, medium in density, dorsally on head obscurely dual, with very minute punctures in addition to regular punctures; vertex with a short, shiny carina, surface of vertex to eyes alutaceous; above each eye with a weak, narrow, longitudinal groove, at anterior margin of eye groove becoming extremely deep and broad, continuing to over antennal base; eyes medium in size, bulging, separated by 2.0–2.4 times vertical diameter of an eye. Last segment of maxillary palpus triangular, a little wider than long, distal margin sinuate, mesal angle bluntly pointed, distal angle more nearly rounded; last segment of labial palpus subtriangular, a little wider than long, distal margin nearly straight, mesal angle rounded, distal angle nearly a right angle.

Dorsal surface.—Pronotal disk with fine punctures of 1 size, moderate in density; surface convex to side, surface at extreme side weakly bulging; lateral margin strong, set off by a distinct groove; punctures at side not dual, a little variable

in size, separated on an average by about diameter of a puncture. Elytral disk with minute, sparse punctures in addition to punctures of striae; posterior half with 2 distinctly impressed grooves laterally, both continued anteriorly by large punctures, with 8 additional striae formed of well-aligned rows of punctures, stria at side strongest, 8 striae weak to obsolete in apical third of elytron, weakened near base of elytron; intervals on disk nearly flat, those at side more or less convex.

Ventral surface.—Metasternum with extremely fine, sparse, dual punctation nearly throughout, larger punctures very small, sparse, smaller punctures minute, often obscure, larger punctures on metasternal lobe larger and denser than those on metasternum. Abdominal sutures 2 and 3 weakly bisinuate, suture 4 distinctly bisinuate; punctation much as that on metasternum; 5th segment distinctly concave before apex.

Length.—4.3–4.5 mm.

Types.—The male holotype (in ZMSP) bears the data—Faz, Pau D'Alno Itú S. Paulo Brasil 9-I-1959 Col.: U. Martins, Dep. Zool. Sao Paulo, 66-31. A female paratype (in USNM) has the data—S Bernardino Paraguay, K Fiebrig Collector.³

Discussion.—This species is very similar to *diversestriatus* and differs only in the few characters referred to in couplet 3 of the key.

The specific name (*aloco*—groove, *bregma*—head) refers to the deep grooves on the front of the head.

The male genitalia of this species are shown in figure 8.

Stichtoptychus arcuatus, new species

General.—Body about 1.6 times as long as wide; elytra widest just behind humeri. Pubescence on dorsum moderate in density, dull yellow, with a sheen in bright light, with swirled patches forming light and dark areas. Body beneath pubescence dark brown, head and abdomen lighter than remainder; surfaces moderately shiny, sides of abdomen less shiny than remainder.

Head.—Front strongly, evenly convex, vaguely depressed adjacent to eyes; with fine, distinct, moderately dense punctation of 1 size; a moderately distinct groove over each eye; eyes medium in size, separated by 1.9 times vertical diameter of an eye,

³ Throughout this bulletin, information pertaining to types is given essentially as it appears on the insect labels.

somewhat flattened anteriorly. Last segment of maxillary palpus triangular, a little longer than wide, distal angle less than a right angle, distal margin distinctly, inwardly arcuate, mesal angle pointed; last segment of labial palpus subtriangular, longer than wide, distal margin arcuate, distal angle less than a right angle, mesal angle broadly rounded.

Dorsal surface.—Pronotal disk with fine, distinct punctation, large and small punctures intergrading in size; surface at side nearly flat; margin somewhat produced, punctation distinct, dual, large punctures much larger than on disk and coalescing adjacent to margin. Elytral disk (in addition to punctures of striae) with fine, distinct, not dual punctation; at side with 2 distinct, impressed, complete striae; with 7 additional, more or less indicated striae, formed of punctures, weak to obsolete before apex.

Ventral surface.—Metasternum anteriorly at side with dual punctation, large punctures varying in size, smaller posteriorly, larger near middle. Abdominal suture 2 nearly straight, suture 3 bisinuate, suture 4 more clearly bisinuate; punctation dual, larger punctures shallow; abdomen nearly evenly convex, slightly flattened at middle of 4th segment.

Length.—2.0 mm.

Type.—The holotype and only specimen (sex?; in ZMSP) has the data - Rio Regina, Serra Lombard, AP, 5.IX.1961, J. Bechyné col. The locality is in northern Brazil (Amapá territory) near French Guiana.

Discussion.—*S. arcuatus* differs from other species in its species group (including *griseus*, *megalops*, *parvus*, and *rubidus*) in having swirled elytral pubescence.

The specific name refers to the arcuate outer margin of the last segment of the maxillary palpus.

Stichtoptychus aurantiacus, new species

General.—Body about 1.7 times as long as wide; elytra widest just behind humeri. Pubescence on dorsum medium in length, dense, semishaggy, weakly yellow except for a large, orange triangular patch on elytral disk, pubescence with moderate sheen, swirled, forming weak light and dark areas. Body beneath pubescence dark brown, head, abdomen, and elytral apex red brown; surfaces moderately shiny.

Head.—Front nearly evenly convex, slightly produced over antennal base; punctation fine, dense, obscurely dual, large and small punctures nearly intergrading, large punctures separated on an average by 1-2 times diameter of a puncture; with a distinct groove over eye, weakly continuing to over antennal base; eyes large, bulging, separated by 1.3 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, a little longer than wide, distal angle pointed, distal margin distinctly, inwardly arcuate, mesal angle bluntly pointed; labial palpus slightly longer than wide, distal angle weakly pointed, outer margin distinctly notched, mesal angle very broadly rounded.

Dorsal surface.—Pronotal disk punctation distinct, dual, small punctures dense, large punctures but slightly larger than small punctures, and separated on an average by 3-4 times diameter of a puncture; lateral margin narrowly, weakly recurved, surface at side weakly concave, punctation distinct, dual, dense, large punctures much larger than on disk, separated on an average by less than diameter of a puncture. Elytral disk with dual punctation (in addition to punctures of striae), small punctures dense, distinct, large punctures separated on an average by about 3 times diameter of a puncture; at side with 2 distinct, complete, impressed striae, with a 3d stria impressed at base, with 7 additional striae of large punctures, striae weaker apically.

Ventral surface.—Metasternum anteriorly at side with distinct, dual punctation, large punctures separated on an average by about 2 times diameter of a puncture, large punctures much smaller to obsolete over rest of metasternum. Abdominal sutures 2 and 3 weakly sinuate, 4th suture bisinuate; punctation fine, distinct, dual; surface nearly evenly convex, slightly flattened at middle of 4th suture.

Length.—3.0 mm.

Type.—The male holotype and only specimen (USNM type No. 72651) has the data - XXPlntnpan, Feb. 11, 1930, Blackwelder Collection. This is a locality in Panama that I have been unable to trace.

Discussion.—This species differs from its nearest relative *elegans* in that the elytral pubescence of *aurantiacus* is mostly light yellow but with a large, basal orange area; the elytral pubescence of *elegans* is predominantly reddish and with short, narrow, light-yellow vittae.

The specific name, meaning orange, refers to the large basal spot on the elytra.

Stichtoptychus brevicollis (Solier)

(Fig. 17)

Calymmaderus brevicollis Solier, 1849, p. 474; Pic, 1912, p. 64; Blackwelder, 1945, p. 404.

Stichtoptychus brevicollis (Solier), White, 1974, p. 229.

General.—Body 1.9–2.0 times as long as wide; elytra in basal third nearly parallel sided. Pubescence on dorsum short, gray, rather sparse, with slight sheen in bright light, that on pronotum swirled, that on elytra not swirled. Body predominantly black and infused with dark dull red, to body dark dull red clouded with black; body surfaces moderately shiny.

Head.—Front nearly evenly convex throughout; punctation dual, dense, large and small punctures nearly intergrading in size; eyes medium in size to small, separated by 2.0–2.5 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, about as wide as long, distal margin broadly, shallowly emarginate; last segment of labial palpus a little wider than long, distal margin straight.

Dorsal surface.—Pronotal disk with dual, dense punctation, large punctures 2–3 times size of small punctures, surface with weak indication of smooth granules; surface at side convex, not produced before posterior angle; punctation at side dual, large punctures dense, shallow, center of each alutaceous, these coalescing and becoming obsolete at extreme side, and there with smooth-topped, shiny granules on an alutaceous background. Elytral disk with (in addition to punctures of striae) dense, minute punctures and large, sparse punctures; elytron with 10 distinct striae on apical half, lowest stria longest, distinct to level of metasternum, next stria distinct to level of hindcoxa, other 8 fading around middle of elytron, continued anteriorly as punctures, none attaining base.

Ventral surface.—Metasternum with dual punctation, larger punctures largest, sparsest anteriorly at side. Abdominal sutures 2, 3, and 4 of female weakly sinuate, suture 2 of male weakly sinuate and sutures 3 and 4 distinctly sinuate; surface with dual punctures; abdomen of female convex throughout, 5th segment nearly flat front to back, at apex granulate; abdomen of male with segments 3, 4, and 5 flattened at center, slightly depressed at suture

between segments 4 and 5, sides of segments and apex of 5th segment produced and granulate.

Length.—4.0–4.7 mm.

Type.—The holotype (in MNHP) is from Concepcion, Chile. It is discussed more fully in White (1974, p. 230).

Discussion.—I have seen three specimens of this species. Other collection localities are Isla Margarita and Pucatrihue Costa, Chile. The male genitalia of this species are illustrated in White (1974, p. 247).

Stichtoptychus coactus, new species

General.—Body about 1.7 times as long as wide; elytra widest just behind humeri. Pubescence on dorsum short, sparse, hairs separated by less than their length, weakly yellowish to weakly orange, with a slight sheen in bright light, forming swirled patches that produce light and dark areas, patches on pronotum more distinct and numerous than on elytra. Body mostly dark brown, head and abdomen red brown, pronotum and elytral apex sometimes red brown; body moderately shiny nearly throughout, elytra and abdomen at apices usually weakly shiny.

Head.—Front strongly, nearly evenly convex, slightly depressed adjacent to eye; sculpture of fine, dense punctation of 1 size; with a distinct to moderately distinct groove over each eye, continued to over antennal base; eyes large, bulging, separated by 1.3–1.5 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, a little longer than wide, distal angle pointed to narrowly rounded, with a broad notch on distal margin, mesal angle pointed; last segment of labial palpus subtriangular, a little longer than wide, distal angle weakly pointed, distal margin sinuate, mesal angle very broadly rounded.

Dorsal surface.—Pronotal sculpture on disk of fine, small, dense punctures, slightly variable in size; surface at side weakly concave to nearly flat and densely, confusedly punctate granulate, lateral margin narrowly recurved. Elytral disk with fine, dense, sometimes indistinct punctation in addition to large punctures of striae; at side with 2 distinct, complete, impressed striae; with 8 additional striae of large shallow punctures, 3d stria usually impressed, all 8 striae weakest before elytral apex.

Ventral surface.—Metasternum anteriorly at side with very fine, dense punctation, sometimes obscurely dual, surface sometimes alutaceous at

margins, at middle with quite distinct, dual punctation, large punctures small to moderately large. Abdominal sutures 2 and 3 bisinuate, suture 4 more strongly bisinuate; surface with fine, dense punctation, surface at side and at apex usually finely alutaceous; abdomen nearly evenly convex throughout, 5th segment sometimes very slightly flattened at base.

Length.—2.6–2.9 mm.

Types.—The holotype (in HAHC) has the data—1100 m. Rancho Grande, Arauca, Venezuela, Feb. 18–19, 1971, H. & A. Howden. Two paratypes (1 in HAHC, 1 in USNM) bear the data—5000', nr. Pichinde, Valle, Colombia, II.24.1970, H. Howden.

Discussion.—*S. coactus* differs from its relative *decorus* in that the side of the pronotum of *coactus* is granulate; that of *decorus* is punctate.

The specific name refers to the stout form as seen in profile.

Stichtoptychus concavus White

Stichtoptychus concavus White, 1974, p. 231.

General.—Body 1.9–2.0 times as long as wide; elytral sides subparallel in about basal two-thirds. Pubescence on dorsum short, moderately sparse, appressed, gray with a weak yellow hue, not swirled. Body dark red brown, margins and elytral striae usually black; surfaces moderately shiny.

Head.—Front convex, at center with a weak, shallow depression; punctation obscurely dual, large and small punctures intergrading in size, surface weakly granulate; eyes medium in size, separated by 2.2–2.3 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, a little longer than wide, distal margin inwardly arcuate; last segment of labial palpus slightly longer than wide, distal margin shallowly, inwardly arcuate.

Dorsal surface.—Pronotal disk with dual punctation, large punctures 3–4 times size of a small puncture, surface smooth; surface at side bluntly produced before posterior angle, sculpture above produced part consisting of smooth-topped granules over finely granulate or punctate background, large punctures sometimes evident, sculpture below produced part consisting of smooth-topped granules over a finely granulate background. Elytral disk with (in addition to punctures of striae) dual punctation, large punctures irregular in size, with obscure granulation, granules distinct at apical

third of elytra; elytron with 10 striae, 2 at side distinct, nearly complete, remaining 8 more or less distinct, strongest apically, more distinct in male than in female, striae in male extending anteriorly beyond middle, in female not attaining middle.

Ventral surface.—Metasternum with dual punctation. Abdominal suture 2 weakly bisinuate, sutures 3 and 4 weakly, anteriorly arcuate; surface with dual punctation; abdomen of male with a distinct, round depression before apex of 5th segment, diameter of depression a little greater than half length of segment, segment with sparse, moderately developed granules; abdomen of female convex as usual but with base on 5th segment slightly flattened and apex with dense, pointed granules.

Length.—2.9–3.0 mm.

Types.—The male holotype is in the Lois Peña collection in Santiago, Chile; the allotype is in the USNM. The type specimens have the label data—Prov. Linares, Cord. Parral, Fdo. Malcho, Chile.

Discussion.—The male genitalia of this species are illustrated in White (1974, p. 249).

Stichtoptychus decorus, new species

General.—Body 1.8 times as long as wide; elytra subparallel in basal half. Pubescence on dorsum short, fine, medium in density, with a distinct yellow, sometimes orange sheen in bright light, with numerous small swirled patches forming light and dark areas. Body red brown, head and abdomen slightly lighter than remainder; surfaces moderately shiny, apex of abdomen and elytra less shiny than remainder.

Head.—Front nearly evenly convex, vaguely produced between antennal insertions, slightly depressed adjacent to eyes; surface with very fine, distinct punctation, not dual but of 1 size, punctures varying slightly in size; with a distinct groove over each eye, continued to over antennal base; eyes large, bulging, separated by 1.6 times vertical diameter of an eye. (Palpi not seen.)

Dorsal surface.—Pronotal punctation on disk fine, dual, moderately dense, large punctures separated by about 3 times diameter of a puncture; surface at side weakly convex, lateral margin moderately recurved, punctation dense, dual, coarse, large punctures much larger than on disk, punctures separated by much less than diameter of a puncture, running together in places. Elytral disk (in addition to punctures of striae) with fine, dense, not dual punctation; at side with 2 distinct, im-

pressed, complete striae; with a 3d more or less impressed stria present; with 7 weaker striae of lineate punctures, weakest before apex.

Ventral surface.—Metasternum with fine, not dual punctation, punctures very small. Abdominal sutures 2 and 3 more or less bisinuate, suture 4 more distinctly bisinuate; surface finely punctate, punctures obscurely dual; surface evenly convex.

Length.—3.0 mm.

Type.—The holotype and only specimen (female; in HAH) bears the data—3000', Rio Jamundi, 10 mi. S. Cali, Valle, Colombia, VII, 13, 1970, H. & A. Howden.

Discussion.—I have labeled a single specimen from Barro Colorado Island, Panama, as near *decorus*. It differs from *decorus* in that the body is broader (1.6 times as long as wide) and the swirled patches of elytral pubescence are much larger. These differences are not great, but they raise doubts as to the status of this specimen.

For characters distinguishing this species from its relative *coactus*, see under the latter.

The specific name, meaning beautiful, refers to the pubescent pattern of the dorsal surface.

Stichtoptychus depressus, new species

General.—Body 1.7 times as long as wide; elytral sides parallel in basal half. Pubescence on dorsum short, medium in density, with a slight sheen in bright light, dull light gray with a weak yellow hue, pubescence on elytra in some places inclined but not swirled. Body dark brown, head and abdomen red brown; surfaces moderately shiny.

Head.—Front moderately convex, weakly, irregularly flattened between eyes; punctation dual, fine, very dense, distinct, large punctures separated on an average by 1–2 times diameter of a puncture; a weak groove over each eye continued to over antennal base; eyes medium in size, separated by 1.9 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, very slightly longer than wide, distal angle pointed, a little more than a 45° angle, distal margin with 3 weak, broad, shallow notches, mesal angle pointed, a little more than a 45° angle; last segment of labial palpus subtriangular, slightly longer than wide, distal angle less than a right angle, distal margin with 3 shallow, narrow notches, mesal angle broadly rounded.

Dorsal surface.—Pronotal disk with fine, dense, distinct, dual punctation, large punctures separated

on an average by 1–2 times diameter of a puncture and 2–3 times size of a small puncture; lateral margin narrowly recurved, surface weakly bulging immediately above margin, punctation very similar to that on disk, but denser, large punctures separated on an average by a little less than diameter of a puncture. Elytral disk with (in addition to punctures of striae) fine, dense, obscurely dual punctation, large punctures rather sparse, intergrading in size with small punctures; at sides with 2 distinctly impressed, complete striae; with a weak 3d stria and 7 weak discal striae, especially weak basally.

Ventral surface.—Metasternum anteriorly at side with obscure punctation that is obscurely dual, punctation and duality more distinct medially. Abdominal sutures 2 and 3 more or less weakly bisinuate, suture 4 more clearly bisinuate; punctation fine, dense, distinct, dual; surface nearly evenly convex, slightly depressed at middle of 4th suture, abdominal margin throughout recurved, 5th segment at apex rather broadly concave.

Length.—4.0 mm.

Type.—The holotype and only specimen (sex?; in ZMSP) bears the data—Faz. Retiro de Telhas, Três Lagoas, MT, X, 1964, Esp. Depto. Zool., Dep. Zool. Sao Paulo, 66–78. This locality is in Brazil, and evidently MT is an error for MG (Mato Grosso).

Discussion.—This species differs from its relative *lunatus* in that the pronotum at the side and immediately above the lateral margin is weakly bulging; in *lunatus* this area is flat to weakly convex.

The specific name refers to the depressed fifth abdominal segment.

Stichtoptychus diversestriatus (Pic), new combination

(Figs. 2, 19)

Cathoroma diversestriata Pic, 1904c, p. 56; Blackwelder, 1945, p. 405.

Eupactus barranus Pic, 1904b, p. 37; Blackwelder, 1945, p. 404.
NEW SYNONYMY.

General.—Body 1.7–1.9 times as long as wide; elytra subparallel in basal half. Pubescence on dorsum light, exceedingly short and sparse, difficult to detect, hairs separated by much more than their length, pubescence on ventral surface longer, denser. Body very dark red brown, some margins nearly black) surfaces shiny.

Head.—Front convex as usual, produced above antennal insertions, slightly depressed above eyes; punctation dual, larger punctures small, smaller punctures very minute, punctures much denser apically; ocular groove deep, narrow, extending over antennal base; eyes medium in size, bulging, separated by 1.8–1.9 times vertical diameter of an eye. Last segment of maxillary palpus a little wider than long, distal angle broadly rounded, distal margin broadly, inwardly arcuate, mesal angle distinct, narrowly rounded, distinctly produced; last segment of labial palpus a little wider than long, distal angle acute, not rounded, distal margin broadly, inwardly arcuate, mesal angle produced, broadly rounded.

Dorsal surface.—Pronotal punctation on disk of 1 size, small, not dense, punctures separated on an average by about 4 times diameter of a puncture; surface at side convex, somewhat bulging above lateral margin, lateral margin very narrowly recurved; punctation at side dual, larger punctures separated on an average by a little more than diameter of a puncture, smaller punctures very minute. Elytral disk with (in addition to punctures of striae) minute and sparse punctation, surface smooth; with 10 nearly complete striae, those on disk weak to absent near apex (fig. 19), lateral 2 (except near base) distinctly impressed, remaining striae of lineate punctures.

Ventral surface.—Metasternum throughout with very minute punctation, difficult to detect, surface smooth. Abdominal sutures 2 and 3 nearly straight across, 4th suture bisinuate; punctation minute, sparse, of 1 size, surface smooth; 5th segment flat at middle, concave apically.

Length.—3.5–4.7 mm.

Types.—Pic's holotype (in MNHP) bears the data – Brasil, Minas, type, Le Nat. No. 408, p. 56, TYPE, *Cathorama diversestriata* Pic.

A Pic specimen of *barranus* (in MNHP; hereby designated as lectotype) has the data – S. Antonio de Barra, Pr. de Bahia.

Discussion.—The description of *diversestriatus* was published in the number of "Le Naturaliste," which is indicated as appearing in March 1904. The description of *barranus* appeared in the May number of "L'Echange." Thus the description of *diversestriatus* predated that of *barranus* by 2 months.

In addition to the types discussed here, three examples of this species are in the USNM from Brazil, one from São Paulo, one from Paraná near

Curitiba, and one from Nova Teutônia, Santa Catarina.

Stichtoptychus dufau (Pic), new combination

(Fig. 9)

Cathorama dufau Pic, 1911, p. 183; Blackwelder, 1945, p. 405.

General.—Body about 1.7 times as long as wide; elytral sides subparallel in basal half. Pubescence on dorsum short, not dense, hairs separated by less than length of a hair, not swirled, weakly yellowish. Body brown, elytral apex, head, and ventral surface vaguely reddish brown; body throughout moderately shiny.

Head.—Front moderately, nearly evenly convex, slightly depressed adjacent to eye; sculpture of fine, dense, dual punctation, large punctures not sharply impressed, separated on an average by 2–3 times diameter of a puncture; with a deep, distinct groove over each eye, continuing to beyond antennal base; eyes large, bulging, separated by 1.7–2.3 times vertical diameter of 1 eye. Last segment of maxillary palpus triangular, slightly longer than wide, distal and mesal angles pointed, distal margin inwardly arcuate; last segment of labial palpus triangular, slightly longer than wide, distal angle pointed, mesal angle rounded, distal margin inwardly arcuate.

Dorsal surface.—Pronotal discal sculpture of fine, dense, dual punctation, large punctures not sharply impressed, punctures separated on an average by about 2 times diameter of a puncture; surface to side nearly evenly convex, at side nearly flat front to back, lateral margin distinct throughout, not recurved; sculpture of fine, dense, dual punctation, large punctures distinctly larger, more sharply impressed than on disk, punctures separated on an average by about diameter of a puncture. Elytral disk with fine, dense, dual punctation in addition to punctures of striae; elytron at side with 2 sharply impressed striae, less distinctly impressed anteriorly, also with 8 additional striae, these most distinct in posterior half of elytron, striae primarily of aligned punctures anteriorly on elytron; intervals in posterior half of elytron more or less convex.

Ventral surface.—Metasternum with fine, dense, dual punctation, large punctures largest,

densest anteriorly at side, there large punctures usually separated by diameter of a puncture. Abdominal sutures 2 and 3 moderately bisinuate, suture 4 more distinctly bisinuate; surface with fine, dense, dual punctation; 5th segment weakly flattened at base, apex slightly produced.

Length.—3.9–4.5 mm.

Type.—This description is primarily from the holotype in the Pic collection (MNHP). It bears the following label data – 1160, Guadeloupe Dufau, Type, TYPE. *Cathorama dufau*.

Discussion.—I have seen two additional specimens taken at Clarke Hall, Dominica.

The male genitalia of this species are shown in figure 9.

Stichtoptychus elegans, new species

(Figs. 7, 10, 15)

General.—Body 1.6–1.7 times as long as wide; elytra widest at base. Pubescence on dorsum short, medium in density, fine, with a sheen in bright light, with swirled patches, more numerous on pronotum, swirled patches on pronotum with an orange, sometimes yellow sheen, patches on elytra with a rusty colored or yellow sheen, yellow patches usually lineate. Body beneath pubescence predominantly dark brown, elytral disk often nearly black, head, abdomen, and sometimes pronotum red brown; dorsal surfaces weakly shiny, ventral surfaces and head moderately shiny.

Head.—Front nearly evenly, distinctly convex; punctation fine, distinct, dense, punctures slightly varying in size; with a distinct groove over eye, weakly or not continuing to over antennal base; eyes medium in size, bulging, separated by nearly 1.9 times vertical diameter of an eye. Maxillary palpus subtriangular, a little longer than wide, distal angle less than a right angle, distal margin weakly sinuate, mesal angle nearly a right angle; labial palpus subtriangular, a little longer than wide, distal angle less than a right angle, distal margin weakly sinuate, mesal angle rounded.

Dorsal surface.—Pronotal disk punctation fine and dense, dual, larger punctures separated on an average by about 3 times diameter of a puncture and nearly intergrading in size with small punctures; surface at side nearly flat, margin narrowly produced outward, punctation dual, large punctures much larger, denser than on disk, large punctures separated on an average by about half

diameter of a puncture and nearly crowding out small punctures (fig. 15). Elytral discal punctation (in addition to punctures of striae) fine, very dense, obscurely dual, large and small punctures intergrading in size; at side with 2 complete, more or less impressed striae; with 8 additional, more or less distinct striae of lineately arranged punctures, 3d stria sometimes impressed at base, these 8 striae weak to obsolete before elytral apex.

Ventral surface.—Metasternum with obscurely dual punctation, size of large and small punctures nearly or quite intergrading, at extreme lateral and anterior margins large punctures larger than elsewhere on metasternum. Abdominal suture 2 nearly straight to weakly bisinuate, suture 3 more or less clearly bisinuate, suture 4 most distinctly bisinuate; punctation fine, dense, dual, larger punctures about 2–3 times diameter of a small puncture; abdomen nearly evenly convex throughout, sometimes slightly flattened at middle of 4th suture.

Length.—2.7–3.0 mm.

Types.—The male holotype (USNM No. 72652) and 4 paratypes (in USNM) bear the data – Peru, Satipo; the type and a paratype have the additional label – IX-X, 1942, Paprzycki; 2 paratypes have – X, 1942, Paprzycki; and 1 paratype has – 1942, Paprzycki.

Discussion.—The yellow pubescence on the elytra of one specimen I have seen (in addition to these types) is in spots and is not lineate as with typical specimens of *elegans*, and the large punctures of the metasternum at the anterior and lateral margins are much larger than in specimens of *elegans*. A larger series than is now available to me will be required to settle the disposition of this specimen.

For characters distinguishing this species from its nearest relative *aurantiacus*, see under the latter.

The specific name refers to the very attractive elytral pattern.

The male genitalia of this species are shown in figure 10.

Stichtoptychus elongatus, new species

(Figs. 1, 11, 18)

General.—Body 2.0–2.3 times as long as wide; elytral sides subparallel in basal two-thirds. Pubescence on dorsum light, weakly gray tan, very short,

medium in density, with a slight sheen in bright light, elytra with no swirled patches. Body dark brown, abdomen and head red brown; surfaces moderately shiny.

Head.—Front strongly, nearly evenly convex, nearly as a segment of a sphere, slightly depressed adjacent to eye; punctation very fine, dense, obscurely dual, large and small punctures intergrading in size; with a distinct groove over eye, groove continuing to over antennal base; eyes medium in size, bulging, separated by 1.7–1.9 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, distal angle distinctly pointed, distal margin with 2 distinct notches, upper broader than lower, mesal angle bluntly pointed; last segment of labial palpus slightly longer than wide, distal angle distinctly pointed, distal margin distinctly, arcuately notched, mesal angle very broadly rounded.

Dorsal surface.—Pronotal disk with fine, dense, dual punctation, larger punctures about 2–3 times size of small punctures and separated on an average by 1–2 times diameter of a puncture; lateral margin rather broadly produced and recurved, surface at side concave, punctation dense, dual, large punctures sometimes irregularly aligned, punctures touching to separated by more than diameter of a puncture, surface sometimes weakly granulate. Elytral disk with (in addition to punctures of striae) very fine, dense, dual punctation, large punctures separated on an average by about 2 times diameter of a puncture and nearly intergrading in size with small punctures; at side with 2 distinct, nearly complete striae, these impressed at apical half, formed of punctures only in anterior half; with a 3d stria, most distinct at level of base of abdomen; with 7 much weaker striae indicated throughout elytra, formed of shallow punctures; intervals sometimes weakly convex.

Ventral surface.—Metasternum anteriorly at side with very fine, dense, dual punctation, large punctures separated on an average by 3 times diameter of a puncture, nearly even in size throughout metasternum. Abdominal suture 2 nearly straight to weakly bisinuate, sutures 3 and 4 more or less clearly bisinuate; punctation fine, dense, dual; abdomen of female nearly evenly convex, but narrowly recurved and granulate at margins; abdomen of male as for that of female except with a broad, distinct concavity on 5th segment.

Length.—4.2–5.2 mm.

Types.—The male holotype (USNM No. 72657),

the allotype (in USNM), and 3 paratypes (in USNM; 1 male, 2 females) bear the data—Brasilien, Nova Teutonia, 27°11' B. 52°23' L. Fritz Plaumann, XII 1940, 300 bis 55 m.

Discussion.—This species differs from other members of the genus by the large size (4.2–5.2 mm long) and elongate form (body 2.0–2.3 times as long as wide). The specific name refers to the body form.

The male genitalia of this species are shown in figure 11.

Stichtoptychus fulgidus, new species

(Figs. 12, 16)

General.—Body a little over 1.9 times as long as wide; body widest just behind humeri. Pubescence on dorsum very short, very sparse, difficult to detect, hairs separated by more than their length, light in color, that on ventral surface longer, denser than that on upper surface. Body rich red brown, elytral striae dark, body margins very dark, nearly black; surfaces shiny.

Head.—Front nearly evenly convex throughout, just slightly depressed adjacent to each eye; punctures fine, distinct, sparse medially, denser dorsally and laterally; ocular groove deep, narrow, extending to over antennal base; eyes large, bulging, separated by 1.6 times vertical diameter of an eye. Last segment of maxillary palpus as wide as long, distal angle narrowly rounded, distal margin weakly, inwardly arcuate, mesal angle narrowly rounded; last segment of labial palpus a little wider than long, distal angle narrowly rounded, distal margin moderately inwardly arcuate, mesal angle broadly rounded.

Dorsal surface.—Pronotum anterior margin slightly projecting; sculpture on disk of dual punctation, larger punctures small, distinct, separated on an average by 1–2 times diameter of a puncture, small punctures very minute; surface at side weakly convex, lateral margin very narrowly recurved, punctation dual, larger punctures larger and denser than on disk, separated on an average by less than diameter of a puncture, small punctures very minute. Elytral disk with (in addition to punctures of striae) small, sparse punctures of 1 size; with 10 distinct striae and a short scutellar stria, striae on disk impressed only at apical third (fig. 16), striae at sides impressed at apical half; intervals convex.

Ventral surface.—Metasternal punctation dual, larger punctures anteriorly at side separated by 1–2

times diameter of a puncture, smaller punctures minute. Abdominal sutures 2, 3, and 4 bisinuate, 4th suture strongly anteriorly arcuate at middle, 2d and 3d moderately so; punctation dual, larger punctures denser posteriorly; 5th segment concave front to back, most distinctly so before apex.

Length.—4.8 mm.

Type.—The male holotype and only specimen (No. 72649 in USNM) bears the data — San Sebastian, P. R., VII-25, 1935, Coll: M. Guiles.

Discussion.—In addition to the holotype, I have seen a partial individual of this species (head and prothorax missing; in USNM) from San Juan, Puerto Rico; it is not a paratype.

This species differs from its nearest relative *diversestriatus*, in that all 10 elytral striae are distinctly impressed on the apical half of an elytron; in *diversestriatus* only 3 elytral striae are distinctly impressed on the apical half of an elytron.

The specific name, meaning shiny, refers to the body surfaces.

The male genitalia of this species are shown in figure 12.

***Stichtoptychus fulvopubens* (Pic). new combination**

Cathorama fulvopubens Pic, 1904d, p. 103.

General.—Body nearly 1.8 times as long as wide; elytral sides subparallel in basal half. Dorsum with appressed, slightly shaggy pubescence, forming numerous small, swirled patches, reflective in light, and forming light and dark areas. Body dark brown nearly throughout, head and abdomen reddish brown; surfaces moderately shiny.

Head.—Front nearly evenly convex throughout, vaguely flattened adjacent to eyes; punctation fine and dense, not clearly dual, some punctures a little larger than others; a weak, narrow groove over eye only; eyes large, bulging, separated by about 1.7 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, slightly longer than wide; last segment of labial palpus subtriangular, about as long as wide.

Dorsal surface.—Pronotal disk with fine, dense, dual punctation, large punctures about 3 or 4 times size of small punctures; surface at side nearly flat, shallowly concave behind anterior margin, lateral margin produced, weakly recurved; large punctures at side larger, running together, surface

at extreme side granulate, large punctures obscure to not detectable. Elytral disk with (in addition to punctures of striae) fine, dense, not dual punctation; at side with 2 distinctly impressed striae, becoming punctate and weaker anteriorly; above these with 8 additional striae formed of large, lineate punctures, stria 3 strongest, all 8 weakest before elytral declivity, some impressed at apex.

Ventral surface.—Metasternum with very fine, dual punctation, moderate in density, large punctures variable in size and density, smallest, sparsest posteriorly. Abdominal segment 2 weakly bisinuate, segments 3 and 4 more distinctly so; punctation fine, moderately dense, dual; 5th segment minutely granulate.

Length.—3.2 mm.

Type.—The description is from the holotype in the Pic collection (MNHP). It has the data — Caracal (Minas Geraez) Brasil, E. Gounelle, I.2.1885, Le Nat. No. 412, 1904, p. 103, Type TYPE, fulvopubens Pic.

***Stichtoptychus germaini* (Pic)**

Cathorama germaini Pic, 1923b, p. 5; Blackwelder, 1945, p. 405. *Stichtoptychus germaini* (Pic), White, 1974, p. 233.

General.—Body 1.8–2.0 times as long as wide; elytra in basal two-thirds nearly parallel sided, slightly widest near middle. Pubescence on dorsum short, fine, medium in density, light yellowish gray, not swirled. Body dull dark brown, with patches of reddish brown; surfaces distinctly shiny.

Head.—Front nearly evenly rounded throughout; punctation dual; eyes medium in size, separated by 2.0–2.4 times vertical diameter of an eye. Last segment of maxillary palpus about as wide as long, distal margin broadly, inwardly arcuate; last segment of labial palpus a little wider than long, distal margin truncate to feebly, inwardly arcuate.

Dorsal surface.—Pronotal disk with dual punctation, large punctures about 3–4 times size of small punctures; surface before posterior angle bluntly, sinuately produced, punctation obscure, dual, surface with weak granules and weakly alutaceous. Elytral disk with dual punctation in addition to punctures of striae, elytral surface on apical third granulate and alutaceous; with 10 striae, most quite distinct, impressed apically, much weaker and represented by punctures anteriorly, not attaining base.

Ventral surface.—Metasternum with dual punctation, moderate in density. Abdominal sutures bisinuate, weak at middle, distinct at sides; punctation distinctly dual; abdomen of male with apex of 3d segment, with 4th segment, and base of 5th segment shallowly, broadly depressed; abdomen of female unmodified; apex of 5th segment in both sexes broadly convex, granulate.

Length.—2.9–4.0 mm.

Type.—The type of this species is discussed in White (1974, p. 233).

Discussion.—This Chilean species is known from nine specimens from Province Valparaíso, between Concón and Quintero, and Province Linares, Cord. Parral, Fdo. Malcho.

The male genitalia of this species are illustrated in White (1974, p. 249).

Stichtoptychus granulosus (Pic)

Calymnaderus granulosus Pic, 1923a, p. 7; Blackwelder, 1945, p. 404.

Stichtoptychus granulosus (Pic), White, 1974, p. 234.

General.—Body 2.0–2.1 times as long as wide; elytra in basal two-thirds nearly parallel sided. Pubescence on dorsum medium in density, very short, appressed, vaguely yellowish gray, not swirled. Body dull dark reddish brown, margins and striae darker; dorsal surface and head weakly shiny, ventral surface more shiny than dorsal surface and head.

Head.—Front evenly rounded; surface densely, rather coarsely granulate-punctate; eyes medium in size, separated by 2.0–2.2 times vertical diameter of an eye. Last segment of maxillary palpus about 1.2 times as long as wide, distal margin broadly, rather shallowly notched; last segment of labial palpus slightly longer than wide, distal margin broadly, shallowly notched.

Dorsal surface.—Pronotal disk densely granulate-punctate; surface at side rounded before posterior margin, not bulging, sculpture of moderate-sized granules on a finely granulate background. Elytral disk (in addition to punctures of striae) granulate-punctate, granulation less coarse than on pronotum; elytron at side with 3 distinctly impressed striae, uppermost weakest; on apical half with 7 additional weak striae, all strongest posteriorly and weaker to obsolete anteriorly, 4th stria nearly attaining base.

Ventral surface.—Metasternum with dual punctation, abdominal sutures 2, 3, and 4 bisinuate, surface with dual punctation; abdomen of male from 3d segment to middle of 5th segment broadly, shallowly depressed, 5th segment at center rather broadly produced each side of center, behind this with a distinct, nearly circular depression; abdomen of female with 3d and 4th segments at center slightly depressed, 5th segment unmodified.

Length.—2.7–3.4 mm.

Type.—The type is discussed by White (1974).

Discussion.—This species is known only from Chile; no precise localities are known.

The male genitalia are illustrated by White (1974, p. 249).

Stichtoptychus griseus, new species

(Fig. 3)

General.—Body 1.6–1.7 times as long as wide; elytral sides subparallel in basal half. Pubescence on dorsum very short, medium in density, dull light grayish, with a slight sheen in bright light, elytra with no swirled patches, pronotum with slightly swirled patches. Body dark brown, head and pronotum red brown; surfaces moderately shiny.

Head.—Front moderately, nearly evenly convex, slightly depressed adjacent to eye; punctation fine, dense, of 1 size; with a shallow, narrow groove over eye, weakly continued to over antennal base; eyes medium in size, bulging, separated by 1.7–1.9 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, longer than wide, distal angle a little greater than a 45°, distal margin nearly straight, mesal angle narrowly rounded; last segment of labial palpus longer than wide, distal angle a little less than a right angle, distal margin very weakly sinuate, mesal angle narrowly rounded.

Dorsal surface.—Pronotal disk with fine, dense punctation, obscurely dual, large and small punctures intergrading in size; lateral margin narrowly reflexed, surface weakly concave, punctation dense, somewhat coarse, dual, distinct, large punctures separated on an average by less than diameter of a large puncture and about 3–4 times diameter of a small puncture. Elytral disk with (in addition to punctures of striae) fine, dense, distinct, obscurely dual punctation; at side with 2 complete, distinct, impressed striae, with a 3d more or less

impressed stria; with 7 additional striae, not impressed, formed of large shallow punctures, weakest apically.

Ventral surface.—Metasternum anteriorly at side with fine, obscurely dual punctation, large punctures weak, punctation uniform throughout metasternum. Abdominal suture 2 weakly bisinuate, suture 3 moderately bisinuate, suture 4 more clearly bisinuate; punctation fine, dense, obscurely dual; surface nearly evenly convex throughout, 5th segment nearly flat front to back to slightly depressed basally and apically.

Length.—2.2–2.4 mm.

Types.—The holotype (sex?; in ZMSP) bears the data – Rio Cauaburi, AM, Brasil, 9.XII.1962, J. Bechyne col. The single paratype (in USNM) bears – Ilha dos Buzios, S. Paulo-Brasil, 16.X-4.XI.1963, Exp. Dept. Zool., Dept. Zool. Sao Paulo, 66–71.

Discussion.—This species differs from *rubidus* in that the eyes are larger (separated by 1.7–1.9 times vertical diameter of an eye) and the body is dark brown; the eyes of *rubidus* are smaller (separated by 2.1–2.3 times vertical diameter of an eye) and the body is red brown.

The specific name, meaning gray, refers to the color of the pubescence.

Stichtoptychus holosericeus (Pic), new combination

Cathorama holosericea Pic, 1904d, p. 103; Blackwelder, 1945, p. 405.

General.—Body about 1.8 times as long as wide; elytral sides subparallel in basal half. Pubescence on dorsum short, medium in density, pale yellowish with a luster in light, forming numerous (more than 10) small, swirled patches on elytra, producing light and dark areas. Body mostly dark brown, elytra with vague reddish vittae apically, head, abdomen, and part of metasternum reddish; surfaces moderately shiny.

Head.—Front strongly, nearly evenly convex, weakly depressed adjacent to eyes; with a narrow, moderately distinct groove over each eye, groove weakly continued to over antennal base; fine, moderately dense punctation of 1 size obscured by minutely alutaceous surface; eyes bulging, medium in size, separated by about 2.1 times vertical diameter of an eye. Last segment of maxillary palpus triangular, nearly as wide as long, distal margin sinuate,

distal angle pointed, mesal angle rounded; last segment of labial palpus triangular, width nearly as great as length, distal margin sinuate, distal angle pointed, mesal angle rounded.

Dorsal surface.—Pronotal sculpture of fine, moderately dense, dual punctation, large punctures 3–4 times size of small punctures, separated on an average by 2–3 times diameter of a puncture; surface to side nearly evenly convex, at side nearly flat front to back; lateral margin weakly reflexed; sculpture at side of dense, dual punctation, large punctures separated on an average by about diameter of a puncture, at extreme side punctation grading into granulation. Elytral disk with (in addition to punctures of striae) fine, moderately dense, dual punctation, large punctures separated on an average by 2–3 times diameter of a puncture; at side with 2 more or less distinctly impressed striae, near base marked by large, deep punctures, with additional irregularly indicated striae marked by large, shallow punctures, almost obsolete apically; intervals flat nearly throughout.

Ventral surface.—Metasternum anteriorly at side with fine, moderately dense, dual punctation, large punctures separated on an average by about 2 times diameter of a puncture, small punctures obscure, not dense. Abdominal suture 2 weakly bisinuate, suture 3 clearly bisinuate; suture 4 continuous with lateral margin of abdomen, 5th segment distinctly set off from 4th segment and appearing nearly as a pygidium, convex at base, weakly depressed before apex; surfaces with fine, dense, dual punctation, sides of basal segments and much of 4th and 5th segments finely alutaceous.

Length.—3.5 mm.

Type.—The description is from the holotype in the Pic collection (MNHP). It bears the data – Caraca (Minas Geraes) Brasil, E. Gounelle 1.2.1885, Le Nat. No. 412, 1904, p. 103, type TYPE, *holosericea* Pic.

Stichtoptychus homalus White

Stichtoptychus homalus White, 1974, p. 235.

General.—Body about 1.9 times as long as wide; elytra subparallel in about basal two-thirds to vaguely widest near middle. Pubescence on dorsum short, sparse, light grayish, with slight sheen in bright light, that on elytra not swirled, vaguely swirled on pronotum. Body predominantly dark reddish brown; surfaces moderately shiny.

Head.—Front convex as usual, slightly bulging above antennal insertions; surface coarsely, densely punctate-granulate to primarily granulate, punctation obscurely dual; with a distinct groove over each eye, groove strongly continuing over antennal base; eyes small, bulging, separated by 2.3–2.7 times vertical diameter of an eye. Maxillary palpus subtriangular, a little longer than wide, distal margin weakly, inwardly arcuate, mesal and distal angles more or less pointed; labial palpus subtriangular, a little longer than wide, distal margin weakly, inwardly arcuate, distal angle pointed, mesal angle rounded.

Dorsal surface.—Pronotal disk with distinct, moderately dense, dual punctation, large punctures about 3 times diameter of small punctures, surface with weak indication of smooth granules; surface at side moderately, nearly evenly convex, with dense, smooth-topped granules on an alutaceous background, some granules running together. Elytral disk with (in addition to punctures of striae) fine, obscurely dual, moderately dense punctation and weak indication of smooth granules, granules strong at elytral apex; elytron with 10 distinct, more or less complete striae, at side strongly impressed, discal striae impressed apically, becoming less distinct to obsolete at base.

Ventral surface.—Metasternum throughout with dual, moderately dense punctation, large punctures clearly smaller near middle. Abdominal sutures 2 and 3 more or less weakly bisinuate, 4th suture distinctly anteriorly arcuate; surface with distinctly dual, moderately dense punctation, at sides and apex surface granulate; abdomen of male more or less distinctly, broadly depressed medially from 2d segment to 5th segment; abdomen of female unmodified to slightly depressed medially.

Length.—3.5–4.6 mm.

Types.—The 5 paratypes at hand bear the data—Prov. Linares, Cord. Parral, Fdo. Malcho, Prov. Nuble, Fdo. Malcho, Cord. Parral, Prov. Cautin, 3 OKms NE. Villarrica, and Pemuhue, Bio Bio. The type (from the first locality here) is in the Luis Peña collection in Santiago, Chile. It is discussed more fully in White (1974).

Discussion.—Six of the eight none-type specimens on hand bear the label—S. Arg. Rio-Negro, El Boison, Topal. Two specimens bear—S. Arg. Chubut, El Puelo, Topal. Six of the specimens are in HAHC, two are in USNM. I have compared external anatomy and male genitalia of this series

with paratypes of *homalus* and found no differences. The male genitalia of this species are illustrated in White (1974, p. 249).

Stichtoptychus incisus White

(Fig. 14)

Stichtoptychus incisus White, 1974, p. 237.

General.—Body about 2 times as long as wide; elytra subparallel in basal two-thirds. Pubescence on dorsum very short, moderately sparse, appressed, gray with a weak yellow hue, not swirled. Body dark red brown; surfaces moderately shiny.

Head.—Front convex, at middle with a shallow depression; surface confusedly granulate-punctate, granules moderate in size and density, punctures obscurely dual; eyes medium in size, separated by 2.1–2.2 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, about 1.5 times as long as wide, distal margin inwardly arcuate, distal and mesal angles pointed; last segment of labial palpus subtriangular, a little longer than wide, distal margin inwardly arcuate, distal angle pointed, mesal angle rounded.

Dorsal surface.—Pronotal disk with dual punctation on a smooth surface, larger punctures about 3–4 times size of smaller punctures; side of pronotum above lateral margin bluntly produced, sculpture of dual punctation on obscurely granulate surface. Elytral disk (in addition to punctures of striae) obscurely granulate punctate, granules distinct near apex, punctation obscurely dual; elytron with 10 distinct striae, all most distinct apically, 3 lateral striae distinct nearly to base, remaining 7 much weaker anteriorly.

Ventral surface.—Metasternal sculpture of dual punctation. Abdominal sutures 2, 3, and 4 bisinuate, last most clearly so (fig. 14); punctation dual; abdomen of male distinctly, broadly depressed from 3d to middle of 5th segment (female not seen).

Length.—3.6–4.0 mm.

Types.—The type series of 3 males (from Chile) bears the data—Prov. Nuble, Fdo. Malcho, Cord. Parral, and Prov. Linares, Cord. Parral, Fdo. Malcho. The type from the first locality here is in the Luis Peña collection at Santiago, Chile.

Discussion.—Further notes on this species are in White (1974). The male genitalia of this species are illustrated on page 247 of this reference.

Stichtoptychus megalops, new species

General.—Body 1.8 times as long as wide; elytral sides very broadly arcuate, widest before middle. Pubescence on dorsum very short, sparse, dull light gray with no swirled patches. Body red brown, head and abdomen lightest; surfaces distinctly shiny.

Head.—Front strongly, nearly evenly convex, slightly depressed adjacent to eye; punctation fine, dense, not dual; with a moderately distinct groove adjacent to eye, weakly continued to over antenna base; eyes large, bulging, separated by 1.3 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, a little longer than wide, distal angle less than 90° angle, distal margin weakly sinuate, mesal angle narrowly rounded; last segment of labial palpus subtriangular, a little longer than wide, distal angle a little less than a right angle, distal margin straight, mesal angle narrowly rounded.

Dorsal surface.—Pronotal disk with fine, moderately dense, dual punctation, large and small punctures nearly intergrading in size, large punctures separated on an average by 2 times diameter of a puncture; lateral margin weakly recurved, surface at side nearly flat, sculpture of dense, distinct, dual punctation, large punctures touching to separated by diameter of 1 puncture, much larger than small punctures. Elytral disk with (in addition to punctures of striae) fine, distinct, moderately dense punctures of 1 size; at side with 2 distinct, more or less complete striae, impressed at apical half; a 3d short stria weakly impressed, very weak apically; with 7 additional striae, formed of lineate punctures, weakest apically.

Ventral surface.—Metasternum anteriorly at side with very fine punctation of 1 size, moderate in density, large punctures absent on metasternum. Abdominal suture 2 nearly straight, suture 3 bisinuate, suture 4 clearly bisinuate; punctation fine, dense, obscurely dual; abdomen shallowly depressed at middle of 4th suture, 5th segment bluntly, longitudinally carinate at apex.

Length.—2.5 mm.

Type.—The male holotype and only specimen (No. 72658 in USNM) bears the data—Peru, Satipo, IX-X, 1942, Paprzycki.

Discussion.—This species differs from its relative *parvus* in that the eyes are larger (separated by 1.3 times vertical diameter of an eye) and the

elytral apex is lighter than the remainder of the elytra; the eyes of *parvus* are separated by 1.7 times vertical diameter of an eye, and the elytral apex is not lighter than the remainder of the elytra.

This is one of the large-eyed species of *Stichtoptychus*; the specific name refers to this character.

Stichtoptychus mexicanus (Pic), new combination

Catorama mexicana Pic, 1927b, p. 10; Blackwelder, 1945, p. 405.

Catorama mexicana multistriata Pic, 1927b, p. 10. NEW SYNONYMY.

General.—Body 1.8 times as long as wide; sides of elytra subparallel in basal half. Pubescence on dorsum fine, short, of medium density, dull whitish, with almost no luster in light, regular in direction, not forming inclined patches. Body brown, head, elytral apex, and abdomen reddish; surfaces moderately shiny nearly throughout.

Head.—Front strongly, nearly evenly convex throughout, slightly depressed adjacent to eyes; surface with fine, moderately dense, dual punctation, large punctures separated on an average by less than diameter of a puncture, large punctures much smaller, sparser dorsally, on vertex approaching size of small punctures; with a distinct, deep groove over each eye, weakly continued to over antennal base; eyes large, bulging, separated by 1.6 times vertical diameter of an eye. (Palpi not seen.)

Dorsal surface.—Pronotal sculpture on disk of fine, dense punctation, obscurely dual, larger punctures very small, nearly intergrading in size with small punctures and separated on an average by 3 times diameter of a puncture; nearly evenly convex to side, at side nearly flat front to back, surface at side with fine, dense, dual punctation, large punctures much larger than small punctures, separated on an average by less than diameter of a puncture, some large punctures confluent, large punctures densest at extreme side. Elytral disk with fine, dense, minute punctation in addition to punctures of striae, some punctures slightly larger than others, but punctation not clearly dual; at side with 2 distinctly impressed striae, near base formed of large, deep punctures, at level of metasternum a 3d stria of large deep punctures, with additional 7 striae clearly marked nearly throughout by well-aligned punctures.

Ventral surface.—Metasternum anteriorly at side with fine, moderately dense, dual punctation, large punctures separated on an average by 1-2 times diameter of a puncture, small punctures less dense than usual. Abdominal sutures 2 and 3 moderately bisinuate, suture 4 weakly bisinuate; sculpture of fine, moderately dense, dual punctation; 5th segment nearly flat front to back, outer margin finely granulate.

Length.—3.2 mm.

Type.—The description is from the holotype in the Pic collection (in MNHP). It bears the data - Mexico, type, TYPE, mexicana n. sp.

Discussion.—The type of *C. mexicana multi-striata* Pic is larger and has the elytral striae more distinct than the type of *C. mexicana*, but I regard the differences as within the expected range of species variation.

Stichtoptychus minutus (Solier)

Calymnaderus minutus Solier, 1849, p. 474; Pic, 1912, p. 65; Blackwelder, 1945, p. 405.

Stichtoptychus minutus (Solier). White, 1974, p. 238.

General.—Body about 1.9 times as long as wide; elytra widest near middle. Pubescence on dorsum medium in density, short, yellowish gray, not swirled. Body dull red brown; surfaces moderately shiny.

Head.—Front convex; surface finely, densely punctate, punctures varying slightly, irregularly raised; with a distinct groove over eye; eyes medium in size, separated by 2.0 times vertical diameter of an eye. (Palpi not seen.)

Dorsal surface.—Pronotal disk with dual punctation, larger punctures separated by a little more than their diameter, surface with blunt, weak granules; surface at side inflated above lateral margin, with dual punctation, larger punctures separated by a little more than their diameter, surface with blunt, weak granules. Elytral discal punctation (in addition to punctures of striae) similar to that of pronotum, larger punctures separated on an average by 2-3 times their diameter, surface weakly granulate; posteriorly at side with 2 distinct striae, weaker anteriorly, lower 1 anteriorly attaining fovea for middle leg, posteriorly curving up elytral declivity, upper 1 attaining metasternum; a 3d, less distinct stria attaining metasternum, other feeble striae detectable near apex.

Ventral surface.—Metasternal punctation

obscurely dual, large and small punctures intergrading in size. Abdominal sutures 2, 3, and 4 very weakly bisinuate; punctation dual; abdomen nearly evenly rounded throughout.

Length.—2.7 mm.

Type.—The type is from Santa Rosa, Chile, and is in the MNHP. No other specimen is known to me.

Stichtoptychus obscurus, new species

General.—Body 1.8 times as long as wide; elytral sides subparallel in basal half. Dorsum with very fine, very short, pale grayish pubescence, uniform in direction, not swirled, with almost no sheen in bright light. Body black nearly throughout, head dark brown; surfaces moderately to weakly shiny.

Head.—Front distinctly, nearly evenly convex, at middle with a weak tubercle; sculpture of fine, moderately dense granulation on a minutely alutaceous background; with a narrow, distinct groove from over eye to over antennal base; eyes very small, separated by 3.7 times vertical diameter of an eye. (Palpi not seen.)

Dorsal surface.—Pronotal disk with very fine, minute, indistinct, obscurely dual punctation; surface at side nearly evenly convex; lateral margin sharp, not quite attaining anterior margin, at side with small, dense, shiny granules on a minutely alutaceous background. Elytral disk with (in addition to punctures of striae) very fine, minute, obscurely dual punctation; at side with 3 distinct, impressed striae, lateral 2 most distinct, all 3 weaker anteriorly, in addition with 7 more or less clearly indicated striae, all finely impressed apically, marked on disk by large, shallow, aligned punctures; intervals on disk flat, those at sides and apex more or less convex.

Ventral surface.—Metasternum nearly throughout with fine, dense, dual punctation, anteriorly at side minutely alutaceous, punctation thus obscured. Abdominal sutures 2, 3, and 4 bisinuate, last most distinctly so; at middle with fine, dense, dual punctation, at sides and apex of abdomen punctation densest, coarser, running together and surfaces thus becoming finely granulate; 5th segment nearly flat front to back.

Length.—4.5 mm.

Type.—The female holotype (in UC) bears the data - Mario Pino, Valparaiso Chile, Collicuan, 8-Dic 1972, H. Sielfeld.

Discussion.—The specific name refers to the in-

distinct punctures found anteriorly on each side of the metasternum; the punctures are obscured by an alutaceous surface.

In addition to the characters given in couplet 30 of the key, this species differs from its nearest relative *tenuivittatus* in having the elytral apices less distinctly granulate.

Stichtoptychus obsoletus White

(Fig. 5)

Stichtoptychus obsoletus White, 1974, p. 239.

General.—Body 1.9–2.0 times as long as wide; elytral sides subparallel in basal two-thirds. Pubescence on dorsum very short, moderately sparse, gray, usually with a weak yellow hue, not swirled. Body dark red brown, margins and striae nearly black, body sometimes clouded with black; most surfaces moderately shiny, apices of elytra and abdomen less shiny.

Head.—Front at center usually weakly depressed; sculpture of dual punctures on a fairly smooth surface; with a distinct, diagonal groove extending from above each eye to over antennal base; eyes medium in size to small, separated by 2.0–2.5 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, about 1.4 times as long as wide, distal margin inwardly arcuate, distal angle pointed, mesal angle narrowly rounded; last segment of labial palpus slightly longer than wide, distal margin inwardly arcuate, distal angle pointed, mesal angle rounded.

Dorsal surface.—Pronotal disk with dense, dual punctation on a smooth surface, a large puncture 4–5 times diameter of a small puncture; surface before posterior angle bluntly produced, sculpture above blunt production variable, usually with smooth-topped granules over dual punctation, sometimes large punctures sparse, and smooth-topped granules over finely punctate-granulate background, sculpture at extreme side of smooth-topped granules over finely granulate background. Elytral disk with (in addition to punctures of striae) dual punctation, large punctures about 2 times size of small punctures, surface obscurely granulate, distinct on about apical third of elytron; elytron at side with 3 nearly complete, impressed striae, lower 2 more strongly impressed than upper 1; at posterior 3d with 7 more or less distinctly im-

pressed striae, anteriorly weaker, punctures of striae poorly aligned.

Ventral surface.—Metasternal sculpture of dual punctation on a smooth surface. Abdominal sutures 2, 3, and 4 more or less weakly bisinuate; punctation dual; male with distinct, elongate, broad depression from apex and 2d segment to past middle of 5th segment; abdomen of female not modified; 5th segment in both sexes finely granulate at sides.

Length.—2.9–3.6 mm.

Types.—The type specimens (see White, 1974, p. 241) are from Chile and have the following specific localities—Prov. Nuble, Las Cabras, 1500 m, Cord. Chillan; Prov. Nuble, Las Trancas, Cord. Chillan; Prov. Nuble, Fdo. Malcho, Cord. Parral; and Prov. Nuble, Cord. Chillan, Las Trancas. The type (from the first locality here) is in the Luis Peña collection in Santiago, Chile.

Discussion.—The male genitalia of this species are illustrated in White (1974, p. 249).

Stichtoptychus ocellatus, new species

(Figs. 4, 13)

General.—Body 1.8–1.9 times as long as wide; elytra subparallel in basal two-thirds to widest before middle. Pubescence on dorsum light in color, weakly yellow, with a sheen in bright light, medium in length and density, semishaggy, with numerous generally small, swirled patches forming light and dark areas. Body beneath pubescence dark brown, abdomen sometimes red brown; dorsal surface and head weakly shiny, ventral surface more shiny than dorsal surface.

Head.—Front strongly convex, sometimes weakly depressed at middle; at middle with distinct granulation on a finely, obscurely punctate-granulate background; with a very distinct groove over eye, strongly extending to over antennal base; carina over antenna produced; eyes small, bulging, separated by 2.4–2.8 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, a little longer than wide, distal angle somewhat pointed, distal margin weakly sinuate, mesal angle narrowly rounded; last segment of labial palpus subtriangular, about as wide as long, distal angle nearly a right angle, distal margin weakly, inwardly arcuate, mesal angle very broadly rounded.

Dorsal surface.—Pronotal disk with distinctly dual punctation, large punctures separated on an average by diameter of a puncture or a little less,

margin of punctures sometimes raised; at side surface weakly convex, lateral margin very narrowly recurved, sculpture of dense, smooth granules on a finely alutaceous background (fig. 13). Elytral disk with dual punctation, large punctures weak to obscure, small punctures very dense, surface often irregularly granulate; at side with 3 distinctly impressed granulate striae, 1st complete, 2d and 3d obsolete basally, 3d sometimes weaker apically; with 7 additional, less distinct striae, weak to obsolete basally, stronger apically.

Ventral surface.—Metasternum anteriorly at side with dual punctation, large punctures separated on an average by less than diameter of a puncture, large punctures small, sparser posteriorly on metasternum. Abdominal sutures 2, 3, and 4 bisinuate, 4th strongly arcuate at middle; punctation distinctly dual; 5th segment depressed apically (male?) or not, usually weakly depressed basally, apex densely granulate.

Length.—2.8–3.7 mm.

Types.—The female holotype (No. 72650 in USNM) bears the data – Brasilien, Nova Teutonia, 27°11' B 52°23' L, Fritz Plaumann, 300 bis 500m, IV 1947. The data on the 5 paratypes differ only as follows: VII 1947 (2 in USNM); X 1966 (1 in ZMSP); VII 1945 (1 in USNM); V 1947 (1 in AC).

Discussion.—This species differs from its relative *granulosus* in that the elytral pubescence is clearly swirled thus producing more or less distinct light and dark patches; the elytral pubescence of *granulosus* is not swirled.

The eyes of this species are among the smallest of members of the genus; the specific name refers to the small eyes.

***Stichtoptychus ornamentus*, new species**

(Fig. 22)

General.—Body about 1.7 times as long as wide; elytra slightly widest before middle. Pubescence on dorsum medium in density, obscuring surface, weakly yellow, with a sheen in bright light, with numerous swirled patches forming more or less distinct light and dark areas. Body beneath pubescence red brown, most margins and vague elytral vittae darker; body moderately shiny, head and sides of abdomen less shiny than remainder.

Head.—Front strongly convex, nearly as a segment of a sphere; surface finely, densely, somewhat coarsely punctate, punctures variable in size; with a

wide, deep groove over eye, continued to over antenna base; eyes aberrant (fig. 22), location on head lateral rather than typical anterolateral location, small, separated by about 2.4 times vertical diameter of an eye, anterior margin straight, ventral margin above antennal insertion notched. Maxillary palpus subtriangular, longer than wide, distal angle nearly a right angle, distal margin distinctly sinuate, mesal angle nearly a right angle; labial palpus subtriangular, about as wide as long, distal angle nearly a right angle, distal margin sinuate, mesal angle broadly rounded.

Dorsal surface.—Pronotal disk with distinct, dual punctation, large punctures about 3 times size of small punctures and separated on an average by about 2 times size of a small puncture; surface at side nearly flat, margin distinctly produced, sculpture of distinct, dual punctation, large punctures larger, denser than on disk, about 4 times diameter of a small puncture, separated by much less than diameter of a puncture. Elytral disk with (in addition to punctures of striae) fine, distinct, dense, not dual punctation; at side with 2 distinct, complete, impressed striae; with a 3d non-impressed stria at basal half; with 7 additional more or less indicated striae of punctures, these obsolete at apex.

Ventral surface.—Metasternum anteriorly at side with fine, dual punctation, larger punctures weak, 2–3 times diameter of smaller punctures and separated on an average by 2–3 times diameter of a large puncture (middle of metasternum concealed). Abdominal sutures 2 and 3 bisinuate, suture 4 a little more strongly bisinuate; punctation fine, somewhat obscure, dual; surface convex, at middle of 4th suture slightly flattened.

Length.—2.7 mm.

Type.—The male holotype and only specimen (No. 72653 in USNM) bears the data – Huadquina, 5000 ft., 30 July, 1911, Yale Peru Exp.

Discussion.—This species differs from its relative *platyops* in that the elytral pubescence is swirled in part and produces light and dark patches; the elytral pubescence of *platyops* is not swirled.

The specific name refers to the swirled elytral pubescence.

***Stichtoptychus parvus*, new species**

General.—Body 1.5 times as long as wide; elytral sides subparallel in basal half. Pubescence on dorsum medium in length and density, slightly shaggy,

dull gray yellowish, with vague sheen in bright light, with no swirled patches. Body dark brown, abdomen and, to a lesser extent, head red brown; surfaces moderately shiny.

Head.—Front moderately, nearly evenly convex; with fine, dense, distinct punctation of 1 size; with a moderately distinct groove over eye, weakly continued to over antennal base; eyes large, bulging, separated by 1.7 times vertical diameter of an eye. Maxillary palpus subquadrate, about 2 times as long as wide, distal angle quite strongly pointed, nearly fingerlike, distal margin strongly, inwardly arcuate, mesal angle distinctly pointed; last segment of labial palpus subquadrate, a little longer than wide, distal angle distinctly pointed, distal margin strongly, inwardly arcuate, mesal angle distinctly pointed.

Dorsal surface.—Pronotal disk with fine, dense, distinct, obscurely dual punctation, lateral margin rather broadly recurved, surface at side weakly concave, sculpture of dense, dual punctation, large punctures large, shallow, running together. Elytral disk with (in addition to punctures of striae) fine, dense punctation of 1 size; at side with 2 distinct, complete, impressed striae, in addition with 8 less distinct striae of large, shallow punctures, striae weakest near apex.

Ventral surface.—Metasternum anteriorly at side with moderately dense, obscure, dual punctation, surface at extreme side alutaceous, punctation similar throughout. Abdominal suture 2 nearly straight, sutures 3 and 4 moderately bisinuate; punctation dense, somewhat coarse, obscurely dual; surface nearly evenly convex.

Length.—1.9 mm.

Type.—The holotype and only specimen (sex?; in ZMSP) bears the data – Rio Cauaburi, AM, Brasil, 9.XII.1962, J. Bechyne col.

Discussion.—For characters distinguishing *parvus* from its relative *megalops*, see under the latter.

This is the smallest species of the genus; the specific name refers to the body size.

Stichtoptychus peruvianus (Pic), new combination

Priotoma peruviana Pic, 1904a, p. 19; Blackwelder, 1945, p. 406.

General.—Body about 1.6 times as long as wide; elytra widest at about middle. Pubescence on dor-

sum fine, short, of medium density, weakly yellowish, regular in direction, not forming light and dark patches. Body brown, head and abdomen reddish; moderately shiny nearly throughout.

Head.—Front distinctly convex, produced between eyes, not depressed adjacent to eyes; sculpture of fine, dense, obscurely dual punctation, larger punctures variable in size; with a moderately developed groove over each eye, weakly continued to over antennal base; eyes small, bulging, separated by about 3 times vertical diameter of an eye. (Maxillary palpus not seen.) Last segment of labial palpus triangular, about as wide as long, distal margin weakly bisinuate.

Dorsal surface.—Pronotal sculpture on disk of fine, dense, minute punctures, some punctures slightly larger than others, surface less convex at side, nearly flat front to back; lateral margin weakly reflexed; sculpture at side of fine, dense granulation, granules variable in size. Elytral disk with fine, dense, obscurely dual punctation in addition to punctures of striae, large punctures small, variable in size and density; at side with 2 distinctly impressed striae in apical two-thirds, also with 8 additional striae, formed of large, flat punctures more or less aligned to confused, 8 striae obsolete apically; intervals on side convex, on disk flat.

Ventral surface.—Metasternum anteriorly at side with obscurely dual punctation, large punctures moderately distinct, separated on an average by 1–2 times diameter of a puncture, small punctures obscure. Abdominal sutures 2, 3, and 4 weakly bisinuate; surface with fine, moderately dense, dual punctation; abdomen nearly convex throughout, 5th segment weakly convex front to back.

Length.—2.2 mm.

Type.—The description is from the holotype in the Pic collection (MNHP). It bears the data – Vilcanota Peru, type, TYPE, *Priotoma peruviana* Pic.

Stichtoptychus platyops, new species

(Fig. 20)

General.—Body 1.6 times as long as wide; elytra vaguely widest just behind humeri. Pubescence on dorsum medium in density, very light grayish, with a weak sheen in bright light, not swirled. Elytra and abdomen dark brown, elytra vaguely red brown apically, pronotum, head, and abdomen red

brown; body surfaces moderately shiny, abdominal apex weakly shiny.

Head.—Front strongly convex, nearly as a segment of a sphere; punctation fine, moderate in density, of 1 size; with a distinct, deep groove over eye, strongly continuing to over antennal base, groove very wide at anterior margin of eye; eyes aberrant, small, flattened, separated by 2.8 times vertical diameter of an eye, located laterally on head as opposed to normal anterolateral location (fig. 20), dorsal margin of eye nearly straight, anterior margin outwardly arcuate. Last segment of maxillary palpus forming nearly an equilateral triangle, a little longer than wide, distal angle less than a right angle, distal margin nearly straight, mesal angle less than a right angle; labial palpus subtriangular, slightly longer than wide, distal angle less than a right angle, distal margin nearly straight, mesal angle broadly rounded.

Dorsal surface.—Pronotal disk with fine, distinct, moderately dense punctation, with very obscure indication of large punctures; surface at side evenly, moderately convex, lateral margin narrowly reflexed, punctation distinct, dual, large punctures about 2–3 times size of smaller punctures, variable in size and nearly intergrading with smaller punctures, larger punctures separated on an average by about 2 times diameter of a puncture. Elytral disk with (in addition to punctures of striae) fine, distinct, moderately dense punctation, with vague indications of larger punctures; at side with 2 distinct, complete striae, 1st impressed, 2d mostly impressed; with a 3d incomplete, vaguely impressed stria and 7 incomplete striae at basal half, formed of punctures.

Ventral surface.—Metasternum anteriorly at side with fine, not dual punctation, moderate in density, at middle punctation dual, large punctures large, distinct, small punctures weak. Abdominal suture 2 weakly bisinuate, suture 3 a little more clearly bisinuate, suture 4 anteriorly arcuate at middle; punctation more or less clearly dual, moderate in density; 5th segment vaguely flattened front to back.

Length.—2.3 mm.

Type.—The male holotype and only specimen (type No. 72655 in USNM) bears the data – Peru, Satipo, X, 1942, Paprzycki.

Discussion.—For differences between this species and its relative *ornamentus*, see under the latter.

The specific name refers to the flattened eyes.

Stichtoptychus presuturalis (Pic). new combination

Catorama presuturalis Pic, 1927a, p. 186; Blackwelder, 1945, p. 405.

General.—Body 1.7 times as long as wide; elytral sides subparallel in basal half. Pubescence on dorsum fine, short, medium in density, mostly regular in direction, inclined in places but not forming swirled patches, feebly yellowish. Body dark brown, head and abdomen reddish; moderately shiny throughout.

Head.—Front strongly, nearly evenly convex, less distinctly convex adjacent to eyes; sculpture of fine, dense, dual punctation, larger punctures but slightly larger than small punctures, nearly intergrading in size with them; with a moderately distinct groove over each eye, weakly continued to over antennal base; eyes large, bulging, separated by 1.6 times vertical diameter of an eye. Last segment of maxillary palpus triangular, a little longer than wide, both distal and mesal angles more or less pointed; last segment of labial palpus triangular, a little longer than wide, distal angle pointed, mesal angle more nearly rounded.

Dorsal surface.—Pronotal sculpture on disk of fine, dense, dual punctation, large punctures about 3 times size of a small punctures, separated on an average by about 2–3 times diameter of a puncture; surface to side nearly evenly convex, at side nearly flat front to back; lateral margin very narrowly, weakly recurved; at side with very dense, dual punctation, larger punctures as much as 5–6 times size of small punctures but variable in size, separated on an average by less than diameter of a puncture and irregularly running together. Elytral disk with (in addition to punctures of striae) fine, dense punctation that is obscurely dual, but 2 sizes of punctures intergrading; at side of elytron with 2 more or less clearly, not deeply impressed striae, marked by punctures anteriorly, elytron also with 8 additional striae formed of large, shallow, well-aligned punctures, all 8 striae weaker to nearly obsolete anteriorly and posteriorly; all intervals flat.

Ventral surface.—Metasternum anteriorly at side with fine, dense, dual punctation, large punctures quite variable in size; pit at middle of metasternum largely below level of tarsal grooves,

and about 3 times as long as wide. Abdominal sutures 2 and 3 weakly bisinuate, suture 4 a little more clearly bisinuate; surface with fine, dense, dual punctation, punctation on 5th segment denser, large punctures less distinct; abdomen nearly evenly convex throughout, 5th segment nearly flat front to back.

Length.—2.9 mm.

Type.—The description is from the holotype in the Pic collection (MNHP). It bears the data — Amazonas, n. sp., type, TYPE, presuturalis n. sp.

Stichtoptychus productus, new species

(Figs. 6, 21)

General.—Body 1.8–1.9 times as long as wide; elytra subparallel in basal half. Pubescence on dorsum light grayish, short, sparse, with very slight sheen in bright light, with no swirled patches, but forming vague vittae on elytra. Body dark brown to very dark brown, head and abdomen sometimes red brown; dorsal surface with a feeble luster, head and ventral surface clearly more shiny.

Head.—Front strongly convex, nearly as a segment of a sphere, depressed adjacent to eye, sometimes weakly flattened near middle; with distinct, dense, somewhat coarse, dual punctation, large punctures separated on an average by about 1–2 times diameter of a puncture; with a wide, deep groove over eye, strongly continued to over antennal base; eyes medium in size, bulging (fig. 21), separated by 1.7–2.0 times vertical diameter of an eye. Maxillary palpus subtriangular, a little longer than wide, distal angle narrowly rounded, distal margin inwardly arcuate and undulate, mesal angle narrowly rounded; labial palpus subtriangular, a little longer than wide, distal angle narrowly rounded, distal margin inwardly arcuate, mesal angle broadly rounded.

Dorsal surface.—Pronotal disk with dense, distinct, somewhat coarse, dual punctation and weak indication of granules, large punctures more or less weak, about 2 times diameter of a small puncture and separated on an average by 1–2 times diameter of a large puncture; surface at side convex to nearly flat, slightly concave immediately above anterior angle; lateral margin somewhat reflexed; sculpture of fine, dense granules on an alutaceous background; side of pronotum distinctly projecting ventrally. Elytral disk with (in addition to punctures of striae)

fine, very dense punctation of 1 size and weak indication of both granules and large punctures; elytron with 10 distinct striae, those at side impressed and complete, those on disk indicated by punctures and impressed apically, much weaker anteriorly, obsolete at base.

Ventral surface.—Metasternum anteriorly at side with distinctly dual punctation, large punctures separated on an average by 1–2 times diameter of a puncture, large punctures smaller at middle. Abdominal sutures 2, 3, and 4 bisinuate, last weakly so; punctation distinctly dual; abdomen nearly evenly convex; margins granulate.

Length.—2.8–3.7 mm.

Types.—The holotype (sex?) and a paratype (both in CNCI) bear — 5 mi. N. Mazatlan, Sin. MEX. VII.24–29, 1964, H. F. Howden. The 4 additional paratypes bear essentially the same data except for the dates as follows: VIII–5–7 (1 in CNCI); VII 24 (3 in USNM).

Discussion.—This species differs from all others of the genus in that the pronotum is produced ventrally (see fig. 6). The specific name refers to this feature.

Stichtoptychus pubiventris, new species

General.—Body about 1.9 times as long as wide; elytral sides subparallel in about basal half. Pubescence on dorsum very fine, short, medium in density, very dull whitish, nearly uniform in direction, lacking swirled patches but in some places weakly inclined, with a feeble luster in light. Body dark brown throughout; surfaces moderately shiny.

Head.—Front moderately, nearly evenly convex, weakly produced between antennal insertions; with a moderately deep, distinct, wide groove adjacent to each eye, distinct to over antennal insertion, surface with fine, moderately dense granulation, background finely punctate; eyes large, bulging, separated by about 1.7 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, a little less than 2 times as long as wide, distal angle pointed, distal margin inwardly arcuate; last segment of labial palpus subtriangular, a little longer than wide, distal angle pointed, distal margin inwardly arcuate.

Dorsal surface.—Pronotal disk granulate-punctate, granules not distinct, smooth topped, punctation very fine; surface at side weakly convex; lateral margin distinct to anterior angle; surface at

side with strong, dense, shiny granules, granules separated by less than diameter of a granule. Elytral disk with indistinct, smooth-topped granules, and with (in addition to punctures of striae) more distinct, fine, very dense punctation, apex granulate; at side with 2 distinct, impressed striae, much weaker anteriorly, above these with 8 weaker striae that are impressed in about apical third of elytron, striae weak to absent anteriorly, when detectable indicated by usually shallow, indistinct punctures; intervals flat, convex only at elytral apex.

Ventral surface.—Metasternum anteriorly at side with obscure granulation and obscure punctation, near middle with more distinct, obscurely dual punctation and little to no granulation. Abdominal sutures 2, 3, and 4 bisinuate, last most distinctly so; surface with dense, dual punctation, at side and apex with indistinct granulation; 5th segment shallowly concave front to back.

Length.—4.3 mm.

Type.—The male holotype and only specimen (in UC) has the data — Zapallar, Valparaiso, 3-VI-1970, J. Solervicens.

Discussion.—This specific name refers to the patch of dense pubescence posteriorly on the metasternum (possibly a male character). No other member of the genus bears this feature.

Stichtoptychus punctatus, new species

General.—Body 1.7 times as long as wide; elytra widest just behind humeri. Pubescence on dorsum fine, short, rather sparse, weakly yellow, with a slight sheen in bright light, with small, weakly swirled patches producing light and dark areas. Body beneath pubescence dark brown, head and abdomen slightly lighter than remainder; most of body moderately shiny, head and apex of abdomen weakly shiny.

Head.—Front convex, slightly depressed adjacent to eyes, somewhat produced between antennal insertions; surface very finely alutaceous and with fine, dense punctation, punctures varying somewhat in size but not dual, surface granulate above each eye; with a distinct, wide groove over each eye, weakly continuing to over antennal base; eyes large, bulging, separated by 1.6 times vertical diameter of an eye. (Palpi not seen.)

Dorsal surface.—Pronotal punctation on disk fine, dense, dual, larger punctures nearly inter-

grading in size with smaller punctures, large punctures separated on an average by 2–3 times diameter of a large puncture; lateral margin produced, surface nearly flat, punctation dual, larger punctures large, dense, coalescing, small punctures obscure, fine. Elytral disk (in addition to punctures of striae) with fine, dense punctation of 1 size; at side with 2 distinct, impressed, complete striae; with a 3d stria that is more or less impressed; with 7 additional striae, formed of punctures only, striae on disk weak, weakest before apex.

Ventral surface.—Metasternum with fine, dual punctation, large punctures largest at middle, anteriorly at side with large punctures separated on an average by about 3 times diameter of a large puncture. Abdominal suture 2 weakly bisinuate, suture 3 moderately bisinuate, suture 4 more distinctly bisinuate; punctation fine, dual; abdomen convex as usual, 5th segment nearly flat front to back.

Length.—3.1 mm.

Type.—The female holotype and only specimen (in HAHC) bears the data — 5000', nr. Pichinde, Valle, Colombia, July 19, 1970, H. & A. Howden.

Discussion.—This species differs from its relative *elegans* in that the elytral pubescence is of one color; the elytral pubescence of *elegans* is bicolored.

The specific name refers to the punctate elytral striae.

Stichtoptychus rubidus, new species

General.—Body 1.6–1.7 times as long as wide; elytral sides subparallel in about basal half. Pubescence on dorsum very short, sparse, dull light gray with a yellowish tinge, with slight sheen in bright light, elytra with no swirled patches, pronotum with slightly swirled patches. Body red brown, head, abdomen, and sometimes pronotum primarily red; surfaces moderately shiny.

Head.—Front distinctly, nearly evenly convex, slightly depressed adjacent to eye; punctation fine, dense, distinct, of 1 size; with a moderately distinct, shallow groove over eye, weakly continued to over antennal base; eyes medium in size, separated by 2.1–2.3 times vertical diameter of an eye, somewhat flattened. Last segment of maxillary palpus subtriangular, a little longer than wide, distal angle narrowly rounded, distal margin shallowly indented medially, mesal angle narrowly rounded; last segment of labial palpus subtriangular, width and

length subequal, distal angle a little less than a right angle, distal margin weakly notched, mesal angle broadly rounded.

Dorsal surface.—Pronotal disk with fine, dense, distinct punctation, obscurely dual, large and small punctures intergrading in size; surface at side weakly convex to nearly flat, lateral margin weakly, narrowly recurved, sculpture of dense, somewhat coarse, dual punctation, large punctures more or less indistinct, separated on an average by about diameter of a large puncture. Elytral disk with (in addition to punctures of striae) fine, moderately dense punctures of 1 size; at side with 2 distinct, complete, more or less impressed striae; with 8 additional striae formed of large, distinct punctures, weak to absent apically.

Ventral surface.—Metasternum anteriorly at side with fine punctation, moderate in density, very obscurely dual, punctation throughout metasternum obscurely dual, fovea distant from middle of metasternum. Abdominal suture 2 weakly to moderately bisinuate, sutures 3 and 4 more clearly bisinuate; punctation fine, dense, distinct, obscurely dual; surface nearly evenly convex, 5th segment nearly flat front to back.

Length.—2.1–2.3 mm.

Types.—The male holotype (USNM No. 72659) bears the data – Peru, Satipo, VII–VIII, 1942, Paprzycki; the 1 paratype differs only in having the date X, 1942 (in USNM).

Discussion.—For the differences distinguishing this species from its relative *griseus*, see under the latter.

The specific name refers to the reddish body.

Stichtoptychus subpubescens (Pic), new combination

Cathorama subpubescens Pic, 1904d, p. 103.

General.—Body 1.8 times as long as wide; elytral sides subparallel in basal half. Pubescence on dorsum weakly golden yellow to vaguely reddish, with a weak sheen in bright light, medium in length and density, weakly shaggy, without swirled, but with weakly inclined patches. Body brown, elytra with vague reddish vittae; surface moderately shiny.

Head.—Front nearly evenly convex throughout; punctation fine, moderate in density, obscurely dual; groove over eye narrow and shallow, weakly continued to over antennal base; eyes large, bulg-

ing, separated by 1.6–1.8 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, slightly wider than long, distal angle less than a right angle, narrowly rounded, distal margin clearly sinuate, mesal angle pointed and moderately broadly rounded; last segment of labial palpus subtriangular, width equal to length, distal angle forming an angle less than 45°, not rounded, distal margin weakly, inwardly arcuate, mesal angle broadly rounded.

Dorsal surface.—Pronotal disk with fine, dense, dual punctation, large punctures separated on an average by 1–3 times diameter of a puncture; surface at side weakly convex, lateral margin weakly, narrowly recurved; sculpture at side of dense, dual punctation, toward side becoming obscured and subgranulate, large punctures separated on an average by less than diameter of a puncture, in places irregularly aligned. Elytral disk with (in addition to weak punctures of striae) fine, dense, dual punctation, large punctures 2–3 times diameter of a small puncture, separated on an average by about 1–3 times diameter of a puncture; at side with 2 distinctly impressed striae, lower more nearly attaining base than upper; near middle of elytron with a short, punctate stria; on disk with only obscure indications of striae, most distinct near suture basally.

Ventral surface.—Metasternum anteriorly at side with dual punctation, medium in density, large punctures separated on an average by a little more than diameter of a puncture, anterior lip of each raised, large punctures a little larger at middle. Abdominal suture 2 nearly straight, suture 3 bisinuate, suture 4 distinctly bisinuate, strongly anteriorly curved at middle; punctation moderately dense, dual, distinct; surface convex throughout, 5th segment nearly flat front to back, outer margin more or less granulate.

Length.—3.3–3.4 mm.

Types.—I hereby designate a specimen in the Pic collection (MNHP) as lectotype. It bears the data – Brasil, Gounelle, Le. Nat, 1904, p. 103. This description is from the lectotype. I have also seen a cotype (in MNHP) from Brazil.

Discussion.—In addition to the two type specimens I have seen, a third specimen was taken at Nova Teutônia, Brazil; it is in USNM.

In addition to the diagnostic characters given in couplets 28 and 29 of the key, this species has the eye groove narrow and shallow; in both of its

nearest relatives *agonus* and *substriatus*, it is wide and deep.

***Stichtoptychus substriatus* (Gorham), new combination**

Mirosternus substriatus Gorham, 1886, p. 349; Blackwelder, 1945, p. 405.

General.—Body 1.7 times as long as wide; elytral sides very broadly arcuate, widest near middle. Pubescence on dorsum very short, medium in density, dull gray with a yellowish hue, with but slight sheen in bright light, that on elytra not swirled, on pronotum somewhat swirled. Body dark brown, head and abdomen dark red brown; surfaces moderately shiny.

Head.—Front strongly, nearly evenly convex, somewhat depressed adjacent to eye, vertex weakly carinate; with fine, dense, obscurely dual punctation, large and small punctures intergrading in size; with a distinct, deep groove over eye, strongly continuing to over antennal base; eyes large, separated by 1.5–1.7 times vertical diameter of an eye, somewhat flattened. Last segment of maxillary palpus subtriangular, very slightly longer than wide, distal angle a little more than a 45° angle, distal margin broadly, inwardly arcuate, mesal angle broadly rounded; last segment of labial palpus subtriangular, slightly longer than wide, distal angle pointed, a little greater than a 45° angle, distal margin very weakly, inwardly arcuate, mesal angle very broadly rounded.

Dorsal surface.—Pronotal disk with fine, very dense, dual punctation, large and small punctures intergrading in size; lateral margin weakly recurved, surface at side flat to weakly convex, sculpture of dense, dual punctation, large punctures very large and dense, sometimes nearly crescent shaped, sometimes alined irregularly or coalescing. Elytral disk with (in addition to punctures of striae) very fine, dense punctation of 1 size; at side with 2 distinct, complete striae, more or less impressed at apical half, punctate basally; with a 3d less distinct stria, weak apically; with 7 additional striae, formed of large, shallow punctures, all weakest apically.

Ventral surface.—Metasternum anteriorly at side with fine, dense, weakly dual punctation, large punctures more distinct near middle of metasternum. Abdominal suture 2 more or less bisinuate, suture 3 moderately bisinuate, suture 4 clearly

bisinuate; punctation fine, dense, obscurely dual; abdomen nearly evenly convex, sometimes slightly depressed at middle of 4th suture, 5th segment sometimes nearly flat front to back.

Length.—3.4–3.6 mm.

Type.—The holotype is in the BMNH and bears the label data – Boquete 3500 ft, Champion, Type, *Mirosternus substriatus* Gorham. It also bears an encircled museum type label and a Biologica Centrali-Americana label. The locality is in Panama.

Discussion.—I have seen an additional three members of this species that were taken in Pichinde Valle, Colombia.

***Stichtoptychus surrufus*, new species**

General.—Body 1.8–1.9 times as long as wide; elytral sides subparallel in basal two-thirds. Pubescence on dorsum short, medium in density to sparse, with a weak sheen in light, pubescence on pronotum dull yellow, on elytra weak light reddish, not swirled. Body dark brown, head and abdomen dark reddish brown; body surfaces with moderate luster.

Head.—Front distinctly, nearly evenly convex; punctation very fine, dense, not dual; with a moderately distinct groove over eye, weakly continued to over antennal base; eyes bulging, medium in size, separated by 1.8–2.2 times vertical diameter of an eye. (Maxillary palpus not seen.) Labial palpus subtriangular, about as wide as long, distal angle nearly a right angle, distal margin weakly sinuate, mesal angle broadly rounded.

Dorsal surface.—Pronotal disk with very fine, dense, dual punctation, large punctures small, about 2–3 times size of small punctures, large punctures separated on an average by about 3 times diameter of a large puncture; surface at side weakly, broadly concave, lateral margin narrowly, weakly recurved, sculpture of fine, dense, smooth-topped granules, background alutaceous. Elytral disk with (in addition to punctures of striae) fine, dense, dual punctation, larger punctures about 2 times diameter of a small puncture; at side with 2 distinct, punctate, complete or nearly complete striae, sometimes with a distinct, short 3d more or less distinct stria at level of hindleg; with 7 striae extending to disk, weak throughout, formed of large shallow punctures, punctures in part poorly alined.

Ventral surface.—Metasternum anteriorly at side with moderate-sized punctures on an alutaceous surface, punctures separated on an average by 1–2 times diameter of a puncture, remainder of metasternum with dual punctation. Abdominal suture 2 more or less bisinuate, suture 3 clearly bisinuate, suture 4 strongly bisinuate; punctation fine, dual, surface weakly alutaceous, obscuring small punctures; abdomen nearly evenly convex, 5th segment medially nearly flat front to back.

Length.—3.3–3.8 mm.

Types.—The holotype (sex?; in ZMSP) bears the data – Eugenio Lefevre, Pindamonhangaba, S.P.–26.X.1962, Exp. Dep. Zool. The single paratype (in USNM) bears the data – Sao Paulo, Campos do Jordao, 28.XII.1944, F. Lane col.; Anobiidae; Dept. Zool. Sao Paulo.

The two type specimens agree very closely in their morphology.

Discussion.—I have labeled two specimens that differ from the types in essentially minor characters as near *surrufus*, because I am uncertain of the status to be accorded these specimens. One of them (from Nova Teutônia, Brazil, and in USNM) is stouter (body 1.7 times as long as wide), has a yellow rather than a red hue to the pubescence, has the large metasternal punctures smaller, and has the third and fourth abdominal sutures not distinctly anteriorly arcuate as in *surrufus*. The other specimen (from Torentoy Canyon, Peru, and in ZMSP) has the body proportions of *surrufus*, but it has a yellow hue to the pubescence. It has the large metasternal punctures smaller than in *surrufus* and has the third and fourth abdominal sutures as in *surrufus*; also the body is darker than in *surrufus*.

S. surrufus differs from its relative *vittatus* in that it is larger (3.3–3.8 mm long) and more elongate (1.8–1.9 times as long as wide); *vittatus* is 2.2–3.1 mm long, and the body is 1.50–1.75 times as long as wide.

The specific name, meaning somewhat reddish, refers to the color of the elytral pubescence.

Stichtoptychus tenuivittatus, new species

General.—Body about 1.8 times as long as wide; elytral sides subparallel in about basal half. Pubescence on dorsum very short, very fine, sparse, dull whitish, nearly even in direction, lacking swirled patches, nearly lusterless in light. Body mostly dark brown, head and pronotum suffused with red-

dish brown, elytra with vague reddish vittae; surfaces moderately shiny.

Head.—Front moderately, nearly evenly convex; surface with moderately fine, dense granulation; with a distinct groove over eye, weakly continued to over antennal base; eyes small, bulging, separated by 3.3 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, slightly longer than wide, distal and mesal angles nearly right angles; last segment of labial palpus subtriangular, a little longer than wide, distal angle less than a right angle, mesal angle rounded.

Dorsal surface.—Pronotal disk obscurely granulate and very finely, moderately densely punctate; surface at side moderately, nearly evenly convex; lateral margin fine, not quite attaining anterior margin; sculpture at side with dense, distinct granulation, granules separated by less than diameter of a granule. Elytral disk with (in addition to punctures of striae) very fine, dense punctation of 1 size and obscure granulation, surface at apex distinctly granulate; at side with 3 distinctly impressed striae, in addition with 7 striae that are more or less impressed near apex, striae anteriorly weak to absent, when present indicated by shallow, obscure punctures; intervals flat, weakly convex only near elytral apex.

Ventral surface.—Metasternum near middle with dense, dual punctation, surface anteriorly at side alutaceous, punctation thus obscured. Abdominal sutures 2, 3, and 4 weakly bisinuate; surface with distinct, dense, dual punctation, at sides and apex surface becoming granulate; 5th segment nearly flat front to back.

Length.—3.3 mm.

Type.—The male holotype (in IML) has the data – Chile, Santiago, Quebrada La Plata, La Rinconada, Maipu, 1.I.1967, Col. I. Stange; Anobiidae, Det. M. Viana 1969; Inst. M. Lillo.

Discussion.—For characters distinguishing this species from its relative *obscurus*, see under the latter.

The specific name, meaning weak vittae, refers to the vague reddish elytral vittae.

Stichtoptychus tijucanus (Pic), new combination

Cathoruma tijucana Pic, 1904d, p. 103; Blackwelder, 1945, p. 406.

General.—Body 1.9 times as long as wide; elytral sides subparallel in basal half. Dorsum with fine,

short, appressed, pale grayish pubescence, medium in density, weakly swirled and producing 3 or 4 more or less distinct light and dark patches on each elytron. Body brown, abdomen reddish brown.

Head.—Front distinctly, nearly evenly convex, weakly depressed near eyes; punctation very fine and dense, dual, larger punctures quite small; above each eye with a moderately distinct groove, continuing weakly to over antennal base; eyes large, bulging, separated by about 1.5 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, a little longer than wide, distal margin bisinuate; last segment of labial palpus similar in shape.

Dorsal surface.—Pronotal disk with fine, dense punctation, dual, larger punctures very small, intergrading in size with smaller punctures; at side surface nearly flat; lateral margin produced, recurved, explanate; punctation at side dual, larger punctures toward side becoming much larger, very dense, at extreme side running together. Elytral disk with (in addition to punctures of striae) very fine, dense, obscurely dual punctation; at side with 2 distinct, impressed striae, becoming weaker anteriorly, with 8 additional, more or less clearly indicated striae, formed of shallow, lineate punctures, punctures irregular in size and running together; most intervals on disk flat, some at side convex.

Ventral surface.—Metasternum anteriorly at side with fine, moderately dense, dual punctation, at extreme side surface becoming finely granulate, posteriorly punctation not clearly dual. Abdominal sutures 2, 3, and 4 bisinuate, 4th most distinctly so; punctation fine, moderate in density, dual; 5th segment weakly concave before apex.

Length.—3.3 mm.

Type.—The description is from the holotype in the Pic collection (MNHP); with the data — Tijuca (Rio) Brasil, E. Gounelle, I.2, 1884; Le Nat., No. 412, 1904, p. 103; Type; TYPE; Cathoroma tijuana Pic.

Stichtoptychus verdensis (Pic), new combination

Thaptor verdensis Pic, 1932, p. 11; Blackwelder, 1945, p. 405.

General.—Body nearly 1.8 times as long as wide; elytral sides subparallel in basal half. Pubescence on dorsum short, medium in density, hairs sepa-

rated by less than their length, with a golden luster in light, that on elytra forming numerous small swirled patches (more than 10) that catch the light causing light and dark areas, pubescence on pronotum also with swirled patches. Body mostly dark brown, apex of elytra, head, and abdomen reddish brown; body moderately shiny, dorsal surface a little less shiny than remainder.

Head.—Front strongly, nearly evenly convex, not depressed adjacent to eyes; sculpture of fine, dense, minute punctation, with obscure indication of larger punctures; with a narrow, indistinct groove over each eye, groove weakly continued to over antennal base; eyes large, bulging, separated by 1.6 times vertical diameter of an eye. (Palpi not seen.)

Dorsal surface.—Pronotal sculpture on disk of fine, dense, dual punctation, larger punctures 2–3 times size of smaller and separated on an average by about 2–3 times diameter of a large puncture; surface to side nearly evenly convex, at side surface shallowly concave front to back, lateral margin moderately distinctly recurved, margin above anterior angle also recurved; sculpture at side of dense, dual punctation, larger punctures separated on an average by less than diameter of a puncture, at extreme side punctation grading into dense granulation. Elytral disk with dense, minute punctation in addition to punctures of striae; at side with 2 distinct, impressed striae, marked by punctures anteriorly, in addition with 8 more or less indicated striae, most consisting of large, shallow punctures, 8 striae most distinct basally, weak to obsolete apically; intervals at side weakly convex, flat elsewhere.

Ventral surface.—Metasternum anteriorly at side with fine, dual punctation, less than moderate in density, large punctures variable in size, not always distinct, small punctures very minute. Abdominal suture 2 nearly straight, suture 3 weakly bisinuate, suture 4 clearly bisinuate; surface with fine, moderately dense, dual punctation, large punctures 2–3 times size of small punctures, separated on an average by 3–4 times diameter of a puncture; 5th segment nearly flat front to back, minutely alutaceous.

Length.—3.2 mm.

Type.—The description is from a specimen in the Pic collection (MNHP). I hereby designate it as lectotype. It bears the data — Brésil Goyaz Rio verde, Thaptor verdensis.

Stichtoptychus vittatus, new species

General.—Body 1.50–1.75 times as long as wide; elytra sides weakly arcuate in basal two-thirds, slightly widest behind humeri. Pubescence on dorsum very light tan, with a slight sheen in light, short, medium in density, not swirled. Body dark brown, except red brown on head, abdomen, and elytral interval between striae 1 and 2 at apex; surfaces moderately shiny.

Head.—Front moderately, nearly evenly convex; punctation fine, dense, not dual; with a narrow groove over eye, weakly or not continued to over antennal base; eyes bulging, large to medium in size, separated by 1.6–2.0 times vertical diameter of an eye. Last segment of maxillary palpus subtriangular, a little longer than wide, distal angle bluntly pointed, distal margin sinuate, mesal angle narrowly rounded; labial palpus subtriangular, slightly longer than wide, distal angle pointed, distal margin weakly sinuate, mesal angle narrowly rounded.

Dorsal surface.—Pronotal disk with fine, dense, dual punctation, larger punctures small and intergrading in size with small punctures, larger punctures separated on an average by 2–3 times diameter of a puncture; surface at side more or less flat, lateral margin narrowly recurved, side densely, obscurely punctate-granulate and alutaceous. Elytral disk with (in addition to punctures of striae) distinct, fine, dense punctation of 1 size; at side with 2 distinct, impressed striae, lower complete, upper complete to not quite complete; with 8 additional striae of lineate punctures, striae at sides sometimes impressed, striae weakest near apex.

Ventral surface.—Metasternum anteriorly at side with fine, dual punctation, moderate in density, large punctures separated on an average by 2–3 times diameter of a puncture, large punctures somewhat larger to much larger at middle. Abdominal suture 2 weakly bisinuate, sutures 3 and 4 more clearly bisinuate; punctation fine, dense, dual; abdomen convex, 5th segment flat to weakly concave front to back.

Length.—2.2–3.1 mm.

Types.—The female holotype (No. 72656 in USNM) bears the data – Cantareira. Sao Paulo. 17.II.1960, J. Halik, 16128; BRASIL, Halik 1966, Collection. A paratype (in USNM) has – Cantareira. S. Paulo, 6.XII 1959 J. Halik, 14745; BRASIL, Halik 1966, Collection. Another

paratype (in USNM) – Borto flor. (TC). S. Paulo, 21. I. 1959, J. Halik, 12386; BRASIL, Halik 1966, Collection. Another paratype (in USNM) – Brasi-
lien, Nova Teutonia, 27° 11 B. 52° 23' L, Fritz Plaumann, Oct. 1962, 300.500 m. Another paratype – Ilha dos Buzios, S. Paulo – Brasil, 16. X – 4.XI.1963, Exp. Dept. Zool.; Dep. Zool. Sao Paulo, 66–80. A final paratype (in ZMSP) has – Ilha da Vitoria, S. Paulo – Brasil, 16–27.III 1964, Exp. Dep. Zool. Dep. Zool., Sao Paulo, 66–82.

Discussion.—This species differs from its relative *volutus* in that the pubescence is regular in arrangement and not swirled; the pubescence of *volutus* is swirled and forms light and dark patches.

The specific name refers to the reddish interval near the elytral apex.

Stichtoptychus volutus, new species

General.—Body about 1.7 times as long as wide; elytra slightly widest behind humeri. Pubescence on dorsum medium in density, vaguely gray yellowish, with a slight sheen in bright light, with swirled patches forming more or less distinct light and dark areas. Body dark brown, head and abdomen lighter than remainder; surfaces moderately shiny, side of pronotum, apices of elytra, and abdomen less shiny than remainder.

Head.—Front distinctly convex, slightly depressed adjacent to eye; punctation fine, distinct, dense, not dual, somewhat coarse; with a moderately distinct groove over eye; eyes large, bulging, separated by 1.5–1.6 times vertical diameter of an eye. Maxillary palpus subtriangular, about as wide as long, distal angle a little less than a right angle, distal margin weakly, inwardly arcuate, mesal angle clearly less than a right angle; labial palpus subtriangular, a little longer than wide, outer margin arcuate, distal angle less than a right angle, slightly pointed, distal margin weakly, inwardly arcuate, mesal angle broadly rounded.

Dorsal surface.—Pronotal disk with fine, distinct, dual punctation, large punctures about 2 times diameter of a small puncture, nearly intergrading with them, separated on an average by 2–3 times diameter of a puncture; surface at side nearly flat, margin slightly, narrowly produced, punctation distinctly dual, dense, large punctures much larger than on disk, separated on an average by less than diameter of a puncture. Elytral disk with (in addition to punctures of striae) fine, dense punctation of 1 size; at side with 2 distinct, complete

striae, impressed, except at base; with 7 additional, more or less indicated striae formed of punctures, weak to obsolete before apex.

Ventral surface.—Metasternum anteriorly at side with fine, moderately dense, obscurely dual punctation, large punctures more or less intergrading in size with small punctures, large punctures smaller over rest of metasternum. Abdominal suture 2 weakly bisinuate, suture 3 moderately bisinuate, suture 4 clearly bisinuate; punctation fine, more or less clearly dual, large punctures sometimes obscure; abdomen nearly evenly convex,

sometimes vaguely flattened at middle of 4th suture.

Length.—2.9–3.1 mm.

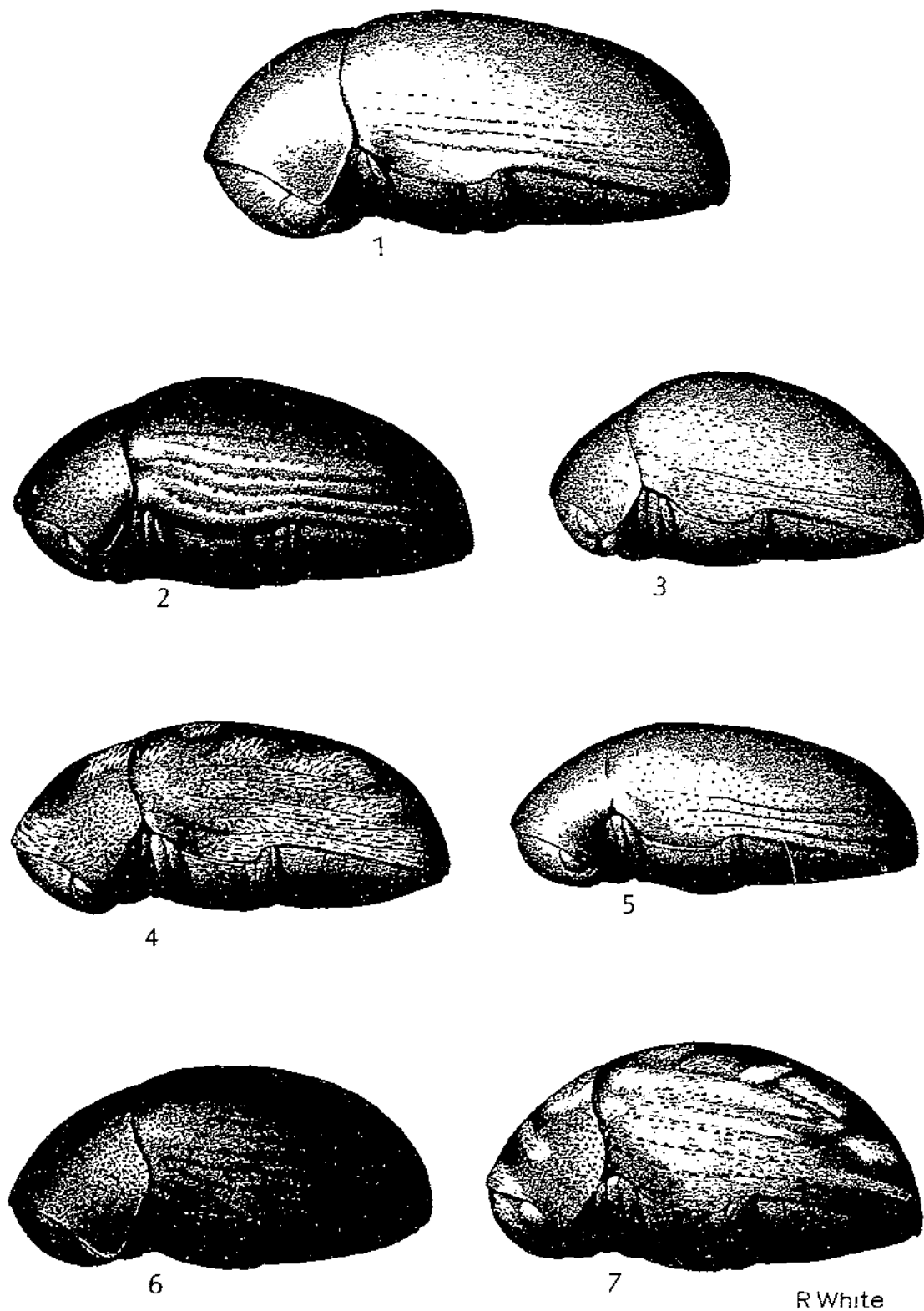
Types.—The female holotype (No. 72654 in USNM) and 4 paratypes (all in USNM) bear the data—Costa Rica, F Nevermann; Turrialba, 800 M, SLG, Schild.

Discussion.—For differences between this species and its relative *vittatus*, see under the latter.

The specific name, meaning spiral, refers to the swirled patches of elytral pubescence.

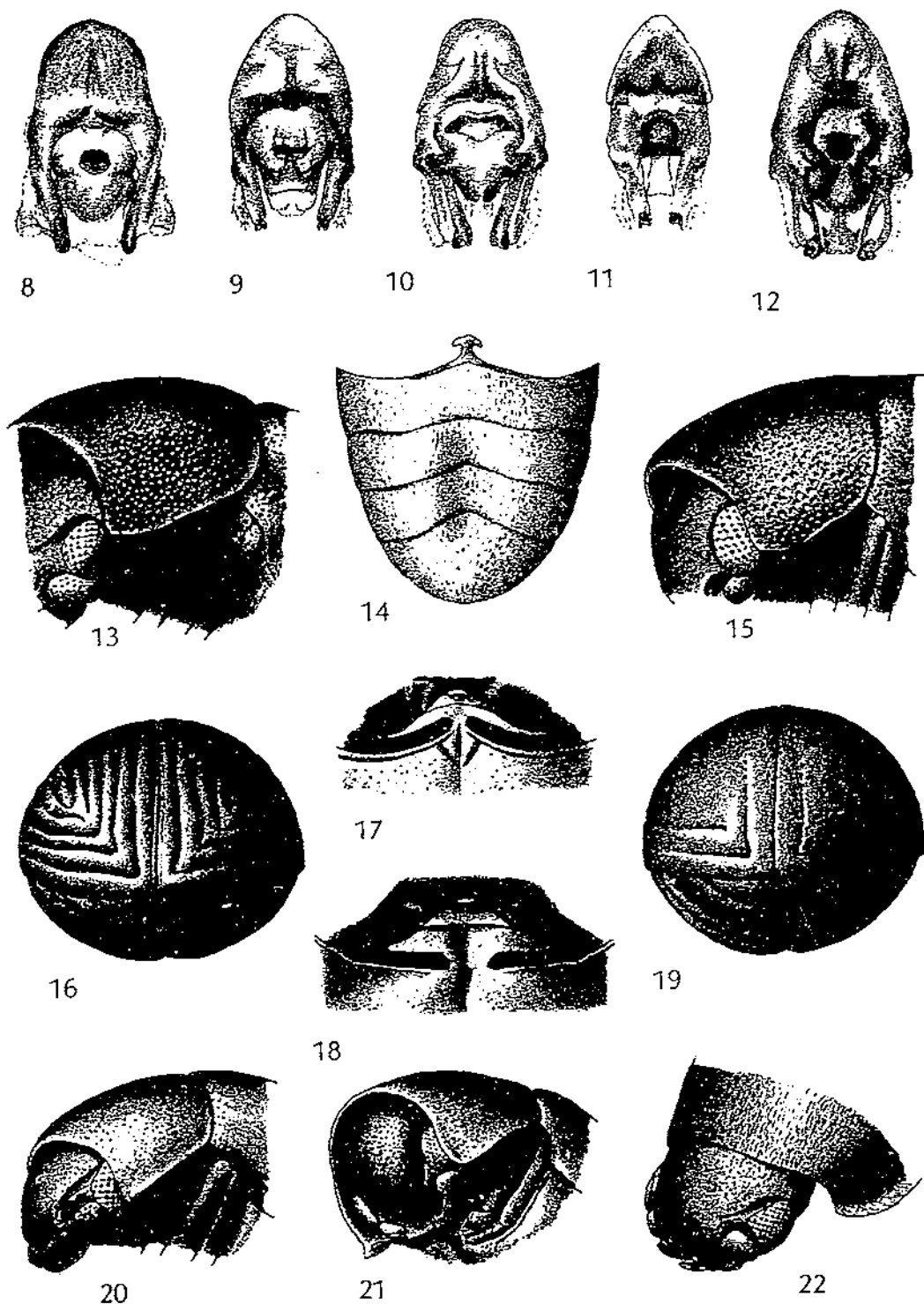
LITERATURE CITED

- (1) ARNETT, R. H.
1962. THE BEETLES OF THE UNITED STATES (A MANUAL FOR IDENTIFICATION). Pt. 4, 118 pp. Catholic Univ. Amer. Press, Washington, D.C.
- (2) BLACKWELDER, R. E.
1945. CHECKLIST OF THE COLEOPTEROUS INSECTS OF MEXICO, CENTRAL AMERICA, THE WEST INDIES, AND SOUTH AMERICA. Pt. 3. U.S. Natl. Mus. Bul. 185, pp. 343–550.
- (3) ESPANOL, F.
1973. NOTAS SOBRE ANOBIDOS. Misc. Zool. 3 (3): 51–67.
- (4) ———
1976. COLEOPTEROS ANOBIIDAE DE LAS ISLAS GALAPAGOS. In Leleup, N. and J., Mission Zoologique Belge . . . Galapagos, v. 3, pp. 295–314.
- (5) FALL, H. C.
1905. REVISION OF THE PTINIDAE OF BOREAL AMERICA, NORTH OF MEXICO. Amer. Ent. Soc. Trans. 31: 97–296.
- (6) GORHAM, H. S.
1886. BIOLOGIA CENTRALI-AMERICANA, INSECTA, COLEOPTERA. Malacodermata, sup. 3 (2): 313–360.
- (7) LENG, C. W.
1920. CATALOGUE OF THE COLEOPTERA OF AMERICA, NORTH OF MEXICO. 470 pp. John D. Sherman, Mt. Vernon, N.Y.
- (8) PIC, M.
1904a. DIAGNOSES DE SEIZE COLEOPTERES EXOTIQUES APPARTENANT A DIVERSES FAMILIES. Echange 20 (231): 18–20.
- (9) ———
1904b. ESSAI DICHOTOMIQUE SUR LES EUPACTUS LEC. ET GENRES VOISINS, DU BRESIL. Echange 20 (233): 36–38.
- (10) ———
1904c. DESCRIPTION DE COLEOPTERES NOUVEAUX. Naturaliste 26: 56–57.
- (11) ———
1904d. DESCRIPTION DE COLEOPTERES NOUVEAUX. Naturaliste 26: 103–104.
- (12) ———
1911. COLEOPTERES EXOTIQUES NOUVEAUX OU PEU CONNUS. Echange 27 (323): 181–183.
- (13) ———
1912. ANOBIIDAE, PARS 48. In Junk, W., Coleopterorum Catalogus, pp. 1–92. Berlin.
- (14) ———
1923a. NOUVEAUTES DIVERSES. Melanges Exot. Ent. 38: 1–32.
- (15) ———
1923b. NOUVEAUTES DIVERSES. Melanges Exot. Ent. 39: 3–32.
- (16) ———
1927a. NOUVEAUX COLEOPTERES DU GLOBE. Soc. Zool. de France Bul. 52: 185–189.
- (17) ———
1927b. NOUVEAUTES DIVERSES. Melanges Exot. Ent. 48: 1–32.
- (18) ———
1932. NOUVEAUTES DIVERSES. Melanges Exot. Ent. 60: 1–36.
- (19) SOLIER, A. J. J.
1849. ORDRE III. COLEOPTERA. In Gay, Historia Fisica y Politica de Chile . . . , v. 4, pp. 414–511.
- (20) SPILMAN, T. J.
1971. FOSSIL STICHTOPTYCHUS AND CRYPTORAMA IN MEXICAN AMBER (COLEOPTERA: ANOBIIDAE). Calif. Univ. Pubs. Ent. 63: 87–89.
- (21) WHITE, R. E.
1974. THE DORCATOMINAE AND TRICORYNINAE OF CHILE (COLEOPTERA: ANOBIIDAE). Amer. Ent. Soc. Trans. 100: 191–253.



R White

FIGURES 1-7.—*Stichtoptychus* species: 1, *elongatus*, n. sp.; 2, *diversestriatus* (Pic); 3, *griseus*, n. sp., holotype; 4, *ocellatus*, n. sp., holotype; 5, *obsoletus* White; 6, *productus*, n. sp., holotype; 7, *elegans*, n. sp.



FIGURES 8-22.—*Stichoptychus* species: 8, *alocobregmus*, n. sp., male genitalia, holotype; 9, *dufaui* (Pic), male genitalia; 10, *elegans*, n. sp., male genitalia, holotype; 11, *elongatus*, n. sp., male genitalia, holotype; 12, *fulgidus*, n. sp., male genitalia; 13, *ocellatus*, n. sp., holotype; 14, *incisus*, n. sp., male abdomen; 15, *elegans*, n. sp.; 16, *fulgidus*, n. sp., elytral apex, holotype; 17, *brevicollis* (Solier), metasternal lobe; 18, *elongatus*, n. sp., metasternal lobe; 19, *diversestriatus* (Pic), elytral apex; 20, *platyops*, n. sp., holotype; 21, *productus*, n. sp., holotype; 22, *ornamentus*, n. sp., holotype.

INDEX TO SPECIES

Valid names are in roman and synonyms in italic.

	Page		
agonus Fall	6	mexicanus (Pic)	19
alocobregmus, n. sp.	7	minutus (Solier)	20
arcuatus, n. sp.	7	<i>multistriatus</i> (Pic)	19
aurantiacus, n. sp.	8	obscurus, n. sp.	20
<i>barranus</i> (Pic)	11	obsoletus White	21
brevicollis (Solier)	9	ocellatus, n. sp.	21
coactus, n. sp.	9	ornamentus, n. sp.	22
concavus White	10	parvus, n. sp.	22
decorus, n. sp.	10	peruvianus (Pic)	23
depressus, n. sp.	11	platyops, n. sp.	23
diversestriatus (Pic)	11	presuturalis (Pic)	24
dufaui (Pic)	12	productus, n. sp.	25
elegans, n. sp.	13	pubiventris, n. sp.	25
elongatus, n. sp.	13	punctatus, n. sp.	26
fulgidus, n. sp.	14	rubidus, n. sp.	26
fulvopubens (Pic)	15	subpubescens (Pic)	27
germaini (Pic)	15	substriatus (Gorham)	28
granulosus (Pic)	16	surrufus, n. sp.	28
griseus, n. sp.	16	tenuivittatus, n. sp.	29
holosericeus (Pic)	17	tijucanus (Pic)	29
homalus White	17	verdensis (Pic)	30
incisus White	18	vittatus, n. sp.	31
megalops, n. sp.	19	volutus, n. sp.	31

U.S. DEPARTMENT OF AGRICULTURE
SCIENCE AND EDUCATION ADMINISTRATION
WASHINGTON, D.C. 20250

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$342

POSTAGE AND FEE PAID
U.S. DEPARTMENT OF
AGRICULTURE
ASH 101



END