722 MR. G. A. BOULENGER ON ADDITIONS TO THE LIZARD [Dec. 4,

to its (the septal half of the valve's) free margin, and, moreover, no muscular fibres can be detected in its substance."

It is very desirable that more hearts of *Ornithorhynchus* should be examined. At present it is uncertain whether the hearts described by Prof. Lankester or those described by Prof. Gegenbaur and myself have the stronger claim to be regarded as the normal.

Postscript, added Dec. 31.—Since writing the above I have seen, through the kindness of Prof. Weldon, another specimen of *Echidna*. There was, as he pointed out to me, an epigastric vein turgid with blood, supported by a fold of membrane in parts at least an inch deep.

 Second Report on Additions to the Lizard Collection in the Natural-History Museum¹. By G. A. BOULENGER, F.R.S.

[Received November 20, 1894.]

(Plates XLVII.-XLIX.)

I. List of the Species, new or previously unrepresented, added to the Collection since February 1890.

(An asterisk indicates type specimens.)

- 1. Tropiocolotes tripolitanus, Ptrs.—Tunisia (Lataste); Egypt (Anderson).
- *2. Gymnodactylus pequensis, Blgr. Ann. Mus. Genova, (2) xiii. 1823, p. 314.—Pegu (Fea).
- *3. Gymnodactylus baluensis, Mocq. Le Natur. 1890, p. 144.-Kina Baloo, N. Borneo (Paris Mus., Everett).
 - 4. Phyllodactylus androyensis, Grand.-Madagascar.
 - 5. Phyllodactylus julieni, Cope.-Curação (Hartert).
- *6. Edura nivaria, Blgr., infra.-Natal (Lewis).
- 7. Hemidactylus greeffii, Bocage.-S. Thomé (Bocage).
- *8. Bunocnemis modesta, Gthr. P. Z. S. 1894, p. 85.—Ngatana, E. Africa (Gregory).
- 9. Phyllopezus goyazensis, Ptrs.-N. Paraguay (Turin Mus.).
- *10. Lygodactylus miops, Gthr. Ann. N. H. (6) viii. 1891, p. 287.—Madagascar (Majastre).
- *11. Lygodactylus angularis, Gthr. P. Z. S. 1892, p. 555.—Shiré Highlands (Johnston).
- *12. Geckolepis polylepis, Bttgr. Kat. Senck. p. 35 (1893).-Madagascar (Senckenb. Mus.).
 - 13. Eurydactylus vieillardi, Bavay.-New Caledonia.

¹ Cf. P. Z. S. 1890, p. 77.

- 14. Phelsuma dubium, Bttgr.-Madagascar (Senckenb. Mus.).
- *15. Elasmodactylus tuberculosus, Blgr., infra.--Lower Congo (Pinnock).
- *16. Sphærodactylus vincenti, Blgr. P. Z. S. 1891, p. 354.-St. Vincent, W.I. (Godman).
 - 17. Delma impar, Fisch.—S. Australia (Stirling).
- *18. Draco quadrasi, Bttgr. Katal. Senck. p. 41 (1893).-Sibuyan Island, Philippines (Senckenb. Mus.).
- *19. Draco walkeri, Blgr. Ann. N. H. (6) vii. 1891, p. 279.-Timor (Walker).
- *20. Draco modiglianii, Vincig. Ann. Mus. Genova, (2) xii. 1892, p. 523.-Engano (Modigliani).
- *21. Draco microlepis, Blgr. P. Z. S. 1893, p. 523.-N. Borneo (Everett).
- *22. Draco maximus, Blgr. P. Z. S. 1893, p. 522.-Sarawak (Hose).
- 23. Gonyocephalus boydii, Macleay.—Herbert R. (Boyd).
- 24. Acanthosaura kakhienensis, And.-S. Shan States (Oates); Karin hills (Fea).
- 25. Japalura ornata, v. Lidth de Jeude, Notes Leyd. Mus. xv. 1893, p. 251.--Kina Baloo, N. Borneo (Everett).
- *26. Agama gregorii, Gthr. P. Z. S. 1894, p. 86 .- Mkonumbi, E. Africa (Gregory).
 - 27. Phrynocephalus vlangalii, Strauch.—Swan Sje (St. Petersburg Mus.); E. Turkestan and W. China (Littledale).
 - 28. Phrynocephalus przewalskii, Strauch.-S. Aljarchan (St. Petersburg Mus.).
- *29. Phrynocephalus arabicus, Anders. Ann. N. H. (6) xiv. 1894, p. 377.—Hadramut (Anderson).
- 30. Amphibolurus decresii, D. & B.-Australia (Christiania Mus.).
- *31. Aporoscelis bentii, Anders. Ann. N. H. (6) xiv. 1894, p. 376.—Hadramut (Anderson).
- *32. Anolis wattsii, Blgr. Ann. N. H. (6) xiv. 1894, p. 375 .--Antigua, W.I. (Watts).
- 33. Anolis limifrons, Cope.—Nicaragua (Rix).
- *34. Anolis rixi, Blgr., infra.-Nicaragua (Rix).
- *35. Anolis rhombifer, Blgr., infra.—Nicaragua (Rix). 36. Polychrus gutturosus, Berth.—Nicaragua (Rix); Panama (Christiania Mus.); Ecuador (Gunter).
- *37. Anisolepis grilli, Blgr. Ann. Mus. Genova, (2) x. 1891, p. 909.—Parana (Grillo); S. Paulo (Ihering).
- *38. Aptycholæmus longicauda, Blgr. Ann. N. H. (6) viii. 1891, p. 85.—Riacho del Oro, Argentina (Copenhagen Mus.).
- *39. Ctenoblepharis jamesii, Blgr. P. Z. S. 1891, p. 3.-Tarapaca, Chili (James).
- *40. Urocentrum guentheri, Blgr., infra.-Yquitos, Peru.
- *41. Sceloporus bulleri, Blgr., infra.—Jalisco, Mexico (Buller).
 - 42. Sceloporus melanorhinus, Bocourt.-S. Domingo de Guzman, Mexico (Buller).

48*

724 MB. G. A. BOULENGER ON ADDITIONS TO THE LIZARD [Dec. 4,

- 43. Sceloporus orcutti, Stejn. N. Am. Faun. no. 7, pt. 2, p. 181 (1893).—California (Gilbert).
- *44. Sceloporus heterolepis, Blgr., infra.—Jalisco (Buller).
 - 45. Phrynosoma coronatum, Blainv.¹—California (Christiania Mus.).
 - 46. Zonurus vittifer, Reichen. Zool. Anz. 1887, p. 372.—Zululand (Christiania Mus.).
- *47. Zonurus jonesii, Blgr. Ann. N. H. (6) vii. 1891, p. 417.-Transvaal (Jones).
- *48. Chamæsaura miopropus, Blgr., infra.—Brit. C. Africa (Carson).
- *49. Diploglossus bivittatus, Blgr., infra.-Nicaragua (Rothschuh).
- *50. Ophiodes intermedius, Blgr. Ann. N. H. (6) xiii. 1894, p. 343.—Paraguay (Bohls).
- *51. Varanus heteropholis, Blgr. P. Z. S. 1892, p. 506.—Sarawak (Hose).
- 52. Varanus togianus, Ptrs.-Macassar (M. Weber).
- *53. Centropyx viridistriga, Blgr. Ann. N. H. (6) xiii. 1894, p. 343.—Paraguay (Bohls).
 - 54. Cnemidophorus arubensis, v. Lidth de Jeude, Notes Leyd. Mus. ix. 1887, p. 132.—Aruba (Hartert).
- *55. Amphisbæna bohlsii, Blgr. Ann. N. H. (6) xiii. 1894, p. 344.—Paraguay (Bohls).
 - 56. Amphisbæna camura, Cope.—Paraguay (Bohls).
- 57. Amphisbæna quadrifrons, Ptrs.-Kalahari (Cuninghame).
- *58. Lepidosternum latifrontale, Blgr. Ann. N. H. (6) xiii. 1894, p. 345.—Paraguay (Bohls).
- *59. Tachydromus holsti, Blgr., infra.—Chimabara, Japan (Holst).
- *60. Tachydromus formosanus, Blgr. Ann. N. H. (6) xiv. 1894, p. 462.—Formosa (Holst).
 - 61. Lacerta simonyi, Steind. Anz. Ak. Wien, 1889, p. 260.-Zalmor, near Hierro, Canary Islands (Tristram).
 - 62. Algiroides moreoticus, Bibr.—Morea (Douglass); Cephalonia (Werner).
 - 63. Eremias sextaniata, Stejneger, Proc. U. S. Nat. Mus. xvi. 1894, p. 718.—Lamu, E. Africa (Jackson).
- *64. Eremias erythrosticta, Blgr. Ann. Mus. Genova, (2) xii. 1891, p. 10.—Somaliland (Robecchi).
 - 65. Mabuia pulchra, Matschie, Sitzb. Ges. nat. Fr. 1893, p. 29.—S. Arabia (Anderson).
 - 66. Mabuia hildebrandtii, Ptrs.—Somaliland (Robecchi).
 - 67. Lygosoma sanctum, D. & B.-Java (M. Weber).
- *68. Lygosoma florense, M. Weber, Zool. Ergebn. p. 173 (1890).—Flores (M. Weber).
 - 69. Lygosoma striolatum, M. Weber, L c. p. 172.—Damma Island (Walker).

¹ The specimens referred to *P. coronatum* in the Catalogue belong to a distinct species, *P. blainvillii*, Gray, as pointed out by Stejneger, N. Am. Faun. no. 7, pt. 2, p. 187 (1893), and Vanderburgh, Proc. Cal. Ac. (2) iv. 1894, p. 296.

*70. Lygosoma amabile, F. Müll. Verh. nat. Ges. Basel, x. 1894, p. 385.—Celebes (Sarasin).

- *71. Lygosoma subcæruleum, Blgr. Ann. N. H. (6) viii. 1891, p. 289.—Travancore (Ferguson).
 - 72. Lygosoma variabile, Bavay.-New Caledonia.
- Lygosoma delicatum, De Vis, Proc. Linn. Soc. N. S. W. (2) ii. 1888, p. 820.—Queensland (Boyd).
- 74. Lygosoma pectorale, De Vis.-N.W. Australia (Walker).
- *75. Lygosoma maccooeyi, Rams. & D. Ogilby, Rec. Austral. Mus. i. 1890, p. 8.—Brawlin, N. S. Wales (Australian Mus.).
- *76. Lygosoma spenceri, Lucas, Proc. R. Soc. Vict. (2) vi. 1894, p. 81.—Victoria (Lucas).
- 77. Lygosoma whiteheadi, Mocq. Le Natur. 1890, p. 144.--Labuan (Everett).
- *78. Lygosoma luzonense, Blgr., infra.-N. Luzon (Whitehead).
- *79. Lygosoma decipiens, Blgr., infra.—N. Luzon (Whitehead).
- 80. Lygosoma anchietæ, Bocage.—Angola (Bocage).
- *81. Lygosoma relictum, Vincig. Ann. Mus. Genova, (2) xii. 1892, p. 524.—Engano (Modigliani).
- *82. Lygosoma maccoyi, Lucas, Proc. R. Soc. Vict. (2) vi. 1894, p. 85.—Victoria (Lucas).
- *83. Lygosoma walkeri, Blgr. Ann. N. H. (6) viii. 1891, p. 405. —N.W. Australia (*Walker*).
- *84. Ablepharus boulengeri, D. Ogilby, Rec. Austral. Mus. i. 1890, p. 10.—Brawlin, N. S. Wales (Australian Mus.).
- *85. Ablepharus carsonii, Blgr., infra.-Brit. C. Africa (Carson).
- *86. Ablepharus festæ, Peracca, Bull. Mus. Torin. ix. 1894, no. 167, p. 8.—Syria (Festa).
- *87. Tropidophorus mocquardii, Blgr., infra.—N. Borneo (Everett).
 - 88. Eumeces schwartzii, Fisch.-W. Indies (Christiania Mus.).
 - 89. Scincopus fasciatus, Ptrs.—Suakin (Penton, Anderson).
 - 90. Ophiomorus brevipes, Blanf.—Transcaspia (Eylandt).
- *91. Chalcides boulengeri, Anders. P. Z. S. 1892, p. 17.—Tunisia (Anderson).
- 92. Chalcides delislii, Lataste.-Suakin (Anderson).
- 93. Scelotes astrolabi, D. & B.-Madagascar.
- 94. Sepsina tetradactyla, Ptrs.-Nyassaland (Johnston).
- *95. Chamæleon longicauda, Gthr. Ann. N. H. (6) viii. 1891, p. 287.—Madagascar.
- 96. Chamæleon tavetensis, Steind. Sitzb. Ak. Wien, c. 1891, p. 310.—Taveta, E. Africa (Anstruther).
- *97. Brookesia stumpffii, Bttgr. Zool. Anz. 1894, p. 182.—Nossi Bé (Senckenberg Mus.).
- *98. Rhampholeon platyceps, Gthr. P. Z. S. 1892, p. 556.-Nyassaland (Johnston).
- *99. Rhampholeon brachyurus, Gthr. l. c. p. 557.-Nyassaland (Johnston).

II. Descriptions of new Species.

(EDURA NIVARIA. (Plate XLVII. fig. 1.)

Head moderate, much depressed, oviform; snout as long as the distance between the eye and the ear-opening, once and a half the diameter of the orbit; ear-opening small, oval, oblique. Head covered with small, round, convex granules, largest on the snout; rostral twice as broad as deep, without cleft; nostril between five scales, the upper largest and separated from its fellow by a granule; eight or nine upper and as many lower labials; mental and anterior lower labials followed by small flat shields, gradually passing into the small granules of the throat. Back covered with uniform granules, as large as those on the snout; ventral scales larger, subimbricate, smooth. Digits strongly dilated, the basal portion not quite so broad as the distal expansion; two pairs of large plates at the extremity of the basal portion, followed by smaller single plates. Male with a curved series of 15 præanal pores. Tail slightly longer than head and body, depressed, tapering to a fine point, its basal portion divided into distinct segments composed of six transverse series of scales above and five beneath. Pale brown above, mottled with darker and with undulous dark brown transverse bands; tail above with blackish transverse spots and with whitish annuli in its distal half.

| | millim. | | millim. |
|---------------|---------|-----------|---------|
| Total length | 118 | Fore limb | 20 |
| Head | | Hind limb | 25 |
| Width of head | | Tail | |
| Body | 41 | | |

A single male specimen, captured on the snow on the Drakensberg Range, Natal (see above, p. 608). Presented by Mr. R. T. Lewis.

ELASMODACTYLUS, g. n. Geckonidarum.

Digits strongly dilated, free, with transverse undivided lamellæ below; all digits with a minute claw fitting in a notch of the distal lamella. Body covered with unequal-sized juxtaposed tubercles. Pupil vertical.

In its digital structure this new form approaches *Rhoptropus*, Peters (= *Dactychilikion*, Thominot¹), and to a certain extent bridges over the gap separating the latter from *Gecko*. But it is well distinguished from *Rhoptropus* by the shorter digits expanding more gradually towards the end, the incomplete palpebral ring, and the dorsal lepidosis.

¹ One of the principal characters on which *Dactychilikion* was founded, viz. the hair-like fringe of the subdigital lamellæ, is common to all Geckos and more or less easily visible when the outer layer of the epidermis has been removed. These cuticular hairs were first noticed in the Geckos by Cartier, Arb. Zool. Inst. Würzb. i. 1872, p. 86, in the Anoles by M. Braun, op. cit. v. 1879, p. 31.

ELASMODACTYLUS TUBERCULOSUS. (Plate XLVII. fig. 2.)

Body stout, limbs short. Head longer than broad, moderately depressed, distinct from neck; snout obtusely pointed, a little longer than the distance from the eye to the ear-opening, once and a half the diameter of the orbit; ear-opening oval-subtriangular, its greatest diameter not quite half that of the orbit. Upper surface of head covered with small granules, which are intermixed with larger ones behind; nostril pierced between the rostral and four scales; rostral once and a half as broad as deep, with median cleft above; ten upper labials; nine lower labials; mental large, posterior border rounded; no chin-shields; throat finely granulate. Body and limbs above with granules and tubercles of unequal sizes, the largest of which are subconical and concentrically striated; the vertebral line with uniform small granules; belly covered with very small, subimbricate, cycloid, smooth scales. Digits moderately elongate, not very unequal in length, depressed at the base, dilated into an elongate ovate disk in the distal half; 20 lamellæ under the median toe. Uniform dark grey-brown above, dirty white beneath.

| From snout to | vent | | | 70 millim. | |
|---------------|------|------|------|----------------|--|
| Head | | | | | |
| Width of head | | | | 15 " | |
| Fore limb | | | | | |
| Hind limb | | | | 27 " | |

The only specimen, collected by the Rev. J. Pinnock in the district of the Lower Congo, is a female with the tail in an early stage of regeneration.

ANOLIS RIXI. (Plate XLVIII. fig. 1.)

Head once and two-thirds as long as broad, slightly longer than the tibia; forehead concave; frontal ridges strong, divergent; upper head-scales mostly keeled, very small on the snout; scales of the supraorbital semicircles strongly enlarged, strongly keeled, separated by one series of small scales; five or six large, strongly keeled supraoculars; occipital small, separated from the supraorbital semicircles by two series of rather large scales; canthal scales three; loreal rows nine; nine upper labials to below centre of eve; earopening large, vertically oval. Gular appendage moderately large; gular scales keeled. Body slightly compressed; no dorso-nuchal Dorsal scales large, larger than the ventrals, irregular, and fold. rather unequal in size, feebly imbricate, feebly keeled; flanks covered with small granular scales; ventrals subrhomboidal, scarcely imbricate, keeled. The adpressed hind limb reaches the centre of the eye; digits very feebly dilated; 14 lamellæ under phalanges II. and III. of the fourth toe. Tail slightly compressed, once and a half length of head and body. No enlarged postanal scales. Coppery brown above, with a dark brown lateral stripe proceeding from the eye; a pale stripe from the shoulder to the groin, edged

728 MR. G. A. BOULENGER ON ADDITIONS TO THE LIZARD [Dec. 4,

below by a dark brown line; upper lip white, crossed by two oblique brown streaks on each side of the snout; limbs with brown cross-bars; lower parts white, the gular appendage greyish on the sides.

| | millim. | · · · · · · · · · · · · · · · · · · · | millim. |
|---------------|---------|---------------------------------------|---------|
| Total length | 147 | Fore limb | . 23 |
| Head | | Hind limb | . 44 |
| Width of head | 9 | Tail | . 88 |
| Body | | | |

A single male specimen from Chontales, Nicaragua, collected by Mr. R. A. Rix. Presented to the British Museum by Mr. W. M. Crowfoot.

ANOLIS RHOMBIFER. (Plate XLVIII. fig. 2.)

Head nearly once and two-thirds as long as broad, longer than the tibia; forehead concave; frontal ridges feebly marked; upper head-scales feebly keeled; scales of the supraorbital semicircles strongly enlarged, separated by one or two series of small scales; twelve to fourteen enlarged supraoculars, separated from the supraorbital scales by a series of very small scales; occipital as large as the ear-opening, separated from the supraorbitals by three or four series of scales; canthal scales four; loreal rows seven; six upper labials to below centre of eye; ear-opening large, vertically oval. Gular appendage moderately large; gular scales keeled. Body slightly compressed; no dorso-nuchal fold. Dorsal scales small, subimbricate, strongly keeled, much smaller than ventrals; flanks covered with minute, granular scales; ventrals imbricate and strongly keeled. The adpressed hind limb reaches the centre or the anterior border of the eye; digits moderately dilated; 14 or 15 lamellæ under phalanges II. and III. of the fourth toe. Tail scarcely compressed, once and one-fourth to once and one-third length of head and body. No enlarged postanal scales. Pale greenish golden above, with two brown stripes originating on the nape above and behind the ears; between these stripes five large rhomboidal brown spots, the last between the hind limbs; a small blackish ring on the base of the tail; lower parts whitish.

| | б. | ¥. |
|---------------|---------|---------|
| | millim. | millim. |
| Total length | 90 | 128 |
| Head | 12 | 15 |
| Width of head | 7.5 | 9 |
| Body | 28 | 40 |
| Fore limb | 19 | 24 |
| Hind limb | 34 | 44 |
| Tail | 50 | 73 |

Two specimens, male and female, from Chontales, Nicaragua, collected by Mr. R. A. Rix. Presented to the British Museum by Mr. W. M. Crowfoot.

UROCENTRUM GUENTHERI. (Plate XLVII. fig. 3.)

Snout short, rounded; nostril directed upwards; upper headscales with small granular asperities; a series of four or five large transverse band-like supraoculars, separated from the supraciliaries by a single series of very small scales; occipital longer than broad, narrower than the supraocular region; four or five upper and five lower labials; ear-opening as large as the eye-opening, without denticulation on its anterior border. Sides of head plicate ; second gular fold strongest. Lateral and anterior dorsal scales very small, granular, smooth; posterior dorsal scales larger, smooth or very obtusely keeled; ventrals larger, squarish, feebly imbricate, smooth. Digits slender. The adpressed hind limb reaches the axilla. Tail shorter and narrower than the body, flat inferiorly, twice as broad as deep, with whorls of very large, obtusely keeled, spinose scales, the spines strongest on the sides. Head and nape bluish grey, back and limbs pale olive; head spotted with black; nape and anterior part of back with curved black cross-bands; posterior half of body with a wide-meshed black network; belly greenish white.

| | millim. | | millim. |
|---------------|---------|-----------------|---------|
| Total length | 122 | Fore limb | 32 |
| Head | 18 | Hind limb | |
| Width of head | 11 | Tail | |
| Body | | A REAL HERE AND | |

A single female specimen from Yquitos, Peru.

SCELOPORUS BULLERI. (Plate XLVIII. fig. 3.)

Head moderate; snout much flattened. Head-shields smooth; a series of four large, transversely enlarged supraoculars, bordered inwards by one series of small scales; two canthal scales; occipital (interparietal) as long as broad or longer than broad, much larger than the parietals; four or five pointed scales form a denticulation on the anterior border of the ear. Dorsal scales much larger than ventrals, a little broader than long, keeled, mucronate and denticulate, converging towards the median line; 36 to 39 scales between the occipital shield and the base of the tail; 8 or 9 scales correspond to the length of the shielded part of the head; lateral scales graduating into the dorsals and ventrals, directed obliquely upwards and backwards; ventrals smooth, bi- or tricuspid; 41 or 44 scales round the middle of the body. The adpressed hind limb reaches the shoulder or the ear; tibia as long as the shielded part of the head; the distance between the base of the fifth toe and the extremity of the fourth equals the distance between the end of the snout and the ear. 15 to 18 femoral pores on each side. Caudal scales as large as dorsals. Male with enlarged postanal scales. Dark olive above, with a black uninterrupted collar, which may be more or less distinctly edged with yellowish or greenish; sides of belly dark blue, black-edged, in both sexes; a patch of blue may be present on the throat, the greater part of which is black or dark olive.

| | ð. millim. | ç. millim. |
|---------------|---------------|------------------|
| Total length | 231 | 194 |
| Head | | 22 |
| Width of head | 22 | 18 |
| Body | 70 | 69 |
| Fore limb | | 38 |
| Hind limb | 64 | 55 |
| Tail | 135 | 103 (reproduced) |

This species appears to be nearest allied to *S. dugesii*, Bocourt. Several specimens were obtained in the State of Jalisco, at Colonia Brizuela and at La Cumbre de los Arrastrados, 8500 feet altitude, by Dr. A. C. Buller.

Among the Reptiles brought home by Dr. Buller from the Isthmus of Tehuantepec there are specimens which I refer to S. melanorhinus, Bocourt. As that species is still very imperfectly known, and as the specimens I have referred to it differ in a few points from Bocourt's diagnosis, I append the following description:—

SCELOPORUS MELANORHINUS, Bocourt, Journ. de Zool. v. 1876, p. 401.

Head large; snout much flattened. Head-shields smooth; a series of four large transverse supraoculars, separated from the frontal and from the supraciliaries by one series of small scales, the fourth in contact with the parietal; occipital (interparietal) a little broader than long, as broad as or broader than the parietals, which are large and broader than long; ear-opening nearly hidden under the large pointed scales in front of it. Dorsal scales much larger than ventrals, as broad as long, strongly keeled and mucronate, entire or feebly denticulate, forming parallel longitudinal series; 26 or 27 scales between the occipital scale and the base of the tail; 6 or 7 scales correspond to the length of the shielded part of the head; lateral scales keeled, directed upwards and backwards, graduating into the dorsals and ventrals; latter smooth, bicuspid; 36 to 40 scales round the middle of the body. The adpressed hind limb reaches the shoulder or the ear; tibia a little shorter than the shielded part of the head; the distance between the base of the fifth toe and the extremity of the fourth equals the distance between the end of the snout or the nostril and the ear. 19 or 20 femoral pores on each side. Caudal scales nearly as large as Male with enlarged postanal scales. Yellowish or dorsals. greyish olive above; a yellowish, black-edged cross-bar between the eyes; a yellowish band from behind the eye to above the axilla, between which a blackish blotch or bar extends across the scapular region; some less distinct dark cross-bars may follow on the back; male with the lower surface of the head black and white in front, pale blue behind, yellowish green on the sides; the breast and median line of belly salmon-red; the belly pale blue near the median line, yellowish green on the sides.

| | б. | 우. |
|------------------------------------------------------------------------------------------------------------------|---------|---------|
| and the second | millim. | millim. |
| Total length | 208 | 193 |
| Head | 25 | 28 |
| Width of head | 22 | 28 |
| Body | 73 | 77 |
| Fore limb | 43 | 46 |
| Hind limb | 57 | 63 |
| Tail | 110 | 95 |
| | | |

Three specimens (male, female, and half-grown) obtained at Santo Domingo de Guzman, Mexico, by Dr. A. C. Buller.

SCELOPORUS HETEROLEPIS. (Plate XLVIII. fig. 4.)

Head small. Head-shields smooth; one or two more or less irregular series of transversely enlarged supraoculars; two canthal scales; occipital large, as long as broad or broader than long; parietals small, sometimes indistinct; anterior border of ear with a denticulation formed by three or four pointed scales. Dorsal scales very unequal in size, irregular, some nearly smooth, others strongly keeled; a pair of vertebral and a latero-dorsal series of large strongly keeled scales form sorts of crests along the body; ventral scales smooth, mostly bicuspid. The adpressed hind limb reaches the shoulder or the ear; tibia as long as the shielded part of the head; the distance between the base of the fifth toe and the extremity of the fourth exceeds the distance between the end of the snout and the posterior border of the ear. 14 to 19 femoral pores on each side. Caudal scales as large as largest dorsals, strongly keeled, spinose. Male with strongly enlarged postanal scales. Coloration very much as in S. microlepis. Greyish or pale brown above, with indistinct darker and lighter blotches and symmetrical blackish markings in the form of transverse or angular lines, the first of which crosses the frontal and supraocular regions; male with a black bar (sometimes interrupted) across the throat and with a large pale blue blotch on each side of the belly, broadly edged with blackish blue on the median ventral line.

| | 3. | Ŷ. |
|---------------|---------|---------|
| | millim. | millim. |
| Total length | 135 | - 125 |
| Head | 16 | 14 |
| Width of head | 14 | 12 |
| Body | 44 | 46 |
| Fore limb | 29 | 26 |
| Hind limb | 39 | 37 |
| Tail | 75 | 65 |

Several specimens were collected by Dr. A. C. Buller at various localities in the State of Jalisco (La Cumbre de los Arrastrados, Real Alto, Riocho La Berberia, Sierra de Bolaños), at altitudes varying between 7800 and 8500 feet.

732 MR. G. A. BO ULENGER ON ADDITIONS TO THE LIZARD [Dec. 4,

CHAMÆSAURA MIOPROPUS.

Fore limb reduced to a minute clawed vestige, no longer than a scale; hind limb much more developed, nearly half as long as the head, ending in a single claw, as in *C. anguina*. One femoral pore. Head-shields and scaling of the body as in *C. anguina*. Yellowish, with four pale brown stripes, the median pair edged with black on the outer side.

| | millim. |
|--------------|---------|
| Total length | 550 |
| Head | 15 |
| Tail | 430 |
| Fore limb | 1 |
| Hind limb | 7 |

A single specimen from Fwambo, British Central Africa. Collected by Mr. A. Carson.

In the first Report I described a species (C. didactyla) intermediate between C. anea and C. anguina. The one now established fills up the gap between C. anguina and C. macrolepis.

The five species of *Chamæsaura* may be distinguished as follows:---

A. Both pairs of limbs very distinct.

| Limbs pentadactyle; 28 scales round the body | 1. ænea, Wgm. |
|----------------------------------------------|---------------------|
| | 2. didactyla, Blgr. |
| ** * | 3. anguina, L. |

B. Fore limb very minute or absent; hind limb monodactyle.

| Fore limb distinct; 26 scales round the body | 4. | miopropus, Blgr. |
|-------------------------------------------------------|----|-------------------|
| No trace of fore limb externally; 22 scales round the | | |
| body | 5. | macrolepis, Cope. |

DIPLOGLOSSUS BIVITTATUS. (Plate XLVIII. fig. 5.)

Head slightly distinct from neck; snout moderate, with obtuse canthus; ear-opening small. A large azygous præfrontal, in contact with the frontal and the first and second supraoculars, in contact with the second loreal, and separated from the rostral by two pairs of shields; frontal twice as long as broad; parietal separated from the frontal and supraoculars by two shields; nasal in contact with the rostral, followed by two superposed postnasals. two loreals, and a præocular; rostral a little narrower than the symphysial; the suture between the sixth and seventh upper labials falls below the centre of the eve; three chin-shields on each side, first in contact with the second and third lower labials. Scales smooth, 33 round the middle of the body. Limbs short, not meeting when adpressed; digits moderate, claws exposed. Tail cylindrical, covered with smooth scales. Black above, with two greenish-white stripes from the end of the snout, where they unite, to the base of the tail, passing above the eye; lips and sides of neck whitish with black bars; throat whitish; belly greyish; tail salmon-pink.

| | millim. | | millim. |
|---------------|---------|-----------|---------|
| Total length | 75 | Fore limb | 8 |
| Head | | Hind limb | 10 |
| Width of head | | Tail | 43 |
| Body | | | |

A single young specimen from the Hacienda Rosa de Jericho, Nicaragua, 3250 feet; collected by Dr. E. Rothschuh.

TACHYDROMUS HOLSTI. (Plate XLIX, fig. 1.)

Head rather short. Rostral forming a suture with the frontonasal, entirely separating the nasals ; supraoculars in contact with the supraciliaries; a small shield separates the large anterior supraocular from the loreal; temporal scales very small, obtusely keeled; three or four chin-shields on each side¹. Six longitudinal series of strongly keeled dorsal shields, the two median smaller; eight longitudinal series of keeled ventral shields; three series of smaller keeled shields on each side of the ventrals. Two inguinal pores on each side. Olive above, greenish white beneath; a white streak from the eye to the shoulder, passing through the tympanum.

| millin | n. millim. |
|------------------|------------------------|
| Total length 113 | Fore limb 16 |
| Head 10 | |
| Width of head 7 | Tail (reproduced) . 58 |
| Body 45 | |

Two specimens, from the Osen Mt., Shimabara, Japan; collected by Mr. Holst.

LYGOSOMA LUZONENSE. (Plate XLIX. fig. 2.)

Section Hinulia. Body elongate; limbs weak; the distance between the end of the snout and the fore limb is contained once and a half in the distance between axilla and groin. Snout short, obtusely pointed. Lower eyelid scaly. Nostril pierced in the nasal; no supranasal; frontonasal broader than long, forming a suture with the rostral; præfrontals in contact; frontal not quite so long as the frontoparietal, which is single, in contact with the first and second supraoculars; four supraoculars, first largest; seven supraciliaries; parietals forming a suture behind the interparietal; no enlarged nuchals; fourth to sixth upper labials below the eye. Ear-opening round, small, not larger than the pupil. 28 smooth scales round the middle of the body; dorsals as large as ventrals, laterals smaller. A pair of feebly enlarged præanals. The length of the hind limb equals the distance between the posterior border of the eye and the fore limb; fourth toe a little longer than third. Tail thick, once and one-fourth the length of

¹ The adult has three chin-shields on the right side and four on the left; the young has four shields on each side.

734 MR. G. A. BOULENGER ON ADDITIONS TO THE LIZARD [Dec. 4,

head and body. Pale reddish brown above, with small darker spots, a slightly undulous blackish line on each side, and a series of blackish spots forming an interrupted vertebral line; sides dark brown, with light dots; lower parts whitish.

| | nillim. | | millim. |
|---------------|---------|-------------------|---------|
| Total length | 88 | Fore limb | 8 |
| Head | 8 | Hind limb | |
| Width of head | | Tail | |
| Body | | Strangent and and | 2DOLGL |

A single specimen from Mt. Benguet, N. Luzon, collected by Mr. Whitehead. Presented by the Subscribers to the Whitehead Exploration Fund.

LYGOSOMA DECIPIENS. (Plate XLIX. fig. 3.)

This small Scink so much resembles the preceding in coloration and in the scaling of the head that one would at first be inclined to refer it to the same species. It differs, however, in several important characters. The ear-opening is much larger and oval, nearly two-thirds the size of the eye-opening. The rostral forms a much broader suture with the frontonasal; the frontal is slightly longer than the frontoparietal. The body is shorter, the distance between the end of the snout and the fore limb once and onefourth to once and one-third in the distance between axilla and groin. The length of the hind limb equals the distance between the nostril and the fore limb. There are 36 scales round the middle of the body. The tail tapers gradually from the base. As stated above, the coloration is much the same as in L. luzonense; there are, however, no other dark spots on the back but those forming the interrupted vertebral line ; a well-defined dark brown streak, continued as a dorso-lateral line, extends along each side of the head and neck, passing through the eye, and the temple and neck below it are white.

| | millim. | and the other states of the | millim. |
|---------------|---------|-----------------------------|---------|
| Total length | 80 | Fore limb | 10 |
| Head | 9 | Hind limb | |
| Width of head | 5 | Tail | |
| Body | | | |

Both this species and the preceding connect the sections Hinulia and Homolepida, but should be referred to the former, as defined by me¹.

Two specimens were obtained by Mr. Whitehead on Isabella, N.E. Luzon.

¹ Through an oversight, the section *Hinulia* is stated in my Catalogue to be characterized by distinct frontoparietals; L. acutum forms an exception in having these shields fused.

ABLEPHARUS CARSONII. (Plate XLIX. fig. 4.)

Snout very short, obtuse. Eye entirely surrounded by a circle of granules. Rostral forming an extensive suture with the frontonasal, which is in contact with the frontal; no supranasal; frontal small, hardly one third the size of the single shield formed through fusion of the frontoparietals and interparietal; three supraoculars, first largest and in contact with the frontal; five or six supraciliaries; a pair of nuchals; four upper labials anterior to the subocular. Ear-opening roundish, as large as the pupil. 26 scales round the middle of the body, laterals a little smaller than dorsals or ventrals. Præanals scarcely enlarged. Limbs pentadactyle, narrowly separated when adpressed. Bronzy brown above. greenish white beneath; a black vertebral line; a black line edged above with yellow, on each side, from the end of the snout to the base of the tail.

| | millim. | | millim. |
|---------------|---------|-----------|---------|
| Total length | 80 | Fore limb | . 8 |
| Head | | Hind limb | . 10 |
| Width of head | 4.5 | Tail | . 46 |
| Body | 28 | | |

A single specimen from Fwambo, British Central Africa. Collected by Mr. A. Carson.

TROPIDOPHORUS MOCQUARDII.

This species, specimens of which have been referred to *T. beccarii* by Dr. Mocquard in his paper on the reptiles of Kina Baloo (N. Arch. Mus. [3] ii. 1890, p. 135), agrees with *T. beccarii* in its smooth scales, with *T. brookii* in its smaller postmental, behind which two pairs of shields are in contact, and in its larger head, which is more swollen at the temples; it differs from both in the greater number of scales round the body, viz. 34. The coloration is the same as in *T. brookii*. From snout to vent 95 millim.

Two specimens, male and female, from Kina Baloo, N. Borneo, received from Mr. A. Everett.

The female contains four fully developed young, measuring 30 millim. from snout to vent.

EXPLANATION OF THE PLATES.

PLATE XLVII.

Fig. 1. Œdura nivaria, Blgr., p. 726.

1 a. ,, ,, Lower surface of foot, $\times 2$.

2. Elasmodactylus tuberculosus, Blgr., p. 727.

2a. ,, ,, Lower surface of foot, $\times 2$.

3. Urocentrum guentheri, Blgr., p. 729.

[Dec. 4,

PLATE XLVIII.

- Fig. 1. Anolis rixi, Blgr., p. 727. Upper surface of head, × 2¹/₂.
 2. Anolis rhombifer, Blgr., p. 728. Upper surface of head, × 2¹/₂.
 3. Sceloporus bulleri, Blgr., p. 729. Head and anterior part of body.
 4. Sceloporus heterolepis, Blgr., p. 731.
 5. Diploglossus bivittatus, Blgr., p. 732.
 5 a. ,, ,, Upper surface of head, × 2¹/₂.

PLATE XLIX.

Fig. 1. Tachydromus holsti, Blgr., p. 733.

| 1 a. | " | ,, | Upper surface of head, $\times 3$. |
|--------------|-------------|-----------|-------------------------------------|
| 1 <i>b</i> . | " | ,, | Lower surface of head, $\times 3$. |
| 2. Ly | gosoma lu | zonense | , Blgr., p. 733. |
| 2 a. | | | Upper surface of head, $\times 3$. |
| 3. Ly | gosoma de | ecipiens. | Blgr., p. 734. |
| 3 a. | | | Upper surface of head, $\times 3$. |
| 4. Abi | lepharus of | carsonii | , Blgr., p. 735. |
| 4a. | ,,, | | Upper surface of head, $\times 3$. |





Boulenger, George Albert. 1895. "Second report on additions to the lizard collection in the Natural History Museum." *Proceedings of the Zoological Society of London* 1894, 722–736.

View This Item Online: <u>https://www.biodiversitylibrary.org/item/97157</u> Permalink: <u>https://www.biodiversitylibrary.org/partpdf/69583</u>

Holding Institution Natural History Museum Library, London

Sponsored by Natural History Museum Library, London

Copyright & Reuse Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.