

VII. *A Monographic List of the species of Gasteracantha, or Crab-spiders, with descriptions of new species, &c.* By A. G. BUTLER, F.L.S., F.Z.S., &c.

[Read 3rd February, 1873.]

IN the preparation of the present list, I have found M. Simon's recent subdivisions (Hist. Nat. des Araign.) of great use; he has not, however, described all the varieties of spinning in this multiform genus, and therefore I have added several, adopting his view of their sub-generic value.

In this paper I have described nineteen species which appear to me to be quite new, some of them being brilliantly coloured, and others very remarkable in form.

I am indebted to the Rev. O. P. Cambridge for calling my attention to Koch's great work on the *Arachnida* of Australia, now being published at Nuremburg.

Sub-genus MACRACANTHA, Simon.

1. *G. arcuata*.

Aranea arcuata, Fabricius, Ent. Syst. 3, p. 425, n. 65.

Var. *Gasteracantha arcuata*, Koch, Arachn. 4, p. 34; pl. 118, fig. 270 (1837).

Ceylon; Java, *Argent*.

B.M.

2. *G. curvicauda*.

Epeira curvicauda, Vauthier, Ann. Sci. Nat. 1, p. 261, pl. 18, figs. 1—6 (1824).

Plectana arcuata? Doleschall, Acta Soc. Scient. Indo-Nederl. 5, pl. 12, fig. 3 (1859).

Java, *Argent*; Borneo, *Wallace*.

B.M.

Seems chiefly to differ from *G. arcuata* in its shorter spines.

Sub-genus TATACANTHA.

Abdomen unequally hexagonal, broader behind than before, with six spines, two short at anterior lateral angles, two long, obliquely ascending (sometimes clubbed at extremity and pilose), and two slightly divergent, rather short, at posterior angles.

Typical form *G. clavatrix*.

3. *G. remifera*, n. sp. Pl. IV. fig. 5.

Female; length of abdomen $3\frac{1}{4}$ lines; breadth at widest part, excluding spines, 4 lines; entire length 5 lines; posterior lateral spines 7 lines.

General form and appearance of cephalothorax and abdomen that of *G. arcuata*, but the long divergent lateral spines of the same character as those of *G. clavatrix*, from which they differ chiefly in their much greater length and less abruptly formed club.

Cephalothorax pitchy, with central area behind caput testaceous; an orange spot on each side of central oculiferous prominence; eyes golden yellow; falces black, castaneous internally; maxillæ and legs pilose, brownish-testaceous with the joints blackish, but the three front pairs with femora bright testaceous; abdomen above dirty ochraceous, with sixteen impressed black spots round the margin, and four, forming a trapezoid in the centre; spines six in number, blue-black, pilose, divergent, straight, otherwise arranged as in *G. curvicauda*; ventral surface dirty ochraceous, speckled with black, deeply wrinkled transversely, strongly but sparsely punctured and pilose; region of spinnerets black; labium and sternum testaceous, clouded with brown.

Ceylon, *Thwaites*. 3 specimens.

B.M.

4. *G. nigrisparsa*, n. sp. Pl. IV. fig. 11.

Female; length of abdomen $3\frac{1}{2}$ lines; breadth at widest part, excluding spines, $4\frac{1}{4}$ lines; entire length, excluding spines, $4\frac{3}{4}$ lines.

General form of the preceding species, but the long divergent lateral spines more slender, with the club curved and more suddenly formed.

Cephalothorax black; eyes pale crystalline yellow; falces black; maxillæ pitchy, testaceous at base; legs brown, pilose; femora of two front pairs testaceous; abdomen above smoky ochraceous, irrorated, especially on the front margin, with black; impressed spots as in preceding species; ventral surface dull ochraceous, irrorated with black, deeply wrinkled transversely, with black impressed spots here and there; region of spinnerets black; labium and sternum testaceous.

Philippines. 2 specimens.

B.M.

5. *G. clavatrix*.

Plectana clavatrix, Walckenaer, Apt. 2, p. 186, n. 56, 1837—39).

Celebes, Menado, *Ida Pfeiffer*.

B.M.

6. *G. globulata*.

Plectana globulata, Walckenaer, Apt. 2, p. 151 (1837).

"Java and Sumatra," *Walckenaer*; Malacca, *Wallace*.
B.M.

Sub-genus ACTINACANTHA, Simon.

7. *G. Blackwallii*.

Gasteracantha Blackwallii, Keyserling, Sitzungsber. der Isis zu Dresden, p. 65; pl. 1, fig. 1 (1863, edit. 1864).

"Madagascar," *Keyserling*.

8. *G. sororna*, n. sp. Pl. IV. fig. 15.

Female; length of abdomen $3\frac{1}{2}$ lines; breadth at widest part, excluding spines, 4 lines: entire length 5 lines; posterior lateral spines $3\frac{1}{2}$ lines; anterior $\frac{1}{2}$ a line; of posterior margin $\frac{3}{4}$ of a line.

Cephalothorax as usual; abdomen subrotundate, with eight unequal angles, and six acute divergent spines; two on anterior lateral angle shortest, directed obliquely forwards; two, seven times as long and robust, on posterior lateral angle, directed obliquely backwards and upwards; two, short, on posterior margin, horizontal and widely divergent.

Cephalothorax dull black, slightly pilose, with anterior edge slenderly castaneous; falces and legs pitchy; abdomen brownish-testaceous; four central and sixteen marginal impressed brown spots; spines blue-black, rugose; ventral surface same colour as above, rugose, transversely wrinkled across the central area, and coarsely punctured at the sides.

Madras, *Jerdon*. 1 specimen. B.M.

Nearly allied to *G. Blackwallii* of Keyserling.

9. *G. helva* (? *Lepelletieri*).

Gasteracantha helva, Blackwall, Ann. and Mag. Nat. Hist. S. 3, vol. 14, p. 42 (1864).

? *Epeira Lepelletier*, Guérin, Enc. Méth. 10, p. 764.

Plectana Lepelletieri, Walckenaer, Apt. 2, p. 156, n. 9 (1837).

? *Plectana prætextata*, Doleschall, Acta Soc. Scient. Indo-Nederl. 5, pl. 8, fig. 4; pl. 11, fig. 6 (1859).

Siam, *Bowring*, &c. B.M.

10. *G. horrens*.

Gasteracantha horrens, Thorell, Öfvers. Vetensk. Akad. Förhandl. xvi. p. 303, n. 11 (1859, edit. 1860); Eug. Resa, Zool. Arachn. p. 21 (1868).

"Assam," Thorell; Sp. ead. ? Sikkim, Dr. Hooker. B.M.

11. *G. hepatica*.

♀ *Gasteracantha hepatica*, Koch, Arachn. Austral. 1, p. 8, n. 8, pl. 1, fig. 5.

"Java and Sumatra," Koch.

12. *G. scintillans*, n. sp. Pl. IV. fig. 9.

Female; length of abdomen 3 lines; breadth at widest part, excluding spines, 4 lines; entire length $4\frac{1}{2}$ lines; posterior lateral spines 3 lines, anterior 1 line; of posterior margin 2 lines.

Cephalothorax of normal type; abdomen hexagonal, with six acute divergent spines; two on the anterior lateral angle, short, directed obliquely forwards; two, three times as long, on the posterior lateral angle, directed obliquely backwards, and nearly vertical, and two shorter ones on the posterior margin, horizontal and widely divergent.

Cephalothorax, falcēs, legs, maxillæ, labium and sternum shining black; abdomen with central area dark brick-red; margin and bases of spines coarsely granulose, metallic green and fiery copper-coloured; spines blue-black; four central and sixteen marginal impressed black spots; ventral surface coarsely granulose, metallic green and fiery copper-coloured, deeply wrinkled and impressed transversely, the sulcæ being black.

Hab. — ? 1 specimen.

B.M.

The most gorgeously coloured spider in this genus.

13. *G. regalis*, n. sp. Pl. IV. fig. 7.

Female; length of abdomen $3\frac{1}{4}$ lines; breadth at widest part, excluding spines, 4 lines; entire length $4\frac{1}{2}$ lines; posterior lateral spines $2\frac{1}{2}$ lines, anterior 1 line; of posterior margin $1\frac{3}{4}$ line.

Cephalothorax of normal type; abdomen hexagonal, with six acute divergent spines; two on the anterior lateral angle, short, directed obliquely forwards and upwards, two much longer on posterior lateral angle, directed obliquely backwards and nearly vertical, and two rather shorter on posterior margin, horizontal and widely divergent.

Cephalothorax, falcēs, legs, maxillæ, labium and sternum

shining black; abdomen ochraceous, four central and eighteen marginal impressed black spots, and two or three dots; spines metallic purple, granulose at base; ventral surface coarsely granulose, metallic purple, deeply wrinkled and impressed transversely, the sulcæ being olivaceous-brown.

New Hebrides, *Cuming*. 1 specimen.

B.M.

Allied to the preceding species.

Sub-genus ANCHACANTHA.

Abdomen irregularly and transversely oblong irregular; with six strong spines, all directed backwards, the two at the anterior lateral angles the shortest, those at the posterior lateral angles the longest, but those at the posterior angles nearly as long, so that the posterior outline of the abdomen exhibits three deep sinuations.

Type, *A. curvispina*.

14. *G. curvispina*.

Epeira curvispina, Guérin, Icon. Règne anim. Arachn. pl. 2, fig. 8 (1829—44).

Plectana curvispina, Walckenaer, Apt. 2, p. 154, n. 5 (1837).

Ashanti.

B.M.

15. *G. retracta*, n. sp. Pl. IV. fig. 12.

Female; length of abdomen $1\frac{3}{4}$ line; breadth at widest part, excluding spines, $2\frac{1}{2}$ lines; entire length $2\frac{1}{4}$ lines; anterior lateral spines $\frac{1}{2}$ a line, posterior 1 line; of posterior margin $\frac{2}{3}$ of a line.

Cephalothorax normal; abdomen subovate, with eight obtuse angles; six acute spines, two from anterior lateral margins, very short, subconical, directed laterally; two from posterior lateral angles, directed obliquely backwards; two from posterior margin subparallel.

Cephalothorax, falces, maxillæ and legs castaneous; labium dirty testaceous; sternum pitchy; abdomen above testaceous, with four central and nineteen submarginal impressed spots of the same colour; spines castaneous, rugose, and pilose; ventral surface dull brown, spotted with yellow, transversely wrinkled, and rugose between the spots; conical projection pitchy.

Old Calabar, *Dalton*. 1 specimen.

B.M.

Allied to *G. curvispina*, but very distinct.

16. *G. vaccula*.

Gasteracantha vaccula, Thorell, Öfvers. Vetensk. Akad. Förhandl. xvi. p. 301, n. 1 (1859, edit. 1860); Eug. Resa, Zool. Arachn. 1, p. 12 (1868).

Sp. ead. ? Sierra Leone (Sherboro Island), *Salmon*.

B.M.

If I have rightly identified this species, it is allied to *G. curvispina*; the description of the spines on the abdomen is so vague in the original diagnosis, the number of them even not being mentioned, that it is impossible to determine the species with certainty.

Sub-genus GASTERACANTHA, Simon.

17. *G. ornata*.

Gasteracantha ornata, Thorell, Öfvers. Vetensk. Akad. Förhandl. xvi. p. 302, n. 7 (1859, edit. 1860); Eug. Resa, Zool. Arachn. p. 16 (1868).

"*Caffraria*" (*Wahlberg*), *Thorell*.

Seems allied to *G. ensifera*; the central lateral spines are, however, directed backwards and upwards.

18. *G. falcicornis*, n. sp. Pl. IV. fig. 10.

Female; length of abdomen $3\frac{1}{4}$ lines; breadth at widest part, excluding spines, $6\frac{1}{2}$ lines; entire length 4 lines; posterior lateral spines about $5\frac{1}{2}$ lines, anterior 1 line; of posterior margin $\frac{3}{4}$ of a line.

Cephalothorax normal; abdomen transversely suboval, with six angles, from which the spines spring; two on anterior lateral margin, short, horizontal, curving slightly backwards; two on posterior lateral margin, about seven times as long, robust, strongly curved backwards and upwards; and two, short on posterior margin, horizontal and nearly parallel.

Cephalothorax, falces and femora of legs castaneous, pilose; maxillæ, labium, tibiæ, and tarsi of legs and sternum pitchy; abdomen testaceous, with four central and twenty marginal impressed red spots; spines reddish-castaneous, pilose; ventral surface brown, spotted with ochraceous, testaceous at the margins, with two or three impressed red spots; a black conical projection between spinnerets and epigyne.

S. Africa, *Rev. Ch. Livingstone*. 1 specimen. B.M.

Seems allied to *G. ornata* of Thorell.

19. *G. Thorellii*.

Gasteracantha Thorellii, Keyserling, Sitzungsber.

der Isis zu Dresden, p. 67; pl. 1, fig. 4 (1863, edit. 1864).

"Nossi-bé," *Keyserling*.

20. *G. unguicornis*, n. sp. Pl. IV. fig. 13.

Female; length of abdomen $3\frac{1}{4}$ lines; breadth at widest part, excluding spines, 8 lines; entire length 4 lines; posterior lateral spines 3 lines, anterior $\frac{1}{2}$ a line; of posterior margin $\frac{1}{2}$ a line.

Cephalothorax normal; abdomen same form as in *G. fornicata*, with six angles from which the spines spring; two on anterior lateral margins acute, very short, directed obliquely forwards; two on posterior lateral margins, six times as long, very robust, rather obtuse, distinctly curved backwards and downwards; and two very short and obtuse on posterior margin, parallel, and directed slightly upwards.

Cephalothorax, falces, maxillæ and sternum pitchy, pilose; labium dark testaceous; legs brown; abdomen rugose, olivaceous-brown, with four central and nineteen marginal impressed castaneous spots; spines pitchy, rugose and pilose; ventral surface rugose, dark olivaceous-brown, with dark castaneous submarginal impressed spots; a well-developed, black, conical projection between spinnerets and epigyne.

"India or China." 1 specimen.

B.M.

Seems allied to *G. Thorellii*.

21. *G. consanguinea*, n. sp.

Female; length of abdomen $3\frac{1}{4}$ lines; breadth at widest part, excluding spines, 8 lines; entire length $4\frac{1}{4}$ lines; posterior lateral spines 2 lines, anterior $\frac{1}{3}$ of a line; of posterior margin $\frac{1}{2}$ a line.

Excepting in the spines, same colours and characters as *G. unguicornis*; lateral spines shorter, posterior lateral spines less curved backwards, and almost horizontal.

China, *J. C. Bowring*. 1 specimen.

B. M.

22. *G. milvoides*, n. sp. Pl. IV. fig. 2.

Female; length of abdomen 3 lines; breadth at widest part, excluding spines, $6\frac{1}{4}$ lines; entire length —?; posterior lateral spines 4 lines, anterior $\frac{1}{2}$ a line; of posterior margin $\frac{2}{3}$ of a line.

Cephalothorax wanting; abdomen nearly same form as in *G. fornicata*, with six angles from which the spines spring; all the spines acute; two on anterior lateral mar-

gin very short, directed slightly forwards; two on posterior lateral margin eight times as long, robust, directed slightly backwards and upwards; and two short on posterior margin, divergent, and nearly horizontal.

Cephalothorax wanting; abdomen above reddish-olivaceous, delicately rugose and pilose, with four central and nineteen marginal impressed castaneous spots; spines dark castaneous, pilose; ventral surface rugose and pilose, reddish-olivaceous, becoming blackish in the centre, transversely wrinkled, and coarsely punctured, with impressed castaneous spots at bases of lateral spines; a black conical projection above spinnerets.

S. Africa, *Rev. Ch. Livingstone*.

B.M.

23. *G. ensifera*.

Gasteracantha ensifera, Thorell, Öfvers. Vetensk. Akad. Förhandl. xvi. p. 302, n. 6 (1859, edit. 1860); Eug. Resa, Zool. Arachn. p. 16 (1868).

Sp. ead.? S. Africa, *Rev. C. Livingstone*. B.M.

Our specimen consists simply of an abdomen, therefore I am unable to be certain of its identity with that described by Dr. Thorell.

24. *G. dicallina*, n. sp. Pl. IV. fig. 1.

Female; length of abdomen $3\frac{1}{2}$ lines; breadth at widest part, excluding spines, 7 lines; entire length — ?; posterior lateral spines $2\frac{3}{4}$ lines, anterior 1 line; of posterior margin 2 lines.

Cephalothorax wanting; abdomen same general form as *G. formosa*, with six angles from which the spines spring; two on anterior lateral margin short, acute, directed laterally, with a very slight inclination forwards; two on posterior lateral margin nearly three times as long, obtuse, but with small terminal tooth, directed laterally, and curving backwards; and two rather long on posterior margin, parallel, and directed obliquely upwards.

Cephalothorax wanting; abdomen smooth, with minutely serrated margin, orange crossed through the centre by two irregular, waved, dark red bars, and posteriorly by a slender interrupted black line, connecting impressed spots; four central and twenty-one marginal impressed red spots; spines red, rugose and pilose; ventral surface coarsely granulose, black, spotted with orange, spines red; impressed spots at base of spines dark red; usual black conical projection.

Pachebon, Siam, *Stevens*.

B.M.

Remarkable for the length of the posterior spines.

25. *G. formosa*.

Gasteracantha formosa, Vinson, Aran. de la Réunion, p. 315, n. 62; pl. 9, fig. 7, var. (1863).
Madagascar, *Ida Pfeiffer*.

B.M.

26. *G. nana*, n. sp. Pl. IV. fig. 4.

Female; length of abdomen 2 lines, breadth at widest part, excluding spines, 3 lines; entire length $2\frac{1}{2}$ lines; posterior lateral spines $1\frac{1}{4}$ line, anterior $\frac{1}{4}$ of a line; of posterior margin $\frac{2}{3}$ of a line.

Cephalothorax normal; abdomen form of *G. formosa*, with six angles bearing the spines; two on anterior lateral margin acute, very short, directed obliquely forwards; two on posterior lateral margin five times as long, acute, directed slightly backwards; and two short, acute, divergent, on posterior margin.

Cephalothorax, falces, maxillæ, labium, sternum and legs ochraceous; abdomen smooth, testaceous, with four central and eighteen marginal impressed castaneous spots; spines castaneous, rugose, pilose; ventral surface black, spotted with testaceous in the centre, but testaceous round the margins, and exhibiting impressed spots at base of lateral spines; black conical projection as usual.

Congo. 1 specimen.

B.M.

27. *G. versicolor*.

Plectana versicolor, Walckenaer, Apt. 2, p. 161, n. 18 (1837).

"Caffraria," *Walckenaer*; Sp. ead.? Pt. Natal, *Stevens*.

B.M.

28. *G. violenta*.

♀ *Gasteracantha violenta*, Koch, Arachn. Austral. 1, p. 5, n. 5; pl. 1, fig. 3 (1871).

"New Guinea," *Koch*; Australia, Port Macquarie, Falkland Isles.

B.M.

Our dried examples of this species are much broken, and show no trace of the dark bands mentioned in Koch's description; in form they agree well with his figure; but the large depressed spots of the second series seem rather continuous with the first than the third series, as in *G. tæniata*.

29. *G. tæniata*.

Plectana tæniata, Walckenaer, Apt. 2, p. 169, n. 29 (1837); Koch, Arachn. Austral. 1, p. 10, n. 10 (1871).

Dorey, *Wallace*.

B.M.

30. *G. panisicca*, n. sp. Pl. IV. fig. 14.

Female; length of abdomen $2\frac{1}{2}$ lines; breadth at widest part, excluding spines, $5\frac{1}{2}$ lines; entire length $3\frac{3}{4}$ lines; posterior lateral spines 1 line, anterior $\frac{1}{2}$ a line; of posterior margin 1 line.

Cephalothorax and abdomen as in *G. tæniata*, the latter with six angles from which the spines spring; two on anterior lateral margin acute, very short, directed slightly forwards; two on posterior lateral margin twice as long, obtuse, with terminal tooth, and two of equal length on posterior margin, acute and widely divergent.

Cephalothorax, falces and sternum black, pilose; labium pitchy, clouded with castaneous and clothed with testaceous hairs; maxillæ and legs pitchy, pilose; abdomen pale testaceous or whitey-brown, rugose, the margins speckled with black granules, with four central and eighteen marginal impressed black spots; spines black, rugose and pilose; ventral surface whitey-brown, speckled with black granules and with black impressed spots round the margin; usual black conical projection.

Philippines. 1 specimen.

B.M.

Allied to *G. tæniata*.

31. *G. Sturii*.

Plectana Sturii, Doleschall, Natuurk. Tijd. Nederlandsch. Indië. xiii. p. 424 (1857); Acta Soc. Scient. Indo-Nederl. 5, pl. 8, fig. 1 (1859).

"Amboina," *Doleschall*; Ceram, *Ida Pfeiffer*. B.M.

Close to *G. tæniata*.

32. *G. centrum*.

Plectana centrum, Doleschall, Natuurk. Tijd. Nederlandsch. Indië. xiii. p. 425 (1857).

"Central Java," *Doleschall*.

33. *G. Mauricia*.

Plectana Mauricia, Walckenaer, Apt. 2, p. 155, n. 8 (1837).

Madagascar (near Antananarivo).

B.M.

34. *G. Lepida*.

Gasteracantha Lepida, Cambridge, Proc. Zool. Soc. p. 821, pl. 50, fig. 2 (1870).

"Sinai" (*Lord*), Cambridge.

Most nearly allied to *G. Mauricia* of Walckenaer, also to *G. sanguinolenta* of Koch.

35. *G. Madagascariensis*.

Gasteracantha Madagascariensis, Vinson, Aran. de la Réunion, p. 315, n. 61; pl. 9, fig. 6 (1863).

"Madagascar," *Vinson*.

A striking black and white species of the typical subgenus.

36. *G. vittata*.

Gasteracantha vittata, Thorell, Öfvers. Vetensk. Akad. Förhandl. xvi. p. 301, n. 2 (1859, edit. 1860); Eug. Resa, Zool. Arachn. 1, p. 13 (1868); Koch, Arachn. Austral. 1, p. 2, n. 3, pl. 1, fig. 1 (1871).

Var. ? *Plectana acuminata*, Doleschall (nec Walckenaer), Acta Soc. Scient. Indo-Nederl. 5, pl. 16, fig. 1 (1859).

Java, *Melly*.

B.M.

37. *G. obliqua*.

Gasteracantha obliqua, Koch, Arachn. 11, p. 64, pl. 375, fig. 884 (1845).

"Brazils," *Koch*.

Near *G. vittata*; we have an allied species from Brazil.

38. *G. sexserrata*.

Plectana sexserrata, Walckenaer, Apt. 2, p. 157, n. 11 (1837).

"Cayenne," *Walckenaer*; Sp. ead. ? *Hab.*—? B.M.

39. *G. irradiata*.

Plectana irradiata, Walckenaer, Apt. 2, p. 170, n. 30 (1837).

"Cochin China," *Walckenaer*; *Corea*, *Adams*. B.M.

40. *G. sanguinolenta*.

Gasteracantha sanguinolenta, Koch, Arachn. 11, p. 51; pl. 373, fig. 875 (1845).

"Cape of Good Hope," *Koch*; Sp. ead. ? Congo, *Curror*. B.M.

41. *G. fornicata*.

Gasteracantha fornicata, Fabricius, Syst. Ent. 2,

p. 417, n. 40; Koch, Arachn. 4, p. 18, pl. 113, fig. 261 (1837).

Gasteracantha transversa, Koch, Arachn. 4, p. 14, pl. 113, fig. 259 (1837).

Var. *Epeira Diadi*, Lucas, Dict. pitt. d'Hist. nat. 3, p. 70; pl. 149, fig. 4.

Ceylon and E. Indies; Java, *Melley, Ross.* B.M.

The type of *G. fornicata* is in the Banksian Collection.

42. *G. nebulosa*, n. sp.

Female; length of abdomen 3 lines; breadth at widest part, excluding spines, 7 lines; entire length 4 lines; posterior lateral spines $2\frac{1}{2}$ lines, anterior $\frac{2}{3}$ of a line; of posterior margin 1 line.

Cephalothorax as usual, but slightly more depressed behind the eyes; abdomen form of *G. fornicata*, with six angles bearing the spines; two on anterior lateral margins acute, short, directed obliquely forwards; two on posterior lateral margins nearly four times as long, robust, acute, curving slightly downwards and backwards, and two short, acute, nearly parallel, on posterior margin.

Cephalothorax and falces pitchy; maxillæ and legs dark castaneous-brown; labium and sternum ochraceous; abdomen dark castaneous, with anterior and posterior areas dirty testaceous, granulated with black; four ill-defined central and fourteen marginal impressed reddish-castaneous spots, ten on front and four in pairs on hind-margin, between the latter four coarse punctures; spines pitchy; those of posterior lateral margins glossed with steel blue; ventral surface brownish-testaceous, covered with shining brown granules, and with reddish impressed submarginal spots, transversely wrinkled behind; two shining castaneous spots at back of spinnerets; conical projection brown; spines as above.

Java, *Argent.* 1 specimen.

B.M.

Possibly a variety of *G. fornicata*.

43. *G. Sumatrana*, n. sp. Pl. III. fig. 3.

Female; length of abdomen $3\frac{1}{2}$ lines; breadth at widest part, excluding spines, 8 lines; entire length $4\frac{1}{2}$ lines; posterior lateral spines $2\frac{1}{4}$ lines, anterior $\frac{1}{2}$ a line; of posterior margin 1 line.

Cephalothorax normal; abdomen same general form as *G. fornicata*, but broader and more prominent in front, with six angles bearing the spines, two on anterior lateral margins, very short, acute, directed obliquely forwards;

two on posterior lateral margins five times as long, robust, obtuse, with suddenly acuminate apex, nearly straight and horizontal; two on posterior margin, acute, nearly parallel, depressed.

Cephalothorax black, with castaneous anterior margin, clothed at the sides with short testaceous hairs; falces and maxillæ black; sternum and legs pitchy; labium pitchy, margined with castaneous; abdomen olivaceous-brown, delicately rugose at the margins, hind margin brownish-testaceous; spines pitchy, rugose; ventral surface brown, dirty testaceous behind, and irrorated with blackish granules; submarginal impressed spots black; conical projection brown.

Sumatra, *Sir Stamford Raffles*.

B.M.

Nearly allied to *G. fornicata*, but certainly distinct.

44. *G. varia*.

Gasteracantha varia, Thorell, Öfvers. Vetensk. Akad. Förhandl. xvi. p. 301, n. 3 (1859, edit. 1860); Eug. Resa, Zool. Arachn. p. 14 (1868).

Hab.—?

Seems to belong to the *G. fornicata* group.

45. *G. frontata*.

Gasteracantha frontata, Blackwall, Ann. & Mag. Nat. Hist. S. 3, vol. 14, p. 40 (1864).

"E. India," *Blackwall*.

Seems, from the description, very like a minute specimen of *G. fornicata*.

46. *G. Hebridisia*, n. sp.

Female; length of abdomen $2\frac{3}{4}$ lines; breadth at widest part, excluding spines, $6\frac{1}{2}$ lines; entire length $3\frac{1}{2}$ lines; posterior lateral spines $1\frac{1}{3}$ line, anterior $\frac{2}{3}$ of a line; of posterior margin 1 line.

Cephalothorax normal; abdomen transversely oblongo-ovate (nearly form of *G. Westringii*), with six angles bearing the spines; two on anterior lateral margin acute, short, directed slightly forwards; two on posterior lateral margin twice as long, robust, obtuse, with terminal tooth, directed slightly downwards and backwards; and two short, acute and divergent, on posterior margin.

Cephalothorax, falces, maxillæ, and legs, black, clothed with testaceous hairs; labium brown; abdomen smooth, ochraceous, with four central and seventeen marginal

reddish-pitchy impressed spots; spines purplish-black, rugose and pilose; ventral surface black, spotted with orange; central area bearing conical projection, castaneous.

Aneiteum, New Hebrides, *Cuming*. 1 specimen. B.M.

Somewhat intermediate in character between *G. tæniata* and *G. Westringii*, and remarkable for the unique colouring of the ventral surface of the abdomen.

47. *G. albiventer*, n. sp. Pl. IV. fig. 6.

Female; length of abdomen $1\frac{3}{4}$ line; breadth at widest part, excluding spines, $3\frac{1}{2}$ lines; posterior lateral spines 1 line, anterior $\frac{1}{2}$ a line; of posterior margin $\frac{2}{3}$ of a line.

Cephalothorax normal; abdomen transversely oblongo-ovate, with six angles bearing the spines; two on anterior lateral margins acute, short, directed obliquely forwards; two on posterior lateral margins twice as long, robust, suddenly pointed at apex, directed obliquely backwards with a slight curve; and two short, acute, nearly parallel, on posterior margin.

Cephalothorax, falces, maxillæ, labium and legs dark olivaceous; sternum testaceous; abdomen testaceous, with four central and nineteen marginal ferruginous impressed spots; spines ferruginous; ventral surface white speckled with black, with spines, impressed spots and conical projection, ferruginous.

Dorey, New Guinea, *Wallace*. 1 specimen. B.M.

Remarkable for the white colour of the ventral surface of the abdomen: it is allied to *G. Hebridisia*.

48. *G. Westringii*.

Gasteracantha Westringii, Keyserling, Sitzungsber. der Isis zu Dresden, p. 66, pl. 1, fig. 2 (1863, edit. 1864); Koch, Arachn. Austral. 1, p. 3, n. 4; pl. 1, fig. 2 (1871).

Australia, *Koch*; "Georgia"! B.M.

Koch says that this species bears a great resemblance to *G. fornicata* and *G. transversa*: our locality is probably wrong, as we have a nearly allied species from the Isle of Pines (not Atlantic).

49. *G. mollusca*.

Gasteracantha mollusca, Koch, Arachn. Austral. 1, p. 7, n. 6; pl. 1, fig. 4 (1871).

"New Caledonia," *Koch*.

Allied to *G. irradiata* of Walckenaer.

50. *G. Hecate*.

Plectana Hecate, Walckenaer, Apt. 2, p. 168, n. 28 (1837); Petiver, Gazoph. pl. 26, fig. 5.

"Luzon," *Walckenaer*; Philippines. B.M.

The front and hind pairs of spines are very short in our example.

51. *G. falcifera*.

Gasteracantha falcifera, Koch, Arachn. 11, p. 62; pl. 375, n. 883 (1845).

Manilla, *Koch*; Philippines. B.M.

52. *G. Bleekeri*.

Plectana Bleekeri, Doleschall, Natuurk. Tijd. Nederlandsch. Indië. xiii. p. 423 (1857).

"Amboina," *Doleschall*.

Seems allied to *G. falcifera*; according to Doleschall it is allied to *G. Linnæi* of Walckenaer.

Sub-genus ATELACANTHA, *Simon*.

53. *G. Mengii*.

Gasteracantha Mengii, Keyserling, Sitzungsber. der Isis zu Dresden, p. 67, pl. 1, fig. 5 (1863, edit. 1864).

Atelacantha Malagensis, Simon, Hist. Nat. des Araign. p. 285, fig. 130 (1864).

"Malacca," *Keyserling*; Singapore, *Wallace*. B.M.

Sub-genus CALLOCANTHA, *Simon*.

54. *G. geminata*.

Aranea geminata, Fabricius, Suppl. Ent. Syst. p. 292, nos. 38, 39.

Gasteracantha geminata, Koch, Arachn. 4, p. 18, pl. 113, fig. 260 (1837).

Madras, *Jerdon*; Ceylon, *Thwaites*. B.M.

55. *G. Servillii*.

Epeire de Serville, Guérin, Enc. Méth. 10, p. 763.

Plectana Servillii, Walckenaer, Apt. p. 159, n. 15 (1837).

Brazil.

According to Walckenaer, it resembles *G. geminata*, but is a broader species, and different.

56. *G. transversalis*.

Plectana transversalis, Walckenaer, Apt. 2, p. 165, n. 22 (1837).

"Timor," *Walckenaer*.

Allied to *G. geminata*.

57. *G. connata*, n. sp.

Female; length of abdomen two lines; breadth at widest part, excluding spines, $3\frac{1}{2}$ lines; entire length $2\frac{3}{4}$ lines; anterior lateral spines $1\frac{1}{4}$ line, posterior $1\frac{1}{3}$ line; of posterior margin 1 line.

Cephalothorax nearly normal, but flattened and indistinctly transversely depressed behind eyes; abdomen same general form as *G. geminata*, but narrower, more prominent in front, and with lateral spines bending slightly forwards (more than in any examples of *G. geminata* in the collection); slightly divergent at their tips; spines of posterior margin acute, slightly divergent.

Cephalothorax and falces pitchy, labium and sternum ochraceous; maxillæ and legs pitchy, banded with ochraceous; abdomen above ochraceous, crossed transversely by two bands of black, with four central and sixteen submarginal impressed spots, three on either side behind, the others in front; spines castaneous, varied with black, slightly rugose and very pilose: ventral surface black, spotted with ochraceous; bases of femora of legs testaceous; basal half of spines castaneous, apical half black; conical projection black.

Old Calabar, *Gray*. 1 specimen.

B.M.

Nearly allied to *G. geminata*.

Sub-genus TETRACANTHA, *Simon*.

58. *G. tetracantha*.

Aranea tetracantha, Linnæus, Syst. Nat. 1, pt. 2, p. 1037, n. 43.

Plectana Linnæi, Walckenaer, Apt. 2, p. 163, n. 20 (1837).

Gasteracantha quadridens, Koch, Arachn. 11, p. 59, pl. 374, fig. 880 (1845).

Var. *Gasteracantha pallida*, Koch, l. c. p. 60, pl. 374, fig. 881 (1845).

"Caffraria and Isle of St. Thomas, coast of Africa," *Walckenaer*; "Isle of St. Thomas, West Indies!" Koch.

B.M.

59. *G. inversa*.

Plectana inversa, Walckenaer, Apt. 2, p. 164, n. 21 (1837).

"Caffraria" (*Delalande*), *Walckenaer*.

Allied to *G. tetracantha*.

60. *G. mæsta*.

Gasteracantha mæsta, Thorell, Öfvers. Vetensk. Akad. Förhandl. xvi. p. 301, n. 4 (1859, edit. 1860); Eug. Resa, Zool. Arachn. p. 14 (1868).

"St. Barthelemy," *Thorell*.

Seems allied to *G. quadridens* of Koch (*tetracantha*, L.).

61. *G. hilaria*.

Gasteracantha hilaria, Thorell, Öfvers. Vetensk. Akad. Förhandl. xvi. p. 302, n. 5 (1859, edit. 1860); Eug. Resa, Zool. Arachn. p. 15 (1868).

"St. Barthelemy," *Thorell*.

Also allied to *G. tetracantha*.

Sub-genus ISACANTHA, Simon.

62. *G. annulipes*.

Gasteracantha annulipes, Koch, Arachn. 11, p. 52, pl. 373, fig. 876 (1845).

Manilla, *Koch*; Philippines.

B.M.

63. *G. picea*.

Gasteracantha picea, Koch, Arachn. 11, p. 61, pl. 375, fig. 882 (1844).

Epeira hexacantha, Walckenaer (nec Fabr.), Tabl. des Aran. p. 66, n. 57; Apt. 2, p. 152, n. 4 (1837).

Haiti, *Tweedie*; Venezuela, *Dyson*.

B.M.

64. *G. rubiginosa*.

Gasteracantha rubiginosa, Koch, Arachn. 11, p. 55, pl. 374, fig. 878 (1845).

Haiti, *Tweedie*.

B.M.

65. *G. atlantica*.

Plectana atlantica, Walckenaer, Apt. 2, p. 167, n. 26 (1837).

Haiti.

Near *G. rubiginosa*, Koch, but whitish above.

66. *G. Kochii*.

Gasteracantha hexacantha, Koch, Arachn. 4, pl. 117, fig. 268 (1837).

Brazil; Pará, *Grahame*.

B.M.

67. *G. quinqueserrata*.

Plectana quinqueserrata, Walckenaer, Apt. 2, p. 157, n. 12 (1837).

Colombia, *Goudot*.

B.M.

68. *G. insulana*.

Gasteracantha insulana, Thorell, Öfvers. Vetensk. Akad. Förhandl. xvi. p. 302, n. 8 (1859, edit. 1860); Eug. Resa, Zool. Arachn. p. 17 (1868).
 "Gallapagos Islands" (*Kinberg*), *Thorell*.

69. *G. hexacantha*.

Aranea hexacantha, Fabricius, Ent. Syst. 2, p. 417, n. 39.

Gasteracantha velitaris, Koch, Arachn. 4, p. 33, pl. 117, fig. 269 (1837).

S. America.

B.M.

The type of this species is in the Banksian Collection.

70. *G. Hassellii*.

Gasteracantha Hassellii, Koch, Arachn. 4, p. 29, pl. 117, fig. 267 (1837).

"Java," *Koch*. —?

B.M.

71. *G. Kuhlii*.

Gasteracantha Kuhlii, Koch, Arachn. 4, p. 10, pl. 114, fig. 262 (1837).

Plectana acuminata, Walckenaer, Apt. 2, p. 159, n. 16 (1837).

Siam (Pachebon), *Stevens*.

B.M.

Walckenaer quotes the *G. Kuhlii* of Koch as his *G. acuminata*; the species figured by Doleschall cannot, therefore, be the species intended by Walckenaer.

72. *G. cuspidata*.

Gasteracantha cuspidata, Koch, Arachn. 4, p. 22, pl. 114, fig. 264 (1837).

"Java," *Koch*.

73. *G. mucronata*.

Gasteracantha mucronata, Walckenaer, Apt. 2, p. 156, n. 10 (1837).

Caffraria.

74. *G. Leucomelas*.

Plectana Leucomelas, Doleschall, Acta Soc. Scient. Indo-Nederl. 5, p. 42, n. 4, pl. 11, fig. 8 (1859).

"Java," *Doleschall*.

Allied to *G. Kuhlii*, but white above, with black spots and spines.

75. *G. parvula*.

Gasteracantha parvula, Thorell, Öfvers. Vetensk. Akad. Förhandl. xvi. p. 303, n. 13 (1859, edit. 1860); Eug. Resa, Zool. Arachn. p. 21 (1868).
"Singapore" (*Kinberg*), *Thorell*.

76. *G. tabulata*.

Gasteracantha tabulata, Thorell, Öfvers. Vetensk. Akad. Förhandl. xvi. p. 303, n. 15 (1859, edit. 1860); Eug. Resa, Zool. Arachn. p. 23 (1868).
Pt. Natal, *Gueinzus*. B.M.

77. *G. modesta*.

Gasteracantha modesta, Thorell, Öfvers. Vetensk. Akad. Förhandl. xvi. p. 304, n. 16 (1859, edit. 1860); Eug. Resa, Zool. Arachn. p. 24 (1868).
"Caffraria" (*Wahlberg*), *Thorell*.
Seems allied to *G. tabulata*.

78. *G. cicatricosa*.

Gasteracantha cicatricosa, Koch. Arachn. 11, p. 54, pl. 373, fig. 877 (1845).
"Cape of Good Hope," *Koch*; S. Africa, *Argent*.
B.M.

79. *G. alba*.

Gasteracantha alba, Vinson, Aran. de la Réunion, p. 315, n. 60 (1863).
"Réunion," *Vinson*.

It is impossible even to guess at the affinities of this species from the diagnosis, as M. Vinson only describes its colours. M. Simon, however, refers it to *Isacantha*.

80. *G. cancriformis*.

Aranea cancriformis, Linnæus, Syst. Nat. 11, p. 1037, n. 46.

Epeira cancriformis, Walckenaer, Hist. nat. des Aran. Fasc. 3, fig. 4.

Gasteracantha cancriformis, Koch, Arachn. 4, pl. 114, fig. 263 (1837).

Plectana cancriformis, Walckenaer, Apt. 2, p. 151 (1837).

Aranea conchata, Schabber, Phys. Belust. 4, Nurnb. p. 1, pl. 1 (1781).
Georgia. B.M.

81. *G. elipsoides*.

Plectana elipsoides, Walckenaer, Apt. 2, p. 155, n. 7 (1837); Abbot's Georg. Spid. fig. 118.

Georgia.

B.M.

82. *G. sacerdotalis*.

♀ *Gasteracantha sacerdotalis*, Koch, Arachn.

Austral. 5, p. 198; pl. 18, fig. 1 (1872).

"Bowen," Koch.

Allied to *G. flavomaculata*.

83. *G. prætextata*.

Plectana prætextata, Walckenaer, Apt. 2, p. 166, n. 25 (1837).

Gasteracantha prætextata, Koch, Arachn. Austral. p. 8, n. 7 (1871).

Australia, *Damel*; Moreton Bay, *Gibbons*.

B.M.

There seems to be much confusion respecting this species; I believe it to be a collection of tolerably well-marked forms, including *G. minax*, *flavomaculata*, &c., which may perhaps be varieties of one species; Koch says that he formerly believed it to be a Javanese form (Arachn. Austral. 1, p. 8), and Doleschall identifies it with a species which I believe to be the *G. helva* of Blackwall.

84. *G. minax*.

Gasteracantha minax, Thorell, Öfvers, Vetensk. Akad. Förhandl. xvi. p. 303, n. 12 (1859, edit. 1860); Eug. Resa, Zool. Arachn. p. 21 (1868); Koch, Arachn. Austral. 1, p. 10, n. 11 (1871).

Australia, *Bynce*.

B.M.

Probably a variety of *G. prætextata*.

85. *G. lugubris*.

♀ *Gasteracantha lugubris*, Koch, Arach. Austral. 1, p. 12, n. 13; pl. 1, fig. 8 (1871).

"Sydney," Koch, Sp. ead. ?? Australia (Sydney). B.M.

We have one shrivelled example of what may be this species; it is allied to *G. minax* of Thorell, but differs much in colouring.

86. *G. flavomaculata*.

Gasteracantha flavomaculata, Keyserling, Verh. Zool.-botan. Gesellsch. in Wien, xv. p. 801, pl. 19, figs. 8, 9 (1865).

"Sydney," *Keyserling*; Goulburn River, *Parry*; Moreton Bay, *Gibbons*.

B.M.

This form seems scarcely distinct from *G. prætextata*; it is, however, rather larger, paler in colour, and the lateral spines in our dried specimens are more divergent. Compare Petiver Gazoph. 1, pl. 26, fig. 6 (1711).

87. *G. astrigera*.

♀ *Gasteracantha astrigera*, Koch, Arachn. Austral. 1, p. 14, n. 14, pl. 1, fig. 9 (1871).

"Sydney," Koch.

Allied to *G. flavomaculata*.

88. *G. lygeana*.

Plectana lygeana, Walckenaer, Apt. 2, p. 197, n. 73 (1837-39).

"Java, Sumatra," Walckenaer; Sp. ead.? Java, Argent. B.M.

Sub-genus STANNEOCLAVIS.

Allied to *Isacantha*, but all the spines resembling mammæ, or inverted broad-headed nails.

Type, *S. pentagona*.

89. *G. pentagona*.

Plectana pentagona, Walckenaer, Apt. 2, p. 163, n. 27 (1837); Koch, Arachn. Austral. 1, p. 9, n. 9; pl. 1, fig. 6 (1871).

"New Ireland," Walckenaer; "Georgia!" B.M.

90. *G. variegata*.

Plectana variegata, Walckenaer, Apt. 2, p. 160, n. 17 (1837); Koch, Arachn. Austral. 1, p. 2, n. 1, *Gasteracantha* v. (1871).

Dorey, Wallace. B.M.

91. *G. tuberosa*.

Gasteracantha tuberosa, Thorell, Öfvers. Vetensk. Akad. Förhandl. xvi. p. 303, n. 14 (1859, edit. 1860); Eug. Resa, Zool. Arachn. p. 22 (1868).

"Caffraria" (*Wahlberg*), Thorell.

Appears to belong to the *G. variegata* group.

92. *G. Canningensis*.

Gasteracantha (Isacantha) Canningensis, Stoliczka, Journ. Asiat. Soc. Bengal, xxxviii. p. 248; pl. xviii, fig. 1 (1869).

"S. of Port Canning (S.E. of Calcutta)," Stoliczka. Hab.—? B.M.

93. *G. suminata*.

♀ *Gasteracantha suminata*, Koch, Arachn. Austral.
1, p. 11, n. 12; pl. 1, fig. 7 (1871).

"Viti-Levu," Koch.

94. *G. borbonica*.

Gasteracantha borbonica, Vinson, Aran. de la
Réunion, p. 314, n. 59; pl. 9, fig. 5 (1863).

"Réunion," Vinson.

Allied to *G. Canningensis*.

95. *G. mammeata*.

Gasteracantha mammeata, Thorell, Öfvers, Ve-
tensk. Akad. Förhandl. xvi. p. 302, n. 9 (1859,
edit. 1860); Eug. Resa, Zool. Arachn. p. 18 (1868).
? *Plectana brevispina*, Doleschall, Natuurk. Tijds.
Nederlandsch. Indië. xiii. p. 423 (1857).

"Manilla," Thorell; "Amboina," Doleschall; Philip-
pines. B.M.

If the above prove to be identical, the name *G. brevispina* will take precedence.

96. *G. roseolimbata*.

Plectana roseolimbata, Doleschall, Acta. Soc.
Scient. Indo-Nederl. 5, p. 43, n. 6; pl. 13, fig. 1
(1859).

Java.

B.M.

Very close to *G. mammeata* of Thorell.

97. *G. mammosa*.

Gasteracantha mammosa, Koch, Arachn. 11, p.
57; pl. 374, fig. 879 (1845).

"Brazils," Koch; Ceylon, Thwaites; Madras, Jerdon.
B.M.

98. *G. flavida*.

Plectana flavida, Doleschall, Acta Soc. Scient.
Indo-Nederl. 5, p. 43, n. 5; pl. 13, fig. 3 (1859).

"Java," Doleschall.

Seems scarcely to differ from *G. mammosa* of Koch.

99. *G. mediofusca*.

Plectana mediofusca, Doleschall, Acta. Soc. Scient.
Indo-Nederl. 5, p. 44, n. 7; pl. 13, fig. 9 (1859).

"Java," Doleschall.

Closely allied to *G. mammosa* and *G. flavida*.

100. *G. guttata*.

Gasteracantha guttata, Thorell, Öfvers. Vetensk. Akad. Förhandl. xvi. p. 302, n. 10 (1859, edit. 1860); Eug. Resa, Zool. Arachn. p. 19 (1868).

"Malacca" (*Kinberg*), *Thorell*.

Seems to belong to the *G. mammosa* group.

Sub-genus TRICANTHA, *Simon*.

101. *G. tricuspidata*.

Plectana tricuspidata, Blackwall, Ann. and Mag. Nat. Hist. S. 3, vol. 11, p. 38 (1863); *Tricantha tricornis*, Simon, Hist. Nat. des Araign. p. 293, fig. 136 (1864).

"Rio Janeiro," *Blackwall*; Venezuela, *Birschell*. B.M.
A very remarkable little species.

Sub-genus DICANTHA.

102. *G. lata*.

Epeira lata, Walckenaer, Tableau des Aran. p. 66, n. 61; Apt. 2, p. 165, n. 23 (1837).

"Guadeloupe," *Walckenaer*.

A curious species with only two spines on the abdomen.

103. *G. tetraedra*.

Plectana tetraedra, Walckenaer, Apt. 2, p. 166, n. 24 (1837).

Hab.—?

Sub-genus ARANÆTHRA.

Abdomen corneous, semicircular, entirely surrounded by subconical spines or teeth more or less prominent, about twenty-six in number; six central and twenty-three submarginal impressed spots, the latter at regular intervals, with the exception of two on each side forming pairs opposite the ninth to tenth tooth from anterior median sinus; cephalothorax much expanded in the centre, and crossed by three prominent rounded tubercles; falces rather short for the genus. Type, *A. Cambridgii*.

104. *G. Cambridgii*, n. sp. Pl. IV. fig. 8.

Female; length of abdomen 7 lines; breadth at widest part, excluding spines, 1 inch; entire length 8 lines; general length of spines 1 line.

Cephalothorax described above; eyes of central prominence, almost equidistant; abdomen semicircular, sinuate behind cephalothorax, with three central large depressions

(possibly due to its siccate condition); fourteen to fifteen more or less prominent subconical teeth on front margin, depressed over cephalothorax, and twelve, more robust, at equal distances round outer margin, strongly depressed and obtusely acuminate.

Cephalothorax above dark castaneous, with anterior margin black; falces black, terminal claw castaneous; labium, sternum, maxillæ and legs shining black; abdomen fulvous, varied with pale olivaceous in front; the impressed spots deeper or lighter fulvous, with brown centres; spines or teeth dark castaneous at base, but becoming black, varied with testaceous, towards apex; ventral surface black, irregularly clouded here and there with testaceous patches; two series of impressed sub-marginal spots along front, and one round outer margin.

Fernand Vas River, West Africa, *Du Chaillu*. 1 specimen. B.M.

I feel great pleasure in naming this truly remarkable species after my friend the Rev. O. P. Cambridge, to whom I am much indebted for assistance received since I took up the study of Apturous Insects; it resembles very remarkably the crustacean genus *Æthra* (near to *Cryptopodia*). Mr. Pickard Cambridge tells me that he possesses two fine examples, and that there are several others in the University Museum at Oxford, all from Africa; its nearest ally, so far as I can judge from the figure, is the *Gasteracantha Gayi* of Nicolet.

I had some thoughts of separating this as a genus from *Gasteracantha*; it however differs little more than several of M. Simon's sub-genera; I have, therefore, retained it in the genus, merely distinguishing it as M. Simon has done with other forms by a sub-generic name.

The following species are unknown to me, and may, perhaps, not belong to this genus:—

105. *G. sector*.

Aranea sector, Forskael, Deser. anim. p. 85; pl. 25, fig. C (1775).

Asia, Arabia.

106. *G. spissa*.

Gasteracantha spissa, Nicolet, Gay's Chili, 4, p. 475, n. 4 (1849).

Chili.

Described as follows—"thorax brown, pale yellow in front; abdomen transversely parallelogram-shaped, multi-spinose; legs pale yellow, annulated with black."

107. *G. flava*.

Gasteracantha flava, Nicolet, Gay's Chili, 4, p. 476, n. 5 (1849).

Chili.

Allied to *G. spissa*; differs in colour, the legs not being annulated, and the under surface of the body being roughened.

108. *G. variabilis*.

Gasteracantha variabilis, Nicolet, Gay's Chili, 4, p. 476, n. 7 (1849).

Chili.

Described as—"blackish; abdomen quadrispinose at the sides, above bispinose, longitudinally carinated; legs brown, annulated with black."

109. *G. pallida*.

Gasteracantha pallida, Nicolet, Gay's Chili, 4, p. 476, n. 6 (1849).

Chili.

This species has the abdomen whitish, with eight spines, a dorsal brown spot; legs orange-yellow, annulated with brown.

110. *G. fumosa*.

Gasteracantha fumosa, Nicolet, Gay's Chili, 4, p. 477, n. 8 (1849).

Chili.

111. *G. mastoidea*.

♀ *Gasteracantha mastoidea*, Koch, Arachn. Austral. 5, p. 201, pl. 18, fig. 2 (1872).

"Viti Levu," Koch.

Almost like a *Cyrtarachne* in general form.

The following are also possibly not *Gasteracanthæ*:—

112. *G.?* *tricolor*.

Plectana tricolor, Doleschall, Acta Soc. Scient. Indo-Nederl. 5, p. 44, n. 8, fig. 3 (1859).

"Amboina," Doleschall.

A triangularly rounded species without spines on abdomen; seems almost to agree with *Cærostris* of Thorell, so far as I can judge from the figure.

113. *G.?* *Gayi*.

Gasteracantha Gayi, Nicolet, Gay's Chili, 4, p. 473, n. 1; pl. 5, fig. 4 (1849).

"Valdivia," Gervais.

114. *G.?* umbrosa.

Gasteracantha umbrosa, Nicolet, Gay's Chili, 4,
p. 474, n. 2 (1849).
"Valdivia," *Gervais*.
Allied to the preceding.

115. *G.?* pennata.

Gasteracantha pennata, Nicolet, Gay's Chili, 4,
p. 474, n. 3, pl. 5, fig. 5 (1849).
"Santiago," *Gervais*.

A very remarkable form, with long broad curved lateral wings to the abdomen.

The following species have been referred to the genus *Cyrtarachne* :—

Genus CYRTARACHNE, *Thorell*.1. *C. Grubii*.

Cyrtogaster Grubii, Keyserling, Sitzungsber. der
Isis zu Dresden, p. 81, pl. 1, fig. 3 (1863, edit. 1864).
"Mauritius?" *Keyserling*.

2. *C. bispinosa*.

Cyrtogaster bispinosa, Keyserling. Verh. Zool.-
botan. Gesellsch. in Wien, 15, p. 802; pl. 19, figs.
10, 11 (1865); Koch, Arachn. Austral. 1, p. 16, n. 1
(1871).
"Sidney," *Keyserling*; Australia. B.M.

3. *C.?* dubia.

Plectana dubia, Walckenaer, Apt. 2, p. 198, n. 75
(1837-39).
"Cochin China," *Walckenaer*.
Appears to be a *Cyrtarachne* from the description.

4. *C. violacea*.

Gasteracantha violacea, Nicolet, Gay's Chili, 4,
p. 479, n. 11 (1849).
Chili.

5. *C. porcellanæ*.

Gasteracantha porcellanæ, Nicolet, Gay's Chili, 4,
p. 480, n. 12 (1849).
Chili.

6. *C. ventrosa*.

Gasteracantha ventrosa, Nicolet, Gay's Chili, 4,
p. 481, n. 15 (1849).
Chili.

7. *C. scitula*.

Gasteracantha scitula, Nicolet, Gay's Chili, 4,
p. 481, n. 16 (1849).
Chili.

8. *C. maculata*.

Gasteracantha maculata, Nicolet, Gay's Chili, 4,
p. 480, n. 13 (1849).
Chili.

9. *C. venusta*.

Gasteracantha venusta, Nicolet, Gay's Chili, 4,
p. 480, n. 14 (1849).
Chili.

10. *C. inflata*.

Gasteracantha inflata, Nicolet, Gay's Chili, 4,
p. 482, n. 17 (1849).
Chili.

11. *C. ? columnata*.

Gasteracantha columnata, Nicolet, Gay's Chili, 4,
p. 482, n. 18 (1849).
Chili.

This species, according to Gervais, has the posterior tubercle prolonged, vertical, cylindrical and swollen at its extremity, resembling a little column; Koch figures a species of *Tholia* (*T. turrigera*) with this character.

12. *C. punctata*.

Gasteracantha punctata, Nicolet, Gay's Chili, 4,
p. 483, n. 19 (1849).
Chili.

13. *C. minuta*.

Gasteracantha minuta, Nicolet, Gay's Chili, 4,
p. 483, n. 20 (1849).
Chili.

14. *C. scutula*.

Gasteracantha scutula, Nicolet, Gay's Chili, 4,
p. 478, n. 9, pl. 5, fig. 6 (1849).
Chili.

15. *C. caduceator*.

Gasteracantha caduceator, Nicolet, Gay's Chili, 4,
p. 479, n. 10 (1849).
Chili.

Same size as the preceding; abdomen scutelliform, tuberculate.

16. *C. tuberculiformis*.

Peltosoma tuberculiformis, Simon, Mém. Liege (1870).

Corsica, Simon.

17. *C. ixiodes*.

Peltosoma ixiodes, Simon, Mém. Liege (1870).

Corsica, Simon.

18. *C. rubicunda*.

♀ *Cyrtarachne rubicunda*, Koch, Arachn. Austral.

1, p. 18, n. 3 (1871).

"Sydney," Koch.

C. excavata, Koch (Besch. neuer Arachn. und Myriap. in Verhandl. Zool.-botan. Gesellsch. Wien, 1867, p. 175), is referred by Mr. Cambridge to his new genus *Thlaosoma*; *Gasteracantha turrigera*, Koch, l. c. p. 173, is referred by Koch to his new genus *Tholia* (Arachn. Austral. 1, p. 22, n. 3; pl. 2, fig. 3); the latter genus appears to me closer to *Epeira* than *Gasteracantha*.

19. *C. verrucosa*.

♀ *Cyrtarachne verrucosa*, Koch, Arachn. Austral.

1, p. 16, n. 2; pl. 2, fig. 1 (1871).

"Upolu," Koch. Sydney or Moreton Bay, *Damel*. B.M.

Thorell (Eur. Spiders, pt. 1) believes that *Epeira paradoxa* of Lucas belongs to this genus.

The *Gasteracantha hemisphærica* of Koch appears to be referable to Thorell's genus *Cærostris*.

Explanation of Plate IV.

1. <i>G. dicallina</i>	page 160	9. <i>G. scintillans</i>	page 156
2. <i>G. milvoides</i>	" 159	10. <i>G. falcicornis</i>	" 158
3. <i>G. Sumatrana</i>	" 164	11. <i>G. nigrisparsa</i>	" 154
4. <i>G. nana</i>	" 161	12. <i>G. retracta</i>	" 157
5. <i>G. remifera</i>	" 154	13. <i>G. unguicornis</i>	" 159
6. <i>G. albiventer</i>	" 166	14. <i>G. panisicca</i>	" 162
7. <i>G. regalis</i>	" 156	15. <i>G. sororna</i>	" 155
8. <i>G. Cambridgii</i>	" 175		

All the species, excepting *G. Cambridgii*, enlarged.



Butler, Arthur G. 1873. "VII. A Monographic List of the species of Gastera-cantha, or Crab-spiders, with descriptions of new species, &c." *Transactions of the Entomological Society of London* 21, 153–180.
<https://doi.org/10.1111/j.1365-2311.1873.tb00640.x>.

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