

Thorell 75

S. 1142



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9. *LATIRUS AUREO-CINCTUS*. (Plate XXIV. fig. 2.)

L. testa elongato-turrita; spira obtuso-acuminata; basi multo contracta; anfractibus 9, rotundatis, spiraliter liratis, longitudinaliter costatis, costis latis rotundatis, liris aureo-flavis, interstitiis atro-fuscis, filo-striatis, striis albidis; apertura ovata, parva; columella triplicata; labio externo crenulato; canali brevi, rectiuscula.

Long. 20, lat. 8; apert. long. 5, lat. $2\frac{1}{2}$ mill.

Hab. Mauritius.

An elongately turreted shell; spire obtusely acuminated; base much contracted; whorls 9 in number, rounded, spirally ridged, longitudinally ribbed; ribs broad, rounded; ridges of a golden yellow colour; interstices nearly black, with fine whitish threads; aperture ovate, small; columella three-plaited; outer lip crenulated; canal short, nearly straight.

Obs. This remarkable little shell I received about two years ago from M. de Robillard of Mauritius; but I believe it has never been described. There is no known species with which it can well be compared.

10. *MYODORA ROTUNDATA*. (Plate XXIV. fig. 8.)

M. testa rotundato-subtrigona, valde inæquivalvi, albida, utrinque concentricè valide striata; latere postico leviter biangulato; margine dorsali excavato, vix incurvato; umbonibus acutis, cæruleo tinctis; valva dextra valde ventricosa, postice bicostata; valva sinistra planata; fovea trigona ligamenti parviuscula.

Lat. 25, alt. 23 mill.

Hab. New Zealand.

A *Myodora* of a rounded form, very inæquivalve, both valves concentrically strongly striated, with two slight angles on the posterior side; dorsal margin excavated, scarcely incurved; umbones acute, of a bluish tint; right valve very ventricose, with two ribs from the umbones to the posterior margin; left valves flat; triangular ligamentary pit rather small.

Obs. Four specimens of this species having come into my hands, I have compared them with a number of specimens of *M. striata*, and find them to differ in these respects—*M. rotundata*, right valve much deeper, umbones more central, dorsal margin less incurved and more sloping, ligamentary pit much smaller, and the whole shell rounder.

EXPLANATION OF PLATE XXIV.

- Fig. 1. *Ovulum depressum*, p. 128.
 2. *Latirus aureo-cinctus*, p. 129.
 3. *Admete tabulata*, p. 128.
 4. *Mitra flexilabris*, p. 127.
 5. *Conus multilineatus*, p. 126.
 6. ——— *gracilis*, p. 125.
 7. *Trochus (Polyodonta) mirabilis*, p. 126.

- Fig. 8 a, b. *Myodora rotundata*,
 p. 129.
 9. *Mitra induta*, p. 128.
 10. *Ziziphinus multiliratus*,
 p. 127.
 11. ———, var. β .

S. 1142.



5. On some Spiders from New Caledonia, Madagascar, and Réunion. By T. THORELL.

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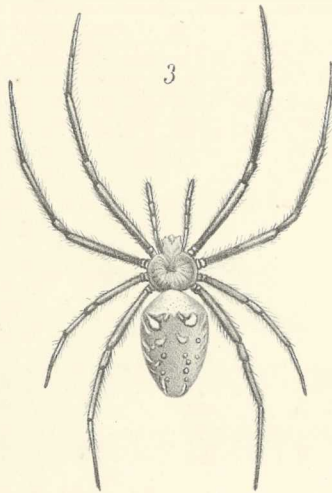
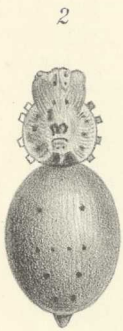
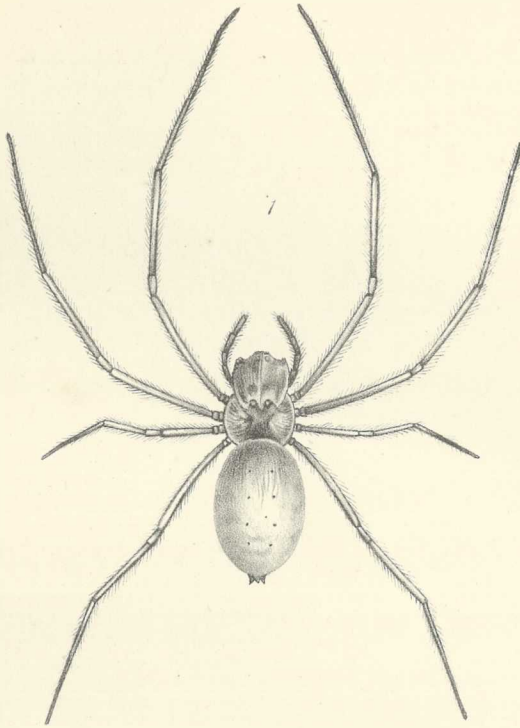
(Plate XXV.)

Some considerable time ago I received from Dr. Aug. Vinson, the celebrated author of 'Aranéides des îles de la Réunion, Maurice et Madagascar,' 'Voyage à Madagascar au couronnement de Radama II.,' &c., a little collection of Spiders, partly from New Caledonia and partly from Madagascar and Réunion, among which were a few new species which Dr. Vinson requested me on a fitting opportunity to describe. The collection was accompanied by beautiful figures of some of the species sent, executed by Dr. Vinson himself, and by various interesting notices relative to their habits, which Dr. Vinson obligingly placed at my disposal. Hindrances, which it was not in my power to avoid, have prevented my executing the commission thus received as early as I could have wished. Having, however, now obtained leisure for the purpose, I have not confined myself to describing those species only which appear to me to be new, accompanied by the figures I have received from Dr. Vinson, but I have also added more or less detailed descriptive notices of the other previously known species. Dr. Vinson's work, 'Aran. des Îles de la Réunion &c.,' has, as is generally known, met with a large and universal approval, and is justly considered one of the most valuable works treating on this interesting group of animals, especially on account of the numerous and important observations it contains relative to the habits and instincts of the species described. The species of which he has treated have, through these observations as well as through Dr. Vinson's descriptions and figures made directly from living specimens, become of the greatest interest to European arachnologists, who are seldom able to learn more about the life of extra-European Spiders than the name of the country where they are met with, or to see other than more or less faded specimens preserved in spirit. Having now had the good fortune to receive original specimens of some of Dr. Vinson's species, I consider myself bound to avail myself of this opportunity to indicate the changes of colour that some of them undergo when (as is the case with the specimens I have received from Dr. Vinson) they have lain some considerable time in spirit, as also to make some additions to Dr. Vinson's descriptions, and thus to offer a little contribution to our knowledge of these Spiders.

The species in question are as follows:—

NEPHILA LABILLARDIERII, n. sp. (Plate XXV. figs. 1, 2.)

Cephalothorace paullo brevior quam tibia cum patella quarti paris, nigro, bituberculato, pube densa subargentea tecto; sterno tuberculo magno nigro pone labium instructo, tuberculis lateralibus eo minoribus, rufescentibus; oculis lateralibus spatio diametro sua plus duplo majore disjunctis; pedibus obscure testaceo-fuscis,



A. Vinson pinx. J. Smit lith.

M. & N. Horhart imp.

NEW SPECIES OF SPIDERS

apice late nigris, pube tenui pallida et pilis nigris tectis, tibiis quarti paris subter paullo longius et densius nigro-pilosis; abdomine subelliptico, circiter dimidio longiore quam latiore, fusco, subargenteo-piloso, pictura in dorso et in ventre distincta vix ulla.

♀ ad. Long. circa 25 millim.

Var. β. Abdomine supra pallido, testaceo-cinereo.

1799. *Aranea edulis*, Labill. Relation du voyage à la recherche de La Pérouse, ii. p. 240, pl. xii. fig. 4 (ad partem).

1841. *Epeira edulis*, Walck. H. N. d. Ins. Apt. ii. p. 93 (ad partem).

Fœmina. Cephalothorax circa $10\frac{1}{2}$ millim. longus, 8 millim. latus, paullo brevior quam patella cum tibia quarti paris, patellam cum tibia tertii paris longitudine æquans, longitudinem tibie quarti paris latitudine non æquans, frontis latit. $5\frac{1}{4}$ millim., lateribus partis thoracice æqualiter rotundatis, partis cephalice lateribus rotundatis quoque, hac parte postice tuberculis duobus fortioribus armata, a latere visa elevato-arcuata, primum (ad tubercula) fortius, tum levius ascendenti, ad oculos vero denique paullo arcuato-proclivi; niger, nitidus, pilis argenteis dense tectus, præter postice hic illic ita detritus, ut ad latera et pone oculos nigris maculis notatus videatur. Tuberculum oculorum mediorum humile, lateraliū altius, costam latam, obliquam, duplo longiorem quam latiore, antice præruptam formans. Oculi medii, spatiis diametro oculi circa triplo majoribus disjuncti, in quadratum dispositi, æquales fere; laterales oculi, iis evidenter minores et subæquales, spatio oculi diametro vix triplo majore inter se remoti; antici eorum plus duplo longius ab anticis mediis quam hi inter se distant; spatium inter oculos medios anticos et marginem clypei paullo majus quam inter eos et medios oculos posticos. Mandibulæ circa $4\frac{1}{2}$ millim. longæ, tibias tertii paris longitudine æquantes, longiores quam patellæ et tarsi (primi paris tarsis exceptis, qui mandibulas longitudine æquant), duplo fere longiores quam latiores basi, in dorso ad basin geniculato-converge, tum rectæ, subcylindrata, apice intus oblique truncato-angustata, nigra, nitida, nigro-pilosa et -setosa. Sulcus unguicularis antice dentibus trinis armatus, quorum medius reliquis major est, postice dentibus 4. Unguis niger. Maxillæ et labium nigra, illæ apice intus anguste pallidæ; labium non antice elevato-marginatum. Palpi nigri, nigro-pilosi, basi subter pube densa subargentea tecti. Pedes longi, graciles valde, præsertim postici: quarti paris femora in medio vix crassiora sunt quam palporum pars patellaris; femora et tibie apice vix vel parum incrassata; obscure testaceo-vel ferrugineo-fusci, apice late nigri (metatarsis ad maximam partem et tarsis nigris), coxis nigricantibus; pube tenui pallida præsertim in femoribus tecti, hac pube præsertim subter evidenti; nigro-pilosi, tibiis quarti paris subter paullo densius et longius nigro-pilosis. Aculei pedum parvi et debiles, sat rari in femoribus; aculei pauci supra in tibiis primi paris

secundum totam longitudinem earum dispositi, non ad apicem tantum. Pedes primi paris cephalothorace circa $5\frac{1}{4}$ longiores: in exemplo, cujus cephalothorax $10\frac{1}{2}$ millim. longus est, pedes primi paris 60 (patella $3\frac{1}{2}$, tibia 14, metatarsus 20, tarsus $4\frac{1}{2}$), secundi paris 49, tertii $25\frac{1}{2}$, quarti paris 43 (patella $3\frac{1}{4}$, tibia $8\frac{1}{2}$) millim. longi. Abdomen cylindrato-ovatum, circiter dimidio longius quam latius, supra fuscum, pube brevi subargentea minus dense vestitum, pictura distincta nulla (an ita in vivis quoque?); venter obscurior, subtestaceo-fuliginosus, scutis pulmonalibus nigro-fuscis, intus sulcis transversis brevibus profundis inæqualibus dense exaratis. Vulva ex area nigra transversa cornea constat, quæ antice costa recurva limitatur, postice vero, in medio (ad ipsam rimam genitalem), costa brevior, compressa, recta, acuta; utrinque hæc area inæqualis foveam majorem oblongam parum profundam ostendit.

Mas ignotus.

Var. β . *Differt abdomine supra pallidior, testaceo-cinereo, et paullo brevior, magis elliptico (long. ejus $12\frac{1}{2}$, lat. $9\frac{1}{2}$ millim.); pedes in exemplo unico a me viso paullo breviores sunt quoque quam in forma principali, femoribus basi nigricantibus; primi paris cephalothorace tantum $5\frac{1}{4}$ longiores. Long. corporis 22, cephaloth. 10, lat. ejus $7\frac{1}{4}$, lat. frontis $5\frac{1}{4}$, pedes primi paris 52 (patella $3\frac{1}{2}$, tibia 12), secundi paris 44, tertii $23\frac{1}{2}$, quarti 40 millim. longi; patella quarti paris $2\frac{3}{4}$, tibia 8 millim.*

Patria. Nova Caledonia. Duas feminas adultas, a cel. Vinson ad me missas, vidi.

This species is no doubt comprised by Labillardière, together with the next following, under the name of *Aranea edulis*; but as his description of the abdomen better suits that species, I have retained for it the specific name *edulis* (Lab.).

NEPHILA EDULIS (Labill.).

Cephalothorace tibiam cum patella quarti paris longitudine æquante, nigro, bituberculato, dense argenteo-villoso, sterno tuberculo pone labium carente, tuberculis lateralibus humillimis, cum limbo antico rufescentibus; oculis lateralibus spatio diametro sua plus duplo majore disjunctis, pedibus rufescenti-fuscis, apice late nigris, subargenteo-pubescentibus, nigro-pilosis, apice femorum et tibiarum pedum anticorum inferius et tibiis quarti paris totis pilis nigris paullo longioribus et densioribus subhirsutis; abdomine fusco, fere duplo longiore quam latiore, plaga vel fascia transversa pallidior in dorso antice notato et pube argentea tecto.

♀ ad. Long. circa 20 millim.

1799. *Aranea edulis*, Labill. Rel. du voy. à la recherche de La Pérouse, ii. p. 240, pl. xii. fig. 4 (salt. ad part.).

1841. *Epeira edulis*, Walck. H. N. d. Ins. Apt. ii. p. 93 (salt. ad part.).

Fœmina. *Cephalothorax* $8\frac{3}{4}$ millim. longus, $6\frac{1}{3}$ millim. latus, patellam cum tibia quarti paris longitudine æquans, latitudine longitudinem

tibiæ ejusdem paris æquans saltem, frontis latitudine $4\frac{1}{2}$ millim.; lateribus partis thoracicæ modice rotundatis, partis cephalicæ lateribus rotundatis quoque, hac parte tuberculis duobus nigris minoribus postice armata, a latere visa primum, pone tubercula, in arcum adscendente, tum leviter modo et secundum lineam parum arcuatam adscendente, denique, ad oculos, leviter arcuato-proclivi; niger, nitidus, pube argentea dense vestitus. Sternum nigrum, tuberculis ordinariis 7 humillimis, parum expressis, cum limbo antico rufescentibus, tuberculo pone labium vix ullo. Tuberculum oculorum mediorum humile, tuberculum oculorum lateraliū costam latam, obliquam, antice et postice præruptam, antice altiorem formans. Oculi medii æquales, in quadratum dispositi, spatio oculi diametro circiter triplo majore disjuncti; oculi laterales subæquales, (antici præsertim) mediis paullo minores, et spatio evidenter minore (oculi lateralis diametro circa triplo majore) disjuncti quam quo distant medii inter se; medii antiqui duplo longius a lateraliibus anticis quam inter se remoti. Mandibulæ nigræ, $3\frac{3}{4}$ millim. longæ (= tibiæ tertii paris), patellis et metatarsis omnibus longiores, latitudine basali fere duplo longiores, in dorso ad basin sat fortiter geniculato-convexæ, tum directæ, nitidæ, versus apicem transverse striatæ, intus nigricanti-pilosæ et -setosæ: sulcus mandibularis antice 3, postice 4 dentibus armatus; unguis niger, apice piceus. Maxillæ et labium nigra, apice pallida. Palpi nigri, nigro-pilosi, parte femorali subter argenteo-pilosa. Pedes graciles, femoribus et tibiis apice leviter modo incrassatis, rufescenti-vel testaceo-fusci, metatarsis, basi excepta, et tarsis nigris, coxis quoque obscurioribus, femoribus (apice præsertim subter nigro-piloso excepto) et tibiis basi late pube argentea tectis, hac pube subter crassiore; præterea nigro-pilosi, tibiis 4 anterioribus versus apicem subter et in lateribus, infra, tibiisque quarti paris totis pilis paullo longioribus et densioribus subvillosis. Primi paris pedes cephalothorace circa quintuplo longiores, $49\frac{1}{2}$ millim. (patella $3\frac{1}{4}$, tibia $9\frac{1}{2}$, metatarsus $14\frac{1}{4}$, tarsus $3\frac{1}{2}$), secundi paris $39\frac{1}{2}$, tertii $21\frac{1}{2}$, quarti 32 (patella $2\frac{3}{4}$, tibia 6) millim. longi. Aculei pedum graciles, sat rari; aculei pauci supra in pedibus anterioribus non ad apicem tantum, sed secundum totam internodiū longitudinem dispositi. Abdomen subcylindricum, fere duplo longius quam latius (13 millim. longum, 7 millim. latum), in fundo fuscum, fascia transversa pallida sat lata prope marginem anticum (?), pube sat densa argentea saltem antice tectum, in lateribus infra et postice striis 3-4 transversis subobliquis flavescentibus notatum; venter subfuliginosus, in medio flavescenti-maculatus; maculæ 4 parvæ flavescentes circa mamillas trapezium formant; scuta pulmonalia nigra, nitida, intus sulcis multis transversis profundis et subundulatis exarata. Vulva ex fovea magna nigra, transversa, plus duplo latiore quam longiore constare videtur, quæ fere lunata est, margine elevato antico recurvo, postico recto.

Mas ignotus.

Patria. Nova Caledonia. Exemplum unicum fœmineum vidi, a

cel. Dr. Vinson amicissime communicatum. Priori speciei, *N. labillardierei*, simillima est hæc aranea, sed certe distincta: differt enim sterni tuberculis vix ullis, femoribus et tibiis anterioribus apice longius pilosis, mandibulis tarsis primi paris longioribus, abdomine duplo fere longiore quam latiore, cet.

In his description of the abdomen of *Aranea edulis*, Labillardière says (*loc. cit.* p. 241), "On voit sur les côtés cinq à six bandes obliques grisâtres et en dessous plusieurs tâches fauves." These words very well suit the specimen here described, but not those which I have above called *N. labillardierei*, and which I received from Dr. Vinson, together with the present specimen, under the name of *Epeira edulis* (Lab.). These two very closely allied species were no doubt united also by Labillardière under his *Aranea edulis*, which is used as food by the natives of New Caledonia (*conf.* Labillardière and Walckenaer *loc. cit.*).

NEPHILA MADAGASCARIENSIS, Vins.

Cephalothorace brevior quam tibia cum patella quarti paris, nigro, bituberculato, pube densa argentea ad maximam partem tecto et setis aculeisque nigricantibus sparso, sterno nigro, tuberculo pone labium tuberculisque septem humilioribus ad insertionem coarum instructo, quorum par tertium reliquis majus est; oculis lateralibus spatio duplam oculi diametrum æquante disjunctis; pedibus breviter et satis æqualiter nigro-pilosis, dense aculeatis, rufis, metatarsis basi excepta et tarsis nigris, patellis saltem anterioribus et apice femorum tiliarumque nigricantibus; abdomine subcylindrato, plus duplo longiore quam latiore, nigro, dense argenteo-pubescente, fascia albicante transversa ad marginem anticum atrum, tum plaga antica inæquali flavescente et denique maculis multis secundum dorsum dispositis flaventibus vel argenteis variato; lateribus abdominis lineis obliquis maculisque ejusdem coloris pictis ventreque fasciis duabus transversis angustis flavis, altera ad rimam genitalem, altera fere in medio ventris, notato.

♀ ad. Long. 30–45 millim.

1863. *Epeira madagascariensis*, Vins. Aran. des îles de la Réunion, Maurice et Madag. p. 191, pl. vii.

Fœmina. *Cephalothorax ad formam ut in N. eduli dixi omnino, sed præter pube densa argentea, qua ad maximam partem (plaga ordinaria postica nuda et parte cephalica in vicinitate oculorum exceptis) vestitus est, setis et spinulis sat longis sparsus, præsertim in parte cephalica. Tubercula postice in parte cephalica sat magna et acuta. Oculi laterales paullo minores quam medii, et spatio disjuncti, quod duplam eorum diametrum æquat: tuberculum, quo insistent, ad formam ut in N. eduli, postice declive, antice præruptum. Oculi medii in quadratum dispositi, æquales, spatiis triplam oculi diametrum pone æquantibus inter se remoti. Sternum tuberculum sat magnum nigrum subacuminatum pone labium ostendit; tubercula lateralia humiliora sunt, obtusa, iis tamen, quæ ad coxas tertii paris locum tenent, majoribus et al-*

tioribus, ovatis. Mandibulae longiores quam tarsi primi paris, breviores quam tibiae tertii paris; sulcus unguicularis antice 3, postice 4 dentibus armatus. Maxilla et labium apice anguste testacea, praeterea ut mandibulae nigra. Palpi nigri, parte femorali rufescente. Femora et tibiae versus apicem parum incrassata, quarti paris femora subter paullo densius nigro-pilosa quam reliqua internodia. Aculei pedum sat breves, in pedibus anterioribus densi, in femoribus horum pedum breves et etiam subter densi, ut in tibiis; subter in femoribus posterioribus aculei via ultra ordinem singulam formant. Vulva ex fovea angusta transversa non magna constare videtur. Long. cephalothoracis in exemplo a me viso $12\frac{1}{2}$, lat. ejus $9\frac{1}{4}$, lat. frontis $6\frac{3}{4}$, long. mandibularum 5 millim. Pedes primi paris 65 (patella $4\frac{1}{2}$, tibia $15\frac{1}{2}$, metatarsus $22\frac{3}{4}$, tarsus $4\frac{1}{4}$) millim., ideoque cephalothorace plus quintuplo longiores; secundi paris pedes $55\frac{1}{2}$, tertii paris 33, quarti $52\frac{1}{2}$ (patella $3\frac{1}{2}$, tibia 11) millim. longi; abdomen 24 millim. longum, 11 millim. latum (long. totius corporis 31 millim.). (Vid. praeterea descr. cel. Vinsonii loc. supra cit.).

Patria. Insula Madagascar. Foeminam unicam supra descriptam benigne ad me misit cel. Dr. Vinson.

The natives of Madagascar eat this Spider, "en l'accommodant avec de l'huile ou de la graisse" (vid. Vinson, 'Voyage à Madagascar,' p. 126).

EPEIRA CUPIDINEA, n. sp. (Plate XXV. fig. 3.)

Cephalothorace brevior quam tibia cum patella quarti paris, humili, antice fortiter angustato, nigricante vel lurido, pube densa subargentea vestito, oculis mediis rectangulum dimidio longiorem quam latiore formantibus, oculis lateralibus spatium oculi diametrum pene aequante disjunctis, ab oculis mediis spatium duplo majore remotis quam quo distant medii antici vel postici inter se; pedibus nigricantibus, plus minus distincte subtestaceo-annulatis; abdomine ovato, longiore, antice bituberculato, dorso ante tubercula testaceo-albicante, argenteo-piloso, pone ea vero obscurius rufo-vel aureo-fusco, maculis argenteis ornato, quarum 4, antice, trapezium antice latius quam postice formant.

♀ ad. Long. circa 18 millim.

Foemina. Cephalothorax inverse ovato-cordiformis fere, in lateribus ample et fortiter rotundatus, antice fortiter sinuato-angustatus, margine postico emarginato; $7\frac{1}{2}$ millim. longus, 6 millim. latus, frontis latitudine modo $2\frac{1}{2}$ millim.; brevior quam patella cum tibia quarti paris, tibiam primi paris longitudine aequans, tibiae quarti paris longitudinem latitudine paullo superans; humilis, dorso fere plano et a latere viso recto, fovea centrali ordinaria paullo pone medium sita, sat magna et profunda, postice latior, subgeminata; in fundo nigricans vel saltem hic illic luridus vel subtestaceus, pube densa cinereo-albicante, subargentea tectus. Sternum breviter ovatum, tuberculis 7 ad insertionem coarum, nigrum, nigro-pilosum, vitta media longitudinali flava. Oculi subaequales; medii in tuberculo postice humili, antice prominenti

positi sunt, aream rectangulam, dimidio longiorem quam latiore occupantes; spatium inter oculos medios anticos, ut inter medios posticos, oculi diametro evidenter, pæne dimidio, majus est; mediæ antici a mediis posticis spatio oculi diametro pæne triplo majore distant, æque saltem longe atque a margine clypei. Oculi laterales bini tuberculo sat forti impositi, intervallo disjuncti sunt quod oculi diametrum vix æquat; spatium inter oculos posticos laterales et medios duplo majus quam spatium quo distant hi inter se. Series oculorum postica desuper visa recta vel parum procurva; oculi laterales antici paullo longius quam mediæ antici a margine clypei distant. Mandibulæ leviter reclinatae, femore antico angustiores, tibia antica vix crassiores, pæne duplo et dimidio longiores quam latiores, subcylindratae, in dorso versus basin arcuato-convexæ, tum vero rectæ, in medio immo subimpressæ, 3 millim. longæ (patellis primi paris paullo breviores); nitidæ, pilosæ, piceæ, macula media testacea notatæ; sulcus unguicularis dentibus fortibus antice 4 (quorum intimus reliquis minor), postice 3 armatus. Maxillæ nigrae, apice intus testaceæ; labium nigrum, apice testaceum. Palpi fuligineo-testacei, nigropilosi et -setosi. Pedes sat robusti, lurido-nigri, vix evidenter pallidius annulati, coxis macula obscure testacea notatis, præsertim subter pube lurida vel ferrugineo-testacea vestiti, nigropilosi, aculeis præsertim in tibiis subter longis et subappressis, sat debilibus, nigris et testaceo-fuscis; tibiæ quarti paris reliquis tibiis paullo robustiores sunt paulloque densius pilosæ videntur. Pedes primi paris $31\frac{1}{2}$, secundi 30, tertii 19, quarti 28 millim. longi; patella cum tibia primi paris $10\frac{1}{2}$, quarti paris $8\frac{3}{4}$ millim. Abdomen sat regulariter ovatum, dimidio saltem longius quam latius (12 millim. longum, $7\frac{1}{2}$ millim. latum), apice postico rotundato, antice tuberculis duobus subconicis, obtusis, haud ita magnis, circa in $\frac{1}{8}$ longitudinis a margine antico distantibus, non ad ipsa latera, sed paullo magis intus locatis præditum; supra ante tubercula albicans, præterea vero obscure rufo-vel aureo-fuscum, argenteo, maculatum: tubercula postice maculis duabus argenteis occupantur; pone has maculas duæ aliæ magis versus medium sitæ adsunt, cum illis trapezium antice fere duplo latius quam postice, et brevius quam latius antice formantes; præterea multis aliis maculis minoribus argenteis notatum est dorsum, posterius duas series laterales formantibus; latera abdominis præsertim antice striis obliquis et maculis parvis argenteis notata; venter niger, serie utrinque pallida ex stria vel macula parva cum maculis binis ad latera mamillarum formata notatum. Vulva epigyni caret: constat ex areâ magna, transversa, nigra, plus duplo latiore quam longiore, margine fortiter elevato circumdata, quæ costa mediâ humili in duas foveas subtransversas divisa est: margo anticus bis sinuatus est vel in medio in formam trianguli brevis retro productus; postice lamina elevata transversa limitantur hæ foveæ, quæ in medio incisa est itaque in duos lobos rotundatos divisa; margo lateralis foveæ latus cæterius hujus laminæ amplectitur. Mamillæ nigricantes.

Mas ignotus.

Fœmina jun., 10 millim. longa, differt cephalothorace et pedibus sordide testaceis, his nigro-punctatis et nigricanti-annulatis, tibiis quarti paris nigris, annulo basali testaceo; ventre fuligineo-testaceo, striis trinis brevibus flavescentibus in utroque latere, punctisque 4 vel 6 subargenteis in medio antierius, in duo vel tria paria dispositis.

Patria. Nova Caledonia, ubi sat frequens inveniri videtur hæc aranea (Vinson in litt.); duas fœminas adultas ibi captas ad me misit cel. Vinson. Fœminam juniorem quoque possideo, a cel. Van Hasselt dono mihi datam, cujus patriam vero ignoro. *E. maritimæ*, Keyserl.*, sine dubio valde propinqua est pulcherrima hæc species, sed verisimiliter diversa: abdomen *E. maritimæ* superne sordide album esse dicitur, area obscura nigricante vel rufescente, per totam longitudinem abdominis extensa, maculis paucis albis notata et vitta undulata alba utrinque limitata; quæ in nostram speciem non quadrant.


ARACHNURA SCORPIONOIDES, Vins.

1863. *Arachnoura scorpionides*, Vins. Aran. d'îles de la Réunion, *vet.* p. 291, pl. xiii. figs. 1, 1a.

1864. *Hapalochrota caudata*, Keys. Besch. neuer Orbitelæ, in Sitz.ber. d. Isis zu Dresden, 1863, p. 82 (20), tab. iii. figs. 6-11.

As this species has already been described and figured, both by Vinson and Keyserling, I shall here only give some few additional remarks, founded on the examination of a female specimen from Réunion which was kindly presented to me by Dr. Vinson. The length of the whole body is 12 millims., of cephalothorax nearly 4, of abdomen 10 (the "tail" about 4) millims. Breadth of cephalothorax $3\frac{1}{4}$, and = length of patella + tibia of the first or second pair of legs; breadth of abdomen about $3\frac{3}{4}$ millims. When measured in the usual way, from the margin of cephalothorax, the proportion of the legs appears to be 2, 4, 1, 3, or 2, 1, 4, 3, the second pair being very slightly longer than the first and fourth pairs, which are of equal length (10 millims.); but when measured on the underside, from the base of the coxæ, the fourth pair are a little longer than the others. Length of third pair of legs nearly 7, of tibia + patella I. (or II.) nearly $3\frac{1}{2}$ millims.; tibia I. is nearly 2, tibia + patella IV. nearly 4, tibia IV. 2 millims. The fore central eyes are larger than the other 6, which are almost equal; the area occupied by the four central eyes is double as long as broad in front, and about half as broad again before as behind. The lateral eyes are separated by an interval evidently larger than their diameter and rather larger than the interval between the fore centrals, this latter interval being somewhat smaller than an eye's diameter; the space between the posterior centrals is distinctly smaller than the diameter of these eyes. The femora of the first pair are slightly incrassated on the interior side towards the apex; they have 1, 1, 1 pale and slender

* "Beiträge z. Kenntn. d. Orbitelæ," in Verhandl. d. zool.-bot. Gesellsch. in Wien, xv. p. 813 (15).

spines on the inner, and 1, 1, 1, 1 such spines on the outer side, all towards the apex; also the tibia has 1, 1 such spines on the inner side; with these exceptions the legs appear to be unarmed. The posterior part of the abdomen, from the anterior mamillæ, is encircled by closely set wrinkles; the skin of its sides, in front of the mamillæ, appears to be folded into closely set, elevated, longitudinal and somewhat undulated wrinkles. The vulva is a tolerably large, blackish, transverse area close by the rima genitalis: it is thrice as broad as long, and its lateral extremities are limited by a short inward curved costa: the anterior extremities of these two costæ are united by another costa curved forward and forming with them almost a , and limiting two shallow foveæ. The whole belly behind the rima genitalis is yellow.

According to Keyserling, the legs of the fourth pair are the longest, and the first pair slightly longer than the second; and the thighs, patellæ, and tibiæ of both first and second pair of legs are armed with spines. His two specimens were from Mauritius. Dr. Vinson tells me that he has found in the isle of Réunion a second species of *Arachnura*, "couleur jaune claire, jaune citron."

Is *Arachnura* really a good genus, different from *Epeira*, for instance? I believe it is so, and consider, with Vinson, its chief characteristic to be the long, transversely wrinkled or annulated *flexible tail*, into which its abdomen is drawn out behind: this tail, says Dr. Vinson, is "susceptible d'abaissement et d'élévation, et se recourbe également vers le dos ou vers le ventre."

Whether the Australian Spiders described by L. Koch under the names *Epeira higginsii** and *E. feredayi*† belong to *Arachnura*, is uncertain, as Dr. L. Koch does not state whether the tail in these Spiders is cross-ringed or -wrinkled, as in the typical species. To judge from his figures, the tail is destitute of such wrinkles; but if *E. higginsii* and *E. feredayi* should prove in this respect to resemble *A. scorpionoides*, I should not hesitate to refer them to *Arachnura*, even though their lateral eyes are separated by a smaller interval than in *A. scorpionoides*. The small difference in the relative lengths of the legs (1, 2, 4, 3, or 1, 4, 2, 3) does not appear to me to be a hindrance to our uniting them with *Arachnura* and removing them from *Epeira*, from which genus they differ in the absence of spines on the legs, also in this respect showing some resemblance to *A. scorpionoides*, which has spines only on the first pair (or first two pairs) of legs.

LATHRODECTUS GEOMETRICUS, C. Koch. (Plate XXV. fig. 4.)

Obscurius vel clarius nigro-vel rufescenti-fuscus, patellis et apice tiliarum late nigricantibus, cephalothorace fere dimidio brevior quam tibia primi paris, ordinibus oculorum extremitatibus non divaricantibus; abdomine secundum dorsum annulis angulatis tribus et vitta postica undulata geminata albicantibus notato, in lateribus fasciis 3-4 obliquis geminatis albicantibus ornato,

* Die Arachn. Australiens, p. 120, tab. xi. figs. 1-1b.

† Ibid. p. 122, tab. xi. figs. 2, 2a.

quarum apices superiores antice circa suam quisque maculam obscuriorem rotundatam plus minus distinctam curvati sunt; ventre ad maximam partem plaga flavescente, in medio constricta occupato; vulvæ margine antico tuberculum utrinque formante.

♀ ad. Long. 8–10½ millim.

Var. β. Pallide fuscus, abdomine cinereo-testaceo, maculis illis ab apicibus superioribus fasciarum lateralium limitatis obscure fuscis vel nigricantibus, series duas laterales in dorso formantibus; præterea formæ principali similis.

1841. *Latrodectus geometricus*, C. Koch, Die Arachn. viii. p. 117, tab. cclxxxiv. fig. 684.

Fœmina. Cephalothorax 3¾ millim. longus, brevior quam tibia quarti paris, fere dimidio brevior quam tibia primi paris, tibiam cum dimidia patella secundi paris longitudine æquans, 3 millim. latus, latitudine longitudinem tibiæ secundi paris parum superans; forma in hoc genere solita, fovea ordinaria media magna profunda transversa, sulcisque cephalicis bene expressis; ferrugineo-fuscus, tenuiter pallide pubescens, antice pilis nigris sparsus. Sternum subtriangulum, parum longius quam latius, fuscum, linea media pallidiorè notatum. Oculi subæquales, laterales antici tamen reliquis, præsertim mediis anticis, evidenter minores; in series duas parallelas dispositi, series antica leviter procurva, postica et antica desuperne visæ recurvæ; spatium inter oculos laterales paullulo minus, saltem non majus, quam spatium inter oculos medios anticos et posticos; oculi laterales, inter se spatio oculi antici diametro dimidio majore disjuncti, a mediis ejusdem seriei intervallo hunc spatium æquante remoti sunt spatioque paullulo majore, quam quo distant medii ejusdem seriei inter se. Area oculorum mediorum paullulo latior postice quam antice, parum vel vix longior quam latior postice; spatium inter oculos medios anticos oculi diametrum vix æquat, intervallum inter medios posticos oculi diametro evidenter majus est. Clypeus, cujus altitudo longitudine aræ oculorum plus dimidio major est, mox sub oculo profunde est impressus, a latere visus subdeclivis et convexus. Mandibulæ longæ et angustæ, in dorso basi ipsa paullulo convexæ, præterea vero rectæ, longitudine patellarum secundi paris, tibiis anterioribus angustiores, triplo et dimidio saltem longiores quam latiores, nitidæ, leviter transverse striatæ et pubescentes, pallide ferrugineo-fuscæ; unguis tenuis, parum curvatus, latitudinem basalem mandibulæ vix longitudine superans. Maxillæ fuscæ, apice intus pallidæ, in labium fuscum transversum antice rotundatum inclinatæ. Palpi testaceo-fusci, nigro-pilosi. Pedes testaceo-fusci, tenuiter pallido-pubescentes, nigro-pilosi. Pedes primi paris cephalothorace plus sextuplo longiores sunt, in exemplo dimenso 23½ millim. longi (patella cum tibia 7¼, tibia 5½ millim.); pedes secundi paris 16½, tertii paris 12, quarti paris 22 (patella eorum cum tibia paullulo plus 6, tibia 4½) millim. longi. Abdomen globoso-ovatum, postice subacuminatum, tenuiter pubescens, obscurius vel pallidius rufescenti-fuscum; utrinque,

mox supra petiolum, adsunt lineæ duæ albicantes inæqualiter retro et extrorsum curvatæ, postice fortiter divaricantes, antice interdum in maculam vel annulum dilatatæ; secundum medium dorsum extenditur vitta ex annulis albicantibus tribus subæqualibus et vitta geminata ejusdem coloris formata: annulus primus angulato-rotundatus est, secundus et tertius, spatio minuto tantum disjuncti, rhomboides; tum, cum annulo tertio conjuncta, sequitur vitta sat brevis (secundum circiter quartam partem posteriorem dorsi extensa), posteriora versus angustata, utrinque linea albicante undulata limitata. In lateribus utrinque adsunt fasciæ trinæ vel quaternæ obliquæ longæ, albicantes, apice superiore subrecurso suam quæque maculam obscuram rotundatam antice amplectentes, mox sub hac macula subito postice dilatatæ, versus apicem inferiorem (posteriorem) sensim angustato-acuminatæ et vitta obscura subcuneata geminatæ. Venter versus latera obscurius vel pallidius fuscus, plaga magna flavescens, in medio leviter constricta notatus, quæ a rima genitæ pæne ad mamillas extenditur; ad latera mamillarum binæ maculæ parvæ flavæ adsunt (plerumque) inter eas maculæ trinæ parvæ nigricantes, his maculis coronam circa anum et mamillas formantibus. Area vulvæ elevata, transversa, nigro-fusca a latere visa tuberculum subconicum format, cujus in apice adest vulva sub specie foveæ vel rimæ transversæ sat parvæ: margo ejus posticus elevatus æqualiter procurvus est, integer (non in medio incisus), margo vero anticus in medio rectus, ad utramque extremitatem in lobum brevem retro directum productus, his lobis tubercula duo assimilantibus.

Mas ignotus.

Variat (β) pallidior, fusco-vel cinereo-testaceus, abdomine pallide cinereo-testaceo, pictura ut in forma principali quidem, sed magis diluta, parum distincta, maculis illis obscuris exceptis, a quibus initium capiunt fasciæ laterales: hæ maculæ utrinque 4 nigro-fuscæ sunt et in series duas laterales valde manifestas ordinatæ (conf. figuram C. Kochii, loc. cit.). Vitta media postica in dorso abdominis interdum deest.

Patria. Africa, America meridionalis. Exempla pauca fœminea possideo, alia in insula Madagascar (ad sinum Bombétock) capta et a cel. Vinson communicata, alia ex Surinam, a cel. Van Hasselt missa. Var. β nostra eadem forma manifeste est atque *L. geometricus*, C. Koch; hoc nomen usurpavi, quum nullum aliud certum invenire potuerim; vix tamen est dubitandum quin sit hæc species etiam sub aliis nominibus descripta. Formam principalem secundum exempla Madagascariensia descripsi; var. β (cum forma principali) ex Surinam obtinui.

The females of *L. curacaviensis* (Müll.) may easily be distinguished from the above-described Spider by a darker, black or brownish black colour, by some small differences in the relative position of the eyes and in the form of the vulva, &c. (see Thor. Rem. on Syn. p. 511). The markings of the abdomen are also different, consisting in *L. curacaviensis* of a long, slightly sinuated, yellowish middle band, often geminated with reddish, and terminating at the anus in

a large yellowish or reddish spot; the sides have each four oblique, yellowish, sometimes geminated bands, of which one, commencing above the petiolum and curved forwards and downwards, is the longest and forms with the corresponding one of the other side, when seen from above, a very large \wedge , open at the apex; under this band is another smaller, almost longitudinal, and behind it two bands, tapering at the ends; but these markings are often more or less obliterated*.

LATHRODECTUS CURACAVIENSIS, Müll.

♂ ad. *Cephalothorace fusco-testaceo, vitta media et marginibus infuscatis, pedibus fusco-testaceis, apice internodiorum plus minus late nigricantibus, cephalothorace quam tibia primi paris circiter dimidio brevior; abdomine fusco, pictura flava nigro-marginata: secundum dorsum vitta media longa, supra anum in maculam rufescenti-flavam dilatata, in lateribus fasciis trinis obliquis; prima earum longa est, foras et retro curvata, et sub ea vitta parva conspicitur; reliquæ duæ magis rectæ sunt; par primum harum fasciarum desuperne inspectum \wedge magnum format; venter plaga magna flavescente antice truncata in medio leviter constricta notatus est.*

Long. circa $3\frac{1}{2}$ millim.

1776. *Aranea curacaviensis*, Müll. Linn. Vollständ. Natursyst. Suppl.- u. Reg.-Band, p. 342 (= ♀).

18—. *Theridion curassavicum*, Héring, conf. Ozanam, Étude s. le venin des Arachn. p. 29.

1860. *Lathrodectus malmignattus*, var. *tropica*, Van Hass. Stud. over d. z. g. Curaçaosche Oranje-Spin, in Tijdschr. voor Entom. iii. p. 62, pl. 5. figs. 1-6 (= ♀).

1873. *Lathrodectus curacaviensis*, Thor. Rem. on Syn. p. 511 (= ♀).

Mas. *Cephalothorax* $1\frac{1}{2}$ millim. longus, brevior quam tibia primi et quarti paris, tibiam cum dimidia patella secundi paris longitudine circiter æquans, paullo longior quam latior, forma in hoc genere solita, fovea ordinaria centrali pone medium locata, magna et profunda, impressionibus cephalicis tribusque sulcis radiantibus utrinque in parte thoracica profundis quoque; testaceo-fuscus, vitta media longitudinali fuliginea, marginibusque late subinfuscatis. Clypei altitudo evidenter, pene dimidio, major quam longitudo areæ oculorum mediorum. Sternum ovato-triangulum, antice late truncatum, obscurius fuscum, vitta media longitudinali substestacea. Oculorum series antica procurva, ambæ series desuperne visæ recurvæ, extremitatibus non divaricantibus, sed paullo appropinquantibus: spatium inter oculos laterales paullo minus est quam spatium inter oculos medios anticos et posticos, et oculi lateralis diametrum æquat.

* The female of *L. curacaviensis* has been carefully described and figured by Van Hasselt (*loc. infra cit.*); the male, on the contrary, is still unknown, and a short description of a male example which Dr. Van Hasselt has kindly sent me will therefore probably not be considered out of place here.

Spatium inter oculos medios posticos diametro oculi non majus est, inter eos et laterales paullo majus. Area oculorum mediorum pæne quadrata, modo paullulo latior antice quam postice; oculi mediū antici reliquis paullo majores, inter se paullo longius, spatio oculi diametrum fere æquante, quam a lateraliibus anticis sejuncti. Mandibulæ testaceo-fuscæ, subreclinatæ, in dorso rectæ, versus apicem sensim subangustatæ, plus duplo longiores quam latiores basi. Maxillæ apice extus rotundatæ, testaceo-fuscæ, apice intus pallidiores, in labium transversum fuscum apice late rotundatum paullo inclinatæ. Palpi testaceo-fusci, breves; pars patellaris latitudine apicali vix vel parum longior, versus apicem sensim paullulo incrassata, apice oblique rotundata, ut pars femoralis basi metatarsorum anteriorum non crassior; pars tibialis parte patellari etiam brevior, supra, exterius, in lobum oblongum foras et sursum directum, interius vero in lobum brevem intus directum producta, his lobis parti tarsali arcte adjacentibus et cum ea in clavam maximam, femore antico plus duplo latiore, antice latissime truncatam, semiorbiculatam vel campanulatam fere, extus et infra profunde et late excisam concretis; apex clavæ helice magna, plana, gyris saltem 3, e seta crassa longissima complanata nigra formata occupatur; ipsa pars patellaris dimidiam partem clavæ interiori et superiorem tantum formare videtur et sulco longitudinali quasi in duas partes dividitur, anteriorem majorem testaceo-fuscam, exteriorem angustiolem, obscuriorem, ferrugineo-fuscam (hæc pars interior forsitan non ad partem tarsalem, sed ad bulbum pertinet?); angulus apicis partis tarsalis interior et inferior in procursum longum deorsum et paullo foras directum productus est, cujus apex ut lobus rotundatus et pilosus sub apice clavæ prominat; sub hoc lobo procursum tenuis pallidus deorsum curvatus adest. Pedes graciles, testaceo-fusci, patellis apice, tibiis annulo versus apicem et præterea summo apice nigricantibus, reliquis internodiis quoque apice anguste et plus minus distincte infuscatis. Tibiæ supra setas binas erectas ostendunt; præterea pedes pube et pilis nigris appressis minus dense vestiti sunt. Pedes primi paris cephalothorace circa $6\frac{1}{2}$ longiores, $9\frac{3}{4}$ millim. (tibiæ cum patella $2\frac{2}{3}$, tibiæ paullo plus 2), secundi paris 6, tertii $4\frac{1}{2}$, quarti $8\frac{1}{2}$ (tibiæ cum patella $2\frac{1}{2}$, tibiæ $1\frac{5}{8}$) millim. longi. Abdomen subovatum, pilis pallidis longioribus sparsum, cinerascenti-fuscum, vitta media longa flavescente per dorsum extensa et supra anum in maculam rufescenti-flavam leviter dilatata ornatum, in lateribus vero fasciis duabus longis flavis deorsum et retro curvatis, supra petiolum initium capientibus, posteriora versus valde divaricantibus, \wedge magnum, quum desuperne inspicitur cephalothorax, formantibus, et sub utraque earum, antice, vitta parva fere longitudinali notato, magis vero postice fasciis binis transversis obliquis flavis, omnibus his vittis et fasciis anguste nigro marginatis. Venter nigricans, plaga magna media flavescente antice truncata, in medio leviter angustata.

Fœminæ diagn. et descr. vid. in Van Hasselt, loc. cit.

Patria hujus speciei America meridionalis (Curaçao, Aruba, Bonaire, et cet.). Locum, ubi inventus fuerit mas supra descriptus, ignoro.

Respecting the habits and supposed venomousness of this Spider, conf. Ozanam, and especially Van Hasselt, *locis cit.*

HETEROPODA? VIRIDIS (Vins.).

1863. *Olios viridis*, Vins. Aran. de la Réun. *cet.* p. 103, pl. xi. fig. 2.

Of this species only one female example (from Madagascar) was received; it appears to be not fully adult, which may account for a few differences between Vinson's description and what I have observed. The beautiful pale-green colour of living specimens is, as has been remarked by Dr. Vinson, totally lost when the animal is placed in spirit of wine; it then becomes of a dull brownish yellow, with the slightly incrassated tarsal joint of the palpi brownish black, only a little paler at the base and apex. The cephalothorax is 4 millims. long and 4 millims. broad; it is tolerably high and rather convex above, being highest just behind the base of the second pair of legs, sloping gradually and slightly towards the eyes; the hind slope is shorter and more abrupt. The cephalic grooves are faint; the hind slope has a longitudinal, rather strong, central groove, about as long as the mandibles. The height of the clypeus nearly equals the diameter of the fore central eyes. The eye-series are almost perfectly parallel, the anterior nearly straight, very little curved forwards; the posterior series, seen from above, is straight and longer than the anterior; the fore lateral eyes are evidently larger, the hind centrals smaller than the other eyes. The area occupied by the central eyes is somewhat larger behind than in front, scarcely shorter than broad behind. The anterior central eyes are separated by an interval about as great as the diameter of an eye, and a little greater than the interval which separates them from the anterior laterals. The eyes of the posterior row are equally distant from each other, their interval being about twice as great as the diameter of the posterior lateral eyes. The lateral eyes are nearly equal; their interval is about once and a half the diameter of an eye, and little or nothing smaller than the interval between the fore and hind centrals. The mandibles are $1\frac{1}{2}$ millim. long (= patella of the fourth pair), double as long as broad, nearly as thick as the fore thighs, rather equally convex longitudinally, shining, reddish yellow, with long, rather scarce, pale hairs; the anterior margin of the claw-furrow is thickly ciliated, the posterior armed with about five small teeth, of which the two inner are the longest. The maxillæ are convex, scarcely half as long again as broad, somewhat narrowed towards the base, with both the exterior and interior side of the apex truncatedly rounded; they are very slightly inclined towards the labium, which is not half as long as the maxillæ, at least double as broad as long, with the apex broadly rounded. The first pair of legs are 19 millims. long (patella + tibia $6\frac{3}{4}$, tibia 5), second pair $19\frac{1}{2}$, third pair 13, fourth pair 16 millims. (their patella + tibia $5\frac{1}{2}$, tibia nearly 4 millims.). The legs

are armed with tolerably numerous spines, which are very long and appressed on the underside of the tibiæ and metatarsi: the thighs of the first pair of legs, for instance, have above 1, 1, before and behind 1, 1, 1, beneath 2, 2 spines; their patella has one spine behind, the tibia and metatarsus before and behind 1, 1, beneath 2, 2 spines, the tibia, moreover, one spine above. The tarsi are fusiform, convex longitudinally above; their underside, like that of the anterior metatarsi, is provided with a scopula.

This species must probably be removed from *Heteropoda* (Latr.), Thor.* (of which genus *Aranea venatoria*, Linn., *Olios leucosios*, Walck., is typical), and should perhaps be made the type of a separate genus.

PHRYNARACHNE † FOKA (Vins.).

1863. *Thomisus foka*, Vins. Aran. de la Réunion, *cat.* p. 69, pl. xiv. fig. 4.

1865. *Thomisus foka*, Vins. Voyage à Madagascar, p. 186, pl. iv. fig. 3.

It is very uncertain whether this species be the true "foka" or "fook" of the natives of Madagascar; as to their opinions regarding the venomousness of that redoubted Spider *vide* Vinson, Aran. de la Réunion, &c. p. 71. But in his letter to me Dr. Vinson says:—"Depuis mon voyage à Madagascar, j'ai des doutes sur les qualités vénéneuses qu'on prête à cette araignée. Je l'ai trouvée à la Réunion (la même) fort inoffensive. La fameuse Foka ou Fouque, comme disent les Malgaches, serait le fameux *Eresus guérinii* qui habite aussi l'Algérie. C'était ma première opinion par analogie de contrée et de voisinage géographique, et j'y reviens. Je n'ai pu jusqu'à présent toutefois approfondir cette question."

The specimen sent me by Dr. Vinson, an adult female, is from Madagascar. Its colour is dark reddish brown, with exception of the tibiæ, metatarsi, and tarsi, and the tibial and tarsal joints of the palpi, which parts are of a bluish black colour. The structural details contained in the following description may in some degree serve as a complement to that given by Dr. Vinson.

Fœmina. *Cephalothorax* pæne 6 millim. longus, $5\frac{1}{2}$ millim. latus, *tibiam cum patella primi paris longitudine saltem æquans, lat. frontis leviter rotundatæ* $2\frac{3}{4}$ millim., *lateribus partis thoracicæ fortiter et ample rotundatis; margine postico emarginato; altissimus, a medio anteriora et posteriora versus satis æqualiter declivis, declivitate postica nitida, fere lævi, fovea media rotundata mediocri, parum profunda; præterea tuberculis magnis et parvis undique valde inæqualis et scaber, tuberculis majoribus perisque partis cephalicæ in ordines longitudinales tres minus æquales ordinatis, impressionibus cephalicis parum expressis; clypeus scaber et tuberculatus, non directus, sed cum mandibulis*

* On Eur. Spid. pp. 174, 177.

† *Phrynarachne*, Thor. 1869. = *Phrynoides*, Sim., 1864 (*vide* Thor., On Eur. Spid. pp. 37, 182). [*Phrynoidis*, Fitz. (Reptil.), 1843.]

proclivis, longitudinem aræ oculorum mediorum altitudine non æquans. Sternum ovatum, pæne dimidio longius quam latius, antice leviter emarginatum, tuberculis minutis suum quoque pilum gerentibus obsitum. Oculorum series antica fortius, postica levius recurva; oculi laterales antichi reliquis fere duplo majores, oculi mediû postici evidenter sed non multo minores quam laterales postici et mediû antichi, qui fere æquales sunt. Area oculorum mediorum pæne quadrata, paullulo modo latior postice quam antice et æque longa atque lata antice. Oculi antichi mediû spatiis fere æqualibus inter se, a mediis posticis et a margine clypei disjuncti, his spatiis oculi mediû antichi diametro circiter quadruplo majoribus, et evidenter sed non dimidio majoribus quam spatium quo a lateralibus anticis remoti sunt mediû antichi. Oculi mediû postici paullulo longius inter se quam a lateralibus posticis distant; intervallum inter oculos laterales circiter dimidio minus est quam spatium inter medios anticos et posticos, vel inter posticos medios et laterales, sed paullo majus quam spatium inter anticos medios et laterales. Quum oblique a latere et ab antice inspicitur cephalothorax, oculi laterales cum oculo medio antico ejusdem lateris lineam rectam designant. Mandibulæ versus apicem sensim angustatæ, subconicæ, $2\frac{1}{4}$ millim. longæ, fere duplo longiores quam latiores basi, a latere visæ angulato-convexæ, latere exteriori ad basin in costam elevato, dorso ad basin exterius in formam fere trianguli subplano et tuberculis minutis tantum scabro; præterea vero in dorso tuberculis majoribus et minoribus inæquales et scabræ sunt mandibulæ pilisque brevioribus sparsæ; sulcus unguicularis antice dentibus paucis parvis armatus et dense ciliatus; unguis parvus, longitudine latitudinem apicis mandibulæ vix superans. Maxillæ parallelæ, vix in labium inclinatæ, longæ et angustæ, saltem duplo longiores quam latiores, in latere exteriori leviter sinuatæ, apice extus rotundatæ, apice intus late et oblique truncate. Labium maxillis duplo brevius, paullo longius quam latius basi, ovato-triangulum, apice obtuso. Palpi metatarsis anticis paullo angustiores, superficie inæquali et scabra, aculeati et pilosi, parte tibiali vix longiore quam patellari, dimidio longiore quam latiore; pars tarsalis versus apicem sat fortiter angustata, subacuminata, parte priore plus dimidio longior. Pedes valde robusti, præsertim anteriores, inæquales valde et scabri, coxis subter fere lævibus, nitidis, aculeis brevibus armati, aculeis subter in tibiis et metatarsis paullo longioribus et fortioribus. In tibiis anterioribus aculei inferius utrinque binas series formant. Unguiculi tarsorum versus basin dense pectinati. Pedes primi paris 16 millim. longi (patella cum tibia $5\frac{1}{2}$, tibia 3 millim.); secundi paris iis parum breviores; quarti paris, qui tertii paris pedibus paullo longiores sunt, $10\frac{1}{2}$ millim. longi (patella cum tibia $3\frac{3}{4}$, tibia 2 millim.). Abdomen subpentagonum, antice subtruncatam, posteriora versus sensim paullo dilatatum, versus anum rursus subito et fortiter angustatum, subacuminatum, cute dura valde inæquali et rugosa tectum: latera ejus in tubercula magna vel quasi mammulas

elevata sunt, quæ inferius minora sunt quam supra: præterea supra et in lateribus tuberculis humilibus sparsum est, quæ vel rotunda vel oblonga sunt, sulco suo quodque circumdata, in dorso, ubi pleræque in series duas longitudinales undulatas ordinata sunt, nitida, læviora, in mammulis magnis lateralibus magis scabra et inæqualia. Supra anum rugas aliquot transversas ostendit abdomen. Vulva valde simplex: eæ fovea parva constare videtur, quæ antice callo nitido subprocurvo limitatur. Mamillæ posticæ anticis longiores, articulo primo cylindrato, paullo longiore quam latiore, secundo parvo; mamillæ anticæ crassiores sunt quam posticæ, subconicæ, articulo primo multo breviora quam latiore basi; mediæ reliquis multo angustiores, anticæ longitudine pæne æquantes.

Patria. Inss. Madagascar et Réunion.

MISUMENA VINSONII, n. sp.

Cephalothorace rufescenti-fusco, granulato, posterius fortiter elevato, longitudine patellam, tibiam et metatarsum quarti paris conjunctim æquante; oculis lateralibus tuberculo obtuso impositis; pedibus cum palpis testaceis, metatarsis apice cum tarsis infuscatis, tantum subter in tibiis et metatarsis aculeis brevissimis armatis; abdomine subpentagono, flavescente, in lateribus ad longitudinem, postice vero transverse rugoso, his rugis nigro-punctatis, supra punctis 5 majoribus nigris notato.

♀ adult. (?) Long. circa 10 millim.

Fœmina. Cephalothorax æque latus atque longus, 4½ millim., patellam + tibiam + metatarsum quarti paris longitudine æquans, lateribus partis thoracicæ fortiter et amplissime rotundatis, antice sensim (et sinu levi mox pone oculos) angustatus, fronte leviter rotundata, 2¼ millim. lata, margine postico leviter rotundato et in medio paullo emarginato; pone medium altus valde, pæne gibbosus, a latere visus dorso anteriora versus ad oculos secundum lineam leviter concavo-curvedam sensim proclivi, postice secundum lineam pæne rectam, modo levissime arcuato- (convexo-) curvatam declivi, hac declivitate postica sat longa et prærupta, fere plana, lævi et nitida, fovea media ovata sat magna; præterea granulis parvis nitidioribus sat densis scaber est cephalothorax, impressionibus cephalicis parum expressis, rufescenti- vel testaceo-fuscus, fascia transversa clariore substestacea inter oculos; oculi laterales bini tuberculo obliquo obtuso impositi (hoc tuberculo non acuminato neque in spinam producto); clypeus fere directus, altitudine dimidiam aræ oculorum mediorum longitudinem non multo superans. Sternum subovatum, antice leviter truncato-emarginatum, substestaceum. Area oculorum triangulum antice truncatum format fere; series antica fortiter recurva est, postica, desuper visa, leviter modo recurva; oculi laterales antici reliquis oculis non parum majores sunt, medii postici paullo minores quam laterales postici, qui pæne æque magni sunt atque medii antici. Area oculorum mediorum rectangula,

circa $\frac{1}{4}$ longior quam latior; oculi mediū antici vix vel parum longius inter se quam a lateralibus anticis remoti, hoc intervallo oculi mediū diametro circiter quadruplo majore; mediū antici longius a mediis posticis quam a margine clypei remoti; oculi laterales intervallo disjuncti, quod paullo minus est quam spatium inter oculos anticos laterales et medios, et pæne duplo minus quam spatium inter medios anticos et posticos; oculi mediū postici paullo longius a lateralibus posticis quam inter se distantes. Mandibulæ longitudine tibiam quarti paris (patellis anterioribus breviores) basi tibiam primi paris crassitie saltem æquantæ, versus apicem sensim angustatæ, tamen apice sat late truncatæ, non in margine exteriorē sinuatæ, in dorso sat fortiter convexæ, ipsa basi fere planæ, ibique in latere exteriorē subelevato-marginatæ; tenuiter rugulosæ et transverse substriatæ, pilis brevibus sparsæ, rufescenti-fuscæ, apice intus longius pilosæ, marginibus sulci unguicularis dense ciliatis; unguis brevis, fortiter curvatus. Maxillæ longæ et angustæ, plus duplo longiores quam latiores, in latere exteriorē leviter sinuatæ, apice rotundatæ, testaceæ, in labium iis pæne duplo brevius, oblongum, in lateribus leviter rotundatum, versus apicem rotundato-acuminatum sensim angustatum leviter inclinatæ. Palpi breves, crassitie metatarsorum, aculeis brevibus sparsi, pilosi, testacei; pars tarsalis versus apicem obtusum sensim angustata, parte tibiali vix dimidio longior. Pedes testacei, metatarsis apice late cum tarsis infuscatis; anteriores longi et fortes; omnes granulis parvis, suum quoque pilum brevem appressum gerentibus dense scabris, remanentibus tamen supra in femoribus, patellis, tibiis et metatarsis (saltem ad partem) viltis binis sat latis lævibus. Femora et patellæ omnes, ut tibiæ et metatarsi posteriores, aculeis carere videntur; tibiæ anteriores subter versus apicem aculeos paucos, omnium brevissimos, in series binas ordinatos habent, metatarsi anteriores subter series duas in medio abruptas aculeorum brevium nigrorum ostendunt, circiter 6 in utraque serie. Tarsi anteriores versus apicem late truncatum sensim paullo incrassatæ. Pedes primi paris 16 millim. longi (patella cum tibia $5\frac{1}{2}$, tibia $3\frac{1}{5}$ millim.); secundi paris fere $15\frac{1}{2}$, tertii 8, quarti paullo plus 9 millim.; patella cum tibia quarti paris 3, tibia pæne $1\frac{2}{3}$ millim. Abdomen subpentagonum, postice utrinque subangulatum; antice truncatum est, tum lateribus subrectis ad circa $\frac{2}{3}$ longitudinis gradatim paullo dilatatum, deinde lateribus leviter rotundatis angustato-acuminatum, hac parte postica rotundato-declivi; circa $5\frac{1}{2}$ millim. longum et latum, in lateribus ad longitudinem, in declivitate postica transverse sat dense sulcatum, his sulcis punctis nigris impressis sat densis, hic illic in lineis confluentibus, notatis; dorsum punctis ejusmodi minutis sparsum est, anterius vero et in medio puncta 5 majora nigra ostendit, quarum 4 posteriores in rectangulum subtransversum ordinatæ sunt; ad ipsum marginem anticum series transversa punctorum ejusmodi purvorum adest. Venter

subtestaceus, basi nigricans; loco vulvæ callus transversus ferrugineo-fuscus adest. Mamillæ posticæ cylindratae, multo angustiores et paullo longiores quam anticæ, quæ crassæ et conicæ sunt; mamillæ mediæ fere duplo angustiores et breviores quam posticæ.

Mas ignotus.

Patria. Madagascar, ubi hanc speciem detexit cel. Alf. Grandidier.

This species is no doubt closely allied to *Thomisus tripunctatus*, Lucas*; but I do not think that it is identical with that West-African species. In *Th. tripunctatus*, according to Lucas, the cephalothorax is prolonged on either side anteriorly (between the lateral eyes) into "a very sharp spine," the mandibles are constricted or sinuated on the outer side towards the apex, and the third pair of legs are longer than the fourth pair &c., which is not the case in the above-described Spider from Madagascar, kindly sent me by Dr. Vinson.

In naming this Spider after Dr. Vinson I only utter a feeble expression of my respect for his scientific merits and my thankfulness for the kindness he has shown me.

PEUCETIA LUCASII (Vins.).

1863. *Sphasus lucasii*, Vins. Aran. d. îles de la Réunion. p. 35, pl. xiii. fig. 3.

The colour of this beautiful Spider is much changed in examples preserved in spirit of wine; the cephalothorax is of a dull and pale olive-green colour, the *pars cephalica* being limited posteriorly by a large \surd of a paler yellowish tint. The legs are yellowish brown, somewhat paler towards their base, brownish black at the extremity; the trochanters are blackish; the thighs and patellæ have a narrow blackish ring or spot at the apex. The abdomen is greenish, with a brownish band along the middle of the back; this band is limited on either side by a whitish band or line, which anteriorly, towards the base of the abdomen, is continued by a series of about four unequal, somewhat oblique, whitish spots. The olive-greenish belly shows two longitudinal yellow bands or lines, the space between these bands being of a darker brownish tint. The two small fore eyes are separated from each other (and from the large middle eyes) by an interval equalling their diameter; the interval between the large (fore) middle eyes is evidently greater than their diameter, but scarcely greater than the interval between them and the hind lateral eyes. The area of the four central eyes is about one fourth larger in front than behind, as long as broad in front; the fore central eyes are separated from the hind centrals by an interval about double as great as the diameter of the largest eyes. The hind series of eyes is slightly curved forward; these eyes are nearly of the same size (the centrals, however, slightly larger than the laterals), and are separated by nearly equal intervals, at least as great as the diameter of the hind centrals. The height of the clypeus is somewhat greater than

* Descr. d. Arachn. qui habitent le Gabon (Voyage au Gabon), in Thomson, Archives Entomol. ii. p. 24, pl. xii. figs. 3, 3a.

the length of the whole eye-area. The form of the vulva is very complicated; this organ consists chiefly of a large, broad, almost triangular or heart-shaped, corneous, slightly elevated, uneven blackish area, the base of which is directed forwards; this area shows a longitudinal furrow in the middle, and two other shorter and oblique ones on each side: in front the vulva is limited by a raised margin curved backwards; and in the almost half-moon-shaped space between this margin and the base of the triangular area are two corneous obtuse teeth proceeding from the angles, and directed inwards and forwards. The two examples seen by me are females. In the larger of them the length of the cephalothorax is $6\frac{1}{2}$ millims., its breadth $5\frac{3}{4}$ millims., breadth of forehead (clypeus) 3 millims., height of clypeus $1\frac{2}{3}$ millim.; length of mandibles 3 millims.; first pair of legs 32 millims. (patella + tibia $10\frac{1}{2}$, tibia $8\frac{1}{2}$), second pair 29, third pair 22, fourth pair 24 (patella + tibia $7\frac{3}{4}$, tibia 6) millims.; length of abdomen $11\frac{1}{2}$, breadth $5\frac{1}{4}$ millims.

From Madagascar.

EXPLANATION OF PLATE XXV.

- Fig. 1. *Nephila labillardieri* ♀, p. 130. Cephalothorax and abdomen, seen from above.
 2. *Nephila labillardieri* ♀, var. β.
 3. *Epeira cupidinea* ♀, p. 135.
 4. *Lathrodectus geometricus* ♀, p. 138. Abdomen, seen in profile.

6. Descriptions of some supposed new Species of Birds from the Fiji Islands. By E. L. LAYARD, F.Z.S., H.B.M.C. administering the Government.

[Received February 24, 1875.]

1. LALAGE NIGROGULARIS, sp. nov.

General colour above brown, below cinereous; top of head cinereous; each feather having a pale edge, presents a slightly scaled appearance; wing-feathers brown, inner webs darkest, outer webs slightly tinged with greenish yellow on the outer edge; tail-feathers in strong light closely barred; covering the nostrils is a patch of black extending into a broadish eyebrow: this coalesces with the black of the throat behind the ear, which is covered by a large white patch; above the black eyebrow a faint whitish streak; chin and upper portion of throat black, this separated from the cinereous of the underparts by a broken, irregular, white band; vent and under tail-coverts whitish, tinged with isabella colour; underside of wing- and tail-feathers paler than the upper, the latter much paler at the tips; upper edge of the wing inside deep black; axillaries whitish; bill and legs blue, changing into black after death; iris brown. Length 8", wing 4" 1"', tail 3" 9"', tarsi 1" 1"', bill 1" 2'''.

This description is taken from a male in full breeding-plumage, testes well developed, shot on the 16th of November, on the hills at the back of Levuka. The natives to whom it was shown did not know

