## 2. SCHIZOPHRYS SPINIGER, Adams & White.

Articulis basalibus chelarum lævibus; in quoque thoracis latere octo dentibus; secundo et tertio a canthis ad basin conjunctis; postice, in medio, duobus parvis dentibus simul dispositis. *Thorax* supra compluribus minutis tuberculis, inter quæ sunt undeviginti paullo majora, plerumque transverse disposita. Thorax flavus est, hic illic rubro tinctus.

HAB. Insulas Philippinas. Siquijor, Ins. Bohol; Cuming.

Basal joints of fore-legs smooth, sides of carapace with eight teeth on each, the second and third from the orbit united at the base; behind in the middle, close to each other, are two small teeth. Carapace above with numerous minute tubercles, amongst which are nineteen of larger size, arranged mostly transversely; carapace yellow, tinged here and there with red.

HAB. Philippine Islands, Siquijor, Island of Bohol; Cuming. Coll. Brit. Museum.

## 13. PERICERA, Latreille.

# 1. PERICERA TIARATA, Adams & White.

Frontis cornibus styliformibus, gracilibus, sine spinis, parallelis, ad apices paululum divergentibus, fimbriatis, ut antennæ exteriores, ad utrumque latus rigidis curvatis setis; spina robustissima ante, altera post canthos.

Lateribus et superiore superficie thoracis obsitis tuberculis conicis, obtusis, diversa magnitudine, cum minoribus, depressioribus, verrucosiformibus tuberculis mixtis; superficie tamen non granulată; ună eminentiore spina ad latera in parte posteriore, inter quas tiara e magnis rotundatis tuberculis conficta extenditur. In parte posteriore valido intermedio tuberculo, et duobus lateralibus, infra quæ series est quinque minorum tuberculorum. Superficie thoracis inter tuberculos sparsis lanosis setis.

Pedibus in superiore superficie lævibus, lateribus tuberculatis et fimbriatis longis, densis, furvis, lanosis setis.

Horns of the front styliform, slender, not armed with spines, parallel, slightly diverging at their points, and fringed, as well as the external antennæ, on each side, with stiff curved hairs; a very strong spine before, and another after, the orbits.

Sides and upper surface of carapace covered with conical, obtuse tubercles, varying in size, mixed with smaller, flatter, wart-like tubercles, but the surface is not granulated; one rather prominent spine on each side, on the hinder part, between which extends a tiara of large rounded tubercles; at the posterior part a strong central, and two lateral tubercles, with a row of five smaller tubercles beneath them. Surface of carapace, between the tubercles, with scattered woolly hairs.

Legs smooth on the upper surface, with the sides tuberculated and fringed with long, thick, reddish-brown, woolly hair.

HAB. Philippine Islands; Cuming.

#### 2. PERICERA SETIGERA, Adams & White.

Cornibus frontis styliformibus parallelis, et per totam longitudinem contiguis; rigidis, curvatis, setis ciliatis, neque tamen spinigeris vel ad fines divergentibus.

Thoracis superiore superficie compluribus rotundatis tuberculis obsită; cristă setarum in cujusque medio; totă superficie et tuberculorum et spatiorum intermediorum minutim granulată; tribus tuberculis eadem magnitudine in parte posteriore, et duobus infra ea minoribus.

Pedibus minutim granulosis præcipue in superficiebus superiore et exteriore, secundis ceteris longioribus. Unguibus minutim denticulatis, longis tenuibus setis inter denticulationes quæ paullo curvatæ et spiniformes sunt.

HAB. Insulas Philippinas.

Horns of the front styliform, parallel, and contiguous throughout their length, ciliated with stiff curved hairs, but not spinigerous nor diverging at their ends.

Upper surface of carapace covered with numerous rounded tubercles, each with a tuft of hairs proceeding from its centre; the entire surface, both of the tubercles and the spaces between them, very finely granulated; three equal-sized tubercles on the hinder part with two smaller ones beneath them.

Legs minutely granulose, more particularly on their upper and outer surface; the second pair longer than the others. Claws finely denticulated, with long, slender hairs between the denticulations, which latter are slightly curved and spiniform.

HAB. Philippine Islands.

#### 3. PERICERA CORNIGERA, Edwards.

Cornibus rostri styliformibus, parallelis, et per totam longitudinem contiguis.

Hab. Insulas Philippinas.

Horns of the rostrum styliform, parallel, and contiguous throughout their length.

HAB. Philippine Islands; Cuming.

Pericera cornigera, Edw. Crust. 1. 335; Pisa cornigera, Latr. Enc. Méth. 10. 141.

#### MENÆTHIUS, Edwards.

# 1. MENÆTHIUS SUBSERRATUS, Adams & White. Tab. IV. Fig. 1, 2.

Thorace trapæziformi angulo anteriore in tres spinas ex câdem planitic surgentes diviso, angulo posteriore truncato; superficie superiore compluribus prominentibus tuberculis obsitâ, lateribus validâ, breviusculâ spinâ, quatuor obtusis, depressis dentibus ante spinam, sinu inter duos anteriores et duos posteriores dentes.

Fronte spina angusta, longa, inclinata, paullo bilobata ad finem, et setis curvatis utroque latere fimbrinta. Chelis brachio cylindrico, paucis tuberculis in superficie superiore et exteriore ad basin; carpo gibboso; manu compressa, lævi, supra et infra obtusa; digitis hiantibus, inferiore curvato, dentibus ad unum finem dense dispositis, nullis tamen ad basin; superiore compluribus dentibus ad finem, dente magno et crasso ad basin, et alto inter cos sinu; brachio pedum posteriorum duobus tuberculis in superficie superiore ad basin; secundo pedum pari ceteris longiore.

Hab. Insulas Philippinas.

Carapace diamond-shaped, with the front-angle divided into three spines, arising from the same plane, and with the hind angle truncated; upper surface covered with numerous, raised, prominent tubercles; side-margins with a rather short, strong spine, with four blunt, flattened teeth before it, and a sinus between the two front ones and the two hinder ones.

Front with a narrow spine, long, bent down, slightly bilobate at the end, and fringed on each side with curved setæ.

Fore-legs with the third joint cylindrical, with a few tubercles on the upper and outer surface near the base; fourth joint gibbose, fifth joint compressed, smooth, obtuse above and

below, fingers gaping, the lower one curved, with closely-set teeth at one end, but without teeth at the base; upper one with several teeth at the end, a large, thick tooth near the base, and a deep sinus between them; third joint of the hind-legs with two tubercles on the upper surface near the base; second pair of legs longer than the others.

HAB. Philippine Islands.

In this species the sides are armed with four broad, rounded teeth placed before the lateral spine, while in *M. porcellus* there is but one tooth anterior to the spine, and in *M. tuber-culatus* there are two large, prominent teeth; the carapace is more elongated in the males than in *M. porcellus* or *M. tuberculatus*, the frontal spine is much longer, and the tubercles on the back are smaller and less rounded. The young female of this species appears to be the *M. diadema*, Leach, MSS., where the carapace is subtetragonal, nearly as wide as long, strongly embossed with numerous tubercles of different sizes, and with the frontal spine short compared with the male and adult females.

### 2. MENÆTHIUS PORCELLUS, Adams & White.

Thorace trigonali, longiore quam latiore, antice producto, postice rotundato; parte superiore compluribus, magnis, rotundatis tuberculis obsită; lateris margine ună, validă spină, magno, obtuso, conspicuo dente ante spinam; lateribus post canthos angustatis.

Fronte tribus dentibus ex eâdem planitie surgentibus; medio admodum elongato, acuminato, ad finem inclinato, longitudine fere tertia parte thoracis, setis curvatis ad utrumque latus ciliato, velut in Huenia; spinis lateralibus admodum validis et acutis, ad utrumque latus prorsum directis; basi pedum duobus vel tribus tuberculis in latere exteriore; secundo pari ceteris longiore.

HAB. Mauritium.

Carapace trigonal, longer than wide, produced anteriorly, rounded behind, upper part very irregular, and covered with numerous large, rounded tubercles; side-margin with one strong spine, with a large, blunt, conspicuous tooth before it; sides narrowed behind the orbits.

Front with three teeth arising from the same plane, the middle one very much elongated, pointed, bent down at the end, about a third the length of the carapace, ciliated on both sides with curved setæ, as in *Huenia*; the lateral spines very strong and sharp, directed forwards on either side, base of legs with two or three tubercles on the outer side, second pair longer than the others.

HAB. Mauritius.

The existence of a single well-formed, strong tooth, situated anterior to the lateral spine, serves to characterize this species.

#### 3. MENÆTHIUS TUBERCULATUS, Adams & White.

Thorace subtrigonali; lateribus duobus, depressis, angularibus dentibus ante spinam lateralem, que obtusa est. Regione cardiaca et ventriculari duobus antice tuberculis, uno ad utrumque latus lineæ mediæ; crista verticali tuberculo minuto, altero post admodum prominente et rotundato, et tertio post alterum paullo minore; posteriore thoracis margine duobus, erectis, angularibus dentibus.

Fronte tribus spinis ex cadem planitie surgentibus; media longa, gracili, inclinata atque in medio sulcata; spinis lateralibus altioribus validis, triangularibus, duobus inter eas parvis tuberculis.

HAB. Mauritium.

Carapace subtrigonal, sides with two large, flattened, angular teeth before the lateral spine, which is obtuse; cardiac and ventricular region with two tubercles anteriorly, one on each side of the middle line; a vertical crest with a minute tubercle; and behind that, a very prominent, rounded tubercle, with another, rather smaller, behind it; posterior edge of carapace with two erect angular teeth.

Front with three spines arising from the same plane, the middle one long, slender, bent down, and grooved in the middle; lateral spines rather elevated, strong, triangular, with two small tubercles between them.

HAB. Mauritius.

M. tuberculatus, Leach, MSS.

#### 4. MENÆTHIUS INCISUS, De Haan.

Fronte bicornută, cornibus divergentibus acutis; regionibus ventriculi et cordis medio acute unispinosis; lateribus ante medium in laciniam truncatam dilatatis.

HAB. Japoniam.

Front with two horns; horns sharp, diverging, a single sharp spine in the ventricular and cardiac regions, the sides anteriorly dilated into a truncated border.

HAB. Japan.

Pisa (Menæthius) incisus, De Haan, F. J. p. 98. t. 24. f. 3. (femina).

#### 5. MENÆTHIUS QUADRIDENS, De Haan.

Fronte bicornută, cornibus divergentibus acutis; regionibus ventriculi et cordis convexis; thoracis lateribus bispinosis, spinis anterioribus ab spinulis canthorum posticis sinu separatis.

HAB. Japoniam.

Front with two horns: horns sharp, diverging, ventricular and cardiac regions convex; sides of the carapace with two spines, the anterior spines separated from the posterior spines of the orbits by a sinus.

HAB. Japan.

Pisa (Menæthius) quadridens, De Haan, F. J. p. 97. t. 24. f. 2. (mas.)

### 15. HUENIA, De Haan.

# 1. HUENIA FRONTALIS, Adams & White. Tab. IV. Fig. 3.

Thorace eque lato atque longo, subquadrilaterali, levi, sine tuberculis in media linea, producto et postice rotundato; lateribus acutis, uno lato lobo, postice paululum emarginato, horizontaliter undulato, antice arcuato, in medio depresso et postice elevato.

Fronte latissimă, lateraliter dilatată, obtusă et antice rotundată, admodum depressă, supra plană et infra în mediă lineă alte sulcată.

Chelis minimis, thoracem fere longitudine adæquantibus, pedibus posterioribus non crassioribus; brachio trigonali, apice in parte superiore valida conica spina et postice duabus minoribus, verticalibus, conicis spinis in carina; carpo supra carinato, spina tuberculari in superficie superiore et minore; manu supra carinata; carina una in medio spina et infra in valido angulari dente desinente; tertio et quarto paribus

pedum ceteris brevioribus; unguibus paululum curvatis, subelongatis, infra minutim serratis et inter serrationes setis circumdatis.

Carapace as broad as long, subquadrilateral, smooth, without tubercles in the middle line, and produced and rounded posteriorly; sides acute, with a single broad lobe, slightly emarginated posteriorly, horizontally undulated, arched anteriorly, depressed in the middle and raised behind.

Front very wide, laterally dilated, obtuse and rounded anteriorly, considerably depressed, plane above, and inferiorly deeply channelled in the middle line.

Fore-legs very small, about the length of the carapace, not thicker than the posterior pairs, third joint trigonal, the end, on the upper part, with a strong conical spine, and posteriorly, two smaller, vertical, conical spines on the keel, fourth joint keeled above, with a tubercular spine on the upper and inner surface; fifth joint keeled above; claws slightly gaping, the upper one with a single spine a little behind the middle.

Second pair of legs longer than the others, third joint trigonal, carinated above, with a single, strong, compressed spine at the end, and two smaller ones posteriorly, fourth joint winged above, carinated externally, and rounded below; fifth joint very much compressed, carinated above, keel with a single spine in the middle, and ending below in a strong, angular tooth; third and fourth pairs of legs shorter than the others; claws slightly curved, rather elongated, finely serrated below, and beset with hairs among the serrations.

In the peculiar and characteristic form of the front and carapace, this species differs in a very remarkable manner from those varieties of *Huenia proteus*, which are named var. *elongata*, heraldica, and tenuipes. The locality of the specimen described above, which is in the collection of Crustacea in the British Museum, is unknown, but as all the others are natives of the Eastern Seas, the present species is most likely from the same part of the globe. The description is from a female.

## 2. HUENIA PROTEUS, De Haan. Tab. IV. Fig. 4-7.

Frontis margine inferiore acuto, pedibus posterioribus margine anteriore valde carinatis.

- a. Mas. Thorace elongato, lateribus uni- vel bi-laciniato; fronte valde producta; thorace longiore. (Var. elongata.)
- b. Fem. Thorace dilatato, lateribus bi-laciniato; fronte dimidium thoracem vix superante. (Var. heraldica.)
- c. Anteriore margine pedum posteriorum paululum carinato; thorace subelongato; chelis gracilibus; inferiore margine frontis non tam producto quam in reliquis varietatibus. (Var. tenuipes.)

HAB. Maria Orientalia.

Lower edge of front sharp, posterior legs with the anterior margin strongly carinated.

- a. Male. Thorax elongated, sides with one or two lobes; front greatly produced, carapace rather long. (Var. elongata.)
- b. Female. Carapace dilated, sides with dilated lobes, front scarcely extending beyond half the length of the carapace. (Var. heraldica.)

c. Anterior margin of hinder legs but slightly keeled; carapace rather elongated; forelegs slender; inferior margin of front not so much produced as in the other varieties. (Var. tenuipes.)

HAB. Eastern Seas; Mindanao, China, Japan.

Maja (Huenia) Proteus, De Haan, Faun. Japon. p. 95. t. 23. f. 4-5 mas. (elongata) f. 6. a, b, femina (heraldica.)

M. De Haan appears to have had considerable difficulty in defining the varieties of this currous species, nor are we able to do more than add another variety to the two already indicated. Whether at any time these varieties will be elevated to the rank of species, on the discovery of a more extensive suite of specimens of different sexes and ages, remains for future observers; and, in the meantime, we furnish a more extended description of the variety we have named tenuipes.

## 3. HUENIA PROTEUS, De Haan. Var. tenuipes. Tab. IV. Fig. 5.

Thorace longiore quam latiore, oblongo, trigonali, superficie superiore depressa et lævi, duobus tuberculis in media linea paululum inter se distantibus; lateribus duobus compressis lamellaribus lobis; anteriore antice rotundato, posterioribus ad margines liberos truncatis.

Fronte valde elongată, thoracem longitudine fere adequante, ad latera ciliată rigidis incurvatis setis; lamellă inferiore non tam deorsum productă quam in H. proteo; canthis productis in validam spinam ad utrumque latus frontis antice directam.

Chelis gracilibus, thoracem longitudine fere adæquantibus, secundo pari paullo crassioribus; brachio subtrigonali, uno tantum parvo tuberculo in superficie superiore, duobus in inferiore; spina ad finem partis superioris parva; in H. proteo autem duo sunt tuberculi supra et tria infra; et spina supra ad apicem pervalida et maxima est; carpo supra obtuso; manu in superficie superiore carinata; unguibus denticulatis; secundo pari pedum thoracem longitudine superante; brachio cylindrico nulla ad finem spina; carpo paululum compresso; manu dilatata infra in spinam validam ad apicem positam, crista setarum adornatam; unguibus longis, marginibus inferioribus minutim denticulatis, setis intermediis; brachio quinti paris una spina in media anteriore parte.

Abdomine quinque articulis: quarto valde convexo in medio longitudinaliter impresso; primo et secundo rotundato in medio tuberculo. Femina adulta.

HAB. Maria Orientalia.

Carapace longer than wide, oblong, trigonal, upper surface flat and smooth, with two tubercles in the median line a little distance apart; sides with two compressed lamellar lobes, the front lobes rounded anteriorly, the hinder lobes truncated at their free edges.

Front very much elongated, nearly as long as the carapace; ciliated at the sides with stiff, incurved hairs, inferior lamella not so much produced downwards as in H. proteus; orbits produced into a strong spine on each side of the front, directed forwards.

Fore-legs slender, nearly as long as the carapace, rather thicker than the second pair, third joint less trigonal, with but one slight tubercle on the upper surface, and but two tubercles on the under surface, the spine at the end of the upper part very small, whereas in H. proteus there are two tubercles above and three below, and the spine at the apex above is

very strong and large; the fourth joint obtuse, superiorly; the fifth joint carinated on the upper surface. Claws denticulated. Second pair of legs longer than the carapace, the third joint cylindrical, without a spine at the end; the fourth joint slightly compressed; the fifth joint dilated below into a strong spine situated near the apex, surmounted by a tuft of hairs; third and fourth pairs of legs with the third joint slightly keeled, with two spines in the middle, the fourth joint carinated: the fifth with a slight tooth tufted with hair; claws long, with the lower edges finely denticulated, and having intermediate setæ; the third joint of the fifth pair with one spine in the middle of the fore-part.

Abdomen five-jointed, the fourth joint very convex, impressed longitudinally in the middle; the first and second joints with a rounded tubercle in the middle. Adult female.

HAB. Eastern Seas, Island of Mindoro.

## 17. HALIMUS, Latr.

1. HALIMUS AURITUS, Edwards.

Nulla spina in margine posteriore thoracis, neque in regione ventriculari.

HAB. Oceanum Indicum.

No spine on the posterior border of the carapace, nor on the ventricular region.

Hab. Indian Ocean.

Halimus auritus, Edw. Crust. 1. 341; Cuv. R. Anim. (Croch.) t. 28. f. 3; Pisa aurita, Latr. Enc. Méth. 10. 140.

## 18. ZEBRIDA, Adams & White.

Thorax depressus, seque longus atque latus.

Frons horizontalis, paululum declinata, conficta ex duabus spinis depressis, conicalibus, antice directis ad apices paululum divergentibus; canthis circularibus; pedunculo oculorum permagno et crasso, latiore ab latere ad latus quam de supra deorsum; cornea oculorum ultra exteriorem frontis marginem protendente, fere complente canthorum hiatus, quorum margines superiores salientes sunt; marginibus thoracis latero-anterioribus uno, valido, depresso processu armatis, conicalibus, acutis, ad basin latis, aciebus exterioribus paululum elevatis, cacuminibus prorsum curvatis; primo articulo antennarum exteriorum permagno, longo, cylindrico, antennis rostro tectis; epistomate ei Acanthonycis simillimo.

Chelæ breviores iis Acanthonycis, spinis depressis, conicalibus, subobtusis armatæ; brachio triangulari, spinå conicali exteriore et interiore; exteriore perlongå, sursum et prorsum directå; carpo tribus spinis armato; una superiore, posteriore prorsum directå; duabus anterioribus lateralibus extrorsum directis, ad extremitates rotundatis; manu spinå acutå, depresså cristatå.

Pedes posteriores breves, crassi, admodum compressi; tertio articulo duabus magnis, depressis, conicis spinis in fronte, prorsum directis; quarto articulo uno depresso, spinoso processu in parte anteriore; quinto articulo ampliata et postice instructo spina acuta, depressa, curvata, retrorsum directa.

Carapace flattened, about as broad as long. Front horizontal, slightly bent down, formed of two flattened spines, conical, directed forwards, and slightly diverging at their tips. The orbits circular; the peduncle of the eyes very large and thick, broader from side to side

than from above downwards; the cornea of the eyes projecting beyond the outer margin of the front, nearly filling up the orbital cavities, the upper margins of which are salient. The latero-anterior borders of the carapace armed with a single, strong, flattened process; conical, trenchant, broad at the base, the outer edge slightly elevated, with the point curving forwards. The first joint of the external antennæ very large, long, and cylindrical, antennæ covered by the rostrum. Epistome very nearly similar to that of Acanthonya. The chelæ, shorter than in that genus, are armed with flattened, conical, slightly obtuse spines. The second joint triangular, with an external and internal conical spine, the external very long, and directed upwards and forwards; the third joint armed with three spines; one superior-posterior, and directed forwards; two anterior-lateral, directed outwards and rounded at their extremities; the fourth joint crested with a sharp, flattened spine. The legs short, thick, very much compressed; the third joint with two large, flattened conical spines on the front, directed forwards; the fourth joint with but one flat, spinous process on its anterior part; the fifth joint enlarged and furnished posteriorly with a sharp, flat, curved spine, directed backwards.

This beautiful genus is very apathetic when alive; in that respect resembling *Lambrus*. In the system it is not far removed from *Acanthonyx* and *Huenia*. The description is from a female.

### 1. ZEBRIDA ADAMSII, White. Tab. VII. Fig. 1.

Colore subcarneolo, fasciis rufo-fuscis; lineâ intermediâ antice bifurcatâ, deinde in basin interiorem cornuum rostri obsoletâ, postice ad ultimum abdominis articulum pertinente, lineâ utrinque tenui duplice paululum undulatâ; duabus latis lineis pertinentibus ab apice spinarum rostri, in ultimo abdominis segmento concurrentibus, in medio thorace angustatis; lineâ extra tenui, duplice; extra lance lineam fasciâ latâ, paululum curvatâ, ad postero-exteriorem thoracis angulum subito desinente; latiore fasciâ rufo-fuscâ ad basin spinarum antero-lateralium. Duabus latis, rubro-fuscis fasciis in omnibus pedum articulis, subdiagonaliter trans articulum directis; unâ latâ fasciâ eodem colore in quarto et quinto articulis. Superficie inferiore colore paullo intensiore. Exteriore parte abdominis segmentorum puncto circulari subnigro. Totâ animalis superficie lævi, sine setis, durâ, politâ et porcellanâ; oculis nigris.

HAB. Borneo.

In colour this species is of a light, delicate pink, with dark liver-coloured markings. There is a central line bifurcated anteriorly, where it is lost on the inner bases of the horns of the rostrum, reaching posteriorly to the last joint of the abdomen, and having external to it a fine, double, somewhat waved line; extending from the apex of the rostral spines, and meeting at the last abdominal segment, are two broad lines, narrowed in the middle of the carapace; external to these is a fine double line, and on the outside of this is a broad, somewhat curved stripe, ending abruptly at the postero-external angle of the carapace; and at the base of the antero-lateral spines is another rather broad linear mark of the same dark liver-colour. The third joint of all the legs has two broad, dark, red-brown bands, directed somewhat diagonally across the joint; the fourth and fifth joints have one broad mark of the same colour. The under surface is of a somewhat darker colour. On the outer part of the

abdominal segments is a round, dark spot. The entire surface of the animal is smooth, hairless, hard, polished, and porcellanous. Eyes black.

HAB. Borneo.

Zebrida Adamsii, White. Pro. Zool. Soc., 1847.

A very distinct variety, from about twelve fathoms, in the Sooloo Seas, had the carapace of a light green, with deep, red-brown stripes, and the legs and chelæ of a pearly semi-opaque white, very distinctly banded with deep red-brown.

The specimen from which the foregoing description is taken, was dredged from a sandy bottom, at about six fathoms water, near the mouth of the Pantai river, on the coast of Borneo. The description, it ought to have been remarked, was from a living specimen; but even the dried individual in the Museum collection is very distinctly marked.

#### III. PARTHENOPIDÆ.

In the family of *Parthenopidæ*, the results of the Expedition furnish us with forms highly interesting to the Crustaceologist, including two new genera and ten new species. The genus *Cryptopodia* has been strengthened and confirmed by the discovery of a new and well-marked species, and several peculiar forms of *Parthenope* and *Lambrus* are here for the first time indicated. In their habits, the members of this group are feeble and inactive, feigning death when captured, and living generally in deep water, seeming to prefer a stony or gravelly bottom; some specimens of *Parthenope* were obtained by the dredge on the coast of Borneo, in thirty fathoms water, from a clear sandy floor; and the sandy mud of the China Sea, in many parts, abounds in *Lambri*.

# 1. LAMBRUS, Leach.

1. LAMBRUS HARPAX, Adams & White. Tab. VI. Fig. 3.

Thorace subtrigonali, lævi, in fronte rotundato, in medio carinato, carinatâ tribus rotundatis tuberculis armatâ, antice furcatâ, intervallum depressum triangulare exhibente, marginibus lateralibus valde crenatis, crenationibus depressis et rotundatis; angulis latero-posterioribus in depresso, triangulari, subobtuso, spinoso, processu desinentibus; posteriore thoracis parte validâ spinâ retrorsum et extrorsum directâ, paululum tuberculiferâ, et validâ carinâ in posteriore parte regionis branchialis continuatâ; alterâ minore spinâ, propius mediam lineam positâ, valde carinatâ, spatio depresso inter se spinamque priorem; tribus parvis tuberculis in lineâ intermediâ, unâ centrali, et unâ ad utrumque latus.

Fronte paululum productă, antice rotundată, margine paululum denticulată.

Chelis vix duplici longitudine thoracis; brachio et carpo, marginibus tuberculis rotundatis armatis; manu lævi, superiore angulari margine tuberculiferâ.

HAB. Oram Brunensem, (Mare Sinense.)

Carapace subtrigonal, smooth, rounded in front, carinated in the middle, the keel armed

with three rounded tubercles, and forked anteriorly, leaving a depressed, triangular interval; lateral edges rather conspicuously crenated, the crenations flattened and rounded; latero-posterior angles ending in a flattened, triangular, rather obtuse, spiny process; hind part of carapace with a strong spine, directed backwards and outwards, slightly tuberculiferous, and continued in a strong ridge upon the posterior portion of the branchial region; another smaller spine, situated nearer the middle line, likewise strongly carinated, leaving a depressed space between it and the former spine; three small tubercles in the median line, one central, and one on each side.

Front but little produced, rounded anteriorly, with the margin slightly denticulated.

Fore-legs about twice the length of the carapace, third and fourth joints with the edges armed with rounded tubercles; fifth joint smooth, with the upper angular edge tuberculiferous.

HAB. China Sea; coast of Borneo.

In the living state, this singular species is of an olive-green colour, with the fore-legs of a light pinkish-brown, and the under surface of a slate colour.

#### 2. LAMBRUS LAMELLIFRONS, Adams & White. (Tab. V. Fig. 1.)

Thorace longiore quam latiore, tribus majusculis tuberculis in parte posteriore superficiei superioris; una in medio et una ad utrumque latus; lateribus thoracis in medio crenatis; latitudine thoracis  $4\frac{1}{2}$  lin., longitudine  $5\frac{3}{4}$  lin.

Chelis longissimis.

HAB. Insulas Philippinas.

Carapace longer than wide, with three rather large protuberances on the hinder part of the upper surface, one in the middle, and one on each side; sides of carapace, about the middle, crenated. Breadth of carapace four lines and a half; length five lines and three quarters.

Fore-legs very long.

HAB. Philippine Islands.

# 3. LAMBRUS TURRIGER, Adams & White. (Tab. V. Fig. 2.)

Thorace longiore quam latiore pentagono paululum producto, in fronte acuminato. Superficie superiore quatuor spinis elevatis, crassulis et ad extremitates obtusis; prima inter anteriorem et posteriorem partem thoracis, sursum et paululum retrorsum directa; altera post multo longiore; tertia ad utrumque latus alterius in posteriore thoracis margine; in medio duabus spinis retrorsum et paululum sursum directis; prima et altera spinis anterioribus sublongis; tertia in medio thorace longa, verticali, et subacuminata; spinis in elevato tuberculo regionis branchialis positis, longis, crassis, erectis et paululum extrorsum retrorsumque directis; tota superficie thoracis obtusis subconicis tuberculis obsita. Latitudine thoracis vix 4 linearum; longitudine vix  $4\frac{1}{2}$  linearum.

Fronte parvâ, valde depressâ, breviusculâ, subobtusâ; in medio profunde concavâ, parvo dente ad utrumque latus.

Chelis longissimis pro magnitudine corporis, tuberculis verrucosis, lævibus, ad latera rotundatis, in cristis angularibus spinosioribus.

Pedibus posterioribus gracillimis, lævibus, supra et infra rotundatis, unguibus longis, tenuibus, paululum depressis et acutissimis.

Hab. Insulas Philippinas.

Carapace longer than wide, five-sided, rather produced and acuminated in front. Upper surface with four elevated spines, rather thickened and blunt at the ends, the first about midway between the fore and hind part of carapace, directed upwards and slightly backwards; behind it, another spine much longer, and one on each side of this, on the hind margin of carapace; in the middle, two spines directed backwards and slightly upwards; the first and second spines from before backwards, moderate in length; the third placed in the centre of the carapace, long, vertical, and rather sharp-pointed; the spines situated in the raised prominent tuberosity of the branchial region, long, stout, erect, and directed a little outwards and backwards; entire surface of the carapace covered with blunt, subconical tubercles. Breadth of carapace about four lines; length about four lines and a half.

Front small, depressed very considerably, rather short, somewhat obtuse, deeply concave in the middle, with a slight tooth on each side.

Fore-legs very long in comparison with the size of the body, verrucose or covered with warty tubercles, which latter are smooth, rounded on the sides, and more spinous on the angular crests.

Hind-legs very slender and smooth, rounded above and below, with the claws long, fine, slightly flattened, and very sharp.

HAB. Philippine Islands.

This species comes very near *Lambrus lamellifrons* (Adams & White), but the legs are smooth, and not spiny like those of the latter, which, moreover, has tubercles on the carapace, instead of long, erect spines.

## 4. LAMBRUS CARINATUS, Milne-Edwards. (Tab. V. Fig. 3.)

Latero-posterioribus marginibus thoracis ad utrumque latus duobus parvis dentibus armatis et validissimo triangulari dente quo margo latero-anterior desinit. Superiore superficie chelarum lævi et marginată dentibus nullum inter se intervallum habentibus.

Thorace admodum inæquali, ad regiones branchiales carinato, et tribus dentibus cristæ formå in lineå intermediå armato.

Fronte magna, triangulari, non denticulata; latero-anterioribus marginibus minutim denticulatis; brachio quatuor posteriorum pedum spinoso.

Longitudine 8 linearum.

HAB. Oram Brunensem, (Mare Sinense.)

Latero-posterior edges of the carapace armed on each side with two small teeth, and with a very strong triangular tooth, similar to that which terminates the latero-anterior edge. Upper surface of the fore-legs smooth, and bordered by close-set teeth. Carapace very unequal, carinated on the branchial regions, and armed with three teeth in the form of a crest in the median line; front large, triangular, and not denticulated, latero-anterior margins finely denticulated. Third joint of the four hind pairs of legs spiny. Length eight lines.

HAB. Coast of Borneo; China Sea.

Lambrus carinatus, Edw. Crust. 1. 358.

### 5. LAMBRUS PISOIDES, Adams & White. (Tab. V. Fig. 4.)

Thorace eque longo ac lato, triangulari, marginibus lateralibus spinis depressis, rotundatis, tuberculiformibus armatis; mediā et branchiali regionibus valde eminentibus et convexis; regione branchiali productā ad utrumque latus in longam, validam, acuminatam spinam retrorsum et extrorsum directam, et paululum prorsum inclinatam; totā superficie thoracis obsitā depressis, lævibus circularibus, verrucosiformibus tuberculis, aliis alios magnitudine longe superantibus; serie elevatorum tuberculorum in posteriore parte longitudinalis lateralis sulci, medium a branchiali regione dividentis, carinam efficientis elevatam desinentem in spinam subobtusam, brevem, retrorsum, extrorsum, et paululum deorsum directam.

Fronte acută, productiore, utrinque dentată, angustiore, profunde sulcată in medio, in spinam valde depressan triangularem desinente.

Chelis longissimis pro magnitudine thoracis, pari longitudine et crassitudine; brachio lævibus, depressis tuberculis supra obsito; marginibus antice et postice armatis compluribus longis et brevibus spinis alternatim dispositis; superficie inferiore angulo obtuso, externe lævi, interne granulată; carpo tuberculis verrucosis supra obsito, et externe armato tribus, validis, obtusis, recurvatis spinis; manu triangulari, in superficie superiore lævibus, rotundis tuberculis obsită, interne et in superficie inferiore minutim granulată; margine externo valde carinato, et quinque eminentibus subcurvatis spinis armato, serie parvorum, obtusorum, tuberculiformium processuum alternatim disposită; in superficie interiore serie parvarum, obtusarum proxime appropinquantium spinarum.

Pedibus posterioribus parvis, tenuibus, infirmis, kevibus marginibus superioribus obtusis; unguibus longis, acutis, depressis, villis lanosis fimbriatis; corpore et chelis subfuscis, majusculis subrubris maculis distinctis.

Hab. Insulas Philippinas.

Carapace about as long as wide, triangular, lateral borders armed with flattened, rounded, tubercle-shaped spines; middle and branchial regions very prominent and convex, branchial region produced, on each side, into a long, strong, and pointed spine, directed backwards and outwards, and inclined slightly upwards; entire surface of carapace covered with flattened, smooth, circular, wart-like tubercles, varying in size, some being considerably larger than others; a row of elevated tubercles on the posterior portion of the longitudinal lateral groove which divides the middle from the branchial region, forming an elevated ridge which terminates in a somewhat obtuse, short spine, directed backwards, outwards, and a little downwards.

Front acute, rather produced, toothed on each side, somewhat narrowed, deeply channelled in the middle, and ending in a considerably-depressed triangular spine.

Fore-legs very long in proportion to the size of the carapace, and equal in length and thickness; third joint covered above with smooth, flattened tubercles, the margins before and behind armed with numerous, long and short spines arranged alternately, lower surface bluntly angled, smooth externally, granulated internally; fourth joint covered above with warty tubercles, and armed externally with three strong, obtuse, recurved spines; fifth joint triangular, covered with smooth, round tubercles on the upper surface, finely granulated internally, and on the under surface, with the external margin strongly keeled and armed with five prominent, slightly-curved spines, finely denticulated on their edges, and alternating with a row of small, blunt tubercle-shaped processes; on the inner surface a row of small, blunt, closely-approximated spines.

Hind-legs small, thin, feeble, smooth, the upper edges obtuse; claws long, sharp, flattened, and fringed with woolly hair. The body and fore-legs of a light brown colour, marked with rather large, faint-red blotches.

HAB. Philippine Islands.

This species is very closely allied to Parthenope (Lambrus) diacantha, De Haan (F. J. Tab. xxiii. Fig. 1.), but it differs from that crustacean in the greater comparative length of the fore-legs; in the fifth joint having intermediate small spines between the five larger ones, which latter, moreover, are different in form; and in having but two spines on either side, extending from the postero-lateral margins of the carapace, whereas in Parthenope (Lambrus) diacantha, there are three on either side.

The Lambri are extremely sluggish in their movements, relying for safety not in muscular force, but in the disguised nature of their bodies, which, owing to their similarity to the gravelly floor on which they are generally found, must afford a protection from their enemies. Many species appear, indeed, at first sight to be made up of a conglomerated mass of small stones and sand. The Lambri are very numerous throughout the China Sea, where they live in about twelve or twenty fathoms, upon the submerged beds of broken shells and muddy gravel which constitute the floor of that sea.

# 6. LAMBRUS LACINIATUS, De Haan.

Thorace multo latiore quam longo, margine laciniato, manibus carina externa et media 15-17 spinis, conicis validis granulatis armatis, carina interna tuberculatis; fronte in spinam basi dilatatam producta, pedum posteriorum tibiis tarsisque margine superiore acuto-carinatis.

HAB. Japoniam.

Carapace much wider than long, the margin laciniated; fifth joint of fore-legs with the external and middle keels armed with from fifteen to seventeen strongly-granulated conical spines; internal keel tuberculated; front produced into a spine dilated at the base; fourth and fifth joints of hind legs acutely carinated on the upper margin.

HAB. Japan.

Lambrus laciniatus, De Haan, Faun. Japon.

# 7. LAMBRUS VALIDUS, De Haan.

Thorace multo latiore quam longo, tuberculis fragiformibus echinato, margine laciniato; manibus carina externa et media spinis 11-12 conicis validis granulatis armatis, interiore vix tuberculatis; fronte in spinam angustam producta; manibus carina media tuberculis 12 armatis; pedum posteriorum tibiis tarsisque margine superiore obtusis.

HAB. Japoniam.

Carapace much wider than long, covered with fragiform tubercles, margin laciniated, external and middle keel of the hands armed with eleven or twelve strongly granulated conical spines, inner keel scarcely tuberculated, front produced into a narrow spine; the

middle keel of the hands armed with twelve tubercles, tibiæ and tarsi of the hinder legs obtuse on the upper edge.

HAB. Japan.

Parthenope (Lambrus) valida, De Haan, Faun. Japon. t. 22. f. 1. (mas.) t. 22. f. 2. (femina.)

#### 8. LAMBRUS LONGIMANUS.

Fronte externè parva subeminente, horizontali, tribus dentibus.

HAB. Oram Brunensem, Insulas Philippinas.

Front extremely small, slightly prominent, horizontal, and formed of three teeth.

HAB. Coast of Borneo, Philippine Islands.

When alive, this curious species is of a stone colour, with the under surface pinkish. Numerous specimens were dredged by us from a gravelly bottom, in about thirty-five fathoms water.

Lambrus longimanus, Leach, Lin. Trans. t. 12. p. 310; Cancer longimanus, Linn. Mus. Lud. Ulr. p. 441. Syst. Nat. 2. 1047, 42; Lambrus pelagicus, Rüppell, t. 4. f. 1? Rumph. pl. 8. f. 2.

### 9. LAMBRUS DIACANTHA, De Haan.

Thorace trigono vix æque lato ac longo, verrucoso, postice utrinque in spinam acutam dilatato; chelis æqualibus; pedibus lævissimis.

HAB. Maria Orientalia.

Minute, with a trigonal carapace hardly as long as wide, warty, dilated posteriorly on both sides into a sharp spine, fore-legs equal, hinder legs very smooth.

HAB. Eastern Seas.

Parthenope (Lambrus) diacantha, De Haan, Faun. Japon. t. 23. f. 1.

#### 10. LAMBRUS SERRATUS, Edwards.

Marginibus latero-posterioribus thoracis serie trium parvarum, æqualium spinarum armatis. Hab. Insulas Philippinas.

Latero-posterior margins of the carapace armed with a row of three, small, equal spines. Hab. Philippine Islands (Corregidor); Cuming.

Lambrus serratus, Edw. Crust. 1. 357. Seba. 3. t. 20. f. 12.

# 2. CRYPTOPODIA, Edwards.

#### 1. CRYPTOPODIA DORSALIS, Adams & White. Tab. 5; Fig. 6,

Thorace depresso, permagno, triangulari, in medio paululum elevato, bis latiore quam longo, postice paululum sinuato; ad margines magnis rotundatis crenationibus valde distinctis; majore parte tergi parvis pustularibus elevationibus obsitû; duobus profundis sulcis in posteriore parte thoracis, longitudinaliter dispositis, et paululum inclinatis ita ut formam lyræ exhibeant.

Fronte horizontali, valdè productă, anticè rotundată, tribus subacutis crenulationibus in utroque latere ; oculis parvis, retractilibus.

Chelis longissimis et maximis, prismaticis, jugis angularibus, tuberculis rotundis, subobtusis, ex ordine dispositis, armatis; quatuor posteribus pedum paribus gracillimis parvis, pari longitudine, et omnino celatis sub lateralibus lamellaribus extensionibus thoracis.

Abdomine lævi, septem articulis, serie parvorum tuberculorum ad utrumque latus subeminentis intermediæ lineæ: articulo penultimo ceteris latiore.

Vivus colore turbide-carneolo, fuscis distinctionibus, et minutis nigris punctis; in utrâque chelâ croceâ lineari maculâ; superficie inferiore albâ, subrubro colore in pectore. Siccatus obscuro, turbido, albo colore est.

HAB. Mare Suluense; fundo scruposo.

Carapace flattened, very large, triangular, slightly elevated in the middle, nearly twice as wide as long, slightly sinuated posteriorly, strongly marked round the edges with coarse, rounded crenations; the greater part of the back covered with slight pustular elevations; on the posterior part of the carapace two deep grooves, placed longitudinally, and slightly bent, so as to have a lyre-shaped form.

Front horizontal, much produced, rounded anteriorly, and having three rather sharp crenulations on either side, eyes small, retractile.

Fore-legs very long and large, prismatic in form, with the angular ridges armed with regular, round, rather blunt tubercles; the four hind pairs of legs very slender, small, equal in length, and entirely concealed beneath the lateral lamellar extension of the carapace.

Abdomen smooth, seven jointed, with a row of small tubercles on either side of the slightly prominent, middle line; penultimate joint wider than the rest. When alive it is of a dirty flesh-colour, with brown markings, and minute black specks; on each chela there is an orange, linear spot; the under surface is of a dead white, with a reddish tinge on the breast. In the dried state it is of a dull, dirty white.

HAB. Sooloo Sea; twenty fathoms, stony bottom.

The species of this genus resemble those of *Calappa*, in their habit of simulating death when disturbed, folding the chelæ close to the front of the carapace, and concealing their legs under the dilated sides of the carapace. They are always found in deep water, while the *Calappidæ* are observed on sandy flats, under the shelter of stones, or even sometimes buried in the sands.

In the distinct and beautiful species of the singular genus described above, the lyre-shaped grooves on the carapace at once distinguish it from the other two known species; it, however, differs from the Cryptopodia fornicata of Herbst, and the C. angulata of Edwards and Lucas, in other and minor particulars. The carapace is narrower and wider than the same part in C. fornicata, and the posterior edge is furnished with coarser and rounder crenations, the ridges on the chelæ have blunter tubercles; the front, moreover, is longer, more rounded in outline, and more deeply crenulated. From C. angulata, Edwards and Lucas, (Archives du Muséum, vol. ii. t. 28. f. 15-19,) described in 1841, it differs in the rounded form of the posterior portion of the carapace, which, in that species, is sharply angulated and spiniferous, and also in the