

## XXXVIII.—Description of Six supposed new species of Parasites.

By HENRY DENNY, Corresponding Member of the Academy of Natural Sciences of Philadelphia, &c.

AMONGST the Parasites collected by myself, or forwarded by scientific friends to assist in my investigation of the *Anoplura*, several specimens occurred which did not belong to the above class, and therefore did not immediately claim my attention. Upon examining these however subsequently, and suspecting that some were undescribed and probably new to science, I felt that a short notice of them was required at my hands. I therefore transmit a brief description, with figures of *six species*, &c. for publication in the 'Annals of Natural History,' under a conviction that should any of them eventually prove recognized species, recent figures of the same may not be wholly useless. These consist of four species of *Trachean Arachnida*, one of the family *Hippoboscidae*, and one of the order *Aphaniptera*, which may be characterized thus:—

## Class ARACHNIDA.

## Order TRACHEARIE.

## Tribe ACARIDES.

## Genus IXODES.

1. *Ixodes bimaculatus* (Denny). Subovatus, depressus; capite, thorace, pedibusque pallide stramineis; abdomine coccineo, rugoso, punctato, cum maculis duabus magnis, suborbicularibus, aurantiacis, eminentibus; pedibus interne hepaticis.—Long. 4 lin. Pl. XVII. fig. 1.

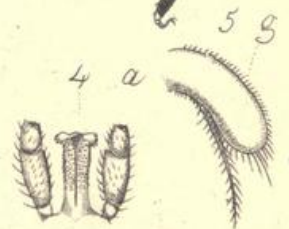
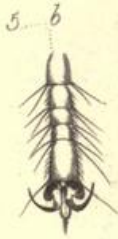
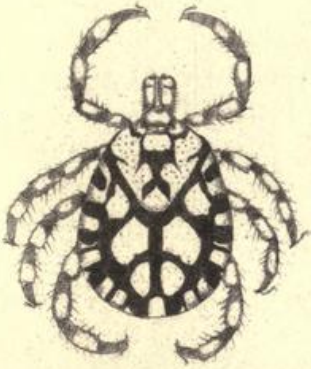
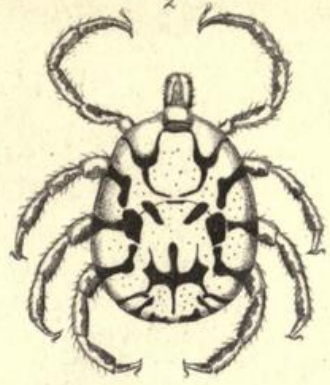
*Hab.* *Hippopotamus amphibius*, Southern Africa.

Subovate and depressed. Thorax and legs pale straw-colour above, slightly pubescent with a few scattered black punctures. Apex and lateral margin of the palpi dull crimson. Head with two black subtriangular spots in the centre. Thorax very distinct, subcordate, with two black, somewhat undulated, impressed longitudinal lines from the anterior margin to the base, and an irregular diagonal spot from the humeral portion of the lateral margin on each side. Abdomen dull crimson, rugose, punctured, with seven obscurely defined longitudinal furrows, and two large, nearly circular, slightly elevated orange-coloured spots, sinuated on the inner margin. Legs thick and strong, the last joint and the under surface of the remainder clouded with deep liver-colour.

Communicated by A. Melly, Esq., of Liverpool.

DeGeer figures and describes a species of *Ixodes* (*Acarus sylvaticus*) obtained at the Cape of Good Hope by Sparrman from a land tortoise, which agrees with this in many respects as to colour; but from his silence as regards the very characteristic orange







spots on the abdomen, together with the legs of his species being a *dull brown*, while those of the above differ so materially on this point, I consider myself justified in characterizing it as a new species.

2. *Ixodes Hippopotamensis* (Denny). Subovatus, subconvexus, pallide stramineus, lævis, cum lineis nigris, submarmoratis seu reticulatis; pedibus flavo-albis, interne hepaticis.—Long. 3 lin. Pl. XVII. fig. 2.

*Hab. Hippopotamus amphibius*, South Africa.

Subovate and rather convex, pale straw-yellow, smooth, with a few scattered impressed punctures. Thorax indistinctly defined, with a bifurcated black line on each side, extending from the insertion of the occiput to the posterior margin, where they become nearly united. Abdomen reticulated by a number of black markings, which form a series of irregular blotches round the lateral margin, and one large patch in the centre. Legs paler than the body, thick, strong and hairy; the inferior margin obscurely toothed; under surface deep liver-red.

Communicated by A. Melly, Esq.

3. *Ixodes Rhinocerinus* (Denny). Ovatus, subconvexus, cum puncturis aliquot magnis; nigris, lævibus, et maculis multis, magnis, aurantiacis; pedibus aurantiacis, cum annulis obscure rufis, superficie interna irregulariter dentata.—Long.  $3\frac{1}{2}$  lin. Pl. XVII. fig. 3.

*Hab. Rhinoceros bicornis*, South Africa.

Ovate, somewhat convex, black and smooth, with a few large punctures scattered over the surface. Head and palpi orange-yellow, the former darker at the occiput. Thorax obscurely defined, subcordate, with a broad interrupted orange margin. Abdomen with *six* large irregular orange blotches in the centre, and a series of smaller ones round the lateral margin, divided by *eleven* impressed lines posteriorly, and united by a semicircular transverse one. Legs orange-yellow, thick and strong, the last joint and the basal portion of the remainder with a deep red annulus; the inferior margin acutely but irregularly toothed and armed with stiff hairs.

Communicated by A. Melly, Esq.

DeGeer describes and figures an *Ixodes* from the Rhinoceros (*Acarus Rhinocerotis*), which in certain points resembles the above so nearly, that I felt some doubts as to whether they might not be the same species at different ages, or extreme varieties. But he says, "*Subrotundus, planus, fuscus, maculis testaceis fusco-punctatis.*" Again, "*Les huit pattes sont du même brun obscure que le corps.*" Now in the first place our insect is *not fuscous*, but *black*; and secondly, the feet are not of the same colour as the



body; and lastly, the very prominent character of the strongly dentate inferior margin of the legs is not alluded to, which therefore appears to favour my supposition that the present species is not the *Rhinocerotis* found by Sparrman at the Cape, but a distinct and undescribed *Ixodes* also infesting the *Rhinoceros bicornis*. It is however by no means improbable that the *Rhinocerotis* was obtained from a different species of Rhinoceros, as at the period when Sparrman visited Africa, and long afterwards, all the individuals which might have been seen were confounded under the appellation of *Rhinoceros Africanus*; since which, owing to the discoveries of Burchell and Smith, two other well-marked species have been found inhabiting the same continent, either of which might have occurred to the Doctor while exploring the interior, and supplied the specimen described by DeGeer.

This and the two preceding species formed part of the collection obtained in South Africa for the Earl of Derby by Mr. Burke, and which his lordship was kind enough to apprise me of under an impression they were belonging to the peculiar family of Parasites I am at present investigating.

4. *Ixodes Hydrosauri* (Denny). Orbicularis, planus, subpubescens, fuscus, thorace piceo; pedibus hepaticis, cum albis annulis.—Long. 3 lin. Pl. XVII. fig. 4.

*Hab.* *Hydrosaurus Gouldii*? Van Diemen's Land.

Orbicular and depressed, obscure, finely punctured and pubescent. Head and palpi dull red. Haustellum ochraceous. Thorax distinct, subtriangular, pitchy; the anterior margin pale red. Abdomen flat, dull brown, with three or four dark, slightly sunk blotches on each side; posterior margin somewhat crenate, with a series of darker spots alternating with impressed lines. Legs thick, liver-coloured, each joint, the last excepted, terminated by a white band.

Communicated by Mr. Gould.

This species was obtained from one of the large lizards of Van Diemen's Land, known to the colonists by the general name of Guana (most probably the *Hydrosaurus Gouldii* of Mr. Gray), by the above talented and zealous zoologist, and given to me on his return from investigating the ornithology of Australia.

Class INSECTA.

Order OMALOPTERA.

Family HIPPOBOSCIDÆ.

Genus LIPOPTENA.

5. *Lipoptena Pteropi* (Denny). Ochraceus, nitidus, pubescens; oculis maximis, cinereo-cæsus; thorace cum angulis lateralibus