

XXXV.—*Respecting a new Distinction between the Species of the Genus Phrynus of Authors.* By ARTHUR G. BUTLER, F.L.S. &c.

IN the second part of the 'Archiv für Naturgeschichte' for this year I find a paper by Dr. F. Karsch (an assistant in the Royal Zoological Museum at Berlin) entitled "Ueber eine neue Eintheilung der Tarantuliden," in which the author splits up the species of *Phrynus* into four genera by the number of the tibial joints of the fourth pair of legs. He says (pp. 196, 197), "We have now before us a series of steps without break in the increase of the tibial joints of the legs of the hindmost pair, which may easily be overlooked." He then proceeds to characterize the genera founded upon this character as follows:—

"1. All six true legs formed alike—that is to say, the fourth pair of legs without posterior tibial joint. *Phrynichus*, nob.

Spec. typ. *Phryn. reniformis* (Linn.), 1763.

Syn. *Phalangium lunatum*, Pallas (1772).

"2. The legs of the fourth pair each with one posterior tibial joint : *Damon* (C. L. Koch), 1850.

Spec. typ. *Damon medius* (Herbst), 1797.

Syn. *Phrynus variegatus*, Perty (1830–34).

"3. The legs of the fourth pair each with two posterior tibial joints, of which the anterior one is shorter. *Tarantula*, Fabr. 1793.

Spec. typ. *Tar. pumilio* (C. L. Koch), 1841.

Syn. *Phalangium reniforme*, Pallas (1772).

"4. The legs of the fourth pair each with three posterior tibial joints. *Charon*, nob.

Spec. typ. *Charon Grayi* (Gerv.), 1842.

Syn. *Phrynus medius*, Hoeven (1842).

"The genus *Phrynichus*, as it appears, has the most species of all to show, then *Tarantula*; to the Austral-Asiatic genus *Charon* two species belong—*Grayi* (Gerv.) and *australianus* (L. Koch, 1867, Verhandl. zool.-bot. Ges. Wien, xvii. pp. 231, 232), from Upolu; and the genus *Damon* appears only to consist of one species, the *medius* (Herbst)."

After reading the above I carefully examined the sixty-eight dried examples of *Phrynus* in the collection of the British Museum (I would not look at our spirit-specimens, because unless these animals are quite dry it is almost impossible to detect the joints in the posterior or fourth pair of legs); and having noted down the number of tibial joints in each species, and compared them with the published figures, I was forced to the conclusion either that the figures do not accu-



rately represent the number of joints, or that they vary in different individuals of the same species. A second difficulty lies in the character given to the genus *Phrynichus* as compared with *Charon*; for either Dr. Karsch has reckoned the metatarsus as a fourth tibial joint, making three posterior tibial joints, in which case the genus *Phrynichus*, according to our specimens, exists only upon paper; or he has not reckoned the metatarsus as a tibial joint, in which case the genus *Charon* ceases to exist.

As I consider that the metatarsus is not a true tibial joint, although in *Phrynus* it often looks like one, I shall regard the genus *Charon* as non-existent, and see how far our examples confirm Dr. Karsch's statements respecting the number of species referable to each genus. Before doing this, however, I may state that I have again compared our specimens with the published figures and satisfied myself that they were correctly determined when my monographic revision of the genus was published. I have also discovered that Herbst invariably, and Koch almost invariably, figures a *Phrynus* without posterior tibial joints to the fourth pair of legs.

The examples in the Museum, then, are as follows:—

#### PHRYNICHUS, Karsch.

*P. scaber*, Walck. (Round Island).

*P. lunatus*, Fabr. (Natal).

*P. fuscimanus*, Koch (Columbia).

According to Koch's figures we should have to add *P. nigrimanus*, *P. marginemaculatus* (figure agrees with *P. lunatus*), *P. variegatus*, *P. reniformis*, *P. palmatus*, and *P. ceylonicus*; and according to Herbst, *P. medius*, *P. palmatus*, and *P. reniforme*. The only conclusion, therefore, that I can rationally arrive at with regard to Dr. Karsch's observation that "the genus *Phrynichus*, as it appears, has the most species" is, that the species have not been seen in nature, but only in the published figures, which are not correct.

#### DAMON, Karsch.

*P. palmatus*, Herbst (Mexico and Columbia).

*P. annulatipes*, Wood (Zulu country, Natal, Cape).

*P. Grayii*, Gervais (Manilla).

*P. bassamensis*, Lucas (West Africa, Congo).

*P. medius*, Herbst (Fernando Po, Sierra Leone).

*P. Kochii*, Butler (America).

Here, again, we have six species in place of one.



TARANTULA, Karsch (= *Phrynus*).

*P. reniformis*, Herbst (Haiti).

*P. variegatus*, Herbst (Amazons, Jamaica, Venezuela, W. coast America).

One example of *P. palmatus*, Herbst (Mexico).

*P. Whitei*, Gervais (Burdwan).

*P. coronatus*, Butler (California).

*P. Batesii*, Butler (Upper Amazons).

*P. longicornis*, Butler (Pará).

*P. granulosus*, Butler (South America).

*P. gorgo*, Wood (Pará?).

*P. cheiracanthus*, Gervais (Demerara, New Granada).

Our two specimens of *P. palmatus* from Mexico are referable, according to this character, to two distinct genera, although in all other respects (excepting that one of them is slightly immature) they agree fairly well. Now although it is possible that they may be distinct, I am much more inclined to believe that the character discovered by Dr. Karsch, although interesting as not having previously been prominently brought forward, is an unreliable one even for specific distinction.

There is one point in which Dr. Karsch appears to have misunderstood my paper where he says, "Butler's Eintheilungsgrund in amerikanische, australische, asiatische und afrikanische Formen halte ich für durchaus unthunlich, da diese geographischen Grenzen nicht für das, was man unter Art versteht, existiren und auf die Bestimmung der Formen als solche gar keine Verwendung finden." If Dr. Karsch means that geographical divisions do not necessarily represent groups of subgeneric value, I am quite willing to agree with him; but if he means that they are of no use in enabling a naturalist to identify his species, I can only answer that he is the only zoological worker, with the exception of one good man who has unfortunately left this world, who ever, to my knowledge, attempted to make such a statement. For my part I believe geography to be of the greatest value in assisting the identification of species; and I should at all times name a wingless African insect, if previously wrongly identified with a tropical American one, just as I have renamed the *P. medius*, described and figured by Koch, from America, knowing by intuition, as well as by comparison of specimens and figures, that it could not be the *P. medius* of Africa.

Before writing a paper on the subdivision of a large genus, many types of which we possess, it is strange that Dr. Karsch should not have asked me to examine them and tell him how many joints there were in the hind tibiæ of the typical



specimens. In the type of *P. Grayii*, upon which the genus *Charon* is founded, there is only one posterior tibial joint; so that, if a species with three joints does exist, the genus must fall, as not being founded upon the species to which it is ascribed.

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XXXVI.—*Description of a new Species of Wild Dog from Demerara.* By Dr. ALBERT GÜNTHER, Keeper of the Zoological Department, British Museum.

AT the beginning of the present year I received from the Rev. W. Y. Turner a living example of a dog from Demerara which was evidently distinct from all the other species described from South America. My esteemed correspondent informed me that the animal must be very rare, as but few of the people in his neighbourhood knew it. It had been brought up in captivity, was perfectly domesticated, and allowed to run about the house like a domestic dog. During its journey to England it lost some of its tameness; but soon became accustomed to its new home, which it never left of its own accord. It was very playful, especially towards evening, but slept during the night. It never barked or wagged its tail, but uttered a short sharp cry when left by itself, or a hiss when an attempt was made to take its food. During my temporary absence from London it was found necessary to confine it in a cage—a change which it survived for a few weeks only.

This species is allied to *Canis vetulus*, from which it differs by having longer legs, a less bushy tail, and a much darker coloration.

Body slender, with long legs and tail, pointed snout, and rather long ears. Fur harsh, brownish grey, the long hairs on the back being black, those on the side whitish; snout coloured very much like the body. Head without conspicuous markings; chin and anterior portion of the throat black; posterior part of the throat, abdomen, and inner side of the thighs dirty whitish. Legs and tail of the same greyish colour as the sides of the body; sole of the fore foot, hinder side of the hind foot, and terminal fourth of the tail black.

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Total length .....	38	6
Length of the head .....	5	9
Distance of the eye from the nose .....	2	6
Length of the ear .....	3	0
Distance of the ear from the tail .....	21	0
Length of the tail .....	12	6



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