

January 27, 1863.

G. R. Waterhouse, Esq., V.P., in the Chair.

Mr. F. Buckland made some observations on the artificial reproduction of fishes, and upon the best mode of transporting their ova without risk of injury.

Mr. A. R. Wallace exhibited a nestling of *Buceros bicornis*, taken by his hunters from a nest in Sumatra, in January 1862.

Dr. Selater exhibited a collection of insects and freshwater shells from Madagascar, transmitted to him by Mr. J. Caldwell, of Mauritius; and read the following notes respecting them, communicated to him by Mr. Caldwell:—

“The insects forwarded last mail were almost all collected in the neighbourhood of Antananarivo, two other boxes full, collected on my journey up, having been literally ground into dust by the motion they were exposed to in being carried along the road. The large Butterfly was, however, procured near Beforona, just before entering the great forest of Alamazaotra. The large Water-Beetles are those eaten by the natives at the capital, and *sold commonly in the market*; and the one with the eggs on its back is, according to the natives, *the male*, on the back of which the female lays her eggs. I have not sent any of the common locusts, which are also very extensively used as an article of food, not having been able to procure any live ones, and those for sale being all fire-dried and damaged. I have sent to the Society at least one of all the insects I was able to save, having retained here only duplicates when any existed.

“There is a vast number of Butterflies in Madagascar, as I was able to ascertain both on my last voyage and on this. I had collected at least twenty more kinds, some remarkably brilliant, and mostly very beautiful; but it is worthy of remark that from Tamatave to Antananarivo I noticed very little variety, notwithstanding the vast difference of elevation—about 5000 feet. This holds good in both the animal and vegetable kingdoms, there being of course many exceptions to the rule, which is, however, pretty well established to my satisfaction, and is cognate to a singular fact not usual in countries where a conquering race is dominant, viz. that all over Madagascar there is in reality but *one language*, though varied by dialects in different parts.

“None of the five kinds of Snakes we found last voyage and this are venomous. Only one is large; and of many specimens I measured before skinning I never found one exceed 60 inches in length. This year they appeared to be scarce, and I could not procure one to skin as I came down. In a box of skins that was lost on the road was a large black Toad, the only one I saw, about $3\frac{1}{2}$ inches long, and

rounder than our European species. I also had some Mammals, closely allied to the English Hedgehogs, but, my medicine-chest being stolen, had no chance or means of injecting them, without which they would not have kept.

"Any birds worth sending home have been already dispatched through my friend Mr. Newton; and I can only say that the country is rich enough to lead us to hope for more unknown as yet. The country west of the capital has never yet been explored.

"By the first opportunity I will forward specimens of the smaller Snakes, Chameleons, Lizards, and a small Bat, in spirits. The Chameleons I have seen attain a length of 18 inches.

"J. CALDWELL."

"Port Louis, December 4, 1862."

P.S. "I had several Aye-eyes (*Chiromys madagascariensis*) in my possession at Tamatave to send to Mauritius; but none arrived alive. One that died in Tamatave I skinned, and gave the skin to Captain Wilson, of H. M. S. 'Gorgon.' In so doing, I noticed what I have not yet seen in any of the published accounts, namely, that the *lower jaws* at the junction of the chin are only connected by a strong ligament, and do not, as in most other animals, virtually form one connected semicircle of bone. They play easily in a vertical direction, independently of each other, and, when the animal is gnawing, *alternately*. This accounts for the prodigious power of gnawing the Aye-aye possesses; for I have seen one cut through a strip of tin plate 2 inches wide, nailed over the door of its cage. As there is the usual vertical and lateral motion of the lower jaw, and this independent power superadded, its effect is not astonishing."

The following papers were read:—

1. DESCRIPTION OF A NEW SPECIES OF THE GENUS DROMICIA, DISCOVERED IN THE NEIGHBOURHOOD OF SYDNEY. BY GERARD KREFFT.

DROMICIA UNICOLOR, sp. nov.

Dentition.—Incisors $\frac{3-3}{1-1}$. Canines $\frac{1-1}{1-1}$. Præmolars $\frac{3-3}{3-3}$. Molars $\frac{3-3}{3-3}$. = 36.

Of the grinders in the upper jaw, two are large and four cuspidate; but the last one is much smaller, of a triangular form, and furnished with three cusps only. The præmolars are three in number, of which the posterior one is large, and furnished with two fangs and two roots; the other two are rudimentary, with flat surfaces; there is an interspace between these teeth and the long canine; of the three incisors the anterior one is the largest.

In the lower jaw there are three true molars, with four cusps to each, but the last or posterior one smaller than the other two; these are preceded by a large two-rooted false molar (which, in one specimen examined, is furnished with one, in the other with two fangs),

the anterior præmolars (two) and the canine being small and rudimentary, with flat crowns; the single incisor is very long.

Coloration.—Fur of a uniform mouse-colour, lighter on the sides and beneath, with a blackish patch in front of the eye.

All the hairs are slate-grey at the base, tipped with yellowish at the back and sides, and with grey beneath; longer black hairs, tipped with white, are interspersed, except on the underside of the body. Bristles black to within one-third of the tip, which is white; a few long bristly black hairs in front and behind the eye. Tail somewhat longer than the body, prehensile, thin, showing every joint; slightly enlarged at the base, and gradually tapering; covered with a mixture of light-coloured and black hairs; apical portion, about $\frac{1}{2}$ " from the tip, wide beneath.

	inches.
Length from tip to tip	6 $\frac{1}{4}$
Tail	3 $\frac{1}{4}$
Face, to base of ear	$\frac{7}{8}$
Ear	$\frac{1}{2}$
Arm and hands	$\frac{1}{2}$
Tarsi and toes	$\frac{5}{8}$

This beautiful little creature was captured near St. Leonard's, North Shore, Sydney, feeding upon the blossoms of the *Banksiæ*, and lived a few days in captivity. In its habits it is nocturnal. The tongue of this *Dromicia* is well adapted for sucking the honey from the blossoms of the *Banksiæ* and *Eucalypti*, being furnished with a slight brush at the tip. This species differs from the *D. concinna* of Western Australia in being of a uniform dark colour without the white belly, and having the base of the tail slightly enlarged; it is of about the same size as *D. concinna*.

2. NOTICE OF A NEW AMERICAN FORM OF MARSUPIAL. BY R. F. TOMES, CORR. MEMB.

(Plate VIII.)

Genus HYRACODON, Tomes.

General form somewhat slender. Tail as long as the head and body, tapering evenly to a fine point, Feet long, and furnished with an opposable thumb; nails somewhat long and pointed. Head rather long; muzzle pointed; ears of medium size, ovoid. *Upper incisors*: middle teeth simple, pointed, small, and in a vertical position; the following two large, thick, and short, but having a semi-acute point, which has a very backward direction; the following one, or fourth, similar, but very small; the fifth, or canine, separated from the preceding by a considerable interval, small, conical, acute, and nearly vertical in position; the two succeeding teeth nearly similar. *Lower incisors*: middle teeth long, nearly straight, and horizontal in position, as in the Shrews; the four following teeth more or less conical in form, closely packed together, and sloping



M & N. Hanhart Imp

HYRACODON FULIGINOSUS.



forward, small in size, and evenly diminishing from the first to the last; the fifth tooth has a canine-like form, a little more prominent than the preceding, and curved forward; the sixth small, conical, vertical in position, and widely separated from the fifth.

H. FULIGINOSUS, n. s. (Pl. VIII.)

Tail sparingly covered with short hairs of a dusky colour, throughout the whole of its length, both above and below; upper surface of the feet sparingly covered with hairs similar to those of the tail; ears nearly naked, and of a dark brown colour; fur on all parts of the body of a deep sooty-brown, scarcely paler on the under parts; all the naked parts brown.

Length of the head and body	3	8
——— of the tail	3	8
——— of the head	1	2

Hab. Ecuador; collected by Mr. Fraser.

3. ON THE SPECIES OF CRASPEDOCEPHALUS WHICH OCCUR IN THE PROVINCE OF BAHIA, BRAZIL. BY DR. OTHO WUCHERER, CORR. MEMB.

In a former paper, containing the first portion of a list of the Ophidians which I had been able to collect in this province, I abstained from certain remarks on some species of the above genus until I should have collected more ample materials to corroborate them.

In the first place, I was struck by the fact that all the specimens of "Jararaca" which had up to that time come to my notice were very similar and belonged to one species, *Craspedocephalus atrox*. Having collected more than thirty specimens, I proceeded to examine them more closely for comparison. Dr. Gray, in the 'Catalogue of Viperine Snakes in the Brit. Mus.' 1849, comments on the difficulty of separating the species of this genus. His diagnoses do not agree exactly with those of Schlegel in his 'Essai,' nor with those of Duméril and Bibron in their 'Erpétologie Générale,' I may therefore be excused if I offer the following remarks on my specimens. In my former paper I stated that I had neither seen *Craspedocephalus lanceolatus* nor *C. brasiliensis*. At the present time I have examined very nearly forty specimens of "Jararaca," all of which, except three, agree sufficiently in every character, and are, according to the descriptions of herpetologists, referable to *C. atrox*. These three specimens show certain slight differences which justify a doubt of their specific identity with the others.

Dr. Gray mentions *C. atrox* as having seven upper labial shields. Schlegel, in his 'Essai,' i. p. 189, and again ii. p. 535, describes this species as having eight labial shields; still this may perhaps be considered a mistake, for in his plate 19 of the above work *C. atrox* is represented as having only seven upper labial shields. Duméril and

Bibron make no allusion to this character in *C. atrox*. Now all the specimens of *C. atrox* which I have had occasion to examine have seven upper labial shields. Only one has on one side eight, which must be considered an irregularity.

Dr. Gray describes *C. brasiliensis* as having nine or ten upper labial shields, the hinder ones of which are smaller; Schlegel describes it as having nine; and Duméril and Bibron do not mention the number of labial shields at all.

The three specimens differing from those of *C. atrox* mentioned above have all eight upper labial shields on each side, the last one narrower than the last one in *C. atrox*.

A statement I made in my former paper, that my specimens of *C. atrox* differed from those described by herpetologists in having fewer longitudinal rows of scales, I now take the opportunity to rectify. The number of longitudinal rows of scales in the species of this genus is not always mentioned as a specific character, and indeed it does not appear very serviceable as such. Schlegel's *C. jararuca*, the *C. brasiliensis* of Dr. Gray's catalogue, has twenty-seven rows of scales; of *C. atrox* he says (Essai, ii. p. 536), "On compte quelquefois 29 rangées d'écailles," leaving it perhaps hence to be inferred that it has generally a lesser number, or twenty-seven, like the one just described, which is *C. brasiliensis*. Duméril and Bibron (vii. p. 1509 and p. 1511) give to *C. atrox* from twenty-nine to thirty-two, to *C. brasiliensis* twenty-seven rows. All my specimens of *C. atrox*, with few exceptions, have twenty-seven rows of scales, a few having twenty-five. Of the three specimens differing from them, two have twenty-five and one twenty-three rows of scales.

Schlegel, Duméril, and Bibron draw some specific differences from the shape of the head, the former saying (ii. p. 535) that the snout of *C. atrox* is more conical, by which I suppose is meant more rounded, Duméril and Bibron stating that the sharp edge on the anterior part of the head is almost effaced, and does not reach back to the orbits, furthermore that the scales on the anterior part of the head are comparatively much larger than on the posterior part in *C. brasiliensis*; but all these differences do not appear very striking in Schlegel's excellent figures on plate 19 of the 'Essai.' My three specimens distinct from *C. atrox* would rather agree in these points with the descriptions of *C. brasiliensis* of these authors.

Schlegel points to the larger size of the superciliary and superior labial shields in *C. atrox*, to its larger and more numerous mental shields, to the stronger keel on its scales, showing a strong tendency to take the form of a tubercle, by which I understand that it is higher and shorter, not reaching the tip. Now these characters, if they occurred simultaneously, might very well serve as some of the specific characters; and it does not appear just in Duméril and Bibron to say (vii. p. 1508), "M. Schlegel, dans l'embarras où il s'est trouvé, n'a indiqué que des différences peu importantes, tirées de la forme des écailles dont la carène paraît plus forte; des lames noires alongées, ou de l'étendue relative des plaques surciliaires ainsi que les plaques labiales,"—although they confess their inability to suggest

any better characters, and still persist in considering them individuals belonging to two species, having no other basis for their separation than the frequent occurrence of *C. atrox* in Guiana, whilst the other species is never found there.

Comparing my three specimens, which differ from those of *C. atrox* in the last-mentioned respects, and first as regards the size of the superciliary shields, I cannot come to any very precise decision, as they are all not full-grown. Comparing with one another old and young specimens of *C. atrox*, I find that not only the superciliary, but all other head-shields are proportionately larger in young individuals, so is the pit in the cheek; and the whole head is flatter, especially the occiput, and more elongate in adult specimens. I compared the three specimens with those of corresponding size of *C. atrox*, but I could not arrive at any decided opinion; and, considering the difference in size of the figures in Schlegel's plate 19, they also do not allow me to draw any safe inference from the relative size of the superciliary shields in each species. Besides, I am not acquainted with the absolute size each species may attain. As regards the size and number of the mental shields, I cannot find any very striking difference; in some specimens of *C. atrox* I have found one, in others two, and even three pairs of chin-shields; in the three specimens which differ in other respects from them, I always found only one pair. The labial shields are certainly smaller in my three specimens which do not agree with *C. atrox*. But more striking still is the shape of the scales and their keel. The three specimens I am inclined to regard as referable to *C. brasiliensis* have narrower scales, their keel lower, narrower, longer, and reaching to their tip. At first glance these specimens have a less hirsute appearance than those of *C. atrox*. In accordance with the narrowness and the smaller number of their scales, their body appears more slender.

I am well aware that the coloration does not afford safe specific characters, except in comparatively few instances; but as all the specimens I referred to *C. atrox* agree so well in this respect, differing from my three supposed *C. brasilienses*, which again agree among themselves, I may be allowed to state in what one and the other differ. The specimens I refer to *C. atrox* are all greyish yellow or olive, and have along the body irregular brown, black-edged spots with sinuated margins, which occupy about as much space as the ground-colour. In young specimens the colours are generally brighter, and the spots more distinct. Underneath they are all, without exception, chequered with dark grey or black.

The three specimens of supposed *C. brasiliensis* are olive-green; similar brown, black-edged spots, with sinuated margins, occupy their back, but occur at much wider intervals, so that they occupy much less space than the ground-colour; underneath, all three are dirty-yellow, punctulated with black, but not at all chequered.

These differences appear very striking, but I refrain from attaching undue weight to them. Schlegel describes some specimens of *C. brasiliensis* with "larges taches carrées" (Essai, ii. p. 533).

Duméril and Bibron are not explicit as regards the coloration of *C. brasiliensis*.

In Prof. Jan's 'Prodrome d'une iconographie descriptive des Ophidiens,' published in 1859, I find *Trigonocephalus newwiedi*, which is synonymous with *C. atrox*, enumerated as a distinct species. I also find that Duméril and Bibron consider specimens with a white tip to the tail as a variety; I may therefore be allowed to make the following remarks. Seven of my specimens of *C. atrox* are quite young, their total length ranging from 0·333 to 0·382; in all the tip of the tail is white. Besides these, I have seen many other small specimens, which always showed the same peculiarity. In two specimens of 0·620 and 0·530 total length, which may be considered half-grown, the tip of the tail is lighter-coloured than the rest of the body, showing the transition to the black colour in the tail of adults. From this I think it reasonable to infer that the difference in the colour of the tip of the tail in individuals of *C. atrox* depends on their age, and does not constitute a variety, much less a species. The Brazilians, however, consider small individuals as a distinct species, which they call "Caisacca." Of the young of *C. brasiliensis* Schlegel states expressly (Essai, ii. p. 533), "Les petits offrent le bout de la queue blanc."

The largest of my three supposed specimens of *C. brasiliensis* has a total length of 0·872, and may be considered therefore about half-grown; the tip of its tail is lighter-coloured than the body; underneath to a greater extent, and above at the extreme tip it is quite white. In one of the other two specimens the tip of the tail is lighter-coloured, in the other white.

According to the statement of Schlegel, the iris of *C. brasiliensis* is dark red; he does not mention how the iris of *C. atrox* is coloured. In many live specimens of the latter species which I have seen, I always found it of a dark grey. I never saw a live specimen of a snake corresponding to my supposed specimens of *C. brasiliensis*. In these the colour of the iris is not preserved.

As to *C. lanceolatus*, I very much doubt whether it occurs in Brazil at all.

Trigonocephalus landsbergii, Schl., *Bothrops castelnaudi*, and *Bothrops alternans*, D. & B., have not yet come under my notice.

Of *Craspedocephalus bilineatus* I have seen eight specimens—seven from the vicinity of Villa Vicosa, where the Prince of Wied, who first described the species, found his specimen, and one of unknown origin.

I had previously observed that some Brazilian species of Snakes (as *Spilotes variabilis* and *S. pæcilostoma*, *Coryphodon pantherinus*, *Xenodon colubrinus*, &c.) have the habit of striking the ground rapidly with their tail when irritated; I had lately occasion to notice the same peculiarity in a large specimen of *Craspedocephalus atrox*.

4. ON THE OPHIDIANS OF THE PROVINCE OF BAHIA, BRAZIL.
 BY DR. OTHO WUCHERER, CORR. MEMB. (Part III.*)

The Dryadidæ which I have here been able to obtain belong to two genera—*Herpetodryas* and *Philodryas*†. The specimens of *Herpetodryas* were in very considerable number, but I am disposed to consider them all belonging to *H. carinatus*. They showed many varieties as regards their scales; some appeared to possess no keels at all, indeed the keel was almost effaced, and barely perceptible, on very close inspection, in a few only of the scales. But these specimens agreed in every other respect so much with undoubted specimens of *H. carinatus* that I could not help considering them specifically the same, and supposing Schlegel was right in not regarding *H. fuscus* as a species. *H. carinatus* is one of the few Snakes possessing the peculiarity pointed out by Reinhardt, that, though they have keeled scales, these have but one groove at the tip. The groove is often very indistinct in *H. carinatus*, and to be found only on some of the scales of the neck.

Of the genus *Philodryas* I have seen two species—*Philodryas reinhardtii* and *P. olfersii*. Of these, the former is by far the most common in our neighbourhood. Soon after my attention was drawn to the small grooves on the scales, I found that all my specimens of *P. viridissimus* had but one groove on each scale. I therefore thought Reinhardt was wrong in stating this Snake to have two grooves, until Dr. Günther showed that there were two species comprehended under the name *P. viridissimus*, to the one of which with two grooves he has left the name *viridissimus* (Surinam), establishing the other with one groove as a new species—*P. reinhardtii* (Brazil).

Of *P. olfersii* I have seen about half-a-dozen specimens. One was sent to me lately from Rio de Janeiro, the rest were from this province.

Of the family Dendrophidæ a single species, *Ahætulla liocerca*, has come to my notice, but in few specimens. One was sent to me from Rio de Janeiro; when alive, it is a very beautiful animal.

The family of Dryiophidæ is represented in this province by two species of the genus *Dryiophis*—*D. argentea* and *D. acuminata*, of which the former seems to be very scarce, whereas the latter is exceedingly common. I have nothing to add to what is already known of these animals. I have repeatedly tried to keep live specimens in confinement, but they all soon perished, after incessant disquietude, without ever taking food of any kind.

The Brazilian Dipsadidæ are all, as far as I have been able to ascertain, of nocturnal habits. During the day, specimens are found only in dark, sheltered places; at night they are frequently met with abroad. A specimen of *Leptodeira annulata*, which I kept for a long time in confinement, was never visible during the day, being hid in a crevice of its cage, but soon after sunset it became very lively. I never saw it take any food; and it died after several

* See P. Z. S. 1861, pp. 113, 322.

† [To these we may now add the genus *Dromicus*; see page 56.—A. G.]

months' confinement, probably from inanition. This species is very frequently found close to dwellings and in the thatch of houses.

Of *Thamnodynastes nattereri* I have obtained a great many specimens; but of *T. punctatissimus* only a few from Cañavieras.

My statement to Dr. Günther that I had seen a specimen of *Eudipsas leucocephalus* was founded on a mistake; no specimen of this species has yet come to my notice.

Leptognathus catesbyi is not very scarce. Of *L. mikanii* I have only lately received specimens from Caravellas.

The Brazilian species belonging to the family Scytalidæ are numerous. Of *Scytale coronatum* I have seen only the variety B. of Dr. Günther's Catalogue. It is exceedingly common, and very remarkable for the different changes of coloration it undergoes by age. Young specimens are of a pale-pink colour; adults are of an almost uniform black colour above, and white beneath. It lives, like all the members of this family, on lizards, chiefly on our most common species, *Trachycyclus marmoratus*. I have frequently had specimens of *Scytale* and *Oxyrhopus* alive for months; they are all of seminocturnal habits, and pursue their prey, not during the night, but at beginning of dusk, or a short time before sunset. On seizing they seldom crush their victims, unless these offer strong resistance; and considering how vigorous and tenacious of life lizards are, I have often been surprised at the little resistance they offer when caught even only by a leg. They seem paralyzed. If they struggle, the snake quickly throws a coil or two over them; if not, they allow their pursuer, after a little while, to relinquish its hold and to seize them deliberately by the head. Is it that the Snakes with grooved teeth are, after all, not quite innocuous, at least for cold-blooded animals? I was once severely bitten by a *Philodryas reinhardtii* without feeling the slightest subsequent inconvenience.

Of the genus *Oxyrhopus* I have seen the following species:—*O. clælia*, *O. formosus*, *O. petolarius*, *O. immaculatus*, and *O. trigeminus*. The last-named one and *O. petolarius* are the most common. Of *O. immaculatus* I have seen a single specimen.

Of the family Elapidæ two species are very common—*Elaps lemniscatus* and *E. corallinus*. The variety of the latter with white-edged black rings never attains but a small size; it differs also in coloration from the others, being brick-red. I am therefore inclined to consider it as a distinct species—the *E. circinalis* of Dum. and Bibron.

5. ADDITION TO DR. WUCHERER'S ARTICLE ON THE OPHIDIANS OF BAHIA. BY DR. A. GÜNTHER, F.Z.S., ETC.

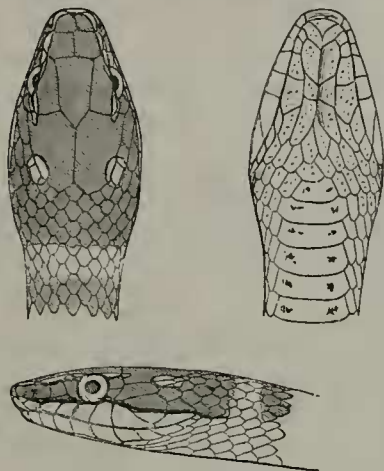
Almost simultaneously with the concluding part of Dr. Wucherer's paper "On the Ophidians of Bahia," I received from him a small Snake, which on examination proved to be a new species of the genus *Dromicus*.

Mr. Cope has lately* pointed out the complete gradation existing

* Proc. Acad. Nat. Sc. Philad. 1862, p. 75.

between the most slender species of *Dromicus* and the stout forms of the genus *Liophis*, dividing them into six divisions, characterized by the structure of the scales and by the relative length of the tail*. This new species would enter the division *Lygophis* of his arrangement, having the scales without grooves, and a tail the length of which is one-fourth of the total.

DROMICUS (LYGOPHIS) WUCHERERI, sp. nov.



Scales in fifteen rows. Loreal square; one præorbital, reaching to the upper surface of the head, but not touching the vertical; two postorbitals; eight upper labials, the third, fourth, and fifth entering the orbit (the third with its posterior angle only); the seventh labial forms only a small portion of the lip, and on one side it is even somewhat remote from the labial edge, the sixth and eighth labials being in contact with each other (as in *Diemennia*, where this shield generally is described as a temporal). An elongate temporal shield is in contact with both oculars; five scale-like temporals behind, in two transverse series. Five pairs of the lower labials are in contact with the chin-shields. 160 ventral shields; anal bifid; 66 subcaudals.

The posterior maxillary tooth is the strongest, and somewhat remote from the preceding.

Light brownish olive, minutely dotted with brown. Anterior part of the trunk with twelve pairs of brown spots, which are arranged in a zigzag series; the spots of the two anterior pairs are confluent.

* Mr. Cope's general observations on the species of these genera are perfectly correct, and the divisions proposed by him are most convenient for the determination of the species, but they do not appear to me to be more natural groups than those which we had before; for instance, *Liophis reginæ* is certainly more closely allied to *L. merremii* and to *L. cobella* than to *Dromicus temminckii*; yet *L. reginæ* and *D. temminckii* are united into one group, and the two others into another. *L. conirostris* cannot be separated from *L. reginæ*. And if *Liophis* and *Dromicus* be brought into so close a proximity as they are by Mr. Cope, *Zamenis* and certain species of *Coronella*, *Leptodira*, &c., cannot be kept at a distance.

Head brown, with a pair of rounded, well-defined, yellowish spots; a yellow line from above the eye, along the canthus rostralis, round the snout; upper lip yellow, separated from the brown colour by a black line; anterior ventral shields with an irregular series of black dots on each side; belly yellow.

The typical specimen is an adult male, 16 inches long. I name the species after my friend Dr. O. Wucherer of Bahia, its discoverer, who informs me that he has seen only three specimens of it, alike in size and colour. The species, therefore, appears to be scarce.

6. CONTRIBUTION TO THE HERPETOLOGY OF CERAM.

BY DR. A. GÜNTHER.

We are indebted to our knowledge of the reptiles of Ceram to Dr. P. v. Bleeker, who, in a paper, "Over de Reptilien-Fauna van Ceram"**, enumerates thirty-eight species collected at Wahaai, on the northern coast of that island, and at Paulohi on the southern coast.

Having received a small collection of these animals from North Ceram, I am enabled to add the following species:—*Tiliqua rufescens*; *Cyclodus carinatus*, n. sp.; *Coluber holochrous*, n. sp.; *Fordonia unicolor*, Gray; *Cerberus acutus*, Gray; and *Diemennia mülleri*, Schleg. However, it is probable that three of these species are comprised in Bleeker's list, but under different names, viz., *Cyclodus carinatus*, mihi, as *C. boddaërtii*, D. & B.; *Fordonia unicolor*, Gray, as *Eurostus plumbeus*, D. & B.; and *Cerberus acutus*, Gray, as *Cerb. boæformis*, D. & B. Therefore, taking the number of Ceramese reptiles known as forty-one, we find that thirty-five of them are referable to the fauna of the Indian Archipelago, whilst the remaining six belong to genera which have hitherto been considered as peculiar to the Australian region. Those six are *Cyclodus*, *Liasis*, *Enygrus*, *Acanthophis*, *Diemennia*, and *Pelodyras* (*Hyla cyanea*).

Dipsas irregularis appears to be one of the most common Snakes in Ceram. One large specimen had swallowed the egg of a bird, probably that of a middle-sized parrot; it was but slightly cracked on one end. This Snake has no œsophageal teeth.

Fordonia unicolor feeds on freshwater crabs.

Enygrus carinatus has twenty-seven series of scales. Schlegel has counted thirty-three.

Acanthophis cerastinus.—The specimens from Ceram differ from those of the Australian continent in the coloration. They are light reddish olive, with indistinct darker cross-bands in young age; a series of black dots runs along each side of the front part of the belly and of the tail. The other markings of the head are the same as in Australian specimens; and as there is no other difference in the form, in the shields, or scales, I consider it merely as a variety, for which I propose the name of *ceramensis*.

* Nat. Tydschr. Nederl. Ind. 1860.

The two following species appear to be new :—

CYCLODUS CARINATUS.

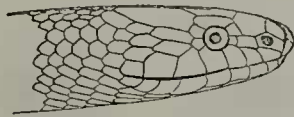
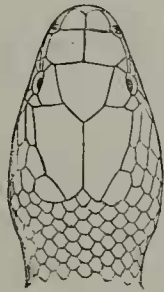
Similar to *C. gigas*, and with the same elongate temporal shields; but the scales are larger, there being thirty-two in a series round the body, and fifty in a longitudinal row between the axils of the fore and hind limbs*. The median scales along the back are very distinctly keeled, the keels forming slight longitudinal ridges along the back of the tail.

Brownish olive, with about ten narrow black bands across the back of the trunk; sides and belly marbled with black; limbs black.

Total length 18 inches, of which the tail measures 8 inches.

COLUBER HOLOCHROUS.

Scales smooth, without groove, in seventeen rows. Seven upper labials; two anterior and two posterior oculars. Uniform brownish grey; belly and the outer series of scales dull yellowish.



Body and tail moderately elongate, but slightly compressed. Rostral shield broader than high, scarcely reaching to the upper surface of the head; anterior frontals not quite half as large as the posterior; vertical pentagonal, as broad as long, the lateral edges being shorter than the anterior. Occipital shields moderate, slightly notched behind. Nostrils wide, the suture between the two nasals being very indistinct. Loreal large, longer than high; two anterior and two posterior oculars, the upper antecular not being in contact with the vertical. Seven upper labials, the third and fourth coming into the orbit. Eight temporal shields in three transverse series; the two anterior temporals are somewhat elongate, and the upper of them is in contact with both postoculars, the others are scale-like. Eight lower labials, five of which are in contact with the chin-shields. Ventral shields 206; anal entire; subcaudals eighty-seven. There

* *Cyclodus gigas*, from New Holland, has thirty-six series of scales round the body, and fifty-seven or sixty between the fore and hind limbs.