August 23, 1842.

William Yarrell, Esq., Vice-President, in the Chair.

Mr. Prince exhibited, on the part of Mr. Gould, two new species of Australian Birds. These Mr. Gould characterizes as follows :—

ASTUR CRUENTUS. *Ast. capite et occipite plumbeis; torque nuchali castaneo dorso, alis, caudæque eplumbeo-fuscis; fusco colore apud dorsum magis prævalente, plumbeo apud ceteras partes; remigum primorum pogoniis internis ad basim albescentibus et plumbeo-fasciatis; corpore inferiore ferrugineo, fasciis crebris, angustis et semicircularibus ornato.*

Male.—Crown of the head and occiput dark slate-colour; sides of the face grey; at the back of the neck a collar of chestnut-red; back, wings, and tail slaty brown, the brown hue predominating on the back and the slate-colour upon the other parts; inner webs of the primaries fading into white at the base, and crossed by bars of slate-colour; the interspaces freckled with buff; inner webs of the tail-feathers marked in a precisely similar manner; chin buffy white; all the under surface rust-red, crossed by numerous narrow semicircular bands of white; irides bright yellow; cere dull yellow; bill black at the tip, blue at the base; legs and feet pale yellow; claws black.

Total length, $14\frac{1}{2}$ inches; bill, $\frac{7}{8}$; wing, 7; tail, 6; tarsi, $2\frac{1}{2}$.

Hab. Western Australia.

This species is intermediate in size between *Astur approximans* and *Accipiter torquatus*, but is of a more grey or blue colour on the back, and has the transverse lines on the breast narrower and more rufous.

LOBIVANELLUS PERSONATUS. *Lob. vertice et occipite nigerrimis; faciei lateribus nuchæ, uropygio, et corpore inferiore albis; dorso et plumis scapularibus pallidè fusciscenti-cinereis; paleis pendentibus flavis; rostro ad basim flavis ad apicem nigris; pedibus e carneo-rubris.*

Crown of the head and occiput jet-black; sides of the face, back of the neck, rump, and all the under surface pure white; back and scapularies light brownish grey; wing-coverts grey; primaries deep black; secondaries white at the base on their inner webs, cinnamon-grey on their outer webs, and largely tipped with black; the extreme ends of the feathers being cinnamon-grey, particularly the two central ones; irides primrose-yellow; wattles lemon-yellow; bill lemon-yellow at the base, black at the tip; legs and feet carmine-red; the scales in front blackish green.

Total length, 12 inches; bill, $1\frac{3}{4}$; wing, $8\frac{3}{4}$; tail, 4; tarsi, $2\frac{3}{4}$.

Hab. North coast of Australia.

This species is of the same size, but more elegantly formed than the *Lob. lobatus*, the fleshy wattles more extensively developed, the crown of the head only black, and not the back and sides of the neck, as in that species.

Mr. Waterhouse exhibited several species of Mammals, collected in Borneo by the Society's Corresponding Member, James Brooke, Esq., and recently forwarded to England by that gentleman.

Among these specimens was a fine example of the *Paradoxurus Derbianus*, Gray, an animal which has also received the names *Paradoxurus Zebra*, *Hemigalea Zebra*, and *Viverra Boiei*.

Two specimens of *Gymnura*, a specimen of the *Prionodon gracilis*, and two species of Squirrel, also formed part of the collection.

The *Gymnuri* differ much in colouring from the *G. Rafflesii*. Instead of having the fur black, and with longer interspersed white hairs, the Bornean specimens are entirely of a yellowish white colour, with the exception of the long bristly hairs interspersed with the ordinary fur, which are some of them black. In other respects the Sumatran and Bornean specimens of *Gymnura* agree so closely that Mr. Waterhouse did not regard the difference in colouring as indicative of specific distinction.

The existence of the *Prionodon gracilis* in Borneo is noticed by Müller, who applies to the animal the name *Linsang gracilis*. Believing the skull of this animal had never been described or figured, Mr. Waterhouse called attention to the peculiarities in its structure.

In some of its external characters, especially in the structure of its feet, with their truly retractile claws, the *Prionodon* evinces an affinity to the Cats, which would lead the naturalist to seek for some corresponding points of resemblance in the skull; this, however, presents all the characteristics of the *Viverridæ*: it is of the same elongated form; the lower jaw is long and slender, and the rami are curved, so that the angular portion and symphysis are raised. Compared with other *Viverridæ*, the *Prionodon* skull is remarkable for the thinness of the bones and the very slight development of the muscular ridges. In general form it approximates more nearly to *Paradoxurus* than to *Viverra* or *Genetta*. The zygomatic arch, which is slender, is thrown more boldly outwards than in the last two mentioned genera, and the posterior portion of the cranium does not exhibit the sudden contraction immediately behind the posterior root of the zygomatic arch which we observe in the *Viverras* and *Genets*. The postorbital process of the temporal bone is but little prominent, being in the form of an obtuse angle; the skull differing in this respect from that of *Paradoxurus*, as well as in having the palate continued considerably beyond the line of the posterior molars. The muzzle is much compressed. The temporal ridges are rather widely separated and but slightly marked, though, judging from the dentition, the animal was adult. The antorbital opening is larger than in *Genetta* and less advanced, and hence the branch of the superior maxillary which forms its upper boundary is narrower, as in *Paradoxurus*. In the form of the lower jaw there is a close ap-

proximation to *Paradoxurus*; the only important difference consists in the smaller antero-posterior extent of the coronoid process.

The teeth in *Prionodon* differ much from those of *Paradoxurus*; indeed, were the dentition alone to be considered, these two genera would be placed at opposite extremes of the Viverrine group, the last-mentioned genus evincing the nearest approach to an omnivorous diet, whilst the *Prionodon* possesses teeth the most unfitted for mastication.

The incisors are arranged closely together, and in a straight line; the incisor on each side of both jaws, nearest the canines, is rather larger than the others, which are slightly notched at the extremity. The canines are rather long, very slender, and moderately curved.

The false molars, which are $\frac{3 \cdot 3}{4 \cdot 4}$, are much compressed, high, and

sharply pointed. The foremost false molar, both of upper and lower jaws, is small, and has a small tubercle on the hinder part of the principal cusp. The second and third false molars of the upper jaw have each two small notches, and a corresponding number of small tubercles on the posterior margin and at the base of the principal cusp; and there is an indistinct tubercle in front, near the base: the second, third, and fourth false molars of the lower jaw have also the double notch behind, but differ in having a distinct, though small, anterior cusp. The first and second false molars of both jaws are separated from the other teeth and from each other by interspaces, of which the broadest is that which separates the second and third of these teeth in the upper jaw, the space here being nearly a line in width. The carnassier of the upper jaw very nearly resembles that of the Cat, but the central cusp is higher, and the inner tubercle is proportionally smaller. The carnassier of the lower jaw may be best described by comparing it with the corresponding tooth in the Genet, from which it differs only in having the cutting edges rather more produced, in being more compressed; the inner tubercle is more pointed, and the heel proportionately smaller. As regards the true molars, the present animal differs from other *Viverridæ* in possessing but one of these teeth on each side of the upper jaw; its

true molars are therefore $\frac{1-1}{1-1}$, and this certainly does not arise from

immaturity in the animal. The form of this tooth closely resembles that of the foremost of the two upper true molars in *Genetta*, but is proportionately rather smaller and the tubercles are somewhat more developed. The true molar of the lower jaw is a mere rudimentary tooth, and differs from that of *Genetta* and other *Viverridæ*, not only in its small size, but in being of a compressed form: its cutting edge is divided by notches into three parts.

In the possession of but one true molar in the upper jaw, *Prionodon* would appear to approach the *Felidæ*; but the structure of this tooth, it must be observed, is essentially the same as in the *Viverridæ*, and it is combined with a small true molar in the lower jaw, which is never found in the Cats.

On the whole, *Prionodon* approaches most nearly to the Genets as

regards its dentition ; but in the general structure of the skull, Mr. Waterhouse observed, it evinced an affinity with the *Paradoxuri*, to which group it appeared to be linked by the *Paradoxurus Derbianus*, or *Hemigalea Zebra*. Links are nevertheless wanting to prove that *Prionodon* should be regarded as an offset from the *Paradoxurine* group.

One of the two Squirrels alluded to is the *Sciurus ephippium*, described in Dr. Müller's great work on the Zoology of the Dutch Possessions in the Indian Archipelago. The other closely resembles the *Sc. Prevostii* or *Rafflesii*, and may be a variety of that species ; it differs in being smaller ; the cheeks are freely pencilled with rusty red, instead of being grey as in *Rafflesii*, and the sides of the muzzle are of the same reddish hue, not having the white patch which is observable in Sir S. Raffles's Sumatran specimen ; the outer side of the thighs has a grey tint, produced by the admixture of black and white ; the hairs being of the former colour, but white or yellowish white at the point. In the type of *Rafflesii* the same part is furnished with uniform white hairs, excepting the hinder part of the thigh, which is black. The tail is uniform black in that animal, but the Bornean specimen has the hairs tipped with white in such a way as to produce rings ; these rings, however, do not extend to the apical portion of the tail, about two inches of which is uniform black. The hairs covering the ears are partly black, but chiefly of the same rich rusty red as are all the under parts of the animal. The Sumatran animal has black ears. Dr. Müller, in the work before quoted, describes specimens of a squirrel from Borneo, which he regards as a variety of *Sc. Rafflesii*, and which agree closely with the specimen from Mr. Brooke's collection ; this, however, has the hairs on the upper parts of the body of a uniform glossy black colour ; Dr. Müller observes they are generally terminated with yellowish points in the specimens he met with.