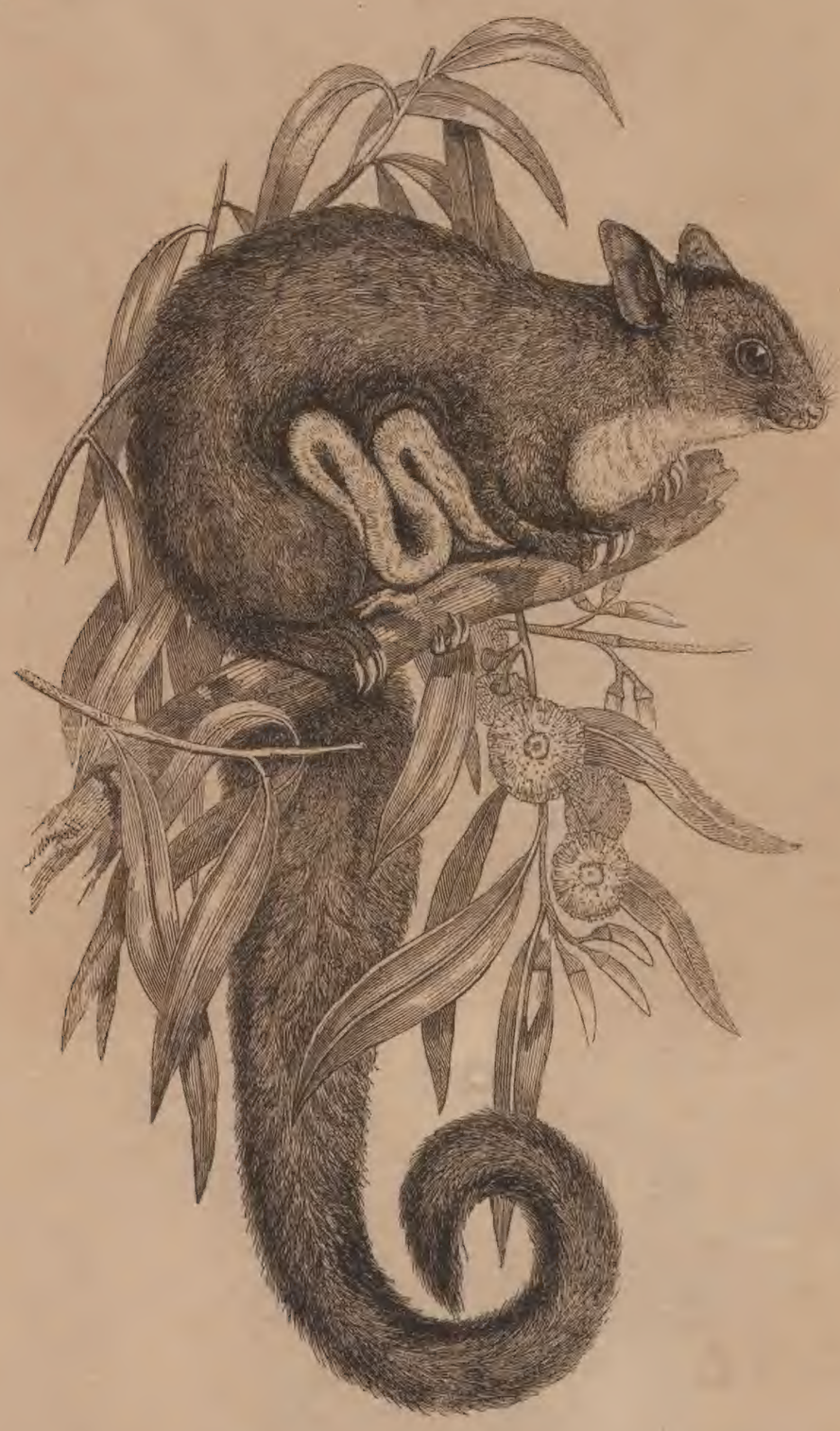
THE MAMMALS OF AUSTRALIA.



BY J. GOULD, F.R.S. &c.

DEDICATED BY PERMISSION TO

HIS ROYAL HIGHNESS PRINCE ALBERT.

PART VII.

CONTENTS.

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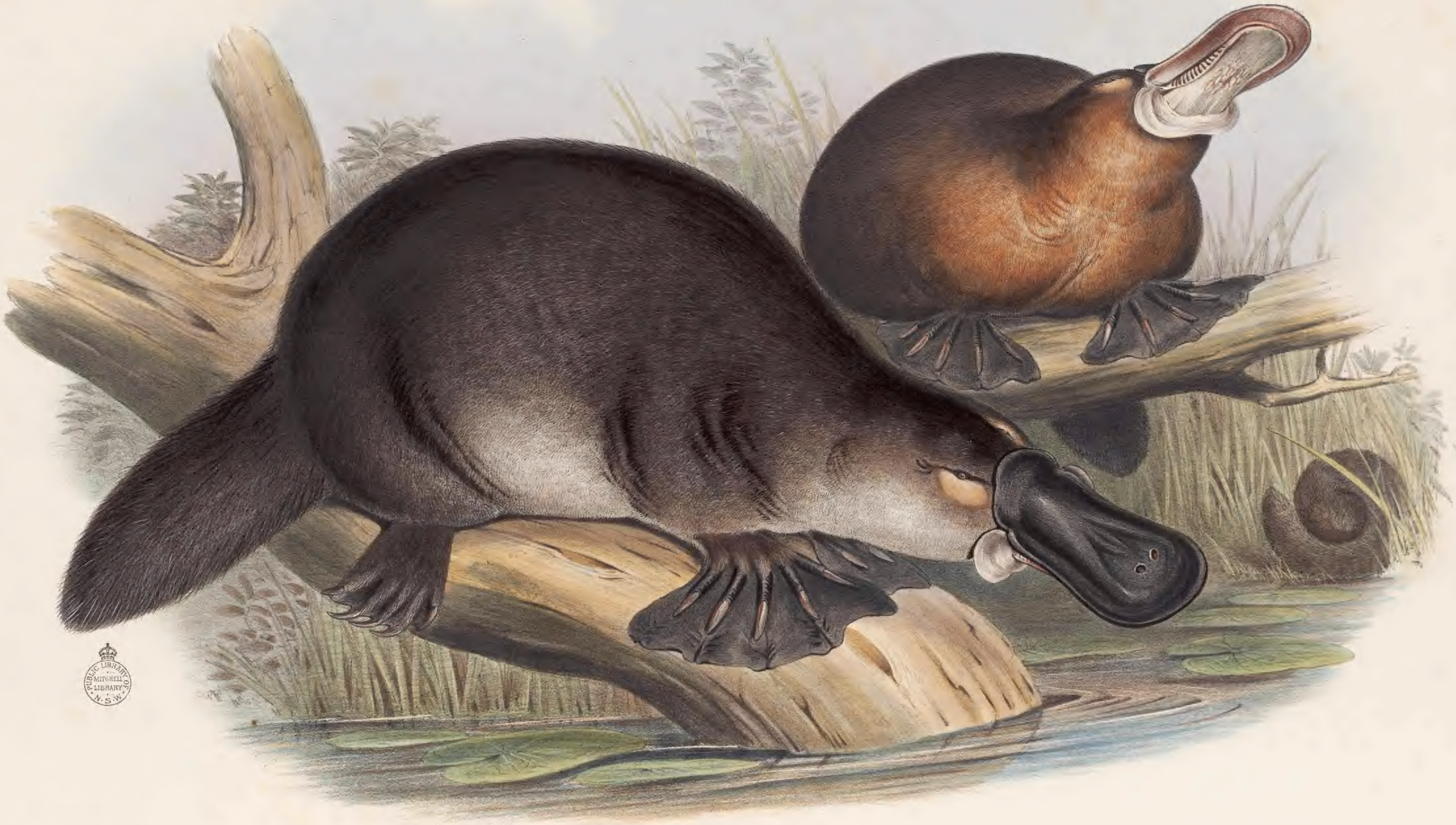


ORNITHORHYNCHUS ANATINUS.

J.Gould and H.C.Richter del et lith.

Hullmandel & Walton, Imp.

ORNITHORHYNCHUS ANATINUS.

Ornithorhynchus.

Platypus Anatinus, Shaw, Nat. Misc., vol. x. pl. 385.—Ib. Gen. Zool., vol. i. part i. p. 229. pls. 66 & 67.—Gray. List of Mamm. in Coll. Brit. Mus., p. 191.

Ornithorhynchus paradoxus, Blumenbach in Voigt's Magaz., tom. ii. p. 305. pl. 41.—Home in Phil. Trans. 1800, p. 432, and 1802, p. 67.—Cuv. Règn. Anim. Edit. 1829, tom. i. p. 235.—Meckel, Ornith. paradoxi desc. anatom., Lips. 1826, fol.—Owen in Trans. Zool. Soc., vol. i. p. 221.—Bennett in Trans. Zool. Soc., vol. i. p. 229.

———— *fuscus* et *rufus*, Peron, Voy. de Découv., tom. i. pl. 34. figs. 1 & 2.—Leach, Zool. Misc., vol. ii. p. 136. pl. 3.—Desm. Mamm., part ii. p. 380.

———— *brevirostris*, Ogilby in Proc. of Comm. of Sci. and Corr. of Zool. Soc., part i. p. 150.

———— *crispus* et *lævis*, MacGill. in Mem. of the Wernerian Soc. 1832, p. 127.

———— *Anatinus*, Waterh. Nat. Hist. of Mamm., vol. i. p. 25.

On commencing a history of the *Ornithorhynchus*, the mind naturally reverts to the period of its first discovery; a period so recent, that the animal was unknown to Linnæus and the older authors. It was in 1799 that a description of this singular quadruped first appeared in the "Naturalists' Miscellany" of Dr. Shaw; about this time also, the *Koala*, *Wombat*, *Kangaroo*, *Emu*, *Menura*, *Cereopsis*, and *Black Swan* were made known. These important discoveries gave an extraordinary impulse to the study of natural history, and set the whole scientific community wondering at the paradoxical creations of the distant country known by the name of Australia. Unquestionably the most singular and anomalous of all these animals was the *Ornithorhynchus*, with the habits and economy of which, as well as the mode of its reproduction, we are even now, after an interval of fifty-five years, but imperfectly acquainted. It is true that Professor Owen has given an elaborate paper on its anatomy and physiology in the "Transactions of the Zoological Society of London," and that the same work contains Mr. Bennett's interesting account of his observations of the animal in a state of nature and in captivity; still I am persuaded that much more remains to be ascertained and made known respecting this extraordinary type among quadrupeds. Although the ornithology of Australia almost exclusively engrossed my attention during my interesting visit to that country, I did not fail to notice the mammals which crossed my path and by which I was always surrounded. The *Ornithorhynchus* especially attracted my attention, as I frequently met with it both while ascending the rivers in Van Diemen's Land and while encamped beside the quiet pools of New South Wales. I endeavoured to determine the centre of its area and to trace the extent of its range, but was not entirely successful, nor have they yet been accurately ascertained: Van Diemen's Land, and the south-eastern part of the continent from Moreton Bay to Port Philip, are the only portions of that great country whence I have received specimens, or where I have heard of it existing. In New South Wales it is common in the streams and rivers flowing from the mountain ranges to the sea, as well as in those descending towards the interior. It is equally numerous in all the tributaries which feed the great rivers Darling and Murray; and if it be not now plentiful in the Hawkesbury, Hunter, &c., the diminution in its numbers is solely due to the wholesale destruction dealt out to it by the settlers, which, if not restrained, will ere long lead to the utter extirpation of this harmless and inoffensive animal, a circumstance which would be much to be regretted; it is in fact often killed from mere wantonness, or at most for no more useful purpose than to make slippers of its skin. Some zoologists have entertained the opinion that there are more than one species of this form, and that the animal inhabiting Van Diemen's Land, with stiff wiry hairs, particularly on the tail, where they, moreover, nearly cross each other at right angles, is specifically different from that found on the continent, which is generally of a smaller size, and of which the hairy covering is more sleek and glossy; I believe, however, that no tangible specific differences will be found, and that the variations in question are due to localization alone; much variety is also found in the colouring of the under surface, but as this occurs both in island and continental specimens, it cannot be regarded as a matter of importance.

In many of its habits and actions, and in much of its economy, the *Ornithorhynchus* assimilates very closely to the Common Water Vole of this country (*Arvicola amphibius*, Desm.); frequenting as it does similar situations, climbing stumps of trees and snags which lie prostrate in the beds of rivers, and burrowing in the bank side in an upward direction, a retreat to which it resorts during the day or on the approach of danger. If it be not strictly nocturnal, it is in the early morning and evening and in lowery weather only that it is to be seen during the daytime. It swims with great ease, and frequents alike the rushy banks of the great rivers near the sea, and the silent, tranquil pools of the interior. Its mode of swimming is very singular and not always alike; sometimes the body of the animal, beaver-like, is partly raised above the surface, while at others, particularly in the still pools, every part is submerged except the upper surface of the bill and nostrils, and these being but sufficiently elevated above the water to enable the animal to breathe,

it is only by the little rings which this operation creates upon the glassy surface that its presence can be detected. I have frequently come suddenly upon it while ascending the reedy sides of the Derwent in a boat, when it instantly dived, with an audible splash, caused apparently by the hasty flap of its broad tail. I could say much more respecting the habits of this curious quadruped. In the volume of the "Transactions of the Zoological Society" above referred to, Mr. Bennett states that:—

"The *Ornithorhynchus* is known to the colonists by the name of *Water-Mole*, from some resemblance which it is supposed to bear to the common European Mole, *Talpa Europæa*, Linn.: by the native tribes at Bathurst and Goulburn Plains, and in the Yas, Murrumbidgee, and Tumat countries, I found it designated by the name of *Mullangong* or *Tambreet*; but the latter is more in use among them than the former. It is very abundant in the river Yas, particularly in the tranquil parts of the stream called 'ponds,' the surface of which is covered with various aquatic plants. On perceiving it, the spectator must remain perfectly stationary, as the slightest noise or movement would cause its instant disappearance, so acute is it in sight or hearing, or perhaps both; and it seldom reappears when it has been frightened. By remaining perfectly quiet when the animal is 'up,' the spectator is enabled to obtain an excellent view of its movements; it seldom, however, remains longer than one or two minutes, playing and paddling on the surface, soon diving again and reappearing a short distance above or below, generally according to the direction in which it dives, which it does head foremost.

"The various contradictory accounts that have been given, on the authority of the aborigines, as to the animal laying eggs and hatching them, induced me to take some pains to find out the cause of error, and being perfectly satisfied, from an internal examination of a female, that *ova* were produced in the *uteri*, I could the more readily determine the accuracy or inaccuracy of the accounts which I might receive from the natives.

"The Yas natives at first asserted that the animal lays eggs, but shortly afterwards contradicted themselves. In the Tumat country the answers were readily and satisfactorily given—'No egg tumble down; pickaninny make tumble down'—which accorded with my own observations.

"On the 7th of October, I accompanied an aborigine, called Daraga, to the banks of the Yas, to see the burrow of an *Ornithorhynchus*, from which, he told me, the young had been taken last summer. I asked him, 'What for you dig up *Mullangong*?' 'Murry budgeree patta' (Very good to eat), was his reply. On arriving at the spot, situated on a steep bank close to the river, about which long grass and various other herbaceous plants abounded, my guide, putting aside the long grass, displayed the entrance to the burrow, distant rather more than a foot from the water's edge. In digging up this retreat the natives had not laid it entirely open, but had delved holes at certain distances, and introduced a stick to ascertain its direction previously to again digging down upon it. By this method they were enabled to explore the whole extent with less labour than by laying it open from end to end. The termination of the burrow was broader than any other part, nearly oval in form, and strewed at the bottom with dry river weeds, &c., a quantity of which still remained. The whole of the interior was smooth, extending about twenty feet in a serpentine direction up the bank. It had one entrance near the water's edge, and another under the water, communicating with the interior by an opening just within the upper entrance. It is no doubt by the latter that the animal seeks refuge when it is seen to dive and not to rise again to the surface.

"On examining the cheek-pouches or the stomachs of these animals, I always observed the food to consist of river insects, very small shell-fish, &c., comminuted and mingled with mud or gravel: this latter might be required to aid digestion, as I never observed the food unmingled with it. The natives say that they also feed on river weeds; but I never found remains of that description of food in their pouches. Mr. George MacLeay informed me that he had shot some, in a part of the Wollondilly River, having river weeds in their pouches; but he observed that in that part of the river aquatic insects were very scarce. The young are suckled at first, and afterwards fed with insects, &c., mingled with mud.

"Having captured one alive, I placed it in a cask, with grass, mud, water, and everything necessary to make it comfortable. It ran round its place of confinement, scratching and making great efforts to get out; but finding them useless, became quite tranquil, contracted itself into a small compass, and soon fell asleep. At night it became very restless, and diligently sought to escape, going round the cask with the fore paws raised against the sides and the webs thrown back, and scratching violently with the claws of the fore feet, as if to burrow its way out. In the morning I found it fast asleep, with the tail turned inwards, the head and beak under the breast, and the body contracted into a very small compass; subsequently, however, I observed it sleeping with the tail turned inwards, the body contracted, and the beak protruded. When disturbed from its sleep, it uttered a noise something like the growl of a puppy, but in a softer and more harmonious key. Although quiet for the greater part of the day, it constantly made efforts to escape, and uttered a growling noise during the night."

Shortly after this, Mr. Bennett started for Sydney, taking with him his interesting captive. "*En route*," he availed himself of the vicinity of some ponds, inhabited by these animals, to give it a little recreation; "and accordingly tied a long cord to its leg and roused it from its sleep; when placed on the bank it soon found its way to the water, and travelled up the stream, apparently delighting in those places which most abounded with aquatic weeds. Although it dived in deep water, it appeared to prefer keeping close

to the bank, occasionally thrusting its beak (with a motion similar to that of a *Duck* when it feeds) among the mud, and at the roots of the weeds lining the margin of the ponds, which we may readily suppose to be the resort of insects. After it had wandered some distance, it crawled up the bank, and lying down on the grass, enjoyed the luxury of scratching itself and rolling about. In this process of cleaning itself, the hind claws were alone brought into use; first the claws of one hind leg, then those of the other. The body being so capable of contraction was readily bronght within reach of the hind feet, and the head also was brought so close as to have its share in the cleaning process. The animal remained for upwards of an hour thus engaged, after which it had a more sleek and glossy appearance. It permitted me to smooth it gently over the back, but disliked being handled.

"On the 28th of December I visited a very beautiful part of the Wollondilly River, which has the native name of Koroa, and explored a burrow, the termination of which was thirty-five feet from the entrance. Extensive as this may appear, burrows have been found of even fifty feet in length. On arriving at the termination a growling was distinctly heard, which upon further search was found to proceed from two full-furred young ones, a male and a female, coiled up asleep, and which growled exceedingly at being exposed to the light of day. They measured ten inches from the extremity of the beak to that of the tail; had a most beautifully sleek and delicate appearance, and seemed never to have left the burrow. When awakened and placed on the ground, they moved about, but did not make such wild attempts to escape as the old ones do when caught. Shortly afterwards a female was captured, which was no doubt the mother; she was in a ragged and wretchedly poor condition; her fur was rubbed in several places and she seemed in a very weak state. The eyes of the natives glistened and their mouths watered when they saw the fine condition of the young *mullangongs*, and they frequently and earnestly exclaimed, 'Cobbong fat' (large, or very fat), and 'Murry budgeree patta' (very good to eat). They said they were more than eight moons old; if so, they must have been the young of the previous season.

"The young animals sleep in various postures; sometimes in an extended position, and often rolled up like a hedgehog. One lies curled up like a dog, keeping its beak warm with the flattened tail brought over it; while another lies stretched on its back, the head resting by way of pillow upon the body of the old one, lying on its side, the delicate beak and smooth clean fur of the young contrasting with the rough and dirtier appearance of the mother. The favourite posture appears to be that of lying rolled up like a ball: this is effected by the fore paws being placed under the beak, with the head and mandibles bent down towards the tail, the hind paws crossed over the mandibles, and the tail turned up, thus completing the rotundity of the figure.

"Although furnished with a good thick coat of fur, they seemed particular about being kept warm. They would allow me to smooth the fur, but if their mandibles were touched they darted away immediately, those parts appearing to be remarkably sensitive. I could permit the young to run about as they pleased, but the old one was so restless, and damaged the walls of the room so much by attempts at burrowing, that I was obliged to keep her close prisoner. The little animals appeared often to dream of swimming, as I have frequently seen their fore paws in movement as if in that act. If placed on the ground in the daytime, they sought some dark corner for repose; but when put in a dark corner or in a box, they huddled themselves up as soon as they became reconciled to the place, and went to sleep. They would sleep on a table, sofa, or indeed in any place; but, if permitted, would always resort to that to which they had been accustomed. Still, although for days together they would sleep in the place made up for them, yet on a sudden they would repose behind a box or in some dark corner in preference.

"When running they are exceedingly animated, their little eyes glisten, and the orifices of the ears contract and dilate with rapidity; if then taken into the hands for examination, they struggle violently to escape, and their loose integuments render it difficult to retain them. Their eyes being placed high in the head, they do not see objects well in a straight line, and consequently run against everything in their perambulations, spreading confusion among all light and readily overturnable articles. Occasionally they elevate the head, as if to observe objects above or around them. Sometimes I have been able to enter into play with them by scratching and tickling them with my finger; they seemed to enjoy it exceedingly, opening their mandibles, biting playfully at the finger, and moving about like puppies indulged with similar treatment. Besides combing their fur to clean or dry it when wet, I have also seen them peck it with the beak, as a *Duck* would clean its feathers, by both which processes their coats acquire a clean and glossy appearance.

"I was often surprised to find them on the summit of a book-case or some other elevated piece of furniture, and equally at a loss to imagine how they came there, until I at length discovered that it was effected by the animal placing its back against the wall and its feet against the book-case, and by means of the strong cutaneous muscles of the back and the claws of the feet, contriving to reach the top very expeditiously."

The number of young produced at one time has not been satisfactorily ascertained; it has been stated that they are from two to four in number, but I believe that they rarely exceed two. When first born they are naked, and the beak does not resemble that of the adult, but is short, broad and thick, and fitted to embrace the mammary areola concealed by the hairs of the mother; "the tongue too," says Professor Owen, "which in the adult is lodged far back in the mouth, advances in the young animal close to the

end of the lower mandibles; and its disproportionate breadth is plainly indicative of the importance of the organ to the young animal, both in receiving and swallowing its food; the thin fold of integument also, which surrounds the base of the mandibles, and extends the angle of the mouth from the base of the lower jaw to equal the breadth of the base of the upper one, must increase the facility for receiving the milk ejected from the mammary areola of the mother." "While sucking," says M. Verreaux, "the young continually rub or triturate the mother's belly with the fore feet, and occasionally with the hinder ones. At the end of fifteen to twenty days the new born are covered with a silky hair, and are able to swim." M. Verreaux also describes another mode by which the young obtain the lacteal fluid:—"Having a considerable number of adults and young at my disposition, I saw the latter accompany their mothers, with which they played, especially when they were too far from the bank to take their nourishment. I observed that when they wished to procure it, they profited by the moment when the mother was amongst the aquatic plants near the land, where there is no current. The female having her back exposed, by the exercise of a strong pressure the milk floats to a little distance, and the young may suck it up with facility; and thus they do, turning about so as to lose as little as possible. I cannot, perhaps, better compare the appearance of the greasy milk, under these circumstances, than to the iridescent colours produced by the solar rays upon stagnant water. I have witnessed this fact repeatedly, both daily and nightly. I have also remarked that the young, when fatigued, climbed upon the back of the mother, who brought it to land, where it caressed her.

"The body of this singular animal is covered with a fine, long and thick hair, underneath which is a finer, short, very soft fur, resembling the two distinct kinds of fur found in the *Seal* and *Otter*; on the abdomen, breast and throat, the fur and hair are of a much finer quality and of a more silky nature than on the other parts of the body; while on the upper surface of the tail the hair is longer and coarser. The general colour of the upper surface is a light black; the under short fur is greyish; the whole of the under surface is ferruginous; immediately below the inner angle of the eye is a small spot of a light or pale yellow; the legs are short, pentadactyle and webbed; on the fore feet (which seem to have the greatest muscular power, and are in principal use for burrowing and swimming) the webs extend a short distance beyond the claws, are loose, and fall back when the animal burrows; the claws are strong, blunt, and well adapted for burrowing; the hind feet are short, narrow, turned backwards, and when the animal is at rest, have, like those of the *Seal*, some resemblance to a fin; their action is backwards and outwards; the nails are all curved backwards, and are longer and sharper than those of the fore feet; the web does not extend further than the base of the claws. The head is rather flat, from which project two flat lips or mandibles, resembling the beak of a *Shoveller Duck*, the lower of which is shorter and narrower than the upper, and has its internal edges channeled with numerous *striæ*, resembling in some degree those seen in the bill of a *Duck*. The colour of the superior mandible is of a dull dirty greyish-black, covered with innumerable minute dots; the under part of the upper mandible is of a pale pink or flesh-colour, as is the internal or upper surface of the lower mandible, the under surface of which is either perfectly white or mottled,—in young specimens usually the former, in old ones the latter; at the base of both mandibles is a transverse loose fold or flap of integument, always similar in colour to the skin covering the mandibles, that is, dull greyish-black above, and white or mottled below. In the upper mandible this is continued to the eyes, and may perhaps afford protection to those organs when the animal is burrowing or seeking food in the mud; the upper fold or flap is continuous with another portion arising from the lower mandible also at its base; the eyes are very small, but brilliant, and of a light brown.

"In young specimens, the under surface of the tail, as well as the hind and fore legs near the feet, are covered by fine hair of a beautiful silvery-white appearance; this is lost, however, in the adult, in which the under surface of the tail is almost entirely destitute of hair. Whether this proceeds from its trailing along the ground, I know not; but the prevailing opinion among the colonists, for which, however, I could not discover any foundation, is that it is occasioned by the animal using the tail as a trowel in the construction of its dwelling.

"The only external difference in the sexes is the presence in the male of a spur, situated on the internal part of the leg, some distance above the claws; this spur, which is moveable and turned backwards and inwards, was considered to be poisonous, but some experiments" (instituted by Mr. Bennett) "prove that it is innocuous: it is entirely wanting in the females.

"The size of the *Ornithorhynchus* varies, but the males are usually found to be slightly larger than the opposite sex; the average length is from 18 to 20 inches."

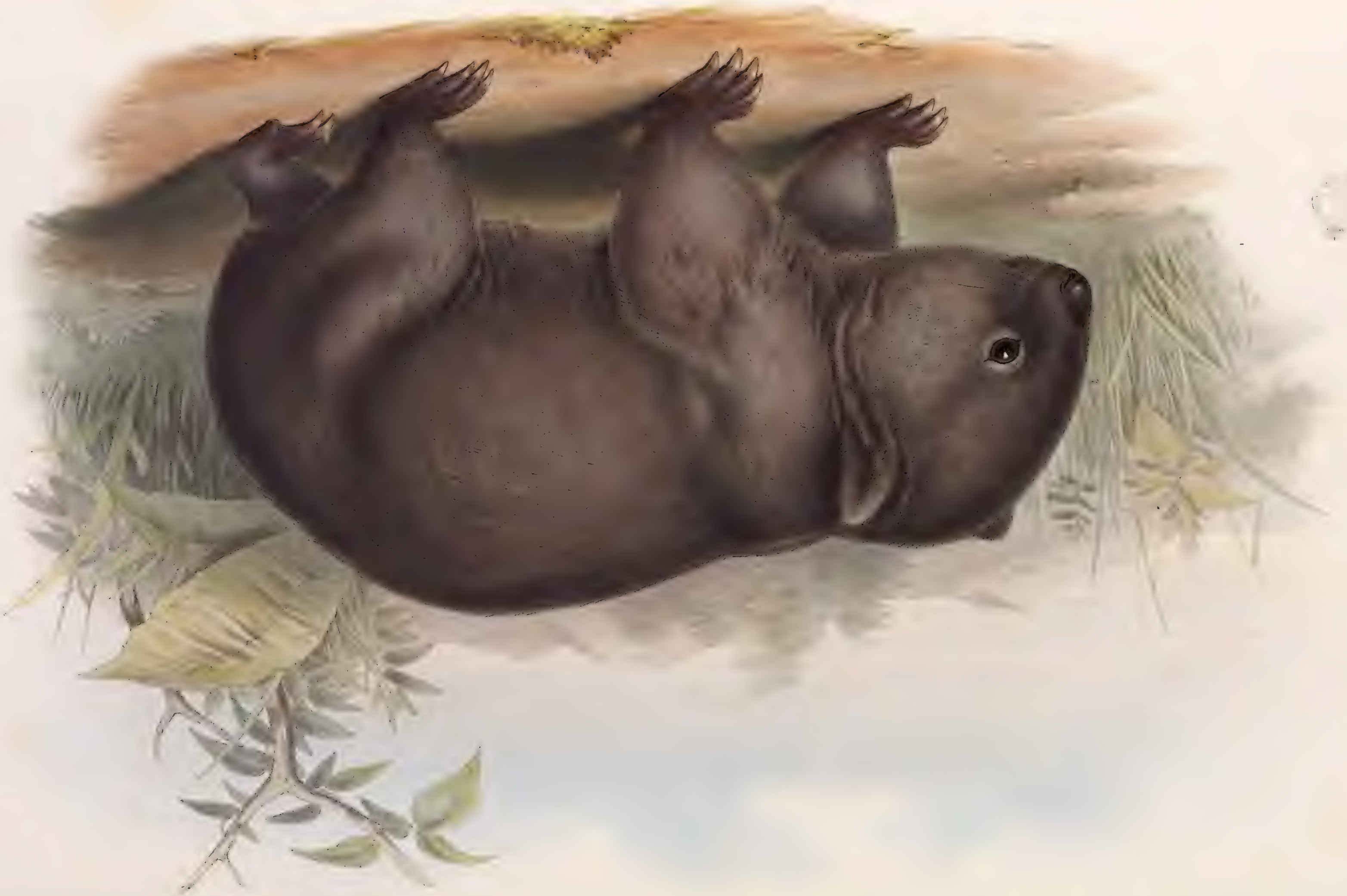
In conclusion, I must not omit to call attention to the very valuable details respecting the anatomy of this animal, given by Professor Owen and Mr. Bennett, in the "Transactions of the Zoological Society" above referred to. There will also be found in the "Revue Zoologique" for 1848 some very interesting particulars respecting the reproduction and other points in the economy of this animal, by M. Jules Verreaux, acquired by personal observation in Van Diemen's Land. Professor Owen's remarks on M. Verreaux's observations, published in the "Annals and Magazine of Natural History" for 1848, may also be consulted with advantage.

The Plate represents the two sexes about three-fourths of the natural size.

PHASCOLOMYS WOMBAT, *Per et Les*

Mintrop and H.C. Richter del. et lith. *Hullmandel & Walton, Imp.*

PHASCOLOMYS WOMBAT, *Per & Les*



PHASCOLOMYS WOMBAT, *Per.* et *Les.*

Wombat.

Phascolomys Wombat, Peron et Lesueur, Voy. aux Terres Australes, Atlas, tab. 28.—Desm. Mamm., part i. p. 276.—Waterh. in Jard. Nat. Lib. Mamm., vol. x. p. 300.—Ib. Nat. Hist. of Mamm., vol. i. p. 246.—Gunn in Proc. of Roy. Soc. of Van Diem. Land, vol. ii. p. 85.
——— *fossor*, Sevastianoff in Mém. de l'Acad. Imp. de St. Pétersb., tom. i. p. 444.
——— *wombatus*, Leach, Zool. Misc., vol. ii. p. 101. pl. 96.
——— *fusca*, Desm. Dict. des Sci. Nat., tom. xxv. p. 500. tab. G 44. fig. 1.
——— *Bassii*, Less. Man. du Mamm., p. 229.
——— *ursinus*, Gray, List of Mamm. in Coll. Brit. Mus., p. 95.
Didelphis ursina, Shaw, Gen. Zool., vol. i. part ii. p. 504.
Wombatus fossor, Geoff.
Opossum hirsutum, Perry, Arcana.
Amblotis fossor, Ill. Prod., p. 77.
Perameles fossor, Peron.
Womback, Bewick's Quadr., 6th Edit. p. 522.
Wombat, Collins's Account of New South Wales, vol. ii. p. 153, and plate at p. 157
Badger, of the Colonists.

The Wombat may be regarded as one of the most curious of the Australian Mammals, ranking as it does, in respect to its anomalous structure and appearance, with the Koala and Ornithorhynchus. In no other part of the world is the form to be found, and it is difficult to say of which of the great groups of placental animals it is the representative in its own class—the *Marsupiatæ*. I obtained several examples in Van Diemen's Land, but failed in procuring continental specimens, which I regret, because it leaves the question as to there being more than one species of this form still undecided; nor can this point be determined until specimens from South Australia have been sent to Europe, or until comparisons have been made in that country by a naturalist competent to set the question at rest. Professor Owen informs us that a skull in the Collection of the Royal College of Surgeons, sent from South Australia, offers sufficient differences from skulls from Van Diemen's Land to convince him that there are at least two species; and when such a statement is made by so high an authority, the doubt that exists on the subject is much diminished. Mr. Waterhouse also states, that in his opinion the continental species will prove to be distinct from the animal found in Van Diemen's Land and the islands in Bass's Straits. I may mention also that His Excellency Sir George Grey has placed in my hands a pencil drawing of the head of a specimen killed in South Australia, to which, from the great breadth of the head, the name of *latifrons*, proposed by Professor Owen for the continental animal, might apply. There appears, therefore, good reasons for concluding that the continental animal is really distinct; but the question still remains an open one, and it is much to be regretted that both skins and skeletons have not been sent home, for its proper elucidation. After what has been stated, it is almost superfluous to say, that my figure was taken from a specimen procured in Van Diemen's Land, where the animal, particularly in certain districts, is extremely common. I met with it myself in the neighbourhood of Port Arthur, in the sterile districts behind Mount Wellington, and in many other situations where a similar character of country prevails. It is also found in the islands in Bass's Straits, where the specimen first described, in "Collins's Voyage," vol. ii. p. 153, was procured. In its habits it is nocturnal, living in the deep stony burrows, excavated by itself, during the day, and emerging on the approach of evening, but seldom trusting itself far from its stronghold, to which it immediately runs for safety on the appearance of an intruder. The natives state, however, that it sometimes indulges in a long ramble, and, if a river should cross its course, quietly walks into the water and traverses the bottom of the stream until it reaches the other side; but I am unable to confirm this statement from personal observation. In its disposition it is quiet and docile in the extreme, soon becoming familiar with and apparently attached to those who feed it; as an evidence of which, I may mention that the two specimens which are now (1855), and have been for a long period, living in the Gardens of the Zoological Society in the Regent's Park, not only admit the closest inspection, but may be handled and scratched by all who choose to make so intimate an acquaintance with them. The following notes are from the pens of various authors who have written on the Wombat; the earliest of whom was Mr. Bass, in "Collins's Voyage" above referred to.

"The *Wombat*," says Mr. Bass, "is a squat, thick, short-legged, and rather inactive quadruped. Its figure and movements strongly remind one of those of a Bear; its pace, too, is hobbling or shuffling, and not unlike the awkward gait of that animal. In disposition it is mild and gentle, but it bites hard and becomes furious when provoked, and then utters a low cry between a hissing and a whizzing sound, which

cannot be heard at a greater distance than thirty or forty yards." Mr. Bass chased one of these animals, lifted it off the ground and laid it along his arm, as if carrying a child. It made no noise, nor any effort to escape, not even a struggle. Its countenance was placid and undisturbed, and it exhibited no discomposure, although in the course of a mile walk it was frequently shifted from arm to arm, and sometimes laid over the shoulder; when, however, he proceeded to secure it by tying its legs, while he left it to cut a specimen of a new wood, it became irritated, whizzed, kicked and scratched most furiously, and snapped off a piece from the elbow of Mr. Bass's jacket with its powerful incisors. Its temper being now ruffled, it remained implacable all the way to the boat, ceasing to kick and struggle only when quite exhausted.

Mr. G. Bennett in his "Wanderings," speaking of one of these animals, kept in a state of domestication at Been in the Tumat country, states that "it would remain in its habitation till dark; it would then come out and seek for the milk-vessels, and should none be uncovered, it would contrive to get off the covers and bathe itself in the milk, drinking at the same time. It would also enter the little vegetable garden attached to the station in search of lettuces, for which it evinced much partiality. If none could be found, it would gnaw the cabbage stalks, without touching the leaves. Although this animal is very numerous in the more distant parts of the colony, it is difficult to procure from the great depth to which it burrows."

"The specimen dissected by Sir Everard Home," says Mr. Waterhouse, "and which was brought from one of the islands in Bass's Straits by Mr. Brown, the eminent botanist, lived as a domestic pet in the house of Mr. Clift for two years. This animal was a male, measured two feet and two inches in length, and weighed about twenty pounds. The observations made by Sir Everard Home on the habits of this animal whilst in confinement, correspond pretty closely with those already given. 'It burrowed in the ground whenever it had an opportunity, and covered itself in the earth with surprising quickness; it was very quiet during the day, but constantly in motion in the night; was very sensible to cold; ate all kinds of vegetables, but was particularly fond of new hay, which it ate stalk by stalk, taking it into its mouth, like a Beaver, by small bits at a time. It was not wanting in intelligence, and appeared attached to those to whom it was accustomed, and who were kind to it. When it saw them it would put up its fore paws on their knees, and when taken up would sleep in the lap. It allowed children to pull and carry it about, and when it bit them, it did not appear to do it in anger or with violence.'"

This animal, like almost every other of the Australian quadrupeds, is eaten by the natives, but as an article of food it must give place to the Kangaroo and its affines. I partook of it myself, but always found its flesh tough, with a musky flavour, and not altogether agreeable.

Mr. Bass remarks that the size of the two sexes is nearly the same, but that the female is somewhat the heavier, and such appears to be the case; the weight, whenever ascertained, being always in favour of the female.

In Mr. Gunn's paper on the Mammals indigenous to Tasmania, published in the "Proceedings of the Royal Society of Van Diemen's Land," above referred to, that gentleman states that—"The Wombats of Tasmania differ much in colour in different localities, some being dirty black, and others of a silvery grey. They are found on the tops of the mountains, and thence to the sea-coasts; and are very numerous in some localities, 234 having been killed in less than a year upon a farm, at present occupied by me, on the St. Patrick's River."

For the details of the internal structure of this curious animal, I must refer my readers to the "Leçons d'Anatomie Comparée" of the celebrated Cuvier, and to the writings of our equally well-known countrymen, Sir Everard Home, in the "Philosophical Transactions" for 1808, and Professor Owen, in the "Proceedings of the Zoological Society" for 1836. The original memoir of the latter author, on *Phascolomys latifrons*, will be found in the "Proceedings" of the same Society for 1845.

The general hue of the tolerably long and very coarse fur of this animal is grey-brown; next the skin, the hairs of the ordinary fur of the upper surface are dusky brown, with the exposed portion of a dirty white, but the longer and coarser hairs are black at the point; on the under surface the hairs are dusky at the root, and dirty white for the remainder of their length, the general hue being paler than that of the upper surface; the muffle is naked and black; the small pointed ears are well clothed with hairs; the legs are short and strong, and the feet broad, naked beneath, and covered with minute, round, fleshy tubercles; the claws are large; those of the fore feet solid, or not concave beneath, slightly curved and depressed; those of the hind feet are curved, slightly compressed, and concave beneath; the hairs of the moustaches are numerous, strong and black, as are also some long bristly hairs which spring from the cheeks; the tail is a mere tubercle, and is hidden by the fur.

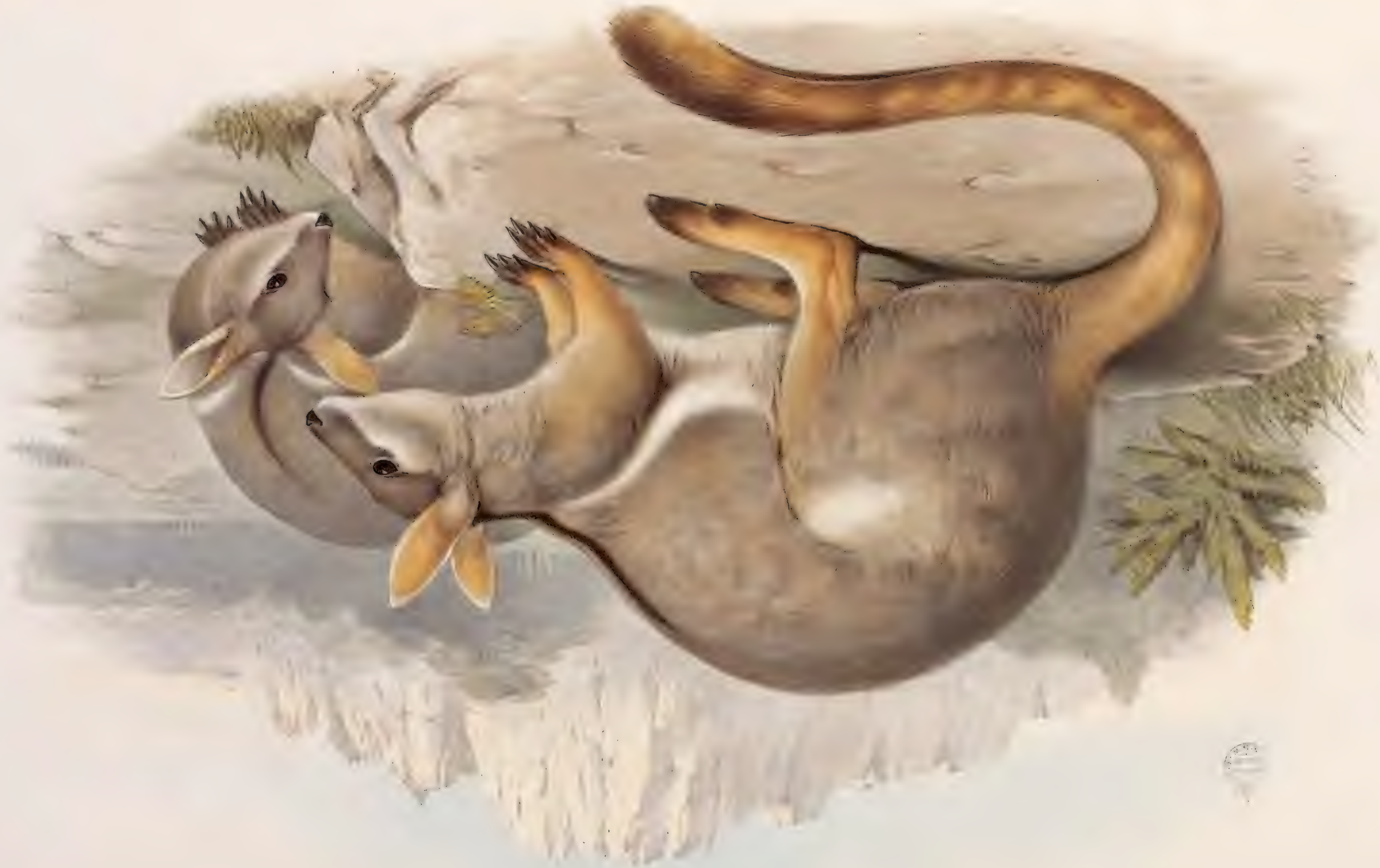
"The skeleton," says Mr. Waterhouse, "presents certain peculiarities well worthy of attention: the number of its ribs, and consequently of its dorsal vertebræ, is unusually large, being fifteen, whilst twelve or thirteen are usually found in the Marsupialia; the body of the atlas vertebra remains permanently cartilaginous; the humerus, besides having the inner condyle perforated, has an opening between the condyles; and the patella, or knee-bone, is wanting."

The Plates represent the head of the natural size, and the entire animal considerably reduced.

PETROGALE XANTHOPUS *Gray*

PETROGALE XANTHOPUS, *Gray*

London. Published 1846. *Hullmandel & Walton Imp.*



PETROGALE XANTHOPUS, *Gray.*

Yellow-footed Rock Wallaby.

Petrogale xanthopus, Gray in Proc. of Zool. Soc., Nov. 14, 1854.

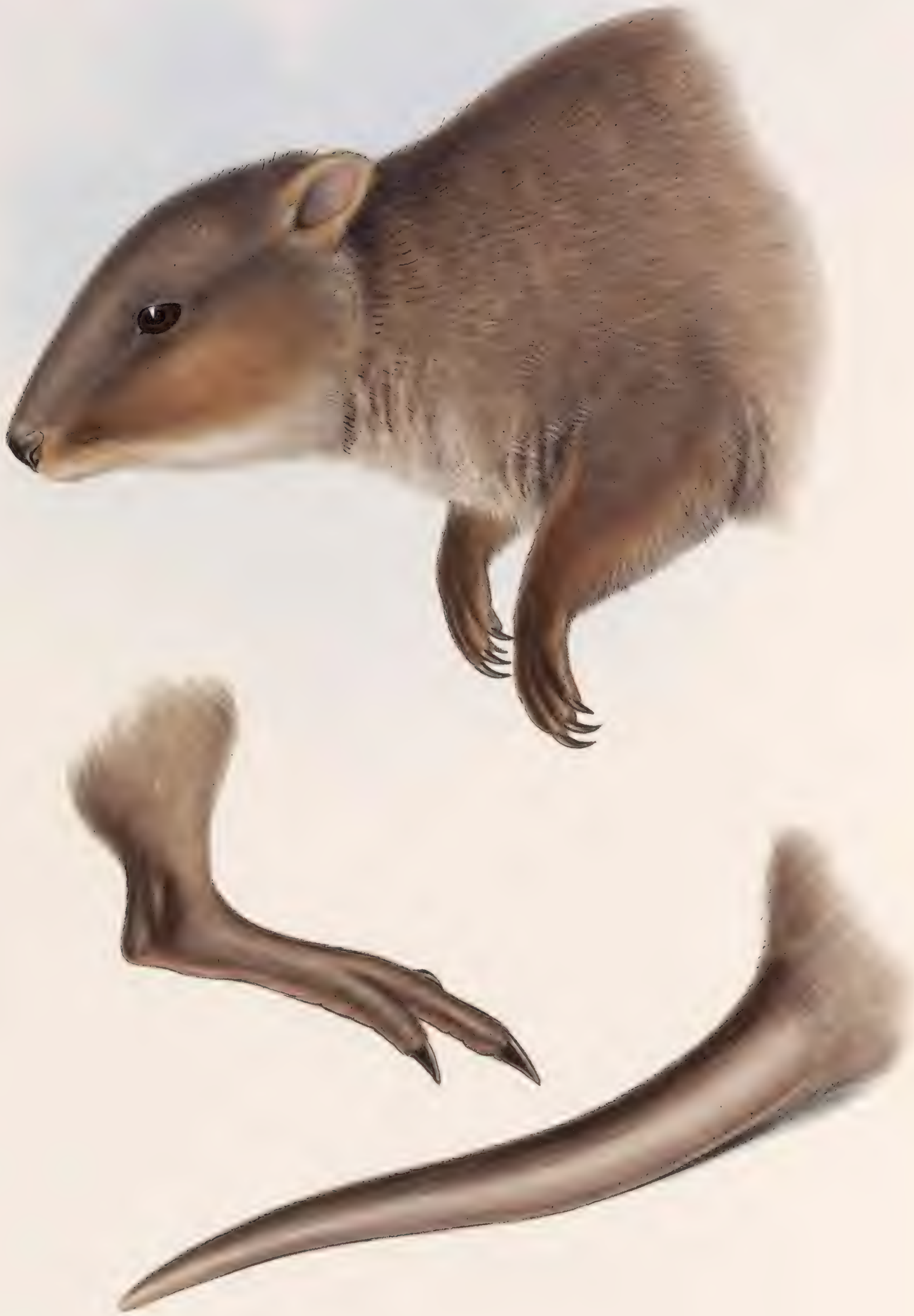
All that is known respecting this fine animal is, that two examples, a male and a female, were collected on Flinders' Range in South Australia, and sent to this country by Mr. Strange, and that they were subsequently purchased by Dr. Gray for the British Museum collection, wherein they are now deposited.

The *Petrogale xanthopus* is a typical example of the genus to which it belongs, and may be regarded as one of the finest species of the form yet discovered. Its large size and rich colouring render it very conspicuous, while the buffy hue of the ears and legs at once distinguishes it from the whole of its congeners.

The habits, actions and economy of the *Petrogale xanthopus* are doubtless as similar to those of the other members of the genus as it is like them in form, but on these points nothing is at present known.

Fur long, soft, and yielding to the touch; face, head, and all the upper surface vinous brown-grey, becoming greyest on the rump; a narrow line of dark rich brown extends from the crown of the head down the centre of the back; on each cheek a distinct mark of white; eyelashes full, prominent, and brownish-black; behind each arm a large patch of reddish-brown, separated from the general tint of the upper surface by a streak of buffy-white; ears ochre-yellow, becoming lighter at the base, fringed internally with white, and tipped externally with brown; front of the arms bright buff; hands rich dark brown; outer side of the legs light ochreous-brown, fading into white on the inner side, and passing into the rich dark brown of the toes; throat and under surface white; tail ochreous-brown, irregularly barred with a darker tint, and ending in a conspicuous tuft which is rich brown above and ochreous below.

Of so fine a species I have considered it desirable to give two illustrations,—the entire animal, necessarily much reduced, and a foreshortened figure of the size of life. Nor must I omit to call attention to the interest which would attach to the introduction of living examples to our menageries, and to the acquisition of additional examples for our museums.



HALMATURUS BRACHYURUS

Gould and H.C. Richter del. et lith.

Hullmandel & Walton imp.

HALMATURUS BRACHYURUS.

Hd and H.C Richter, del et lith

Hullmandel & Walton, Imp

HALMATURUS BRACHYURUS.

Short-tailed Wallaby.

Kangurus brachyurus, Quoy et Gaim. Voy. de l'Astrolabe, Zoologie, tom. i. p. 114. pl. 19.
Halmaturus (Thylogale) brevicaudatus, Gray, List of Mamm. in Coll. Brit. Mus. p. 90.
Macropus (Halmaturus) brachyurus, Waterh. Nat. Hist. of Mamm. vol. i. p. 162.
Bañ-gup, Aborigines around Perth in Western Australia.
Quăk-a, Aborigines of King George's Sound.

Before my visit to Australia, this animal was extremely rare in the collections of Europe; indeed the example in the Paris Museum was the only one then known. The specimen alluded to was said to have been picked up dead at King George's Sound, and there also my specimens were procured. Even now it is still a rare animal, those examples introduced by myself being, so far as I am aware, all that have been transmitted to Europe.

In his notes respecting this species, Mr. Gilbert states that besides meeting with it at King George's Sound, he found it abundant in all the swampy tracts which skirt nearly the whole of Western Australia at a short distance from the sea, and that at Augusta, where its native name, Quăk-a, is the same as at King George's Sound, it inhabits the thickets and is destroyed in great numbers at the close of the season by the natives, who, after firing the bush, place themselves in a clear space and spear them as they attempt to escape from the fire: it is also caught by the settlers with springes placed in their little covered runs beneath the scrub. Mr. Gilbert adds, that he had not heard of its being killed to the eastward of the Darling range.

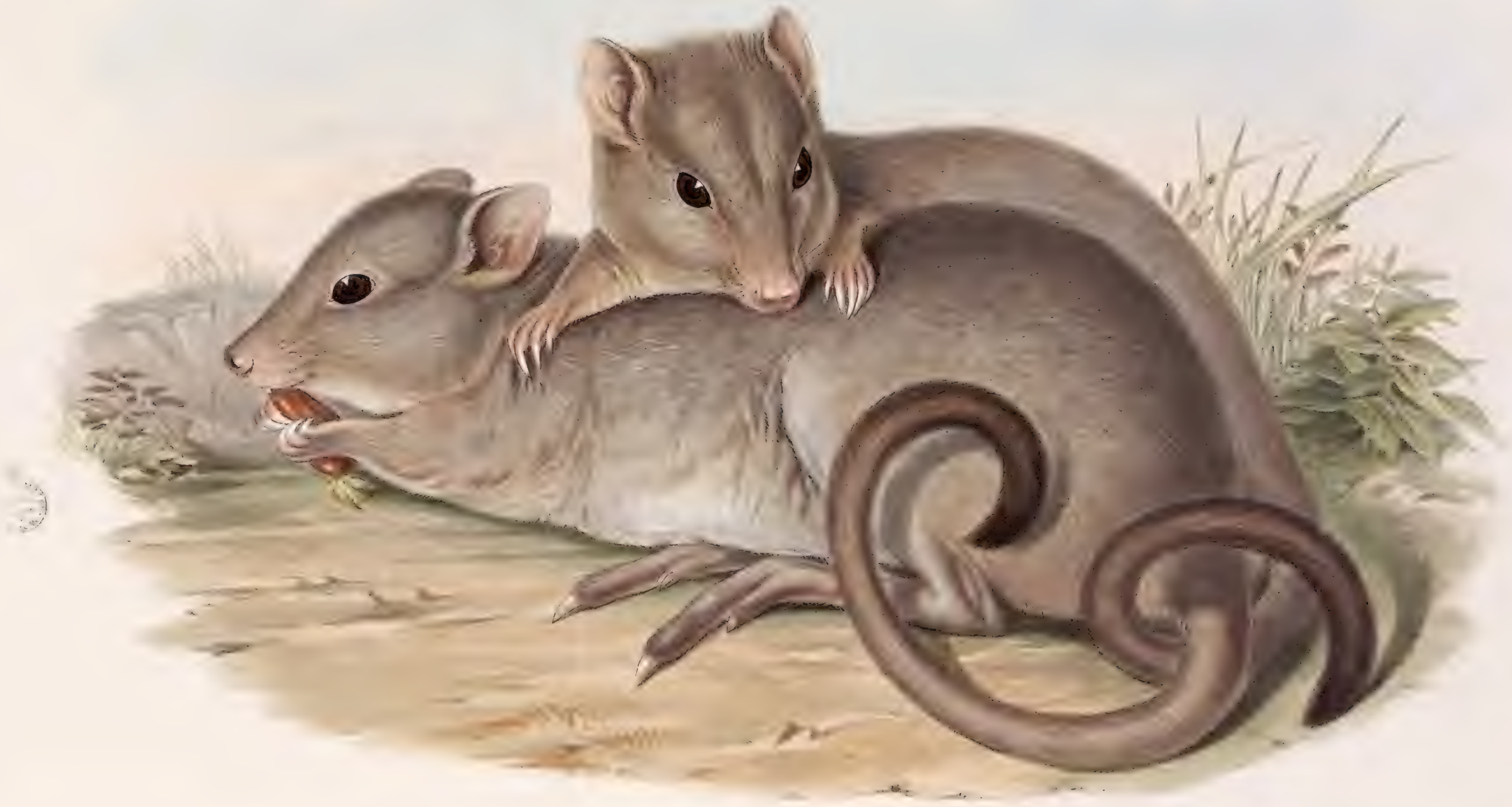
Mr. Waterhouse has given the relative admeasurements of the Paris specimen, and of an example in the British Museum which had been procured by Mr. Gilbert; the latter is considerably smaller than the former; but I have since received a specimen from the same locality which considerably exceeds both in size, its admeasurements being as follows:—

Length from the nose to the root of the tail . .	1 foot	10 inches.
„ of the tail	10	„
„ „ tarsus, toes, and nails	4½	„
„ „ ear	1½	„

This animal differs from all the other *Halmaturi* in its short bluff head, diminutive ears, and extremely short tail; it is also clothed, especially about the face, with thick, stiff, and wiry hairs; which, combined with the general character of the fur, would lead to the inference that it resorts to more humid and secluded situations than those frequented by the other members of the genus.

The short and rounded ears, which are much hidden by the long fur of the head, are well clothed with hairs, those on the inner side being yellow, while externally they are of the reddish-brown tint which pervades the head and back of the neck, but which is somewhat brighter in the region of the ears; the hairs of the back are grey next the skin, broadly annulated with yellow towards the point, and black at the extremity; the back is also beset with numerous long, interspersed, almost entirely black hairs, which, being most plentiful in the middle of the back, give that part a deeper hue; the hairs of the sides of the body are similar, but the yellow portion is paler and the tips are brownish; on the under surface the hairs are grey next the skin, with a pale yellow external tint; feet deep brown; tail sparingly clothed with small stiff hairs, between which rings of small blackish scales are very perceptible.

Of this rare species I have given two illustrations; one representing the entire animal, much reduced, and the other, the head, tail, and foot, of the natural size.



BETTONGIA GRAII, *Gould*

Vincent and W.m Richter del et lith *Hullmandel & Walton Imp.*

BETTONGIA GRAII, *Gould.*

Gray's Jerboa Kangaroo.

Hypsiprymnus Graii, Gould in Proc. of Zool. Soc., part viii. p. 178.—Waterh. in Jard. Nat. Lib. Mamm., vol. xi. (*Marsupialia*) p. 190.
Bettongia Grayii, Gray, List of Mamm. in Coll. Brit. Mus., p. 93.
Hypsiprymnus (*Bettongia*) *Graii*, Waterh. Nat. Hist. of Mamm., vol. i. p. 203.
—— *Lesueuri*, Quoy et Gaim. Voy. de la Coquille ?
Boor-dee, Aborigines of the mountain districts of Western Australia.

I first described this species in the "Proceedings of the Zoological Society of London" for 1840, from Swan River specimens, and remarked that it differed from its near ally, the *Bettongia rufescens*, in being of an ashy-brown colour above, and in having the hairs which clothe the back of the ears of the same colour as those of the head. During the years which have elapsed between 1840 and the time at which I am now writing (1855), many other specimens have come under my notice, the examination of which has confirmed my views as to its specific value: although in some of its characters it approximates to *B. rufescens*, its most near ally is the species found in Van Diemen's Land, and figured under the name of *B. cuniculus*; it differs, however, from that animal in its more bluff head and in its shorter hind feet. Mr. Waterhouse remarks also, that although the many specimens which have come under his notice exhibited considerable variation in their colouring, and sometimes approximated very closely to other species, yet, with the assistance of the skull, he found no difficulty in distinguishing them.

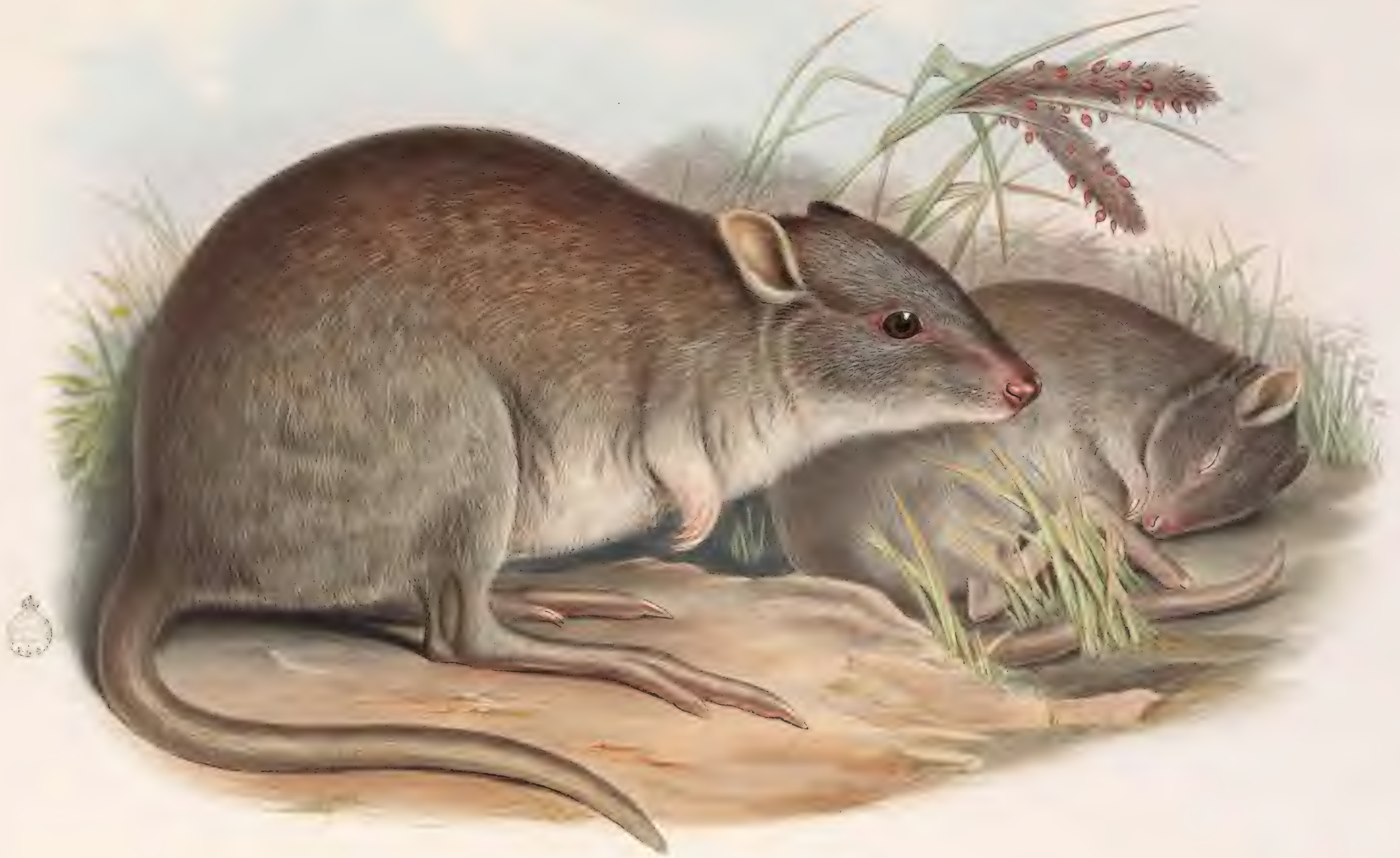
I have received examples of this animal from various parts of the south-western coasts of Australia, and it appears to be equally abundant in the plains around Adelaide as in those in the neighbourhood of Perth in Western Australia. My drawing was taken from living examples in the Menagerie of the Zoological Society, and I mention this because the positions may appear somewhat singular, but they are correct representations of those the animals assumed at the time. Mr. Gilbert, who had many opportunities of observing the *Bettongia Graii* in Western Australia, states that:—

"It is truly gregarious, many dwelling together in extensively ramified burrows with several entrances, before which the excavated earth is formed into large mounds; the openings are not, as usual, mere round holes, but are dug out in the form of tunnels with perpendicular sides, as correct as if dug with a spade. These burrows are usually constructed in a bank sloping down to a brook or river, and are very numerous along both banks of the river Avon. I made several attempts to dig them out, but failed in every instance in consequence of the depth, six or eight feet, and sometimes even more, at which the burrows are constructed, and of their running one into the other in endless confusion. The Boor-dee is exclusively a nocturnal feeder, and, by quietly watching near the entrances to the burrows at sunset, may be shot in considerable numbers either when they emerge or while feeding in the immediate vicinity. It is one of the most destructive animals to the garden of the settler that occurs in Western Australia, almost every kind of vegetable being attacked by it, but especially peas and beans; and I know of no species of its size which makes so loud a thumping noise while hopping along the ground on being alarmed; besides making this noise with its feet, it also utters, when first started, a most singular succession of sounds, which I find it impossible to describe. Many of the specimens brought in by the natives were much discoloured, either by their dirty cloaks, or the clayey soil in which they had been captured. A remarkable circumstance connected with this animal is, that it is extremely difficult to meet with specimens which are not more or less denuded of the fur of the back, and I have often shot examples almost destitute of fur on any part of the body; whether this is the result of disease or some accidental circumstance I am unable to say, but the skins of several I examined certainly presented a very similar appearance to that of dogs afflicted with mange.

"The Boor-dee is confined to the interior, and, besides burrowing as above described, sometimes dwells among the rocks like the *Petrogalæ*."

Fur of the upper and under surface grey at the base; hairs of the under surface dirty-white externally; those of the back dirty-white, inclining to ash-colour near the apex, and tipped with brownish-black; on the sides of the head and body a very faint wash of yellow; ears sparingly clothed, internally with small yellowish hairs, externally with fur like that of the head; feet, greyish-brown in Western Australian specimens, and dark brown, inclining to chestnut, in those from South Australia. A similar difference occurs in the colouring of the tail; there is also an absence of white hairs near the tip of South Australian specimens; nose and other denuded parts flesh-colour.

The figures are about the size of life.



BETTONGIA RUFESCENS, Gray.

Hullmandel & Walton imp.

BETTONGIA RUFESCENS, *Gray*.

Rufous Jerboa Kangaroo.

Bettongia rufescens, Gray, Mag. Nat. Hist. 1837, vol. i. p. 584.—Gould, Mon. of Macropodidæ, pl. .—Gray, List of Mamm. in Coll. Brit. Mus., p. 94.

Hypsiprymnus rufescens, Waterh. in Jard. Nat. Lib. Mamm., vol. xi. (Marsupialia) p. 188.—Ib. Nat. Hist. of Mamm., vol. i. p. 196.

—— *melanotis*, Ogilby in Proc. of Zool. Soc., part vi. p. 62.

There will be but little difficulty in distinguishing this species from every other member of the genus *Bettongia* yet discovered. It is the largest and most powerful of its tribe, and this remark applies particularly to its strong hind feet and legs: the hair with which it is clothed is also more harsh and bristly than that of its allies; again, the back part of the ears is nearly black, and the back and upper surface generally are strongly suffused with chestnut-brown, with which the stiff silvery-white interspersed hairs present a strong contrast. The south-eastern portion of the continent is its true habitat; and it is almost universally dispersed over New South Wales, both on the sea and interior side of the mountain ranges. I found it very abundant on the stony sterile ridges bordering the grassy flats of the Upper Hunter, and in all similar situations. It constructs a warm nest in which it lies coiled up during the day, the nests being placed under the shelter of a fallen tree or some scrubby bush: it sometimes sits in a form like the Hare Kangaroo, but never sits out on the open plains like that species: on being startled, it runs for a short distance with remarkable rapidity; but, from its invariably seeking shelter in the hollow logs, easily falls a prey to the natives, who hunt it for food. In size it fully equals that of a full-grown rabbit: its food consists of roots and grasses. There is no material difference in the colouring of the sexes; but in size the female is somewhat smaller than the male.

Fur harsh and wiry; general colour grizzled-grey and rufous, the latter hue predominating on the back; ears black externally and buffy-white internally; under surface greyish-white, slightly tinged with buff; tail strongly prehensile, covered with short wiry grizzled-grey hairs, becoming whiter towards the tip, where they are much lengthened; under side of the tail, throughout its whole length, dirty-white; hands grey; nails white; tarsi and feet greyish.

The figures are about the size of life.

TERATHELES MASTIX, Illiger.

PERAMELES NASUTA, *Geoff.*

Long-nosed Perameles.

Perameles nasuta, Geoff. Ann. du Muséum, tom. iv. p. 62. pl. 44.—Waterh. in Jard. Nat. Lib. Mamm., vol. xi. (Marsupialia) p. 155. pl. 13.—Gray, List of Mamm. in Coll. Brit. Mus., p. 96.—Waterh. Nat. Hist. of Mamm., vol. i. p. 374.

——— *Lawsoni*, Quoy et Gaim. Voy. de l'Uranie, Zoologie, pp. 57 & 711.

——— *nasuta* et *aurita* of the Paris Museum.

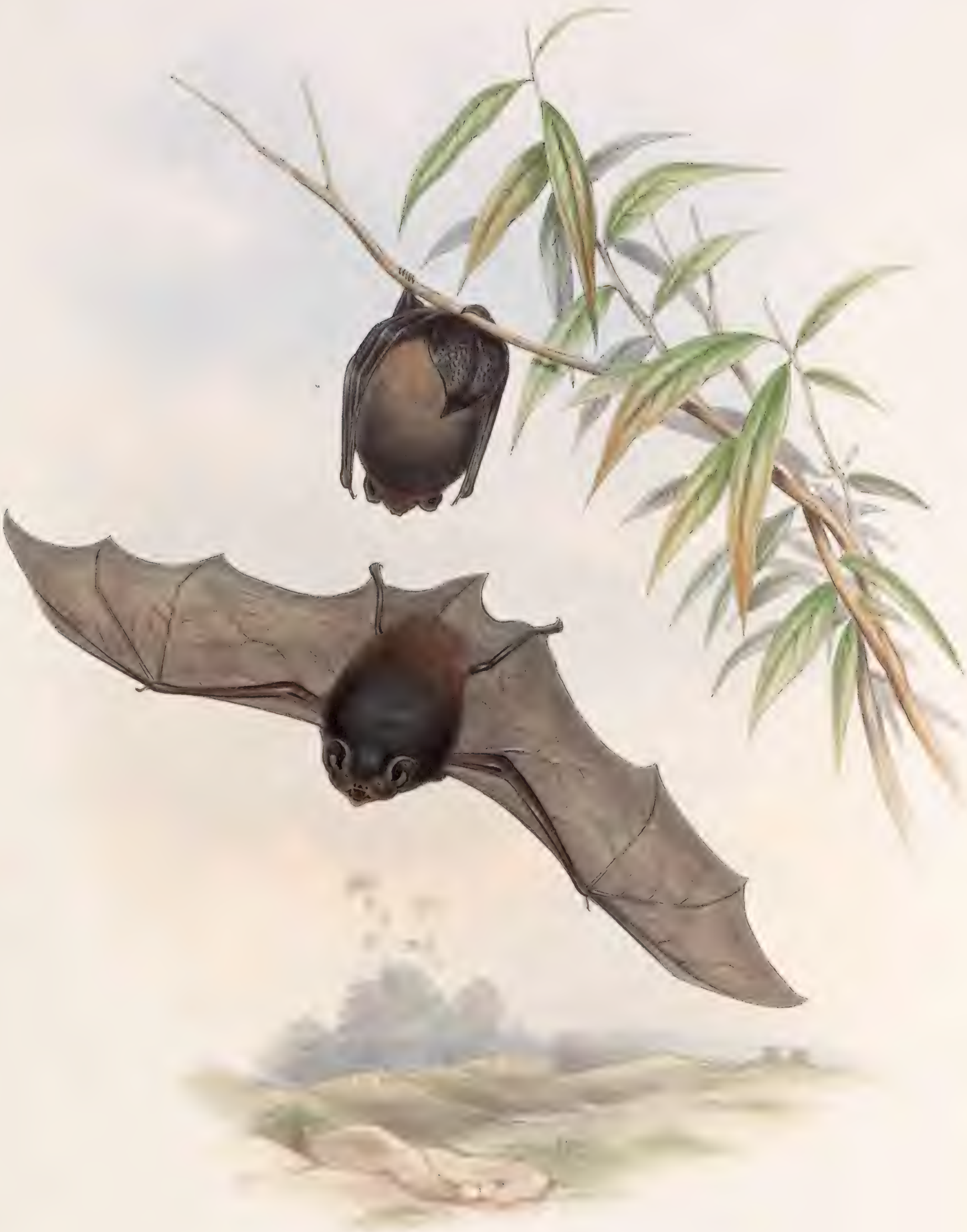
Although this animal inhabits the portion of Australia which has been longest known to us, it is remarkable how little is the information that has been obtained respecting it; I procured many specimens during my sojourn in the country, and ascertained that it is sparingly dispersed over the districts lying between the mountain ranges and the sea. It frequents stony and sterile localities, and in all parts of this character, even in the neighbourhood of Sydney, it occurs as frequently as elsewhere. It is perhaps the largest species of the genus yet discovered, and is distinguished from every other by the great length of its snout, which circumstance has obtained it the specific appellation of *nasuta*. I have never met with this species in collections from any other part of Australia than New South Wales: I mention this because Dr. Gray considers the *Perameles Bougainvillii* of MM. Quoy and Gaimard, which inhabits Western Australia, to be identical with it; but, in my opinion, such is not the case. Independently of the genus *Paragalea*, there are two other very distinct sections of the *Peramelinæ*, one of them inhabiting low swampy grounds covered with dense vegetation; the other, the stony ridges of the hotter and more exposed parts: the former is represented by the *Perameles obesula* and its allies, the latter by the beautiful banded group comprising *P. fasciata*, *P. Gunni*, *P. myosurus*, &c. To this latter section the present species, though destitute of the dorsal markings, also belongs.

The food of this animal consists of bulbous and other roots, which it readily obtains by means of its powerful fore feet and claws.

The sexes, as is usual with the other members of the family, do not differ in colour, but the female never attains the size of the male.

The fur, which is almost entirely composed of harsh, flattened hairs with a scanty under-fur of finer hairs, is of a pale grey on the upper surface of the body; the longer and coarser hairs of the back are pencilled with pale brown and blackish; on the sides the black is nearly obsolete, and here, as well as on the sides of the head, the general tint is pale vinous-red; the under surface of the body is white, the hairs being uniform to the root; feet white; the fore leg is grey externally at the base, and the hind leg has a dusky patch immediately above the heel; ears clothed with very small hairs, which are whitish on the inner side, dusky on the outer, and pale brown near the anterior angle; the small stiff hairs of the tail are brownish on the upper surface and dirty-white on the under.

The front figure is of the natural size.



J Gould and W^m Richter del et lith *Hullmandel & Walton, Imp*

SCOTOPHILUS GOULDI, *Gray.*

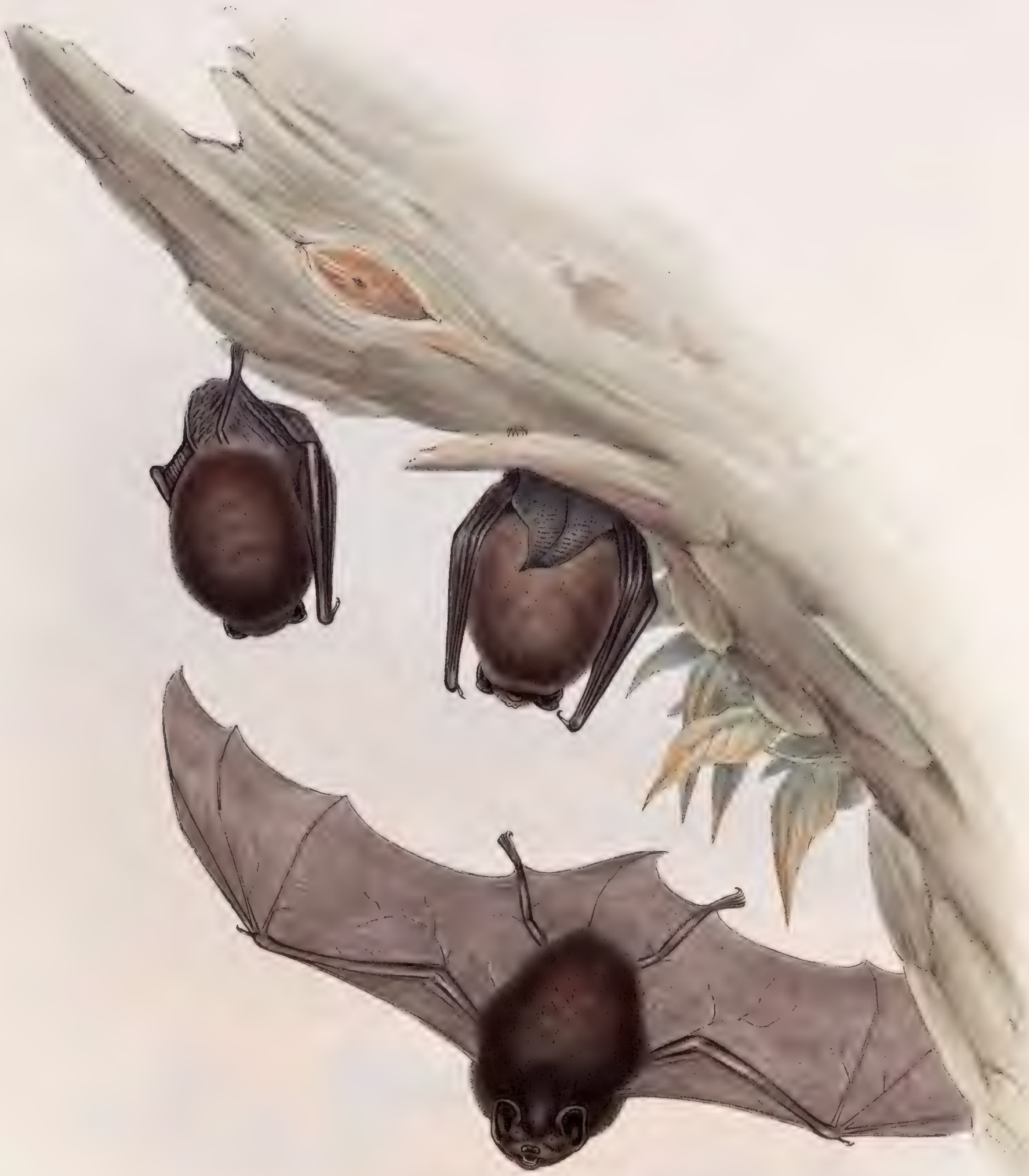
Gould's Bat.

Scotophilus Gouldii, Gray in Grey's Journ. of Discoveries in Australia, App. vol. ii. p. 405.—Ib. List of Mamm. in Coll. Brit. Mus., p. 30.

This fine species of Bat is very generally dispersed over New South Wales, and, I believe, South Australia; but, as yet, I have only seen examples from the districts of the former country lying between the mountain ranges and the sea, where it frequents the outskirts of the brushes and the wooded borders of the great rivers. It may be readily distinguished by the upper half of the body being black, while the lower is suffused with brown; and by the hairs of the latter hue on the under surface being lengthened, and extending on to the arms and wing-membranes. It appears, however, to be subject to considerable variation in colour, some being parti-coloured as described, while in others the black predominates; others again, from Flinders' Range in South Australia, have the brown tint reaching nearly to the nape on the upper surface and to the chest on the under surface. I have some specimens also from this locality with a good deal of brown on the chin and throat. I was for some time inclined to consider the Flinders' Range specimens to be distinct; but, on submitting them to the inspection of Mr. Tomes, who has paid the most minute attention to this group of animals, that gentleman states that he considers them to be identical, and that the mere variation in colour, unaccompanied by a difference in structure, is not sufficient to warrant their separation.

The anterior half of the body, both above and beneath, is sooty-black; the posterior half of the upper surface brown; sides and abdomen brownish fawn-colour; wing-membranes purplish-brown.

The figures are of the natural size.



Hullmandel & Walton Imp.

SCOTOPHILUS MORIO, *Gray.*

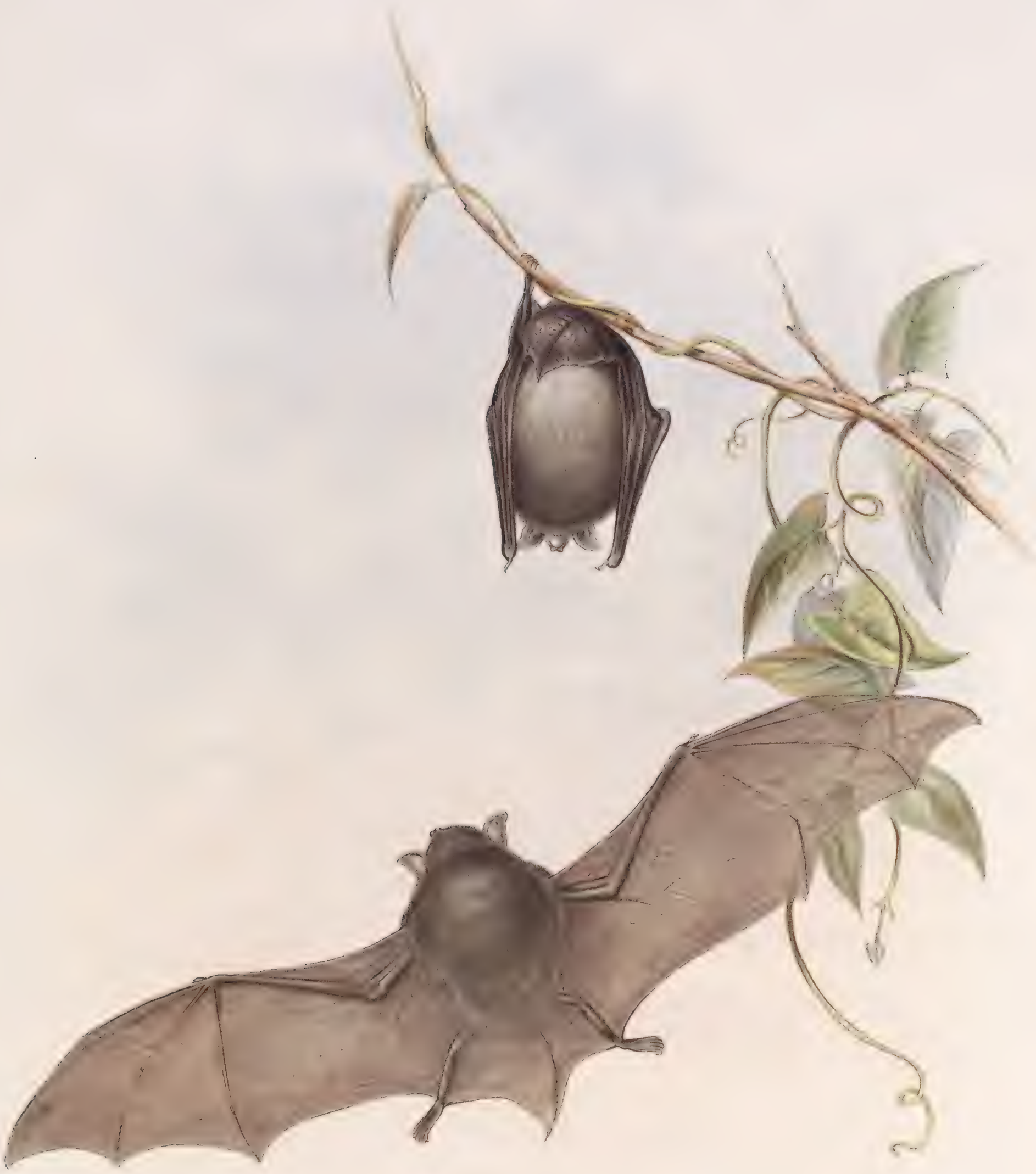
Chocolate Bat.

Scotophilus morio, Gray in Grey's Journ. of Discoveries in Australia, App. vol. ii. p. 405.—Ib. List of Mamm. in Coll. Brit. Mus., p. 29.

This species is about the size of *Scotophilus Gouldi*, but differs in having larger ears, and in the colouring of the entire body being of a uniform chocolate-brown. It is very common in New South Wales, between Moreton Bay and Sydney, and Mr. Gilbert states that it also inhabits Western Australia. I have not, however, his specimens to compare with those from New South Wales; its inhabiting the western coast must therefore rest upon his authority; if his assertion be correct, its range will probably be found to extend over the whole of the southern portion of the country. The animal Mr. Gilbert describes is called by the natives *Bam̈-be*, and in his notes he says that "it is rather uncommon, but may be readily recognized by its habit of flying at a great elevation, and generally around the branches of the loftiest *Eucalypti*."

The whole of the fur of both the upper and under surface of a uniform chocolate-brown, becoming somewhat darker or nearly black on the cheeks; wing-membranes purplish-brown.

The figures are of the natural size.



SCOTOPHILUS HORSFIELDII, *Gould*

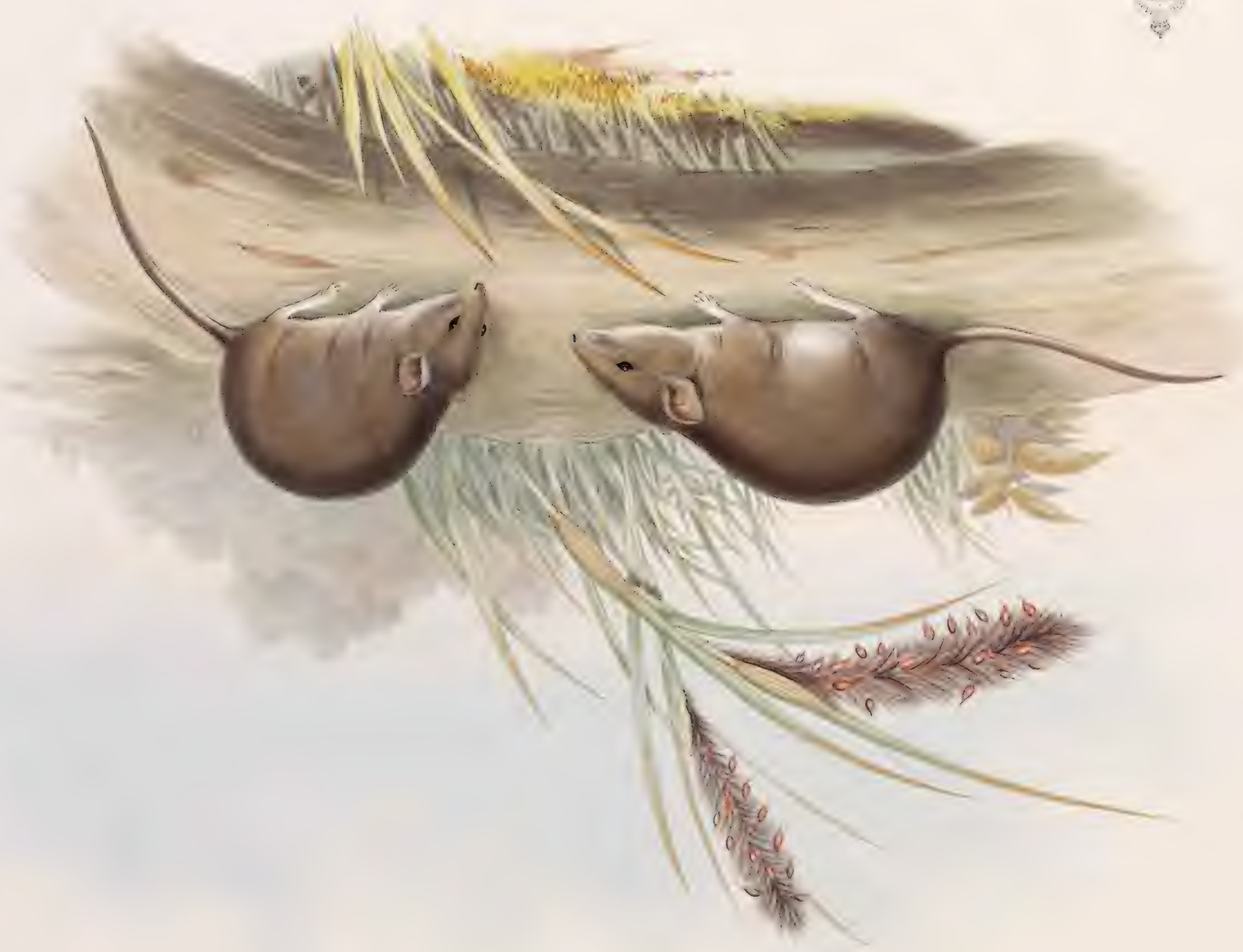
VESPERTILIO MACROPUS, *Gould.*

Great-footed Bat.

Mr. Tomes having carefully examined my collection of Bats, and come to the conclusion that this animal has not been described, I have, in accordance with his views, characterized it as distinct. It is a native of South Australia, in every respect a true *Vespertilio*, and remarkable for having rather lengthened and elegantly-formed ears, a delicately-constructed body, large wings, and very large hind feet, whence its specific name; besides these peculiarities it is also distinguished from every other Australian Bat by the hoary colouring of its fur, particularly on the lower part of the abdomen, where it is nearly white; it appears, however, subject to some variation in this respect, as in one of my specimens the hoary tint gives place to a pale reddish hue; but I believe hoary to be the prevailing colour.

General tint of the fur greyish-brown, becoming hoary on the posterior parts of the body, especially on the lower part of the abdomen, whence it gradually becomes paler, and fades into buffy-white on the vent; wing-membranes light brown.

The figures are of the size of life.



MUS GOULDI, *Waterh.*

White-footed Mouse.

Mus Gouldii, Waterh. Zool. of Voy. of Beagle, Mamm., p. . pl. 32. fig. 18, teeth.—Gray, List of Mamm. in Coll. Brit. Mus., p. 111.

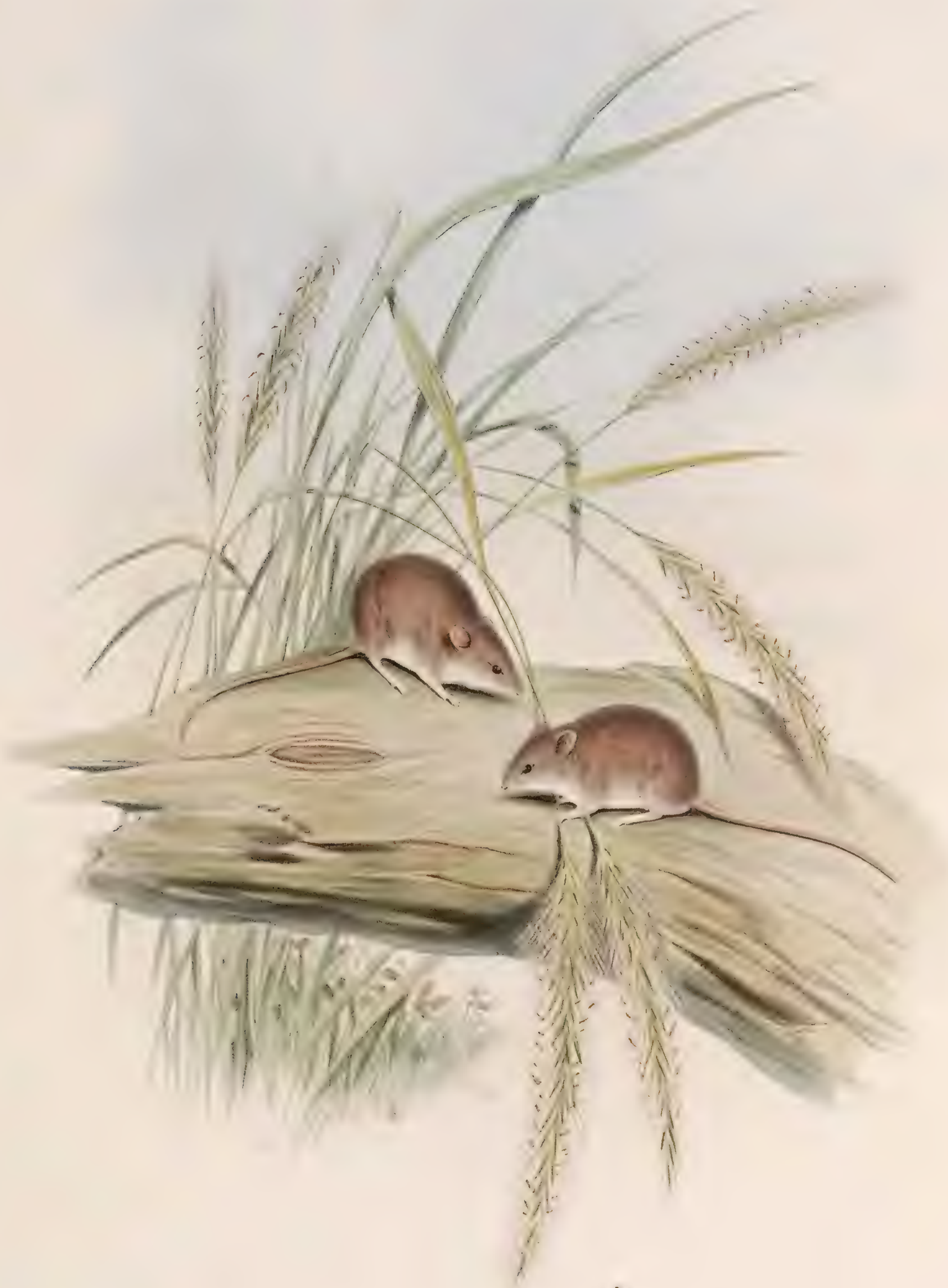
—— *Greyii*, Gray in Grey's Journ. of Discoveries in Australia, App. vol. ii. p. 410.

Kurn-dyne, Aborigines of the neighbourhood of Moore's River, in the interior of Western Australia.

The *Mus Gouldi* is a very distinct and well-marked species, of a size intermediate between that of a Rat and a common Mouse, and may be at all times distinguished by its lengthened, slender, and, white hind feet. It evinces a preference for the plains and sand-hills of the interior, and, as I have seen specimens from the Liverpool Plains, from South Australia, and from the neighbourhood of Moore's River, in Western Australia, appears to range across the southern part of the continent from east to west. The original example from which Mr. Waterhouse took his description was probably from Mr. Coxen's collection, made either on the Upper Hunter or on the interior side of the Liverpool range. Two others transmitted by Mr. Strange were said to have been found between the River Courong and Lake Albert, "and to make their burrows under bushes." Mr. Gilbert states that in Western Australia the animal inhabits the sides of grassy hills where the soil is loose; that its burrows, which are constructed about six inches below the surface, are often of great extent, and that it is generally found in small families of from four to eight in number, inhabiting the same burrow, and even the same nest of dried soft grasses.

Fur soft; general hue buffy-brown, interspersed on the head, upper surface and sides, but particularly on the back, with numerous somewhat longer black hairs; under surface pale buffy-white, washed with a deeper tint of buff on the cheeks and lower portion of the sides; whiskers black; hands and feet white; tail brown above, paler beneath.

The figures are of the natural size.



MUS DELICATULUS. *Gould*

MUS DELICATULUS, *Gould.*

Delicate-coloured Mouse.

Mus delicatulus, Gould in Proc. of Zool. Soc., part x. p. 13.—Ann. and Mag. Nat. Hist., vol. x. p. 406.—Gray, List of Mamm. in Coll. Brit. Mus., p. 112.
Mo-lyne-be, Aborigines of Port Essington.

The contour and general colouring of this, the smallest and most beautiful species of *Mus* yet discovered in the great country of Australia, strongly remind one of the pretty little harvest mouse, *Mus messorius*, of our own islands. It is a native of Port Essington, where it was discovered by the late Mr. Gilbert, and all we know respecting it is comprised in the following brief notice of it in his Journal:—

"I only met with this species on one occasion, on the Native Companion plains near Point Smith, at the entrance of the harbour, when I found four in a hole which ran along a few inches below the surface for about five feet in a zigzag manner, and terminated in a circular space, wherein was a nest of fine dried grass, in which I captured them."

Two specimens of this little animal are in the collection at the British Museum. Mr. Gray states that I had attached the MS. name of *albirostris* to them; but that appellation not having been published, the term *delicatulus*, under which the animal was certainly described in the "Proceedings of the Zoological Society," is the one retained.

The fur is soft and short; that on the upper parts of the body is of a pale yellow-brown; the sides are of a delicate yellow tint; and the lower part of the sides of the muzzle, chin, throat, under surface and feet are pure white; on the throat and along the mesial line of the abdomen, the hairs are of a uniform colour to the base; ears small; feet delicate; tail slender, and nearly as long as the head and body.

The figures are of the natural size.