THE JAVELIN BAT*.

OF the various bats which were unknown, we denominated ſome by names derived from foreign languages, and others by appellations drawn from their moſt ſtriking characters. The animal now under conſideration, we have called the *javelin bat*, becauſe it has a membrane on its noſe nearly of the ſhape of an ancient javelin or ſpear. Though this character be ſufficient to diſtinguiſh it from all other bats, we may add, that it has almoſt no tail; that it is nearly of the ſame colour and ſize with the

* Javelin bat with large pointed ears, and an erect membrane at the end of the noſe, in the form of the head of an ancient javelin, having on each ſide two upright proceſſes. It has no tail; the fur is cinereous; and it is of the ſize of a common bat; *Pennant's Synopſ. of Quad. p.* 363.

Veſpertilio Americanus vulgaris; *Seb. Muſ. vol.* i. *tab.* 55. *fig.* 2.

Veſpertilio perſpicillatus, ecaudatus, naſo foliato, plano, acuminato; *Linn. Syſt. Nat. p.* 47.

Veſpertilio murini coloris, pedibus anticis tetradactylis, poſticis pentadactylis; *Briſſon, Quad. p.* 161. — *Nota*, This animal has five toes on the fore-feet, as well as all the other bats.

Bat from Jamaica; *Edw. Birds, p.* 201.

Veſpertilio roſtro appendice auriculæ forma donato; *Sloan's Hiſt. of Jamaica, vol.* ii. *p.* 330.

La chauve-ſouris ſer-de-lance; *Buffon.*

common

common bat; but that, inſtead of having ſix cutting teeth in the under jaw, like moſt of the other ſpecies, it has only four. This bat, which is very common in America, does not exiſt in Europe.

In Senegal, there is another bat with a membrane on its noſe; but this membrane, inſtead of reſembling a javelin, or a horſe ſhoe, as in this and a former ſpecies, has the figure of an oval leaf. Theſe three bats, as they belong to different climates, are not ſimple varieties, but diſtinct ſpecies. M. Daubenton has deſcribed this bat under the name of the *leaf bat*, in the *Memoirs of the Academy of Sciences, ann.* 1759, *p.* 374.

The bats, which are already greatly allied to the birds by their flying, their wings, and the ſtrength of their pectoral muſcles, ſeem to make a ſtill nearer approach by theſe creſts, or membranes, on their face. Theſe redundant parts, which, at firſt ſight, appear to be ſuperfluous deformities, are the real characters, the viſible ſhades, by which Nature has connected theſe flying quadrupeds to the birds; for moſt of the latter have membranes and creſts round their bills and heads, which ſeem to be equally ſuperfluous with thoſe of the bats.

SUPPLEMENT.

M. Pallas, who ſent us deſcriptions of two new bats, the figures of which we now give, informs us, that the javelin bat, formerly deſcribed, ſhould not be confounded with the bat deſcribed by Seba under the appellation of the common American bat. M. Pallas, after comparing the two, aſſures us, that they are very different ſpecies. Our acknowledgments are due to M. Pallas for pointing out this miſtake.

He then gives a deſcription of one of theſe new bats, which is a native of India. He calls it *cephalotte*, becauſe its head is very large in proportion to its body. The neck is alſo more diſtinct, becauſe it is not ſo thickly covered with hair. The following is an extract from M. Pallas's deſcription.

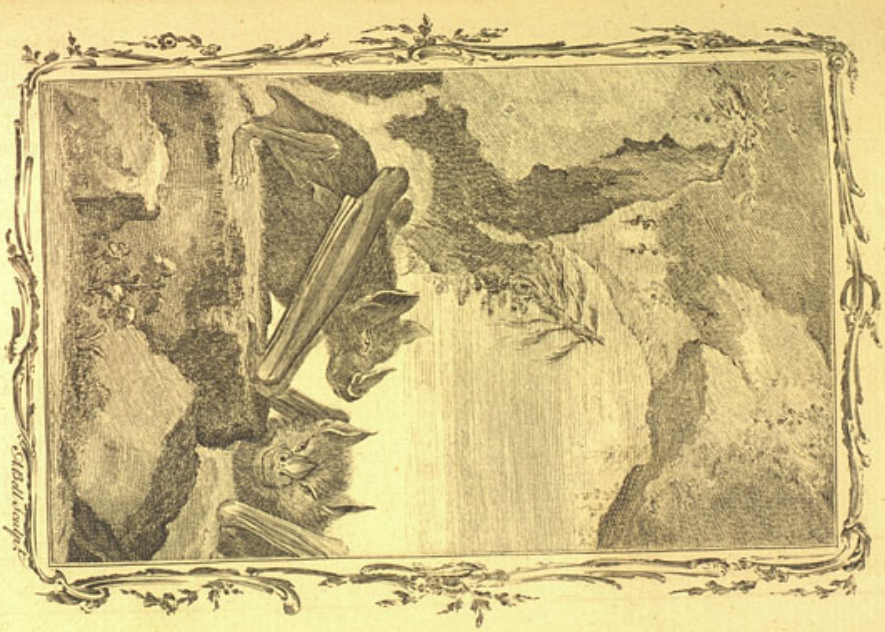
'This bat, hitherto unknown to the Naturaliſts, is found in the Molucca iſlands, from which two females were ſent to M. Schloſſer at Amſterdam. The female ſeems to produce but one young. This conjecture is founded on M. Pallas's diſſection of one of theſe females, in which he found one fœtus only.

'This bat,' continues M. Pallas, 'differs from all others in the teeth, which have ſome reſemblance to thoſe of the mouſe, or even of

'the hedge-hog, and appear to be rather deſtined for cutting fruits than for devouring prey. The canine teeth of the upper jaw are ſeparated by two ſmall teeth. In the under jaw, theſe ſmall teeth are wanting, and the two canine teeth of the ſame jaw are like the cutting teeth of a mouſe.'

I ſhall here add a table of the number and arrangement of the teeth in the bat-kind, communicated to me by M. Daubenton; from which it will appear, that the cephalotte, and the *ſhrew bat*, to be afterwards taken notice of, are new ſpecies diſcovered by M. Pallas.

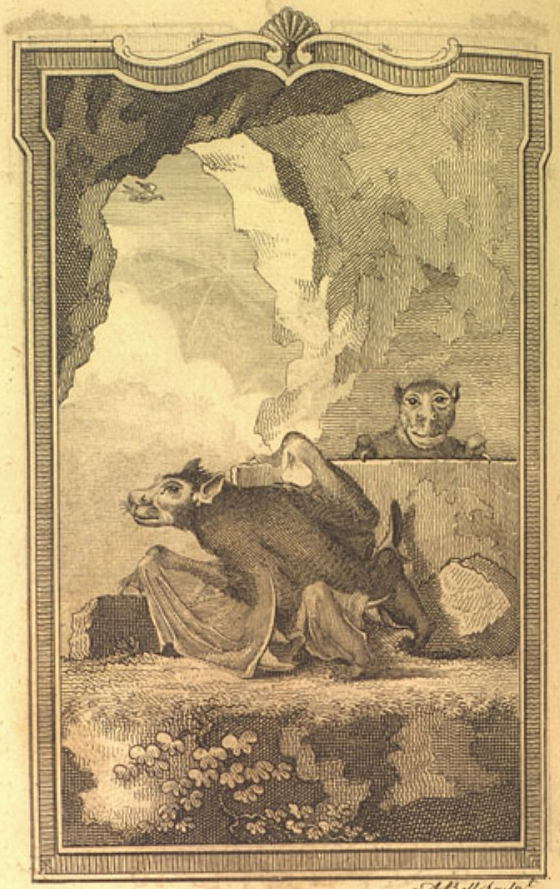
NAMES.	Cutting teeth below.	Cutting teeth above.	Grinders above.	Grinders below.	Canine teeth.	Total.
Horſe-ſhoe bat	- - 0	- - 4	- - 8	- - 10	- - 4	26
Leaf bat	- - 0	- - 4	- - 8	- - 10	- - 4	26
Flying rat -	- - 2	- - 2	- - 8	- - 10	- - 4	26
Flying field mouſe	- - 2	- - 2	- - 8	- - 10	- - 4	26
Flying marmot	- - 2	- - 6	- - 8	- - 8	- - 4	28
Flying ſquirrel	- - 0	- - 4	- - 10	- - 10	- - 4	28
Flying campagnol	- - 4	- - 6	- - 8	- - 8	- - 4	30
Noctule - -	- - 4	- - 6	- - 8	- - 10	- - 4	32
Serotine -	- - 4	- - 6	- - 8	- - 10	- - 4	32
Flying dog -	- - 4	- - 4	- - 8	- - 12	- - 4	32
Ternate bat -	- - 4	- - 4	- - 8	- - 12	- - 4	32
Pipiſtrelle -	- - 4	- - 6	- - 10	- - 10	- - 4	34
Long-eared bat	- - 4	- - 6	- - 10	- - 12	- - 4	36
Common bat -	- - 4	- - 6	- - 12	- - 12	- - 4	38
Flying dormouſe	- - 4	- - 6	- - 12	- - 12	- - 4	38
Javelin bat -	- - 4	- - 4	- - 10	- - 10	- - 4	32
Cephalotte -	- - 2	- - 0	- - 6	- - 10	- - 4	22
Shrew bat -	- - 4	- - 4	- - 6	- - 6	- - 4	24



HORSE SHOE BAT.

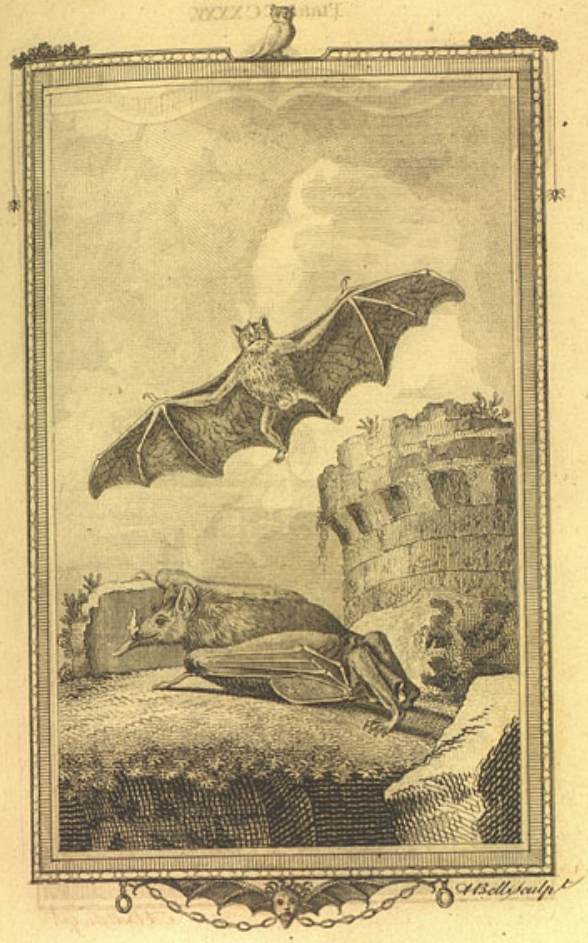
Plate CCXXXIV.

Plate CCXXXV.



LARGE-HEADED BAT

Plate CCXXXVI.



SHREW BAT

'The tail of the cephalotte bat,' ſays M. Pallas, 'is not long, and is ſituated under the 'membrane between the two thighs. The 'figure of the noſtrils diſtinguiſhes it from 'every other bat. The form of the pupil like-'wiſe differs from that of every other bat. The 'breaſt is broad, and has a greater reſemblance 'to the breaſt of a bird than any other ſpecies. 'This animal is about 3 $\frac{5}{4}$ inches long, and its 'wings extend above a foot in length.'

The ſecond ſpecies of bats deſcribed by M. Pallas under the denomination of *veſpertilio ſoricinus*, or ſhrew bat, has no tail, and carries a leaf or membrane on its noſe. It is the ſmalleſt of thoſe kinds which want the tail, being only about two inches long. It is equally common in the warmeſt regions of America, the Caribbee iſlands, and Surinam. Its figure ſeems to be given by Edwards, *plate* 201. *fig.* 1. The muzzle of this bat is longer, and more ſlender than in the other kinds. The tongue is remarkable both for its length and ſtructure. The male and female hardly differ but in the organs of generation.