

that it has been erroneously thought to be the parent form.<sup>20</sup> In the Zoological Gardens, some rodents have coupled, but have never produced young; some have neither coupled nor bred; but a few have bred, as the porcupine more than once, the Barbary mouse, lemming, chinchilla, and agouti (*Dasyprocta aguti*) several times. This latter animal has also produced young in Paraguay, though they were born dead and ill-formed; but in Amazonia, according to Mr. Bates, it never breeds, though often kept tame about the houses. Nor does the paca (*Cælogenys paca*) breed there. The common hare when confined has, I believe, never bred in Europe; though, according to a recent statement, it has crossed with the rabbit.<sup>21</sup> I have never heard of the dormouse breeding in confinement. But squirrels offer a more curious case: with one exception, no species has bred in the Zoological Gardens, yet as many as fourteen individuals of *S. palmarum* were kept together during several years. The *S. cinera* has been seen to couple, but it did not produce young; nor has this species, when rendered extremely tame in its native country, North America, been ever known to breed.<sup>22</sup> At Lord Derby's menagerie squirrels of many kinds were kept in numbers, but Mr. Thompson, the superintendent, told me that none had ever bred there, or elsewhere as far as he knew. I have never heard of the English squirrel breeding in confinement. But the species which has bred more than once in the Zoological Gardens is the one which perhaps might have been least expected, namely, the flying squirrel (*Sciuropterus volucella*): it has, also, bred several times near Birmingham; but the female never produced more than two young at a birth, whereas in its native American home she bears from three to six young.<sup>23</sup>

Monkeys, in the nine-year Report from the Zoological Gardens, are stated to unite most freely, but during this period, though many individuals were kept, there were only seven births. I have heard of only one American monkey, the Ouistiti, breeding in Europe.<sup>24</sup> A *Macacus*, according to Flourens, bred in Paris; and

<sup>20</sup> Rengger, 'Säugethiere,' &c., s. 276. On the parentage of the guinea-pig, see also Isid. Geoffroy St.-Hilaire, 'Hist. Nat. Gén.' I sent to Mr. H. Denny of Leeds the lice which I collected from the wild aperea in La Plata, and he informs me that they belong to a genus distinct from those found on the guinea-pig. This is important evidence that the aperea is not the parent of the guinea-pig; and is worth giving, as some authors erroneously suppose that the guinea-pig since being domesticated has become sterile when crossed with the aperea.

<sup>21</sup> Although the existence of the

*Leporides*, as described by Dr. Broca ('Journal de Phys.,' tom. ii. p. 370), has been positively denied, yet Dr. Pigeaux ('Annals and Mag. of Nat. Hist.' vol. xx., 1867, p. 75) affirms that the hare and rabbit have produced hybrids.

<sup>22</sup> 'Quadrupeds of North America,' by Audubon and Bachman, 1846, p. 268.

<sup>23</sup> Loudon's 'Mag. of Nat. Hist.,' vol. ix., 1836, p. 571; Audubon and Bachman's 'Quadrupeds of North America,' p. 221.

<sup>24</sup> Flourens, 'De l'Instinct,' &c., 1845, p. 88.