

CAMEL

CAMEL (from the Arabic *Djemel* or the Heb. *Gamal*), the name of the single-humped Arabian *Camelus dromedarius*, but also applied to the two-humped central Asian *C. bactrianus* and to the extinct relatives of both. The characteristics of camels and their systematic position are discussed under the headings TYLOPODA and ARTIODACTYLA. The two living species are distinguishable at a glance. It may be mentioned that the Bactrian camel, which is a shorter-legged and more ponderous animal than the Arabian species, grows an enormously long and thick winter coat, which is shed in blanket-like masses in spring. The Arabian camel, which is used not only in the country from which it takes its name, but also in North Africa and India, and has been introduced into Australia and North America, is known only as a domesticated animal. On the other hand, the Bactrian species, which is employed throughout a large tract of central Asia in the domesticated condition, appears, according to recent researches, to exist in the wild state in some of the central Asian deserts. From the examination of specimens collected by Dr Sven Hedin, Professor W. Leche shows that the wild Bactrian camel differs from the domesticated breed of central Asia in the following external characters: the humps are smaller; the long hair does not occupy nearly so much of the body; the colour is much more rufous; and the ears and muzzle are shorter. Many important differences are also recorded between the skulls of the two animals, and it is especially noteworthy that the last lower molar is smaller in the wild than in the tame race. In connexion with this point it should be noticed that, unlike what occurs in the yak, the wild animal is not larger than the tame one, although it is incorrect to say that the former is decidedly the inferior of the latter in point of stature. Dr Leche also institutes a comparison between the skeletons of the wild and the tame Bactrian camel with the remains of certain fossil Asiatic camels, namely, *Camelus knoblochi* from Sarepta, Russia, and *C. alutensis* from the Aluta valley, Rumania. This comparison leads to the important conclusion that the wild Bactrian *Camelus bactrianus ferox* comes much nearer to the fossil species than it does to the domesticated breed, the resemblance being specially noticeable in the absolutely and relatively small size of the last molar. In view of these differences from the domesticated breed, and the resemblance of the skull or lower jaw to that of the extinct European species, it becomes practically impossible to regard the wild camels as the offspring of animals that have escaped from captivity.

On the latter hypothesis it has been generally assumed that the wild camels are the descendants of droves of the domesticated breed which escaped when certain central Asian cities were overwhelmed by sand-storms. This theory, according to Professor Leche, is rendered improbable by Dr Sven Hedin's observations on the habits and mode of life of the wild camel. The habitat of the latter extends from the lower course of the Keria river to the desert at the termination of that river, and thence to the neighbourhood of the Achik, the ancient bed of the Tarim river. These animals also occur in the desert district south of the Tarim; but are most abundant in the deserts and mountains to the southward of Kuruktagh, where there are a few brackish-water pools, and are also common in the barren mountains between Kuruktagh and Choetagh. Large herds have also been observed in the deserts near Altyntagh. The capacity of camels for travelling long distances without water—owing to special structural modifications in the stomach—is familiar to all. That the Arabian species was one of the earliest animals to be domesticated is evident from the record of Scripture, where six thousand camels are said to have formed part of the wealth of the patriarch Job. Camels also formed part of the present which Pharaoh gave to Abraham, and it was to a company of Ishmaelites travelling from Gilead to Egypt on camels, laden with spices, much as their Arabian descendants do at the present day, that Joseph was sold by his brothers.

The hump (or humps) varies in size according to the condition of the animal, becoming small and flaccid after hard work and poor diet.

During the rutting-season male camels become exceedingly

savage and dangerous, uttering a loud bubbling roar and engaging in fierce contests with their fellows. The female carries her young for fully eleven months, and produces only one calf at a time, which she suckles for a year. Eight days after birth the young Arabian camel stands 3 ft. high, but does not reach its full growth till its sixteenth or seventeenth year; it lives from forty to fifty years. The flesh of the young camel resembles veal, and is a favourite food of the Arabs, while camel's milk forms an excellent and highly nutritious beverage, although it does not furnish butter. The long hair is shorn every summer, and woven into a variety of stuffs used by the Arab for clothing himself and his family, and covering his tent. It was in raiment of camel's hair that John the Baptist appeared as a preacher. The hair imported into Europe is chiefly used in the manufacture of small brushes used by painters, while the thick hide is formed into a very durable leather. The droppings are used as fuel, and from the incinerated remains of these sal-ammoniac is extracted, which was at one time largely exported from Egypt.

The Bactrian camel is, if possible, of still more importance to many of the central Asian Mongol races, supplying them alike with food and raiment. It is, however, as "the ship of the desert," without which vast tracts of the earth's surface could scarcely be explored, that the camel is specially valuable. In its fourth year its training as a beast of burden begins, when it is taught to kneel and to rise at a given signal, and is gradually accustomed to bear increasing loads. These vary in weight from 500 to 1000 lb, according to the variety of camel employed, for of the Arabian camel there are almost as many breeds as there are of the horse. When crossing a desert camels are expected to carry their loads 25 m. a day for three days without drink, getting a supply of water, however, on the fourth; but the fleetest breeds will carry their rider and a bag of water 50 m. a day for five days without drinking. When too heavily laden the camel refuses to rise, but on the march it is exceedingly patient under its burden, only yielding beneath it to die. Relieved from its load it does not, like other animals, seek the shade, even when that is to be found, but prefers to kneel beside its burden in the broad glare of the sun, seeming to luxuriate in the burning sand. When overtaken by a dust-storm it falls on its knees, and stretching its neck along the sand, closes its nostrils and remains thus motionless till the atmosphere clears; and in this position it affords some shelter to its driver, who, wrapping his face in his mantle, crouches behind his beast.

The food of the camel consists chiefly of the leaves of trees, shrubs and dry hard vegetables, which it is enabled to tear down and masticate by means of its powerful front teeth. As regards temperament, if, writes Sir F. Palgrave, "docile means stupid, well and good; in such a case the camel is the very model of docility. But if the epithet is intended to designate an animal that takes an interest in its rider so far as a beast can, that in some way understands his intentions, or shares them in a subordinate fashion, that obeys from a sort of submissive or half-fellow-feeling with his master, like the horse or elephant, then I say that the camel is by no means docile—very much the contrary. He takes no heed of his rider, pays no attention whether he be on his back or not, walks straight on when once set agoing, merely because he is too stupid to turn aside, and then should some tempting thorn or green branch allure him out of the path, continues to walk on in the new direction simply because he is too dull to turn back into the right road. In a word, he is from first to last an undomesticated and savage animal rendered serviceable by stupidity alone, without much skill on his master's part, or any co-operation on his own, save that of an extreme passiveness. Neither attachment nor even habit impresses him; never tame, though not wide-awake enough to be exactly wild."

For extinct camels see TYLOPODA.

(R. L.*)

The Biblical expression (Matt. xix. 24, &c.), "it is easier for a camel to go through a needle's eye," &c., is sometimes explained by saying that the "needle's eye" means the small gate which is opened in the great gate of a city, when the latter is closed for the night; but recent criticism (*e.g.* Post in *Hastings' Dict.*, under "Camel") throws doubt on this explanation, and assumes that the more violent hyper-

bole is intended. There is a various reading κάμιλος (camel) for κάμηλος (camel), but Cheyne, in the *Ency. Biblica*, rejects this (see CABLE).