

His Lordship the Elephant—Big and Clever

Descendant of Piglike Pigmy

By GUY MURCHIE JR.

THE story of the elephant is a story in superlatives. Not only is he the largest land animal, but careful checking of facts points to the elephant as the probable real king of beasts. There are few reports of his having been defeated in mortal combat by other creatures. He is almost invulnerable to attack and clever in his actions.

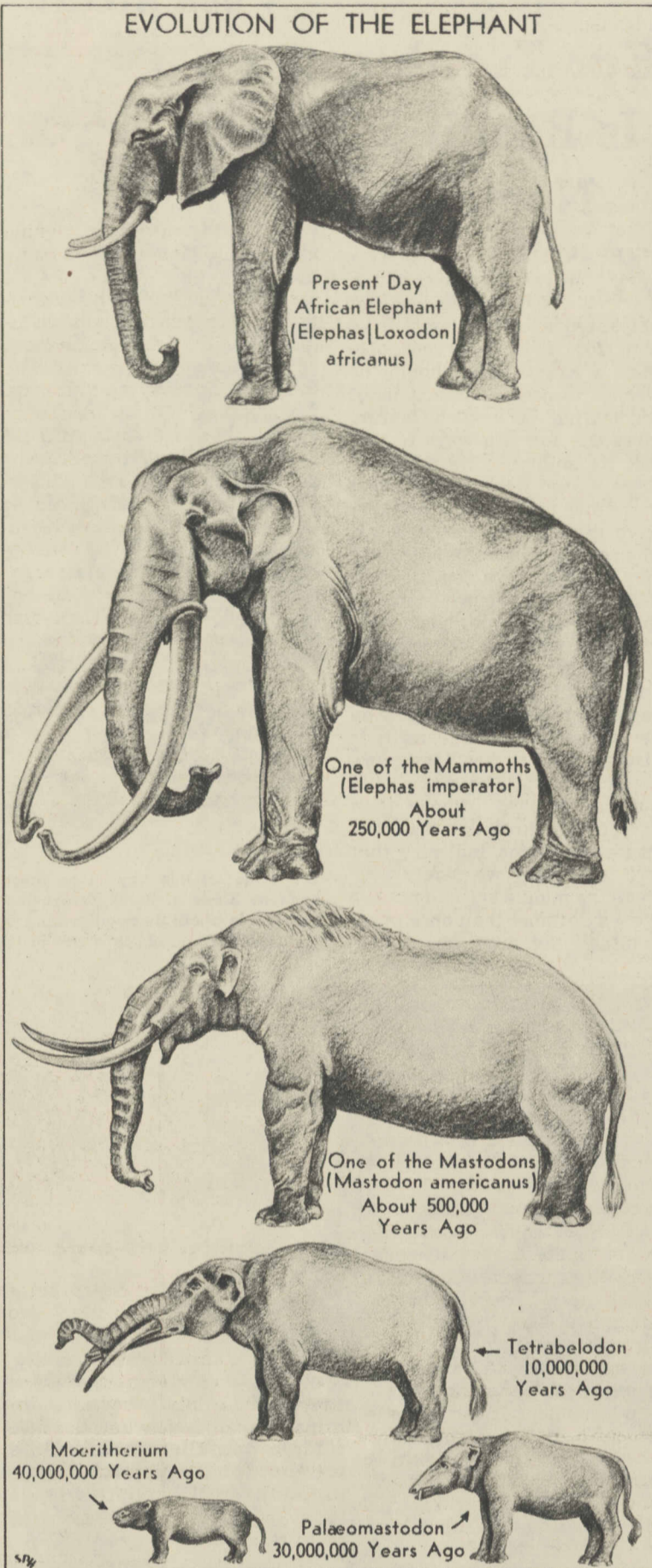
Among his peculiar attributes are his trunk, which serves both as arm and nose; his great tusks, which have been known to attain a length of 11½ feet and to weigh 293 pounds; his pillarlike legs, which appear jointless as he stands erect; his thick hide, which gives him the name pachyderm, and his head, in which his smallish brain is protected by so many surrounding bony cavities that only a very carefully aimed bullet can reach it.

It might be well to begin by answering the questions: "Who is the elephant? What is his family history, and how did he get this way?"

Strange as it may seem, the mighty elephant's closest living relative is the gentle little rock rabbit, or coney, of Africa. In outward appearance it would be hard to find two animals more dissimilar, for, even if magnified to the great size of his cousin, the coney would appear entirely different in shape. It is only by a very careful analysis of skeletal structure, especially in the feet, that zoologists have proved the relationship, and how it came about is a whelm of evolution.

The kinship dates back to the Eocene age of some forty million years ago, when the primitive stock of animals began to divide up into the more or less distinct groups we recognize today. In those days there was neither elephant nor coney in the world, but there was a piglike pigmy of an animal with a pointed snout, the moeritherium, which is now known to have been the common ancestor of both. At some time shortly thereafter the rattier individuals of this species began to live apart from the more tapirlike individuals until two separate species were created, the rattier one becoming smaller and more rodentlike, while the tapirlike one developed great size and a long proboscis, or trunk, which is really an elaboration of both upper lip and nose.

In this latter line of development were produced the ancient mastodons and more recent mammoths, all elephantlike beasts of great size, some varieties of which became extinct and others of which were the direct ancestors of the modern elephants. The hairy mammoths of Siberia, for instance, probably died out only a few thousand years ago, and specimens have been found frozen in the northern ice in such a remarkable state of preservation that the meat was in fit condi-



This drawing suggests the lavish caprice of evolution, which in producing the modern elephant tried out many models. A few are here shown in correct scale.

tion for eating. This extinct species was actually a little larger than the elephants, but the direct line of elephant ancestry goes back in diminishing stages to its tapirlike forbears.

Some people have an idea that prehistoric creatures were all gigantic like the dinosaurs and brontosaurus, but actually these reptiles were exceptional and died out leaving no descendants. The largest animal that evolution has ever developed, for instance, lives today in the person of the blue whale, which is considerably over 100 feet in length.

The elephants of today may be broadly grouped into two races, the Asiatic or Indian elephant, which is the common elephant of the circus, and the larger, bigger-eared African elephant, who includes among his kind a local race of pigmy elephants living in the hinterland

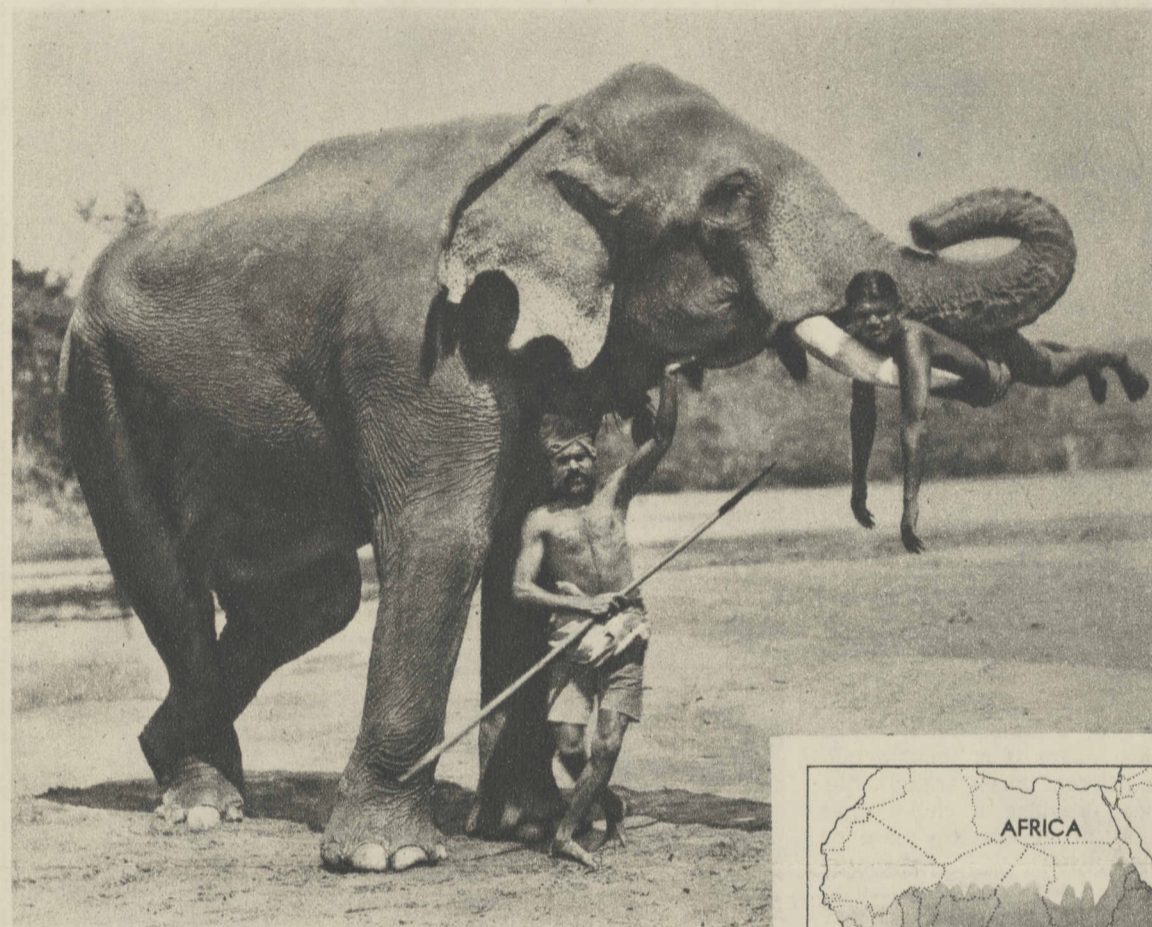
of the Congo and standing only about five feet high. The white elephants which turn up every now and then in Burma and Siam are merely albino individuals of the Asiatic elephant race. Some sixty of them have been recorded in history, mostly of a mottled pink skin and pinkish eyes, due to the absence of body pigment characteristic of albinos. The Siamese believe them sacred and traditionally have presented them to the kings for use in royal processions and religious ceremonies.

The biggest elephant on record was an African elephant 12 feet 2 inches high, shot by Os- well, the noted hunter. It weighed about seven or eight tons. Few mammoths were much bigger than that, but the very biggest of all the elephant's prehistoric cousins measured a little over sixteen feet at the shoulder. This is proved by the fossil remains of an elephantlike creature discovered in India and known as the Narbada elephant. As far as is known it was the biggest beast that ever wore a trunk.

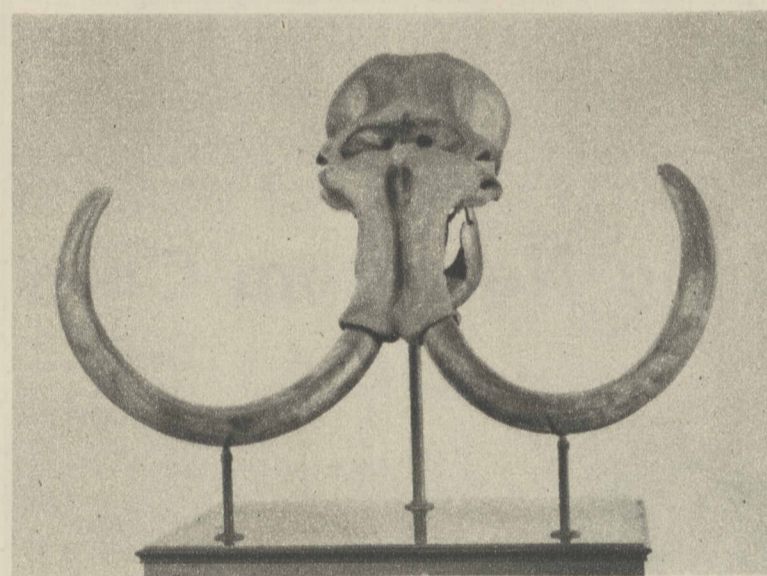
Elephants, of course, are herbivorous, living on vegetable matter exclusively. The African elephant takes to such coarse stuff as bark, saplings, and tree branches; the Asiatic prefers succulent bamboos, plantains, and figs. They drink by sucking up water in the trunk, then blowing it out into the mouth. Grain is eaten this way also. In the case of baby elephants taking milk, however, they suckle directly into the mouth. The babies are born about three feet tall and weighing several hundred pounds. They are covered with woolly hair like the coat of the prehistoric woolly mammoth. Elephants almost never have twins. Their period of gestation is long, varying anywhere from



A group of African elephants at a waterhole. These animals are slightly bigger than the Asiatic variety shown below. While a cow African elephant with calf is considered very dangerous, the elephant normally is not hostile. (Wide World photo.)



This trained Asiatic elephant is doing a trick commonly performed before tourists. A big tusker can easily lift a ton of lumber thus. (Ewing Galloway photo.)



Skull of an Alaskan mammoth, an early species of elephant, on exhibition in the Field Museum of Natural History. (Field Museum photo.)

eighteen to twenty-two months.

As to the elephant's agility, it is pertinent to read the interesting statement of Zoologist Ernest Protheroe, F. Z. S., concerning the elephant's legs: "In order to support the enormous weight which rests upon them the legs are very stout and are set perpendicularly, without that bend in the hinder leg which is found in most animals. This pillarlike structure is of infinite use when the animal climbs or descends steep acclivities, which it can perform with marvelous ease. Considering its bulk, the elephant is remarkably active; it can lie down and regain its feet as easily as a dog; it can stand upon its hind feet alone, or erect itself upon its forefeet; and it can even stand upon its head. It cannot trot or gallop, but nevertheless can move along at eight miles an hour if needed. . . . A ditch seven feet wide would prove a complete bar, as the animal's maximum stride is only six and a half feet, and it cannot jump an inch."

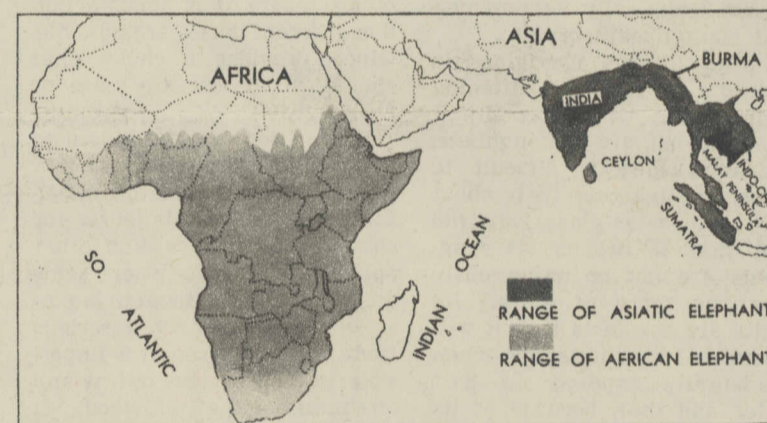
The statement about the elephant's pace is probably an understatement, for hunters would have no need to fear an animal whose speed was limited

to eight miles an hour. Zoologist G. M. Vevers, superintendent of the London zoo, says: "Both species of elephants are fast movers over a short distance, and a speed of fifteen miles an hour is not uncommonly kept up for a quarter of a mile or so, but whereas the African can keep up a speed of ten miles an hour for several hours on end, the Indian, being shorter in the leg and more cumbersome, cannot maintain a speed of more than six or seven miles an hour."

Continuing on the differences between the elephants, Vevers adds: "Generally speaking, the African elephant is the more active and powerful animal of the two and is the more ferocious and ready to charge when attacked or disturbed. The African charges with the trunk raised above the head, while the Indian coils up its trunk tightly and tramples its victims to death with the forefeet. Of the senses, that of scent is most highly developed in the African species, neither sight nor hearing being very acute in either race. Although both are fond of bathing, the Indian excels as

seven Indian mahouts imported in 1920 as instructors. Half-grown wild elephants are chosen for training, which is carried on for ten years before the animal is strong enough for regular work. Attempts to shorten the period of training in the past have always ended in the death of the animal."

A description of the Indian elephant at work says: "A log that forty coolies can scarcely move, the elephant will quietly lift upon his tusks and, holding it there with his trunk, will carry it to whatever part of the yard he may be directed by his driver. He will also, using trunk, feet, and tusks, pile the huge timbers with the utmost precision. It is surprising to see the sagacious animal select and pick out particular timbers



The elephant family, which once ranged the world, now is limited to the territories here shown.

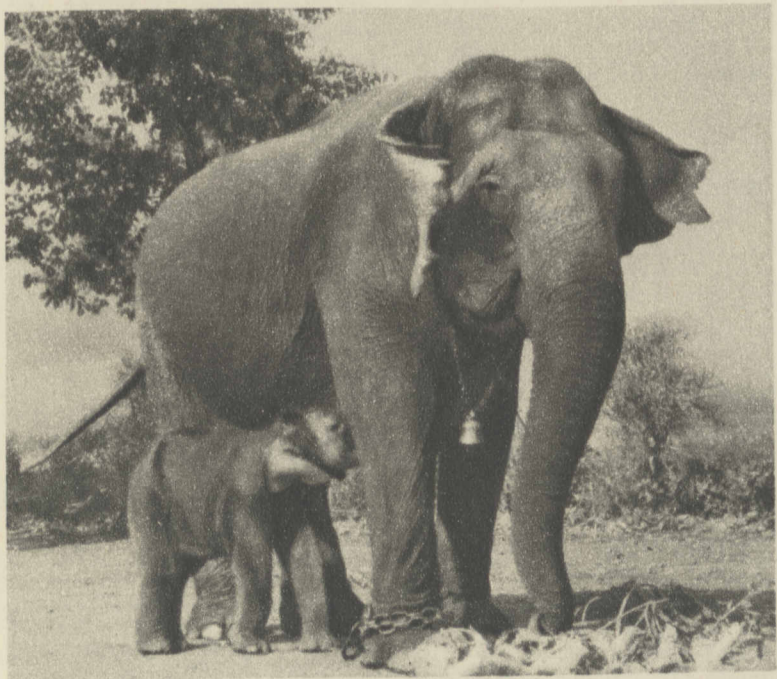
a swimmer and is quite at home in the deepest water, sometimes swimming for hours at a time with the body entirely submerged and only the head and trunk appearing above the surface."

One would not think offhand that a little thing like a germ could greatly disturb the mighty elephant or that he would faint easily, yet the truth is that elephants have little resistance to either disease or shock. According to Vevers: "Many have been known to lie down and die of a broken heart when given too great a burden to carry, and they succumb to anthrax in a very few hours after the bacillus of that dread disease has found an entry into the blood stream; in Burma alone this disease accounts for the death of several thousands of these animals every year." If free of disease and shock an elephant may live 100 years or more, but Vevers believes the average length of life for an elephant to be around thirty years.

In India, Burma, and Siam elephants have been domesticated since written history began, being used as beasts of burden and for hunting. The period of training lasts many years, and a well trained animal will frequently command a price as high as \$5,000. Contrary to general belief, the big African elephants are about as amenable to training as their Indian cousins. The armies of ancient Carthage used African elephants in war, and, according to Vevers: "At Api, in the Congo, there were in 1928 fifty elephants in training, nineteen of which had completed the course and were working animals. The training is done by local natives who learnt their business from



Robert C. Thorne, member of a paleontological expedition, with jawbone of a mastodon excavated on the shore of Rio Quequen Grande, Argentina. The specimen now is in the Field Museum collection. (Field Museum photo.)



The baby elephant takes milk with his trunk, but later will learn to drink water by sucking it up in his trunk and then blowing it into his mouth. A scene from the movie "Elephant Boy."