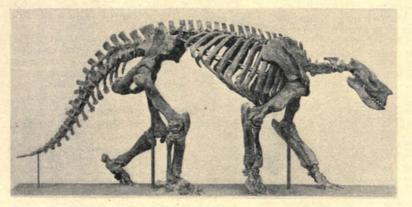
WORLD'S ONLY COMPLETE MOUNTED TITANOIDES SKELETON

BY BRYAN PATTERSON

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The mounted skeleton of an extremely rare and surpassingly interesting fossil mammal was added last month to the paleontological collection in Ernest R. Graham Hall (Hall 38). This animal, known as *Titanoides*, was until very recently one of the least known of American fossil mammals. It lived during the Paleocene or opening period of the Age of Mammals, some fifty million years ago. At that time the dinosaur and other great reptiles which had dominated the earth during the Age of Reptiles had but recently, geologically speaking, vanished from the scene, and their immediate mammalian successors were for the most part small. Among these, *Titanoides* looms as the giant of its time. ive swimming organ since it was decidedly flexible and somewhat deeper than wide.

The story of the discovery of the animal reveals the great extent to which friends of the Museum sometimes aid in the work it carries on. Up to 1931 *Titanoides* was known only from incomplete lower jaws that had been found in North Dakota and Wyoming. In that year Mr. Edwin B. Faber of Grand Junction, Colorado, presented to the Museum nearly complete lower jaws which he had found near Mesa, Colorado. These were recognized as new, and the species was named *Titanoides faberi* in his honor. As a result of the interest aroused by this specimen, Mr. T. J. Newhill, Jr., and the writer made a reconnaissance of the area in 1932. Three partial skeletons were collected, two of which had been located previously by Mr. Faber. In 1933 the region



One of Rarest American Fossil Mammals

Titanoides faberi, a strange extinct animal with no recognizable close relatives in modern life. This skeleton, exhibited in Ernest R. Graham Hall, is the only complete mounted example in the world of this unique creature. Prepared by Mr. J. H. Quinn.

Mammals were in existence during the greater part of the Age of Reptiles, but nearly all were of very small size, since the presence of the dinosaurs and other successful reptilian groups prevented them from achieving any great evolutionary radiation. It was only after the world-wide extinction of the dominant reptiles at the end of the Cretaceous period that the mammals came into their own and filled the various stations in life that had previously been closed to them. Among these was the attainment of large size by the plant feeders. The geologic record reveals the history of many mammalian families which first appeared as small forms, increased to large proportions and then became extinct, yielding place to others of different types. As far as now known, the line that culminated in Titanoides was the first of these.

Titanoides was about eight and a half feet long and four feet high. It has no near relatives now living and is so unlike any existing mammal that profitable comparisons are impossible. The outstanding structural features are the comparatively small head and neck, the stout body, the large massive legs and feet, and the long heavy tail. From studies made in the Museum and in the field it seems probable that the animal's habitat was a low swampy area supporting an abun-dant vegetation. The low-crowned teeth were adapted to a diet of soft succulent plants. The broad feet would aid in preventing the animal from sinking in soft ground, and the heavy powerful body would be well suited to forcing passage through tangled thickets. Although it was not primarily adapted to aquatic life, it seems likely that Titanoides was a good swimmer on occasion. The tail could have been used as an effect

was worked by a party, consisting of Mr. C. A. Quinn, Mr. James H. Quinn, and the writer, and by great good fortune three nearly complete skeletons were obtained from a single excavation. At the time when Mr. Faber began his investigations not a single specimen was known to have come from the formation in which the skeletons were collected. Had it not been for his efforts this mag-

nificent fossil would in all probability have remained unknown for some time to come.

The preparation of the skeletons and the mounting of one of them has taken a year's work in the laboratories. This very difficult task has been skillfully carried out by Mr. James H. Quinn.

CHINESE GAS BOMBS

Some Chinese gaseous bombs are included in the exhibits devoted to Oriental methods of warfare in Hall 32. These are spherical earthen jars, their surfaces largely covered by pointed projections which make them appear like great thorns. They were called variously "thunder stones" and "stink pots" by the Chinese, and were used especially in besieging cities. The jars, charged with gunpowder, were hurled upon the enemy, exploding and bursting.

Such bombs were much used by pirates infesting the China seas, who filled them with powder, sulphur, nails and shot. The tops of the jars were then sealed, and the bombs were put in calico bags closed at the mouth with a string. Several of these would be packed in a basket and hoisted up to the masthead. When they were about to be thrown, three or four pieces of lighted incense sticks were inserted in each bag. Thus when the jar was smashed by falling on the enemy's deck, the incense sticks ignited the powder and sulphur, and the whole pot exploded, fragments wounding the victims while the sulphurous gas blinded and suffocated them.

An elaborately carved and painted wooden house front from a hut of the primitive Batak people of North Central Sumatra is on exhibition in Hall G.

RARE ETHIOPIAN IBEX IN PULLMAN HALL

A specimen of Ethiopian ibex, an animal striking in appearance, obtained in the Simien mountains in northeastern Ethiopia not far from the present northern fighting front of the Italians, was placed on exhibition last month in George M. Pullman Hall (Hall 13).

The Ethiopian ibex is one of the world's rarer animals, and the Field Museum specimen is believed to be the only one on exhibition in any museum of the United States. It was one of several collected by a party from the Field Museum-Chicago Daily News Abyssinian Expedition, consisting of Mr. James Baum of Chicago, Mr. C. Suydam Cutting of New York, and Mr. Alfred M. Bailey, then a member of the Museum staff.

Ibex hunting is extremely difficult and dangerous, because the animals have to be sought in rough precipitous mountains at altitudes from 14,000 to 16,000 feet. Messrs. Baum, Cutting and Bailey are probably the only Americans, and among the few white men of any nation, ever to hunt successfully the Ethiopian ibex, according to Dr. Wilfred H. Osgood, Curator of the Department of Zoology, who was in general charge of the expedition.

Like the Ethiopian people themselves, the ibex is not indigenous to Africa, but is descended from a tribe of invaders that crossed over from Asia, probably, at some time in dim antiquity. Ibexes, and wild goats in general, are northern in origin, and their normal range is in the various mountain regions of Asia and Europe. The ibex is one



Ethiopian Ibex

This animal is quite rare, and extremely difficult to hunt. The specimen shown above is on view in George M. Pullman Hall. Taxidermy by Mr. W. E. Eigsti.

of a comparatively few Asiatic and European animals to reach Africa. The species found in Ethiopia has by now developed some distinguishing characteristics of its own.

Plant Collection from Brazil

From the S. C. Johnson Carnauba Brazilian Expedition the Museum has just received a large quantity of plant material collected by Dr. B. E. Dahlgren in the states of Ceará, Piauhy and Bahia. Mr. H. F. Johnson, Jr., of Racine, Wisconsin, who sponsored and led this expedition to the carnauba zone of northeastern Brazil is a Non-resident Life Member of the Museum.

A habitat group of birds which inhabit the Chicago end of Lake Michigan during the winter, with a scenic background of ice floes and water, is to be seen in Hall 20.



1936. "Rare Ethiopian Ibex In Pullman Hall." *Field Museum news* 7(2), 3–3.

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