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THE NEBRASKA STATE MUSEUM
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A NEW RHINOCEROS MOUNT, TRIGONIAS OSBORNI

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On February 9, 1934, a pair of rhinoceroses, *Trigonias osborni,* was installed in the Founder's Room in Morrill Hall, the Nebraska State Museum. They are figured and accorded brief consideration here in order to maintain the printed records of such acquisitions in the Nebraska State Museum.

The two skeletons, carefully posed, were put in the south wall case to be associated with a pair of *Diceratherium* from Morrill County, and the mounted skeletons of two Brown County *Teleoceras.* In this gallery two long built-in wall cases insure ample facilities for the proper installation of six rhinoceroses, for each wall case is 45 feet long, nine feet high, and six feet deep.

The two skeletons of *Trigonias* were secured in the Chadron (Lower Oligocene) of Weld County, Colorado, and were given to the Morrill Palaeontological Collections of the Nebraska State Museum by Director J. D. Figgins of the Colorado Museum of Natural History in exchange for a skeleton of *Bison occidentalis.* The Weld County quarries are located 23 miles northeast of New Raymer, and 14 miles north of Stoneham, in Township 10 north, Range 57 West, Sections 26 and 27, at an altitude of 5,000 feet. *Trigonias* was amongst the first of the true rhinoceroses. It was a primitive, hornless, long-skulled (dolichocephalic) form, with the front feet functionally four-toed (tetradactyl). In size and general appearance *Trigonias* was much like *Subhyracodon tridactylum* of the later Protoceras beds. *Subhyracodon* was formerly known as *Aceratherium* and *Caenopus,* names which have become pretty well established amongst collectors in this region.

Subhyracodon tridactylum had three toes on its front foot or manus, as the name implies. Aside from this there was a strong outward resemblance between the two. Both were especially prolific in their respective days. Local collectors will find that the teeth furnish excellent diagnostic characters, and the dental formula of *Trigonias* reads as follows: incisors, 3 above and 3 below; canines, 1 to none above, none below; premolars, 4 above and 4 below; molars, 3 above and 3 below. The dental formula of *Subhyracodon,* with which citizens can easily confound *Trigonias,* is as follows: incisors,

2 above and 2 below (incisor 3 is suppressed both above and below); canines, none to 1 above and none below; premolars, 4 above and 3 to 4 below; and molars, 3 above and 3 below.

Trigonias and *Subhyracodon* were both hornless like all of the earlier Nebraska rhinoceroses. It was not until much later that these animals were dignified with this powerful weapon of offense and defense. *Trigonias* was not so large as living rhinoceroses. It was, however, fully waist high, as shown in the accompanying figure of the group, and its limbs were relatively long and slim, showing they were designed for a measure of speed and general agility. The earliest known rhinoceroses were very like the earliest horses, and both developed in a similar manner. At the outset the rhinoceroses had light bodies, their limbs were slim and trim, and they

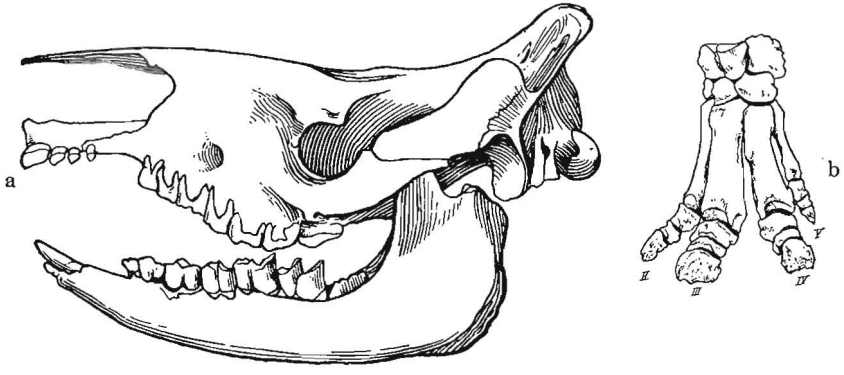

FIG. 175.—a, Skull of *Trigonias osborni*, a hornless, Lower Oligocene rhinoceros, showing characteristic dentition.

b, Manus of *Trigonias* showing four functional digits. Both figures modified after Hatcher.

were fleet and active. Later they became medium in size but continued to have slim limbs. Still later they grew larger, had heavy bodies and clumsy limbs (graviportal), and were more powerful but less active. The change from lightness and fleetness to heaviness and relative slowness, and the progressive changes in the skull, skeleton, and body of rhinoceroses were not so fundamental as those which took place in the teeth.

Once great herds of rhinoceroses of a wide range of sizes, shapes, and kinds, well adapted to devious modes of life, flourished in Nebraska, incongruous though it may seem in

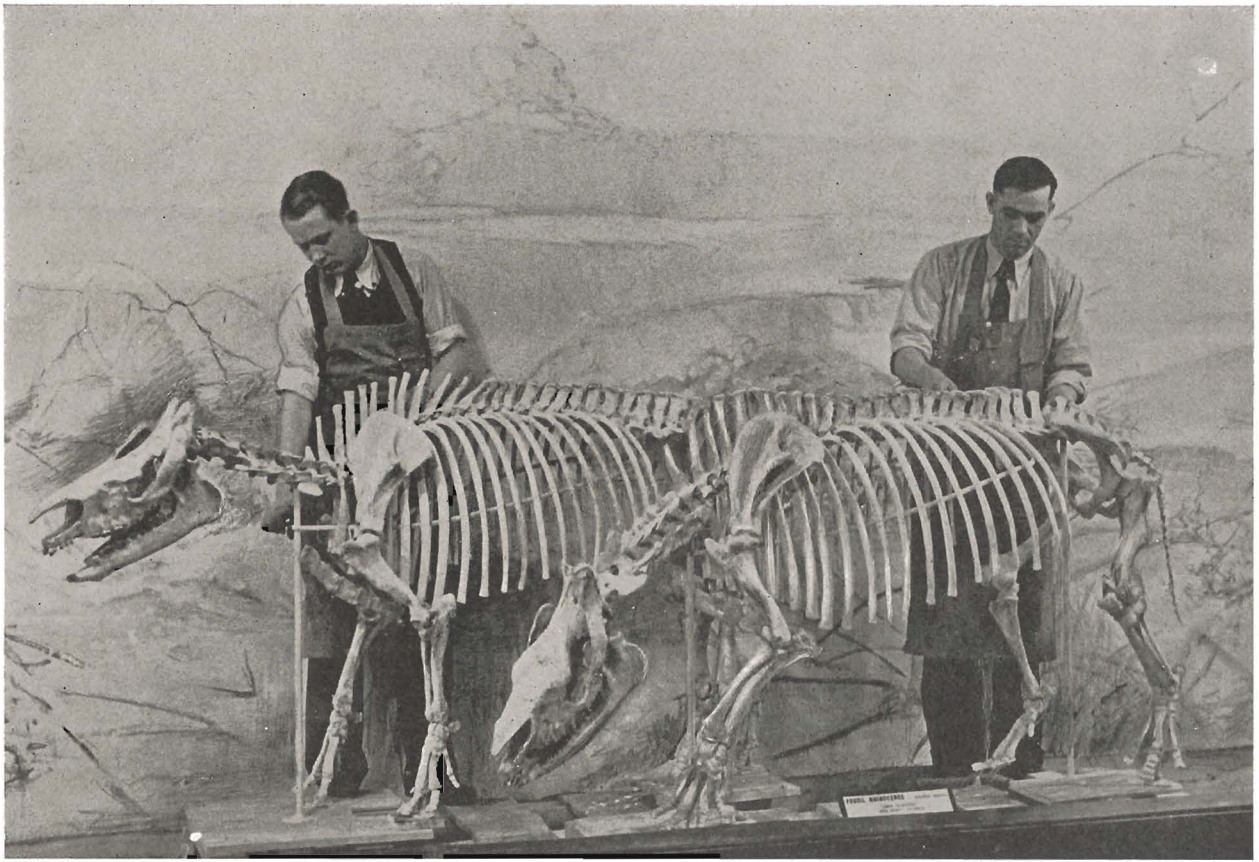

FIG. 176.—*Trigonias osborni*, a pair of Oligocene rhinoceroses being installed in their case in Morrill Hall, the Nebraska State Museum. Donated by Mr. J. D. Figgins, Director of the Colorado Museum of Natural History at Denver, Colorado. Posed and mounted by Henry Reider (right) and Frank Bell (left).

consideration of present climatic conditions. The times were propitious then, for rhinoceroses not only maintained themselves successfully, but steadily underwent progressive development in size and organization. Then, too, conditions in the region were favorable for the rapid interment of their remains, so their bones did not perish outright, as do slowly interred, and especially unburied, bones, but were covered and preserved in our rocks and soils. Their relics are scattered well over the State, but in certain counties are to be found in superabundance.

The rhinoceroses, a prolific race of animals, after a long and successful course suffered extinction before the Pleistocene in North America but survived in Africa and Asia. In Nebraska their geographic range seems to have been the entire state and beyond, and their geologic range from the early Oligocene through the Pliocene. No Pleistocene rhinoceroses are positively known from North America.

The *Trigonias* group, shown in figure 176, was posed and mounted by Henry Reider and Frank Bell (Class of 1930), who amongst other things have succeeded well in concealing all artificial supports.

The mural background, part of which is shown, is about 45 feet long by 9 feet high, and was carefully painted in subdued tones by the mural artist, Miss Elizabeth Dolan.

Located as we are in the midst of fossil beds, unusual numbers of our youths and adults become not merely interested in, but informed about, and conversant with mammalian fossils in general, and are thus prompted to establish many local collections and even local museums.

The University of Nebraska,
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