

NOTEBOOK

By LEE S. CRANDALL

in collaboration with

WILLIAM BRIDGES



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weighed as much as 690 pounds, and the San Diego Zoo weighed a female at 750 pounds.

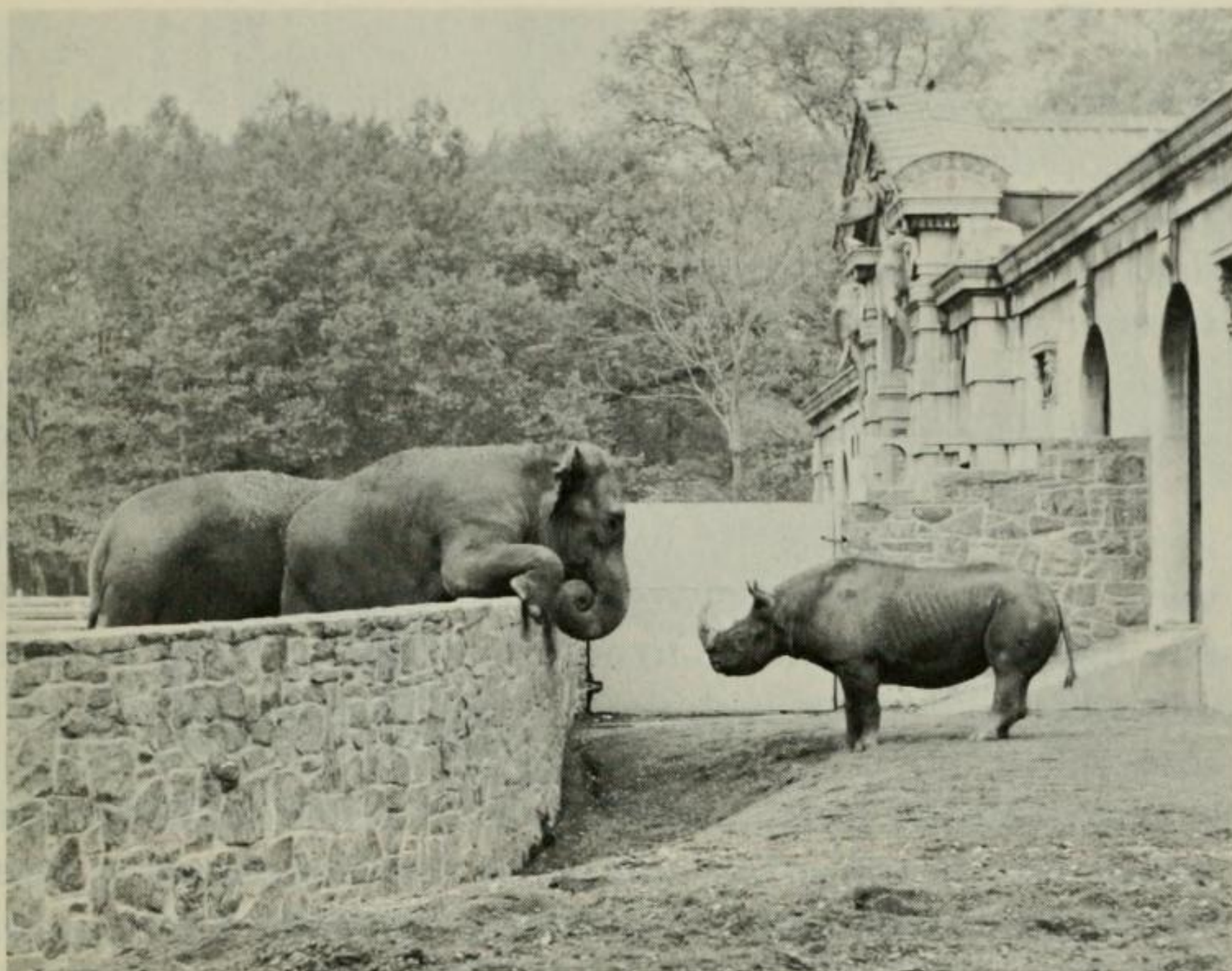
Wherever they are found, tapirs frequent heavy jungle, often swampy or close to streams or lakes, either in tropical lowlands or high in mountainous regions. They swim well and take freely to water when pressed by enemies. Their natural food is low-growing forest vegetation and various fallen fruits. Night is their usual time for roaming in search of food and both in the wild and in captivity they pass much of the day in sleep, although they quickly become alert, even in bright sunshine, if they are disturbed.

Most references to them in the wild describe them as harmless, defenseless, and slow-moving, but our experience is that an aroused tapir can be a serious antagonist, able to use its teeth effectively and capable of surprising speed and agility. Hand-reared specimens usually remain tame and gentle and are often kept as pets around native villages—as our young Panchita was—but they are still subject to occasional moods best described as “tantrums,” when they are anything but tame and gentle. I recall one male Brazilian tapir that was much given to tantrums. His bathing tank in the elephant house was fronted by ½-inch plate glass for better visibility, and in one of his frenzies he broke the glass, as well as a replacement sheet we hurriedly set in place. It was not until we substituted shock-resistant laminated Herculite glass that his charges were foiled.

THE RHINOCEROSSES

Since the rhinoceroses are rivaled only by the hippopotamus as second to the elephants among the greatest of the living land mammals of the world, it might be expected that their exhibition would present many difficult problems. Actually, if normal safety devices are installed and precautions taken, the problems are solved readily enough.

Sometimes a surprisingly simple device is effective. Accom-



The African black rhinoceros, an object of great curiosity to Asiatic elephants in an adjoining yard in the New York Zoological Park, is a dark brownish-gray rather than black.

modations for rhinoceroses in the New York Zoological Park are, traditionally, in the elephant house, where winter heat is available. There are only two stalls, each 24 feet square and each fronted with 2½-inch steel bars on 20-inch centers. These bare stalls, just as laid out in the original construction, were far from convenient and certainly lacked provision for safety, since no area was provided where a rhinoceros could be shifted for safety when the keeper had to enter the stall for cleaning. As a first step toward improving this condition, a concrete wall only 38 inches high was built from front to back across the compartment occupied by a particularly obstreperous black rhinoceros bull. Spaces 5 feet wide were left at front and back, so that the low wall only partly divided the stall and the animal could circulate freely. A heavy chain was so arranged that it could be drawn across the forward gap,

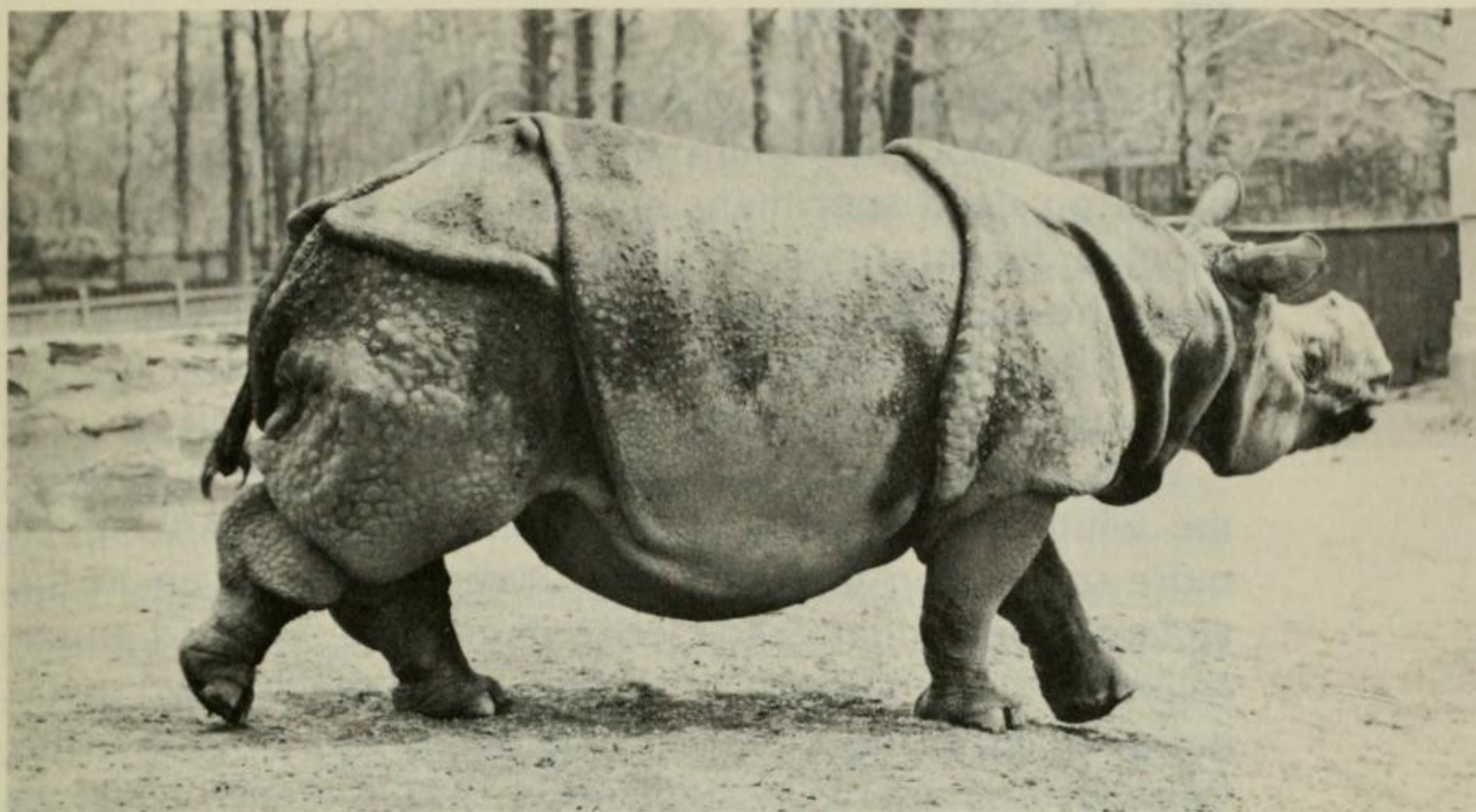
hanging loosely about 12 inches above the floor. Such a barrier would not seem to be impassable to a big and determined animal—but it was. For 10 winters the rhinoceros struggled daily with this apparently slight obstruction and never once succeeded in crossing it, so that servicing could be carried out on one side after the other. Nowadays hydraulically operated doors under remote control, and a former storeroom doing duty as a shifting cage, insure complete safety for the keeper. Nevertheless, he worked safely for all those years with only the chain between himself and the animal. He has, however, been heard to admit that he feels a *little* easier when the rhinoceros is shut up in the shifting cage behind a steel door!

Rhinoceroses today are relics of a once numerous and widely distributed group, and of the five living species, three are native to Asia and two to Africa. It is their great misfortune that all possess horns, for there is a persistent belief in Oriental countries that ground-up rhinoceros horn is an aphrodisiac, and as a consequence, rhinoceroses of any and all species have been implacably hunted, several forms almost to extinction.

In all three species of rhinoceros found in Asia, the thick skin is arranged in folds with thinner and more pliable areas lying between them, giving an armor-plated effect—indeed, medieval artists depicted the animal with bolt heads protruding from its “armor.” This warty skin does depend on its thickness for its defensive value but it is far from being bullet-proof, as was once believed.

The plates of the skin reach their greatest development in the Indian rhinoceros. Both sexes carry a single horn, and the record specimen is 24 inches long, a respectable length but by no means the greatest. With a shoulder height of 5 feet to 5 feet, 9 inches, and a weight frequently quoted as about 4,000 pounds, the Indian is, of course, a very large and powerful animal—but again, not the largest. The white, or square-lipped, rhinoceros of Africa has that distinction.

Asia has two other rhinoceroses, the Javan or lesser one-horned, now almost extinct, and the two-horned, all of which are in need of protection if they are going to survive.



Medieval artists depicted the Indian rhinoceros with bolt-heads projecting from its "armor." The skin is thick and tough, but certainly not bullet-proof.

Legal hunting and poaching have reduced the African black rhinoceros to a fraction of its former range and it is now found in greatest numbers in Kenya and Tanganyika. Black rhinoceroses (which are not actually black but dark brownish-gray) are not infrequently exhibited, at least in the larger zoological parks, and even under those conditions of captivity they give an impression of being surprisingly agile and fast on their feet. Experience in Africa bears this out. While their sense of smell and hearing are certainly sufficiently keen, their sight is reputed to be weak, which may account for the unpredictable charges they are said to make. Charges have been timed—probably by people trying to escape from them in cars—at 32–35 miles an hour at the gallop, and 27.2 at the trot. Having on many a spring morning watched our African blacks galloping around their out-of-doors inclosure, tails straight up and the dust flying, I can well credit such speeds.

The giant of the rhinoceroses is the white, or square-lipped, of east Africa. Maximum measurements are presumably based on dead specimens and they are gigantic indeed—shoulder heights up to 6 feet, 9 inches and weights of 3 to 4 tons. The animal's weapons are in proportion: like the black, the white rhinoceros carries 2 horns, the front one usually the longer, and the record one was 62½ inches long.

With all this—great size, great speed, formidable horns—the white rhinoceros is a comparatively mild giant, much more social than the black and, it seems, less given to the violent charges that characterize its relative. We had an excellent demonstration of its placidity when the first two specimens arrived at the New York Zoological Park from the Umfolosi Game Preserve in Zululand in 1962. A crane picked up the heavy crates in which the animals had been transported by sea and placed them carefully in the doorway of the elephant house. Keepers working from the top of the crates knocked out nails and loosened bolts so that the inward end of the crates could be lifted and removed. Much banging and hammering was inevitable and when the crate ends were lifted we would not have been surprised if the animals, frightened and confused, had charged out at full speed and crashed against the steel bars at the front of the stall. Nothing could have been more anticlimactic. Once the end of the crate was removed, the animals stood mildly looking around at the strange surroundings, and then they stepped out—almost daintily—and proceeded to make a leisurely exploration of their new home. In due course they came to the pile of alfalfa in one corner, and both the male and female thereupon ignored zoo staff, keepers, press photographers, and reporters and began munching the hay.

Temperamentally the white rhinoceros—so called because of misapplication of its common name in Afrikaans, *witrenoster*—may be quite different from the irascible black, but it is a cardinal rule that no keeper should ever enter the inclosure of an adult rhinoceros of any species or of either sex. That any black rhinoceros, however quiet it may appear to be, is likely to charge at any time is well understood. In this species the

horns are the usual offensive weapons, but while the Indian may use its horn on occasion, it has a real predilection for biting. I once saw a supposedly gentle female Indian rhinoceros savage a steel cage bar with her teeth just after missing the rapidly departing rear of a too-trusting keeper.

Until comparatively recently, births of rhinoceroses in captivity were rare indeed. For one thing, the animals were so costly that few zoological gardens were able to own pairs. For another, even when male and female of the same species were kept, their violent battles were so alarming that they were usually separated to save them from serious injury. It appears that the numerous births in recent years have been due largely to the determination of those in charge to let them fight it out, sometimes with horns carefully blunted. Actually, these brawls between the sexes are often less serious than they appear to be, but the greatest obstacle to successful breeding in captivity continues to be the difficulty of persuading potential parents to tolerate each other long enough for the purposes of procreation. Once a baby arrives, female rhinoceroses have generally proved to be excellent mothers.

THE PIGS

"Pigs is pigs," as everybody knows, and even wild pigs might seem to be comparatively uninteresting as zoological exhibits. This is hardly the case, however, and it is unfortunate that because of import restrictions and the high cost of transportation, wild pigs of any sort are actually rarities in the zoological parks of this country.

From time to time we have exhibited the European wild boar, as well as those from North Africa and Japan. Our Europeans were never as large as the maximum of 350 pounds, but they were impressive animals nevertheless. All our wild boars were kept out of doors, in large runs floored with concrete or asphalt and stone, leaving a small area filled with earth or sand for a wallow—for in their liking of a