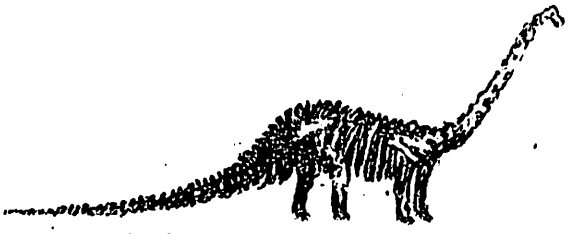

"DIPPY" THE TRAFFIC STOPPER

Diplodocus has arrived in this Atomic Age of man! It's a real "traffic stopper" on the lawn of the Utah Field House of Natural History. This spectacular outdoor exhibit was dedicated on June 8, 1957, during the Utah State Lions Club convention at Vernal.

As far as is known, this skeleton is the only authentic cement replica of Diplodocus for outdoor use. In its own time, some 140 million years ago, "Dippy" is estimated to have weighed 30 tons when he roamed the Vernal area. This cement skeleton weighs 8 tons, is 76 feet long, and the head rises 21 feet above the ground. From head to tail there are 103 vertebrae, 73 of which form the tail section. It is made up of approximately 600 separate pieces which were cast, assembled and erected by the museum staff.

The project of reconstructing this sauropod extended over a three-year period. The molds from which the skeleton was cast had gathered dust and soot from the steel mills in the basement of the Carnegie Museum in Pittsburgh, Pennsylvania, for more than 40 years. Sometime after the Utah Field House of Natural History was completed in the dinosaur country of northeastern Utah, the Carnegie Museum, through the courtesy of Dr. J. LeRoy Kay, offered the molds to the State Museum as a gift, if transportation could be provided. The Vernal Lions Club paid the freight charges and upon receipt of the molds they were cleaned and repaired for casting.

Considerable preliminary experimenting was done with various mixtures of cement and aggrelite (a light-weight volcanic pumice product) and with cement and aragonite (a form of limestone), with dry color added to simulate the appearance of most fossil dinosaur bone. A proportion of the latter mixture was deemed best and most weather resistant for the outside exhibit.

Most of the casting was done by museum personnel at the Otto Buehner Concrete Products Co. of Salt Lake City, who made their plant facilities available to the Field House. The casts of the more complicated bones, such as large vertebrae, were made here at the museum. Casting itself required the better part of one year, as did cleaning and repairing of the molds. The third winter and spring were spent assembling the pieces to make the individual "bones." Some vertebrae, for instance, were made up of 8 or more casts to complete them. These pieces were glued together with fiberglass and reinforced with iron rod. Originally, each plaster mold bore an identifying number, but with age and use many of the numbers were obliterated, complicating the assembling of the casts. Each completed "bone" was joined to its neighbor by iron rod and fiberglass and all crevices and joints filled with a grout mixture of cement and fiberglass in order to weatherproof them and

reduce the destructive effects of freezing and thawing of accumulated moisture, after being set up outdoors.

Short lengths of smaller neck and tail vertebrae were joined inside the museum to facilitate handling outside, but heavy casts were carried out individually and assembled with hysters and block and tackle. The heavy pelvis was first placed over a large iron pipe which had been cemented in the concrete base outside. Hind legs and feet were next attached, proper position determined, and welded in place. Dorsal vertebrae were then welded to it and to one another, forward from the pelvis. Front legs and feet were set up and welded to the front dorsal vertebrae. Ribs were attached, then the neck and tail vertebrae and finally the head and small neck section which completed the assembling. The skeleton was guyed with iron rods which have enabled it to withstand 70-mile per hour gales.

Thanks to the late Andrew Carnegie, famous steel magnate and donor of public libraries, these plaster molds were made from the original, nearly perfect skeleton, which is one of the outstanding exhibits in the dinosaur hall at the Carnegie Museum. This skeleton, which is similar to the Diplodocus skeletons excavated at Dinosaur National Monument quarry a few miles east of the Vernal Museum, came from Sheep Creek, Wyoming, near the turn of the century, and created a great deal of interest in the scientific world. From the set of molds which Mr. Carnegie had made, 10 plaster-of-paris replicas were cast which he presented as gifts to European, South American and Mexican Museums. The Diplodocus at the Vernal museum is the 11th cast to be made from these molds. They will not be relegated to the basement as was formerly the case, for many other museums and schools are interested in making plaster or plastic replicas for their own institutions.