

Fossil Parade

HOW "DIPPY" CAME TO PITTSBURGH

By ARTHUR S. COGGESHALL



It all started on a bright Sunday morning in November 1898, when one of the wealthiest and most successful men in the world came down to breakfast in his New York City mansion—quite sure there was nothing in the world that he wanted, for he had everything. A copy of the *New York Journal* was at his plate. Andrew Carnegie picked it up, took one look, and discovered there was something he wanted—for Pittsburgh.

The *Journal* pictured a huge dinosaur looking into the eleventh story of a skyscraper on lower Broadway, followed by a full-page article under a scarehead announcing "Most Colossal Animal Ever on Earth Just Found."

Yes, Mr. Carnegie wanted this monster. He wrote on the margin of the page: "Dear Chancellor, Buy this for Pittsburgh," and enclosed a check for \$10,000. The chancellor was Dr. William J. Holland, director of the recently opened Carnegie Museum and chancellor of the University of Western Pennsylvania, which later became the University of Pittsburgh.

Dr. Holland was a very close friend of Mr. Carnegie, as well as director of the Museum, and Mr. Carnegie felt that if anyone could corral the "Most Colossal Animal Ever on Earth," the Doctor could. But neither of these gentlemen knew or had ever heard of the man who was reported to have found the fossil bones of the great *Brontosaurus* ("thunder lizard") or *Apatosaurus*, which the newspaper described as a "130-foot Dinosaur." The finder was William H. (Bill) Reed of Laramie, Wyoming. Had they known Bill as others in the field knew him, they would have divided by two and crossed their fingers in hopes that everything would be as described.

Dr. Holland immediately got in touch with Bill Reed in Laramie and arranged to visit him. Reed had the upper part of a large limb bone of a *Brontosaurus* which Dr.

Holland brought back to Pittsburgh, after signing Bill to a contract for a year with Carnegie Museum. Reed had told Dr. Holland that while he could find fossils, he knew nothing about preparing or describing them, and suggested that Dr. Holland employ persons skilled in this important branch of paleontology.

At that time the American Museum of Natural History in New York City was leading in dinosaur work, so Dr. Holland went to that institution to look for the scientists he needed. He made the offer so attractive that J. L. Wortman, assistant curator of paleontology at the Museum, agreed to go to Pittsburgh to organize a section of paleontology, but only on condition that the writer, then at the American Museum, accompany him to take charge of the laboratories at Carnegie Museum. After a conference this was agreed upon, and in April 1899, Wortman and Coggeshall left for Pittsburgh. Upon arrival at Carnegie, Dr. Holland, with a great deal of pride, introduced us to the upper part of the large leg bone which he had brought in from the West—the only part of that "Colossal Animal" that was ever found.

Dr. Coggeshall has been director of the Santa Barbara Museum of Natural History, in California, for the past fourteen years, and previously had directed the Illinois State Museum and the St. Paul Institute. From 1899 to 1929 he was at Carnegie Museum in charge of all dinosaur work.

Here in Pittsburgh he inaugurated the educational program of the Museum and also the lecture courses, and from 1921-25 was assistant to museum director Douglas Stewart. Accompanying Dr. W. J. Holland, Dr. Coggeshall erected the replicas of *Diplodocus carnegiei* given by Andrew Carnegie to ten foreign countries, and next month in *CARNEGIE MAGAZINE* will describe his experiences in this connection.

He began his museum career as a boy in the Old Peabody Museum at Yale University and when twenty-one received an offer from Henry Fairfield Osborn to work in paleontology at the American Museum of Natural History.

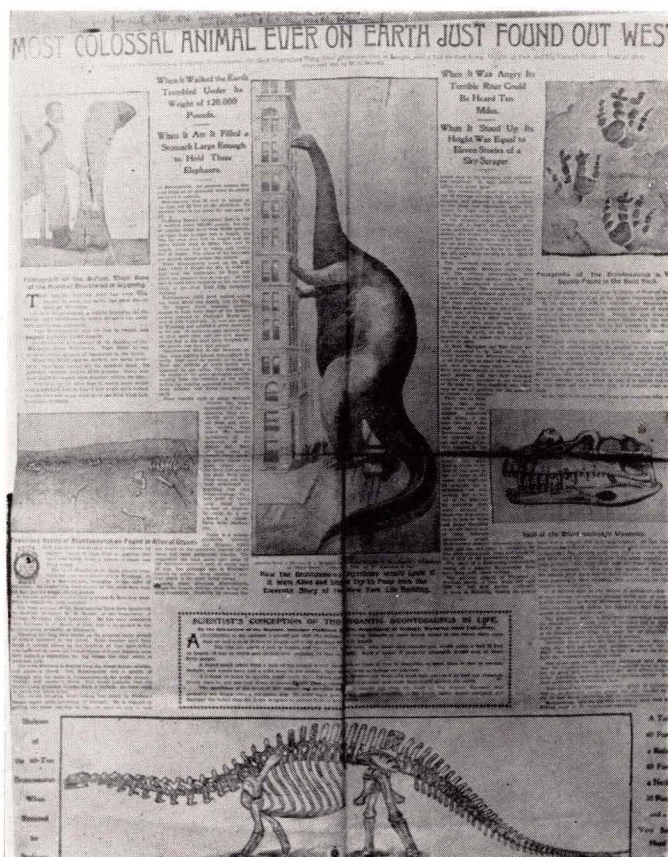
As a Chautauqua and Lyceum speaker Dr. Coggeshall lectured widely on the Carnegie dinosaurs. Last year he received an honorary doctorate from Occidental College in California.

Of course the news reporters, under Dr. Holland's expert handling, had a field day with us, asking all the foolish questions they could think of. Most of them had never so much as heard of a dinosaur until Dr. Holland told them about this "Colossal Animal" that Andrew Carnegie was giving to Carnegie Museum.

Dr. Holland believed in and made sure of publicity, so that day we had lunch with him, President William N. Frew, Secretary Samuel Harden Church, and Trustee C. C. Mellor of the Institute at the old Henry Hotel. When Wortman and the writer left for Wyoming that night, it was with the blessings and good wishes of all concerned. Dr. Holland assured us that as soon as we had excavated the remainder of the "Colossal Animal," he would visit us.

At Chicago we outfitted and arranged to have delivered to us at Medicine Bow, Wyoming, a ton of plaster and a bale of burlap. This was to wrap up the huge bones as we excavated them. Literally that ton of plaster of Paris was the cross the writer had to bear that summer.

The Overland Limited arrived in due time at Medicine Bow, or the Bow as it was called, and we met Bill Reed at the post office. Those who have read Owen Wister's famous story of the old West, *The Virginian*, will remember that the plot was laid in the Medicine Bow country, and we can testify to the authenticity of the story in one respect—that the country in the nineties was every bit as "wild and woolly" as Wister pictured it. The Union Pacific was straightening out its tracks and there were nightly shooting scrapes in the Bow between the graders and cowboys. Gambling in the saloons ran full



THIS STORY IN "NEW YORK JOURNAL" CAUGHT MR. CARNEGIE'S EYE

blast and, all in all, it was a very lively place, particularly for a green young fellow of twenty-five who had never before been west of Pittsburgh.

Reed had a team of horses and a farm wagon into which we loaded our gear and the ton of plaster. Early that spring the high water had carried away the bridge across the Medicine Bow River. This was replaced with a pontoon bridge, just flat timbers tied together and held up by oil barrels. As the bridge had no sides, the horses had to be unhitched and led across, then the wagon unloaded and pushed over. There was that ton of plaster in hundred-pound sacks, and as the writer was the youngest in the party he was elected to do the carrying. This same laborious procedure was repeated at "nine-mile" crossing.

We finally reached the Traber Brothers Ranch at the foot of the Freeze-Out Mountains. The location of Bill Reed's

find was a short distance from the ranch. After a few days of digging, Reed had to admit, as we suspected, that the piece of leg bone which was in Pittsburgh was all he had ever found there, and the whole story of the "Most Colossal Animal Ever Found" was based on that fragment.

Discouraging? Yes, it was, but bone hunters, like prospectors for gold and silver, have to take discouragement in their stride.

For two months we kept doggedly prospecting until on the afternoon of July 3, 1899, we found ourselves on Sheep Creek in Albany County, Wyoming, about thirty miles from the Bow and without that ton of plaster which, much to my relief, we had left at the T. B. Ranch. Camp was made on Sheep Creek, with plenty of grass for the horses and cold mountain water nearby. We were to prospect the surrounding country, for we had seen evidence of the Jurassic outcrop in which the big dinosaur fossils might be found.

Perhaps *Diplodocus* should have been named the Star-Spangled Dinosaur, for it was discovered on the Fourth of July. The morning of the Fourth, Wortman and Reed mounted horses and pulled out to prospect an escarpment about two miles away, leaving me, as the youngest member, the writer, to prospect afoot.

The first indication of "Dippy" was a toe bone of a hind foot. After very close scanning of the ground, a few pieces of weathered bone were found. It was then that the heartbeats of the writer really became loud, for it was the best prospect any of us had discovered in over two months of hard and disappointing work, and we did so want to make good with a dinosaur for Mr. Carnegie.

By noon, when the boss, Dr. Wortman, and Reed returned empty-handed, there was enough of the left pelvis cleared away for us to feel sure we had at last found something that, while it might not be the "Most Colossal Dinosaur" ever discovered, indicated a splendid find.

The rock in which the bones were encased was a joint clay, not terribly hard, greenish gray in color. The clay indicated that "Dippy" had died in the mud of an ancient lake or stream and, as there had been almost no movement of the water, the skeleton was practically intact, lying on its right side. From the character of the surrounding rock, we estimated that "Dippy's" burial had occurred about 120 million years ago.

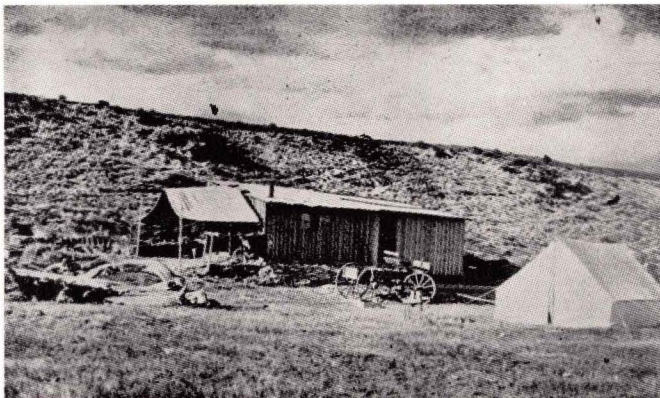
Of course, as soon as the importance of the find was determined, a telegram was dispatched to Dr. Holland in Pittsburgh who, in turn, notified Andrew Carnegie, and joy again reigned in Carnegie Museum.

While "Dippy" was the best and most complete skeleton of the great dinosaurs ever found in position up to that time, it was not quite all there, for some of the bones had weathered away before we discovered it.

As "Dippy" was gradually exposed, the news of our find traveled and there were scientists from museums and universities visiting the quarry almost every day.

The Union Pacific Railroad had chosen that year, 1899, to offer free transportation to all geologists who would visit and explore Wyoming. In August Dr. Holland and two young men from Pittsburgh visited Camp Carnegie, as we had named our Sheep Creek Camp.

Work went on in the laboratory during the winter of 1899 at high speed under the direction of the writer, and in the spring of 1900 another field party, under the supervision of O. A. Peterson, enlarged the quarry D of the previous year and another



CAMP CARNEGIE ON SHEEP CREEK IN SOUTHEASTERN WYOMING



THE DINOSAUR LABORATORY AT CARNEGIE MUSEUM IN 1899

partial skeleton of a *Diplodocus* was uncovered. The present skeleton is a composite of the two, No. 84 and No. 94, for, by good luck, they supplemented each other and were of about the same size. In honor of Andrew Carnegie, this famous skeleton was described by J. B. Hatcher as *Diplodocus carnegiei*.

"Dippy" is 84 feet long over the curves, although he had a brain no larger than a man's thumb. As there was no room large enough in the early Museum on the second floor of the original building, now used by the Library, the mounting of this giant reptile presented a problem. "Dippy" therefore was one of the main factors in the decision of Mr. Carnegie in his gift of the greater edifice which bears his name.

To carry the great weight of these petrified bones, an entirely new system of mounting was designed and perfected by the writer in 1904. A backbone of cast steel was made which supports the vertebral column. This system is now used in all museums. In life "Dippy" weighed in the neighborhood of thirty tons, but this was mainly flesh, as the bone structure was very light, being built on the principle of a bridge with maximum strength but minimum weight. Turned to stone, the bones are very heavy, some leg bones weighing as much as 800 pounds.

To *Diplodocus carnegiei* goes the credit for making "dinosaur" a household word, for as presidents, kings, emperors, and czars besieged Andrew Carnegie for rep-

licas to be installed in their national museums, "Dippy" crashed royalty. His adventures in plaster on three continents will be told in a later issue.

Among Our Friends

THE Sarah Mellon Scaife Foundation has given \$7,500 for a Pennsylvania Herpetological Survey. Although the Museum's collection of Pennsylvania amphibians and reptiles is the largest in existence, many critical areas in the state have not been studied intensively. This grant will insure rapid completion of the field work required for a comprehensive report, comparable to Todd's *Birds of Western Pennsylvania*.

A gift of \$5,000 has been made to Carnegie Institute for its general purposes by Mrs. Henry O. Rea. This gift had been provided for by Mrs. Rea prior to her death.

The Richard King Mellon Foundation has recently given \$5,000 to the Museum for the labeling of exhibits.

Alice Hall Cargill, a friend and promoter of library services, has given \$360 to the Carnegie Library School to establish an emergency loan fund in her name.

Edward Duff Balken has made another gift of \$100 to CARNEGIE MAGAZINE.

The Hilltop Garden Club has given \$50 to the Department of Fine Arts.