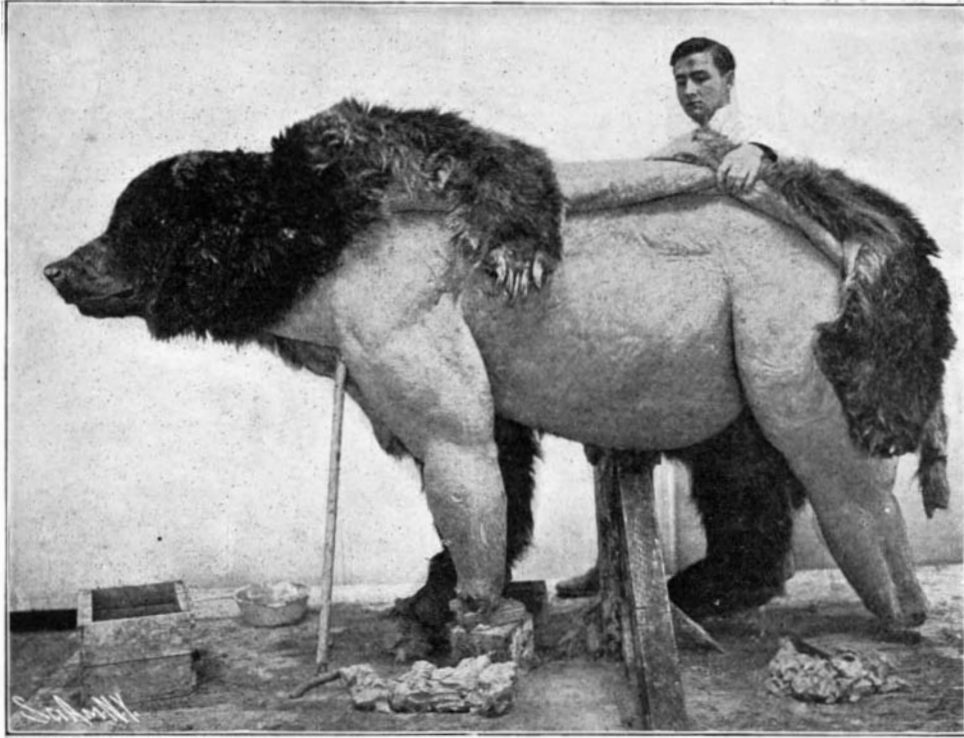


THE LOFTY PECOS VIADUCT ON THE SOUTHERN PACIFIC RAILWAY.

BY DAY ALLEN WILLEY.

The traveler on the Southern Pacific Railway between New Orleans and California crosses one of the most notable viaducts in the world. This is a bridge which spans the Pecos River. A few miles from the point where it flows into the Rio Grande, the Pecos passes through a canyon which is directly on the route of the railway in question. In addition to the height of the canyon walls another problem which the engineers had to solve was the flow of water during the season when the river is in flood. Frequently the volume of water carried down is so great that in twenty-four hours the river may rise to a height of from 20 to 30 feet. The plan decided on was a bridge supported by steel towers, the center towers resting upon piers of masonry which would place the footing of the steelwork at a height above the ordinary freshet. As the photograph shows, the cantilever system of construction was employed to bridge the full width occupied by the river when it is in flood. At the greatest elevation the rails are no less than 321 feet above the water. In fact, the only viaduct in North and South America which exceeds the Pecos is the Loa in the Andes Mountains. This is 336 feet high, but only 800 feet in length, less than half the length of the Pecos, which is 2,180 feet from end to end. The structure which crosses the Kinzua Creek in Pennsylvania on the route of the Erie Railway is next in height in the United States—301 feet—but is slightly shorter, being but 2,053 feet in length. The famous Gokteik bridge recently completed in Southern Asia is but 320 feet high, although it is about 100 feet longer.

Considering its dimensions, the Pecos viaduct is an exceedingly light and graceful structure, containing but 1,820 tons of metal in all. The heavy trains of Pullman cars, with the two big passenger locomotives at the head, will weigh about 860 tons, or nearly half as much as the whole bridge. The great height can be estimated by noting the size of the locomotives and cars, as they are seen from the bottom of the canyon. The bridge is situated in Val Verde County, Texas, and is 219 miles west of the city of San Antonio.



DRAWING THE BEAR'S SKIN OVER THE MODEL.

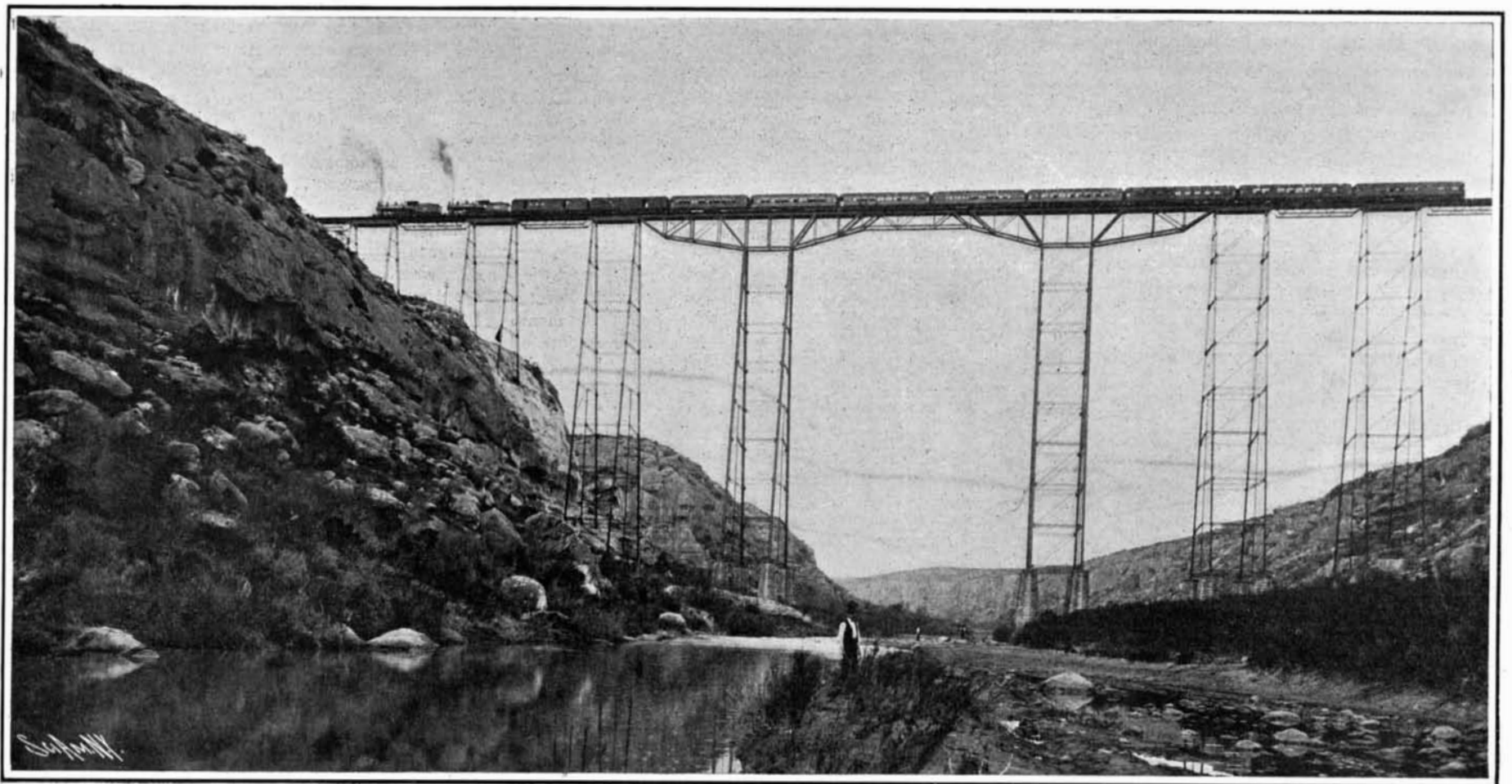


MOUNTING THE LARGEST BEAR EVER KILLED. WEIGHT 1,600 POUNDS.

THE LARGEST OF BEARS.

The record-breaking bear of the world has been brought down. This magnificent natural history prize, and one of the greatest specimens of wild animal life which has reached civilization, will shortly be installed in Prof. J. A. Allen's Department of Mammalogy in the American Museum of Natural History, New York. This leviathan was secured by the Museum's 1903

expedition under the leadership of Mr. Andrew J. Stone, who was sent to Alaska and northern British Columbia to secure Arctic mammals and birds for the museum. The funds for these hunting explorations in the Far North were provided in 1901 through the generosity of several friends of the institution. Three expeditions were made in all, the results being that the museum has now acquired the finest series of the large game animals of sub-Arctic America in existence, besides several thousands of small mammals, representing abundantly nearly all the species of the regions visited. Fine specimens were obtained for groups of the big Alaska brown, black, and grizzly bears, the great Alaska moose, two species of caribou, two of the mountain sheep, mountain goat, and the Sitka deer. Among the small mammals, several entirely new species were discovered and others previously little known were secured, besides a large number of birds. The round-up of the hunt of 1903, the last of the expeditions, numbered 873 forms, including about thirty large mammals (moose, sheep, bears, etc.) representing 28 species. About 140 were collected on the Bering Sea side of the Alaska Peninsula, near Muller Bay, and the remainder on the Kenai Peninsula. The principal trophy, aside from its scientific importance, and one destined to attract widespread attention among all big-game lovers and sportsmen, was the great male bear, *Ursus dalli gyas* Merriam, measuring 8 feet in length and 4 feet 4 inches in height at the shoulders, and weighing approximately 1,600 pounds. Mr. Stone, with four experienced hunters, two Indians and two white, made a special bear hunt in May, 1903, in and around Muller Bay. On the 29th the big creature was shot, affording his captors an exciting and somewhat dangerous experience. Ten fine examples of large brown bears obtained by Mr. Stone at Muller Bay throw much light on the question of the number of species of bears on the Alaskan Peninsula. Of these specimens nine belong to the form *Ursus merriami* and one to *Ursus dalli gyas* Merriam, based on specimens from Pavlof Bay, on the opposite side of the peninsula from Muller Bay. The two species proved to be read-



Height of rails above water, 321 feet. Length of bridge, 2,180 feet.

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