

extremity of the tunnel twenty-three feet from the surface above, as determined by a ventilating shaft dug near by. The floor of the tunnel is a heavy stratum of Carboniferous limestone six feet in thickness, that outcrops at its mouth. The material excavated, nearly uniform in all parts of the tunnel, is river loess or alluvium, interspersed here and there by limestone fragments. Some of these limestone masses are of considerable size and lie, for the most part, horizontally, as though they had fallen from a neighboring cliff and had been transported by the water. The material also contains numerous snail and some clam shells, the latter with the valves united. The alluvium is so firm and indurated that the tunnel, about eight feet in diameter, has retained its shape without any protecting props or walls, nor has there been any caving of its walls or roof. The skull and larger part of the skeleton was found irregularly placed, according to the testimony of the young men, near the bottom of the tunnel, the mandible separated some five or six feet. That the skeleton was intrusive, had been buried, or its position due to a creeping or sliding of the material, is inconceivable and out of the question. That there had been any deception on the part of the finders is equally inconceivable. I discovered fragments lying on the floor of the tunnel near the place ascribed to the discovery and picked up numerous other fragments on the dump outside, including a phalange and a complete os uncinatum. The bones were found where they were reported to be, and had been deposited there by the water, at or near the time of the person's death. The cranium itself contains positive evidence of its genuineness; not only is the characteristic matrix yet firmly attached to the bone, but indurated portions are included in its sinuses. The specimen is unquestionably a fossil and was found buried twenty-three feet below the present surface in indurated alluvium that has never been disturbed since its deposition. This alluvium is, moreover, of water deposition, and not æolian, or talus from the neighboring cliffs. Distinct lines of stratification are observed, one of them running clearly the whole length of

the tunnel a little above the horizon of the skeleton.

The age of the skeleton is evidently post-glacial, but is nevertheless very great. Its horizon is about twenty feet above the highest water mark of the Missouri River and more than fifty feet above its present bed. Add to this at least twenty feet of river alluvium covering the fossil and we have evidence of a change of altitude in the Missouri River since the deposition of the fossil of at least forty and probably fifty feet. That is, the skeleton was deposited during the period of depression following the glacial epoch, during the time of the so-called *Equus* beds, the time of *Elephas*, *Mastodon*, extinct bisons, moose, camels, llamas and peccaries. I see no other possible conclusion to be drawn. I have examined the later Pleistocene deposits in Kansas in many places and have fossils of this subepoch from all parts of the state. I am confident that the Lansing man belongs in the same fauna.

Of the skull and other bones I will say little. I trust they may receive the attention of some professional ethnologist. Much credit is due Mr. Long for his appreciation of the value of the find, and for the care and infinite patience with which he has restored the badly mutilated cranium to its present satisfactory condition. The cranium appears to be of normal capacity, dolichocephalic, the forehead receding, the supraorbital and especially the supraciliary ridges prominent.

S. W. WILLISTON.

LAWRENCE, KANSAS, July 19, 1902.

PALEONTOLOGY AT THE AMERICAN MUSEUM OF NATURAL HISTORY.

THE American Museum of Natural History has sent out four field parties, under the direction of Professor Osborn, for the collection of fossil vertebrates. Two of these are at present in Montana, one under Mr. Brown exploring the Laramie for horned Dinosaurs, the other under Dr. Matthew working farther west for Upper Miocene mammals. A third party under Mr. Granger has returned to the Como district of Wyoming and is working two quarries in that rich region; the Bone Cabin quarry is

still unexhausted, and promises to yield fine results again this season. A fourth party is working in western Nebraska especially for fossil horses, with the aid of the William C. Whitney Fund; this is the region where most of Leidy's classical types were found, and it is especially hoped to secure more material in order to determine the actual structure of these highly varied species of horses. In the museum the skeleton of the three-toed *Anchitherium*, secured by the Whitney exploration party last year, has recently been placed on exhibition, and will shortly be described in the *Museum Bulletin*. Professor E. C. Sterling has donated the fore and hind limbs of *Diprotodon* from Lake Callabona, Australia, with foot bones and casts sufficient to mount the feet of this enormous marsupial. From Moscow has been received through Mme. Pavlow a fine skull of the woolly rhinoceros, *R. tichorhinus*. Professor Koken, of Tübingen, has sent a series of casts of Triassic Dinosaurs. From Lyons, through Professor Charles Depéret, a beautiful series of original teeth of the genus *Lophiodon* has been received, chiefly Upper Eocene. Mr. Charles Knight has recently completed restorations of the *Ichthyosaurus* and a revised restoration of *Brontosaurus*, as well as of *Tylosaurus*.

SCIENTIFIC NOTES AND NEWS.

It is announced that the President has designated Col. R. M. O'Reilly to be surgeon-general of the army to succeed General Forwood, who will retire on September 7 next. Colonel O'Reilly would hold the office for seven years before reaching the age limit.

DR. PASQUALE VILLARI has been elected president of the Accademia dei Lincei, Rome.

DR. J. G. GARSON has been appointed assistant general secretary of the British Association, succeeding the late Mr. G. Griffith.

We regret to learn that Professor Virchow, who is now in the Hartz Mountains, is again confined to his bed, after having nearly recovered from his recent accident.

MR. J. E. SPURR, of the U. S. Geological Survey, who has for a year been engaged in

surveys for the government of Turkey, has returned to the United States.

MR. H. W. TURNER has resigned his position in the U. S. Geological Survey to engage in practice as an expert in San Francisco.

PROFESSOR ALBERT VON KÖLLIKER, the eminent anatomist, has retired from the chair at the University of Würzburg, which he has held for thirty-five years.

DR. RITTER VON BASCH, professor of experimental pathology in the University of Vienna, recently celebrated the fortieth anniversary of his doctorate.

MR. PAUL DU CHAILLU is at present in Russia collecting materials for a book on the Russians.

We learn from *Nature* that among the British civil list pensions announced in a parliamentary paper are the following: Mr. W. H. Hudson, in recognition of the originality of his writings on natural history, 150*l.*; the Rev. Dr. John Kerr, F.R.S., in recognition of his valuable discoveries in physical science, 100*l.*; Mrs. S. C. Jones, in recognition of the services rendered by her late husband, Principal John Viriamu Jones, to the cause of higher education in Wales, 75*l.*; and Mr. H. Ling Roth in consideration of his services to anthropology, 70*l.*

DR. CHARLES KENDALL ADAMS died at Redlands, Cal., on July 27. He was president of Cornell University from 1885 to 1892, when he resigned and became president of the University of Wisconsin. This post he held actively until 1901, when he retired on account of ill health. Since then he had lived in southern California, but the University had not accepted his resignation, and he was still president when he died. He was born at Derby, Vt., on January 24, 1835, and was graduated from the University of Michigan in 1861. Dr. Adams was the author of many works on historical and educational subjects, including 'Monarchy and Democracy in France' and 'A Manual of Historical Literature.'

MR. A. D. HOGG, who had been a botanical assistant to Professor Bayley Balfour in the University of Edinburgh, was drowned on July