each day one of the windows in his house rattled in the most violent manner. On consulting the local railway time-table, he could find no train running at the hour specified; but on examining another table, which included a separate line, he found that a heavy train passed at the time at a distance of several miles from his house. He then referred to the geological formation of the ground between the two points, and at once saw that there was an outcropping ledge of rock which formed a link of connection between the distant railway line and his home. It was the vibration carried by this rock from the passing train that rattled the window.

A REMARKABLE LAND-SLIDE.

THE U. S. geological survey has learned from Mr. C. W. Cross, engaged in field-work at Denver, Col., the particulars of a remarkable land-slide near Cimarron, Gunnison county, which was described in the local papers as an earthquake. Professor Farnham, of the Nebraska state normal school, who chanced to be in the neighborhood, had personally visited the scene of the supposed earthquake; and when he called upon Mr. Cross, and described the appearance of the region, the fissures formed, etc., the latter inferred that a serious disturbance must have occurred along the line of faulting on the west side of the Trident mesa, indicated on the Hayden maps. As soon as practicable, Mr. Cross went to Cimarron. He found the locality about nine miles south of that town, on the east side of the west fork of the Cimarron River. Between the two forks of the Cimarron is a mesa capped by eruptive rock, the valleys on either side being eroded out of cretaceous rocks, apparently the clays of the Colorado group. The area involved extends from the base of the cliffs of eruptive rock forming the top of the mesa, down the slopes toward the valley bottom, nearly to the edge of the belt of timber. Such a crumpling of the surface had taken place, — throwing down forests in inextricable confusion, pushing the ground up into ridges, and leaving fissure-like depressions, — that the assumption by untechnical persons of an earthquake as the cause was not surprising; but, after a two-days' examination, Mr. Cross satisfied himself that there had been no earthquake, but a remarkable land-slide, involving an area of nearly two square miles. It was evident that the surface of the ground had become loosened from the underlying clay beds, probably in consequence of the sepage of water, and that a movement of the area, starting at its upper end, had been thereby instituted in the direction of the mesa. The lower portion having moved less, or not at all, the ground there had been most thoroughly ridged, fissured, compressed, and overlapped, in such a manner that trees had been overthrown, little ponds drained and new ones formed, and the courses of small streams changed. Ranchmen living near by had preceived no tremor or other evidence of earthquake disturbance, nor could they tell when the movement took place; but they agreed in saying that the rainfall had been unusually heavy. Evidences were found of similar land-slides of earlier date, at various places along the valley, and it seems clear that such slides must have played an important part in shaping out the valley depression.

THE 1886 PRINCETON SCIENTIFIC EXPEDITION.

AFTER a most successful working season of over ten weeks, the Princeton scientific expedition has returned from its explorations in the Bridger beds, south-western Wyoming, and the White River country, north-eastern Utah. It will be remembered by those familiar with the history of bad land explorations that this is the sixth expedition that Princeton has sent out to the west. Since 1877, Prof. W. B. Scott and his coadjutors have worked in the Bridger beds and Bitter Creek country of Wyoming, in the White River of Dakota country, in the Yellowstone region, and now in the White River basin in Utah. The result is that the Princeton museum has now a splendid collection of American fossils, less complete, it is true, than Professor Marsh's collection at New Haven, but in some important respects quite equal to it.

The expedition this year started in June last, under Professor Scott's personal direction; but, after the first two weeks, he was obliged to return east, and his place as leader and director of the work was taken by Mr. Francis Speir, jun., of Princeton (1877), who has had wide experience in the western bad lands. Mr. Speir had under his command seven men (mostly Princeton students), a guide, and a cook.

Fort Bridger was the original base of supplies, and the first working camp was on Henry's Fork, an important tributary of Green River, about thirty-five miles south of the fort. Work was begun near the spot where a fine skull of Uintatherium was found last year, and careful search resulted in exhuming the remainder of the skeleton nearly complete, and in excellent preservation. Twin Buttes, a spot some thirty miles to the east, was the second working camp, and in that vicinity was found an extraordinarily perfect skeleton of Mesonyx; and it is believed that Princeton will

now possess the only skull of a carnivore of the American eocene.

This work on the south slope of the Uintah Mountains was only preparatory to the main aim of the expedition, — the exploration of the little-known White River country. The passage of the Uintahs was quite difficult, for the climbing is very steep and the road very poor. The road bears off to the eastward, and crosses the range at an elevation of over ten thousand feet. The scenery was very wild and grand, and the air delightful. The nights were always very cold, and on the night of July 25 there was a severe frost. The descent into the Ashley valley on the south slope is very fine, and the views toward Salt Lake City in the west, and the Colorado mountains in the east, superb. The valley of Ashley's Fork, another tributary of Green River, has by wonderful irrigation and great care become of much agricultural value, and is now supporting a considerable population, almost entirely Mormon. From the settlement of Ashley to Ouray, the agency of the Uncompahgre Ute Indians, is a long, hot ride of thirty-five miles through a desert country in which some of the cañon formations are most curious.

Ouray agency is on the west bank of the Green River, just above the mouths of White River, flowing in from the east, and Duchesne River, a tributary from the north and west. Green River was crossed here, — a work of great difficulty, because of the swiftness of the current and quicksand bottom, — and the march continued almost due east, following the north bank of White River. Camp was pitched in a small cottonwood grove, the only trees for miles and miles, in a bend of the river, and work prosecuted from there. No fossils were found within two miles of camp, and at the conclusion of the work the ride out was from twelve to fourteen miles. The expedition's work was well organized; and men detailed to dig out and pack followed the prospectors, who located the fossiliferous strata and particular outcroppings of bone. No bones of any account were found, save in the two white or gray strata, the one lying at the base of the buttes, and the other some thirty feet above it, with two distinct strata intervening.

The prospectors soon discovered much of interest and value; and when camp was broken, and the march back begun, some twelve or fourteen hundred pounds of fossils were ready for transport. Every thing was packed with greatest care; cotton, tissue-paper, wrapping-paper, canvas sacks, and thin gunny sacks being used for teeth and joints, and all save cotton being used in every instance.

Of Amynodon, which the expedition desired particularly to get, numerous fragments were obtained, enough to make one nearly complete skeleton and the major part of several others. Tapiroids were found in great abundance, and it is not improbable that careful study will reveal some unique specimens among the finds of this expedition. The bones are not all in the best preservation, though some are in a far better state than others found immediately adjoining. The real scientific value of the expedition will only be known when the authorities of the museum make a careful study and description of the bones found.

The weather on White River was intensely hot by day, and very hot even at night. Mosquitoes were in abundance; and the river-water, while not strongly alkali, is warm and insipid. There is absolutely no vegetation save grease-wood and scanty sage-brush, and no animal life beyond small snakes and lizards and a few rabbits. The snow-topped Uintah range was in full view, and thunder-showers could be seen there daily. But in this White River desert it never rained, and it was asserted that it had not rained there since April, 1885.

The third week in August the White River country was left behind, and the long, slow march over the mountains began. Perhaps the country was left none too soon, for the Indians were very insolent, and, even on crossing the mountains, General Crook was passed going into that country with a detachment of cavalry and infantry to locate a new military post, as a safeguard against Indian treachery and violence.

The expedition is greatly indebted for its comfort to the aid rendered in outfitting by the war department and the quartermaster-general of the state of New Jersey, and for courtesies extended by the officers at Fort Bridger and the officials at the Ouray agency. For its scientific success, it is indebted to the untiring energy and ability of its conductor, Mr. Francis Speir, jun., of South Orange, N.J. N. M. B.

THE LONGEVITY OF GREAT MEN.

THE conclusion that the intellectual giants of the race are favored by an abundance of years on the scene of their heroic activity, and are thus further differentiated from their more common fellow-men, seems natural, and has been accepted upon evidence which, in a less pleasing conclusion, would be considered ridiculously insufficient, and even false. The usual method of attempting to answer the question whether great men are longer-lived than others, is to prepare a list of the ages, at