

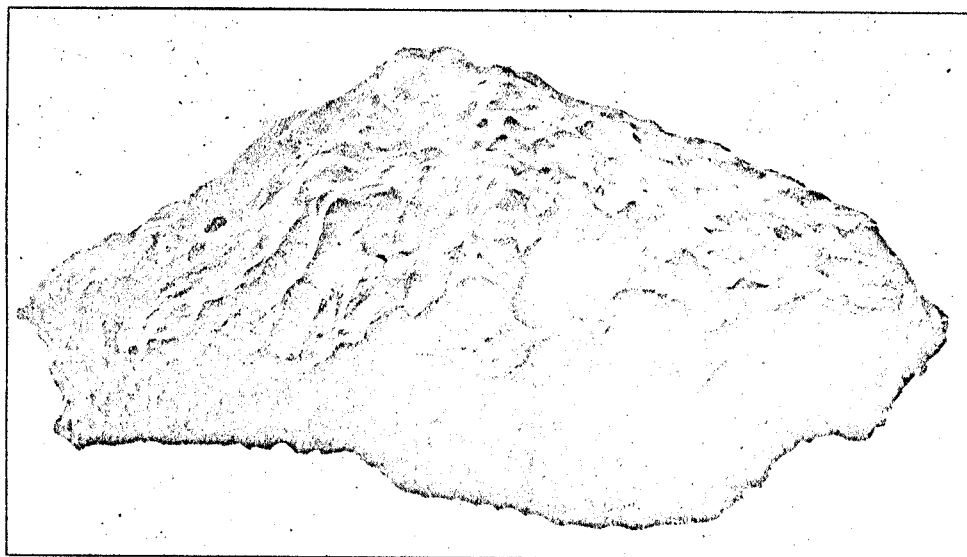
THE NEVADA METEORITE.

Written for the MINING AND SCIENTIFIC PRESS
By WALTER P. JENNEY.

In the latter part of August of this year (1908) a prospector looking for borax in the Quinn Canyon range, in Nye county, Nevada, discovered and located a mass of metallic iron, which he found lying half-buried in the soil among the foot-hills of the range. Cutting off a few small pieces of the metal with a cold-chisel, he returned to Tonopah, where he sold out all his interest in the find and soon after left the country. The region where the meteorite fell is almost uninhabited save for a few sheep-herders and occasional wandering prospectors. The Quinn Canyon range, marked on some maps as the Grant mountains, bounds Railroad valley on the east and, by wagon-road, is nearly due east 110 miles from Tonopah.

The purchaser placed the matter in my hands with

It was lying partly embedded in the soil of a low hill of volcanic rock (andesite), on the westerly slope of the range. The foot-hills in the vicinity are treeless and support a sparse growth of sage-brush and grass. The gentle slope on which the meteorite lay faced northerly and the contour of the surrounding hills was such that, in falling, its course through the air, if at a low angle, may have been easterly, southerly, or southwesterly. It bears some resemblance in shape to a great turtle, and when found was resting on its flat side, with the domed or pyramidal upper surface projecting above ground. The longest dimensions, as it lay, were easterly and westerly, and the depth to which it was buried in the mantle of soil covering the hill did not exceed 10 to 11 in. The contour of the surface of the ground had resulted from extremely slow erosion; there was no evidence that the meteorite had ever been deeper buried, and subsequently exposed by the wearing away of the hillside. The deeply chan-



The Nevada Meteorite.

instructions to find the meteorite, bring it to Tonopah, and open negotiations with various museums in this country for its sale.

Only a general and imperfect description of the locality had been obtained from the original discoverer and, in consequence, the first attempt to find the meteorite failed; it was not until a second search was made that, with the help of a guide, it was found. These two trips by automobile made by me to find the meteorite covered 430 miles. Later a freight-wagon with six horses and three men, provided with a derrick and chain-pulleys went to Quinn Canyon and hauled the meteorite to Tonopah, the nearest shipping point on a railroad; the round trip consuming eight days. Great care was taken that the polished surface of the meteorite should not suffer abrasion; as soon as loosened from its bed, it was wrapped in sacking and reached the Tonopah Bank, where it is now stored, unimpaired.

The point where the meteorite fell is 90 miles due east of Tonopah, 18 miles north of the Mount Diablo base line, and 100 miles west of the Utah boundary.

neled and pitted upper surface of the meteorite was covered with a thin smooth skin of magnetic oxide, which had protected it from corrosion; even the portion buried was little rusted. The outline, while extremely irregular, is rudely oval, measuring on each diagonal of the ellipse, 44 in.; the breadth is 34 in., and the circumference 132 in. It is 20 in. high and is estimated to weigh 4000 lb. A few small prominences were cut off by the prospector who found it, in order to determine the composition; the amount removed was not more than one or two ounces, so that the meteorite is practically as it fell. Analysis shows that this meteorite contains from 90 to 95% iron alloyed with 5 to 10% nickel. On etching a polished surface, the Widmannstätten figures appear as closely spaced brilliant lines on a dark ground; in places the outer surface of the meteorite displays an octohedral crystalline structure in grouped equilateral triangles. However, the characteristic Widmannstätten pattern can only be obtained when a large surface of the meteorite is etched.

All the evidence gained from an inspection of the

meteorite before it was removed from its bed, seems to support the view that it is a comparatively recent fall, probably within the last 20 years. The wonderful preservation of the surface shows that it has not been long exposed to the weather. The deeply channeled surface, produced by the liquation and combustion of the complex metallic alloy, caused by the intense heat generated in its passage through the Earth's atmosphere, is evidence that the meteor traveled far, before coming to rest where found; that is, its path must have been nearly tangent to the surface of the Earth. This is confirmed by the shallow depth it penetrated the soil; further, it is possible that it ricocheted on the flat side before the momentum with which it was traveling was finally arrested.

This aerolite is supposed to have fallen in 1894. Residents of Candelaria, at that time, recall the passage of an immense meteor that traveled in an easterly direction and was seen to fall far to the east, beyond where Tonopah now stands. Articles appeared in the San Francisco *Examiner* and in other California papers, describing this meteor as entering the Earth's atmosphere over the Pacific Ocean, crossing the Coast range, the Sacramento valley, the Sierra Nevada mountains, passing nearly over Bodie (California) and Belleville and Candelaria (Nevada), to be lost in the desert to the east. Its fall was recorded by the U. S. Weather Bureau at Reno, Nevada. Several residents of Tonopah saw the meteor when it fell. Among them is Fred Corkhill, superintendent of the West End Mining Co. Mr. Corkhill, who at that time was living in Candelaria, states that on February 1, 1894, about 10 o'clock in the evening the residents of Candelaria observed the meteor, which passed directly over that place and was seen to disappear in the east. It gave an intense blinding blue-white light, so dazzling that you could not see the meteor itself. The illumination was so intense that the interior of rooms in the buildings that had shutters closed was lighted up as brilliantly as day. The rush of air after the passage of the meteor lasted a minute or more. After it had passed there was a loud explosion accompanied by a powerful jar. Mr. Corkhill wrote an article on this meteor and it was published in the MINING AND SCIENTIFIC PRESS in the spring of 1894. The place where the meteorite was found is 130 miles due east from Candelaria.

[Here follows the account sent my Mr. Corkhill to the MINING AND SCIENTIFIC PRESS of February 10, 1894.—EDITOR.]

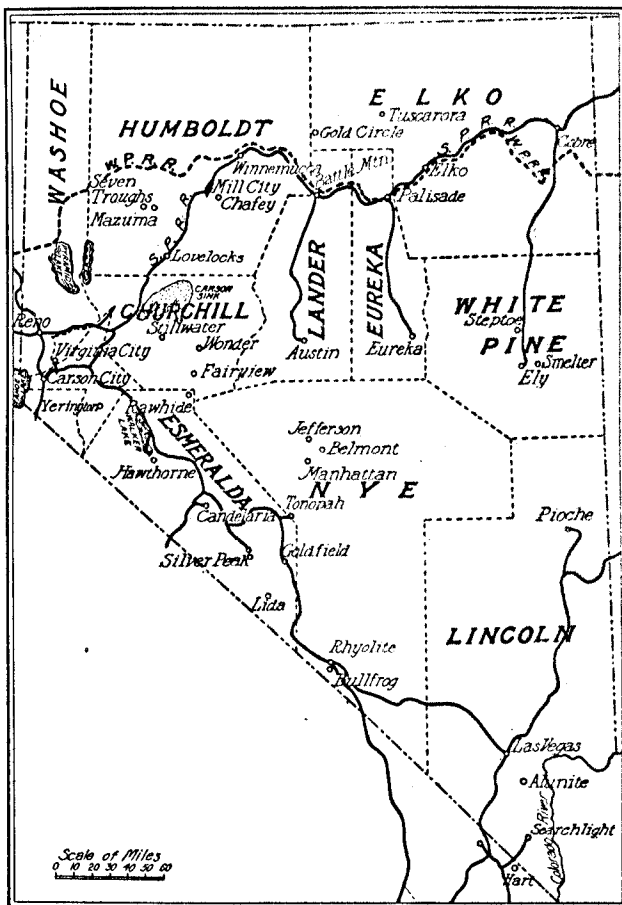
To the Editor: I send a description of the meteor that fell at this place on the night of February 1st. The thermometer registered 15 degrees above zero. At 10 o'clock 7 minutes a brilliant meteor appeared, coming from the southwest. It made a tremendous illumination, suddenly, as if a great flash light was thrown in well-lighted rooms, wherever a corner of window curtain or shade was not tightly drawn. So intense was it in brilliancy that those who were out of doors were dazed, and but few could tell whence it came or whither it went. It was of a dazzling electric blue, like many arc lights had suddenly shot into

existence. The illumination lasted about four seconds, disappearing in the northeast. The illumination brought all who were awake to their doors, awe stricken, thinking some slumbering crater had burst into flame.

Thirty seconds later a terrific explosion occurred, like tons of dynamite suddenly exploded, shaking the hills and echoing through the rocky caverns.

It was like a huge bombshell had been hurled in our midst. There followed a boiling and sizzling roar, like an immense mass of red-hot iron cooling in water. The sound grew fainter and gradually died away. This lasted about fifteen seconds.

Those who were sleeping and did not see the illumination were aroused and rushed out of doors,



Showing Position of Tonopah and Candelaria.

supposing it to be an earthquake or that the crack of doom had come.

When the snow melts and the focus of the explosion is definitely located, a search will be made for the meteorite.

None who saw or heard this meteor will forget it, and they will relate it in future years as a great event; nor will any one here desire to be nearer to those celestial bombs than he was this night. Some ducked their heads to let it go by and considered it a very close shot for a star.

FRED CORKHILL.

Candelaria, Nevada, Feb. 4, 1894.

On Claim 15 Above Discovery (at Lat. 64° 59' North) on Ophir creek, 85 miles from Nome, Alaska, four pans of dirt yielded 70 oz., or \$1250, and one single pan gave 25 oz. of gold.