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slope of the mountain, and is cut through by a deep cañon, giving an opportunity to examine the vein, and to open it by tunnels at a great depth. It crops out boldly, showing an apparent width of from 15 to 20 feet. The vein has been opened at several places, and found to be valuable. The Illinois, Indiana, Webster, and other veins of good repute, are the property of W. H. Raymond & Co., of New York.

The Indiana, on Peters's mountain, has been tapped by a tunnel of 125 feet, at a depth of 120 feet below the croppings, showing a pay streak of 6 feet in a vein of 10 feet between the walls.

The Webster, on Raymond mountain, has been struck by a vertical shaft 100 feet below the croppings, with a pay streak of about 10 feet.

The Alameda Company.—This is a New York organization, and owns the List and other mines. The List is a location of 400 feet in length upon a vein which extends through several similar locations. In the claim of the Alameda Company it is most developed, and shows a width of from 5 to 10 feet, bearing two strata of ore, respectively 6 and 18 inches in width. Several tons of this ore have been taken to Austin for reduction, and produced at the rate of \$100 per ton, and a number of tons worked at the Crescent mill, near the vein, yielded \$80 per ton. The developments consist in an incline 23 feet, and a shaft 50 feet in depth, from the bottom of which a tunnel has been run, but it has not as yet penetrated the vein. Wm. Fleming is the superintendent. The wages paid for first-class miners in this district are \$6 per day in currency. Mr. Islin, Captain Dahlgren, and others, are about to commence operations on mines of which they are owners or agents. The district bids fair, with its mineral-bearing ledges and agricultural resources, to become one of importance. It is connected with Austin by a weekly mail, and the road between the two places is naturally good, and has been well improved, so it is easily, safely, and pleasantly passed by heavy freight wagons and travellers. It lies on a practicable route for a railroad from the Central Pacific, at several points on the Humboldt river, to the Colorado at the head of navigation, or to the crossing of the Atlantic and Pacific railroad, should such a road be constructed.

COLORADO DISTRICT.—A recent act of Congress annexed a portion of Arizona to Nevada, and in the section transferred is Colorado district, or the mining region of El Dorado cañon. This is on the banks of the Colorado river, and as yet has had but little intercourse with the original Nevada. It may not be regarded as within the limits of this report to give a description of this district, but as a step-child of Nevada, it is proper to recognize its existence. It was organized in 1861, and a large number of claims located bearing gold, silver, and copper.

Northern Mines.—In July of the present year, a party composed of Messrs. McCan, Beard, Heath, and others left Austin on an exploring tour to the ranges of mountains north of the Humboldt river. There had been rumors of discoveries of gold-bearing veins and placers in those ranges, and also in the Goose Creek mountains, dividing the waters of the Humboldt and Owyhee from Salt Lake. This part of the country was infested with hostile Indians, and it was regarded as dangerous to penetrate it. For that reason it had remained unexplored, yet its very dangers were inviting to the venturesome prospector, whose imagination gave the wild country wealth in proportion to the hardships and dangers attending its occupation. This party of explorers, consisting of eight men, passed the Humboldt river, and going north on about the 117th meridian, crossed a range of mountains, made up chiefly of detached hills or buttes running easterly and westerly, and when upon the northern slope, about 60 miles from the river, discovered gold in placers and *in situ*.

TUSCARORA DISTRICT.—Upon making the discoveries of gold, the prospectors organized a mining district, to which they gave the name of Tuscarora. A small stream running through it northwardly was named McCan. Along this stream for about three miles gold in small quantities was found to exist. It appears very much

diffused through the soil from the surface to the depth reached, which did not exceed five feet. Several ledges, or what are supposed to be ledges, were found, showing gold. The party returning to Austin with specimens reported their discoveries, and as is usual upon such occasions an excitement was created, and 100 or more men, well armed for defence against the Indians, and prepared for prospecting, immediately proceeded to the new mining region. A large area of country has already been explored, and mines found in various localities. At the present time the real value of the discoveries is unknown, as but little labor has been expended upon either the gold-bearing veins or in washing the soil. The creek does not furnish water in sufficient quantities for extensive and rapid washing, and therefore unless very rich deposits are found, it is not probable any large fortunes will be realized. It is estimated, however, from the prospects obtained that from \$10 to \$20 per diem may be made per man, for a score or more of men. Should the specimens of gold-bearing quartz found be any criterion of the value of the veins at great depths, they are rich indeed. The geography of the region is but little known, and it cannot be stated at present whether the waters drain to the Owyhee sink in a basin of their own, or flow to some branch of the Humboldt. A short period will determine all such doubts. The country is described as well adapted for grazing, producing an abundance of grass of a very nutritious character. There are many valleys of large size capable of cultivation, and which, when the treacherous savage is exterminated or subdued, and the miners fill the hills, will furnish pleasant homes to settlers.

About 40 miles east of Tuscarora, and on the southern slope of the range, ledges bearing both silver and gold have been discovered. These discoveries were lately made. No district has yet been formed. The locality is about 50 miles north of Gravelly Ford, on the Humboldt river. T. J. Tennant and party, the discoverers, brought specimens of the ore to Austin, where they were assayed, and showed value. The rock is granite, the veins of quartz running north and south. This is represented as a good farming and grazing country, with grass covering the hills like a meadow. Game, as deer, antelope, hare, and several varieties of grouse, the chief of which is the sage hen, abounds in great plenty.

This new region, which has so long been closed against the pioneer, promises to become an important and wealthy portion of the State.

The following classification of the minerals which characterize the veins of Eastern Nevada is prepared by Charles A. Stetefeldt, esq., assayer and metallurgist, of Austin.

CATALOGUE OF MINERALS.

REESE RIVER DISTRICT.*—*Eastern part of Lander Hill and Central Hill.*—Pyrargyrite, proustite, polybasite, and stephanite predominant; tetrahedrite seldom; few sulphurets of base metals.

Central part of Lander Hill and Union Hill.—Tetrahedrite predominant; pyrites of iron and copper, galena and blende; few polybasite and stephanite.

Western part of Lander Hill and Union Hill.—Argentiferous galena, pyrites

*MINERALS OF REESE RIVER DISTRICT, ARRANGED ACCORDING TO DANA'S SYSTEM. BY EUGENE N. RIOTTE, M. E.

I. NATIVE ELEMENTS:

Native gold, native silver, native copper.

II. SULPHURETS ARSENURETS, ETC:

I. Binary compounds.

1. Stibnite, antimonglance.
2. Silverglanze; erubescite, variegated copper ore; galena, blende, copper glance, stromeyerite, pyrites, lucopgrites, molyadenite.

II. Double binary compounds.

Chalcopyrite, pyrargyrite, proustite, tetrahedrite, polybasite, stephanite, fireblende.

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III. FLOUR

I. Bina
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IV. OXYGEN

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II. Salt
Pyroxene

and orthocl
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spathe iron

Loc?

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