

Mining Conditions at Ely, Nevada.

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Anyone who has lived for any length of time in the West or has come in contact with old-time Westerners in any part of the world has heard of the White Pine excitement in eastern Nevada in the late sixties. Gold was discovered in White Pine county at that time, and hundreds of men, having had their cupidity aroused by the various excitements and rushes which had been taking place on the Pacific slope with more or less frequency from '48 to the discovery of the Comstock, years after, were unable to restrain themselves when the word was passed that there was gold in White Pine. Stories of wealth to be gained and sudden fortune to be acquired appeal to everyone. True, everyone does not rush to new 'diggings' at the first rumor of discovery, but the majority of the old-timers were found in almost every rush, provided the rumors regarding it were sufficiently persistent and elaborately embellished in detail.

Thus it was in the White Pine rush. The magic words 'gold in White Pine' was the slogan that caused otherwise level-headed men to drop the 'bird in the hand' to wander, aye, and to suffer, in search of the mythical 'two in the bush.'

As near as we can learn, in regard to White Pine, however, the prizes were miserably small and few in number. There was gold, it is true, but in such meagre quantities that it neither warranted an excitement nor maintained a camp of any consequence after the rush was over.

The town of Ely came into existence about this time, and managed to maintain a precarious existence, partly due to its situation, on the edge of the Steptoe valley where a little ranching was carried on, and partly because it was a supply point for the few miners who had the hardihood to stay with White Pine, and hold on to the claims they had located, hoping that some day they would become valuable. Monuments to the enterprise and tenacity of these pioneers are still in evidence in the form of mills and kindred reduction plants that bear silent witness to the grit of these old-timers, who had the courage of their convictions, however mis-applied and ill-directed their efforts were.

Gold was the much-sought metal then; if the mines would not pay as gold producers, it was argued, they would not pay at all. Copper was recognized as being present, but its very presence was cursed as being a great evil and detrimental to the recovery of the precious metal. Mills and concentrators were erected, tried out, found wanting, and abandoned, and finally all hope of making White Pine a paying mining district appears to have been abandoned and the camp relapsed into that condition described by Mr. Cleveland as "inocuous desuetude."

A few years ago the attention of several experienced mining men was directed to the district in the hope that, with the healthy tone of the copper market and the large area of available ground, it might be found commercially profitable to work the ores on a large scale. Work was commenced and vigorously prosecuted on the present holdings of the Nevada Consolidated and Giroux companies, with a view to ascertaining the exact extent and assay-value of the orebodies known to exist. An experimental reduction plant was erected on the Ruth mine and work was pushed vigorously underground. Developments in this and adjacent mines showed that the orebodies were of such prodigious proportions as to stand without a parallel among sulphide copper deposits.

The Nevada Consolidated people have now connected the town of Ely with the Southern Pacific railway at Cobre (a station 135 miles west of Ogden) by a standard-

gauge railway 150 miles long. This road is now being extended from Ely, through Robinson cañon, to the mines of the company.

It is stated that a large smelter is to be built to treat the ores of this company, but nothing tangible in this direction is, as yet, in evidence. The Giroux company has a 100-ton smelter built and the Taylor Engineering Works is now building a 500-ton concentrator for this company. The Giroux people are working five shafts, the ore being placed on the dump to await reduction facilities. The extent of the copper-bearing zone already proved is about six miles long by two miles wide. West of the Giroux company's holdings are situated the mines of the Cumberland-Ely Co., now said to be absorbed by the Nevada Consolidated. Of this group of claims the Veteran mine is where most of the development has been done and the ore exposed therein appears to be of a higher copper tenor than in the mines farther east, while the real extent of the ore is unknown, although hundreds of feet of openings have already been made.

As to the geology of the district and the genesis of the mammoth copper-bearing orebodies, many different theories have been advanced. Mining men coming here with preconceived ideas relative to mines and mining as they occur in other places have been compelled to admit that it is a new one on them, and then do some thinking. The country generally, aside from where the gossan protrudes, is covered with either lime or rhyolite; the gossan is, of course, barren of copper, but has some gold in places. The copper-bearing sulphides—usually either chalcocite or chalcopyrite—occur in a quartz-porphry matrix at a depth varying from 75 to 250 ft. below surface. The quartz-porphry may occur with or without a paying copper content, but it seems that when pay-ore is encountered it is invariably associated with this quartz-porphry.

Many of our regulation phrases, such as dip, strike, foot-wall, hanging wall, etc., will have to be quietly laid aside and forgotten here. As far as development up to this time indicates, none of these terms can be applied to the orebodies in question. As far as the exploration to date shows, they may be simply referred to as 'deposits', of no particular dip, and, while the proved ground would seem to show that the general trend of the ore-zone is easterly and westerly, this is simply because almost all the work done up to this time has been confined to where the gossan appears on surface.

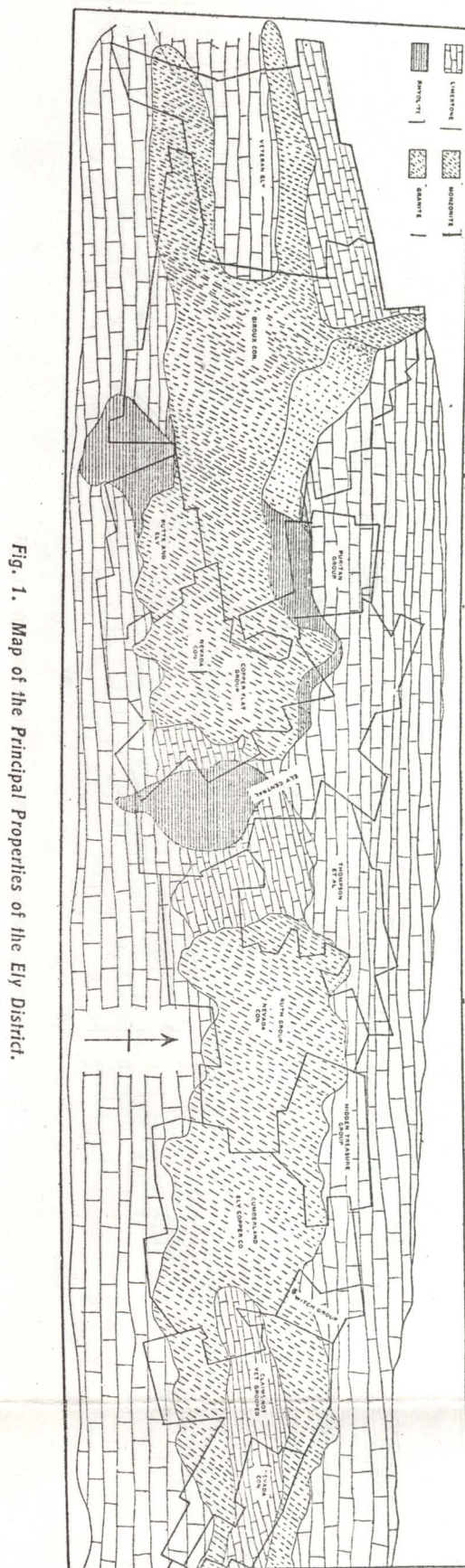
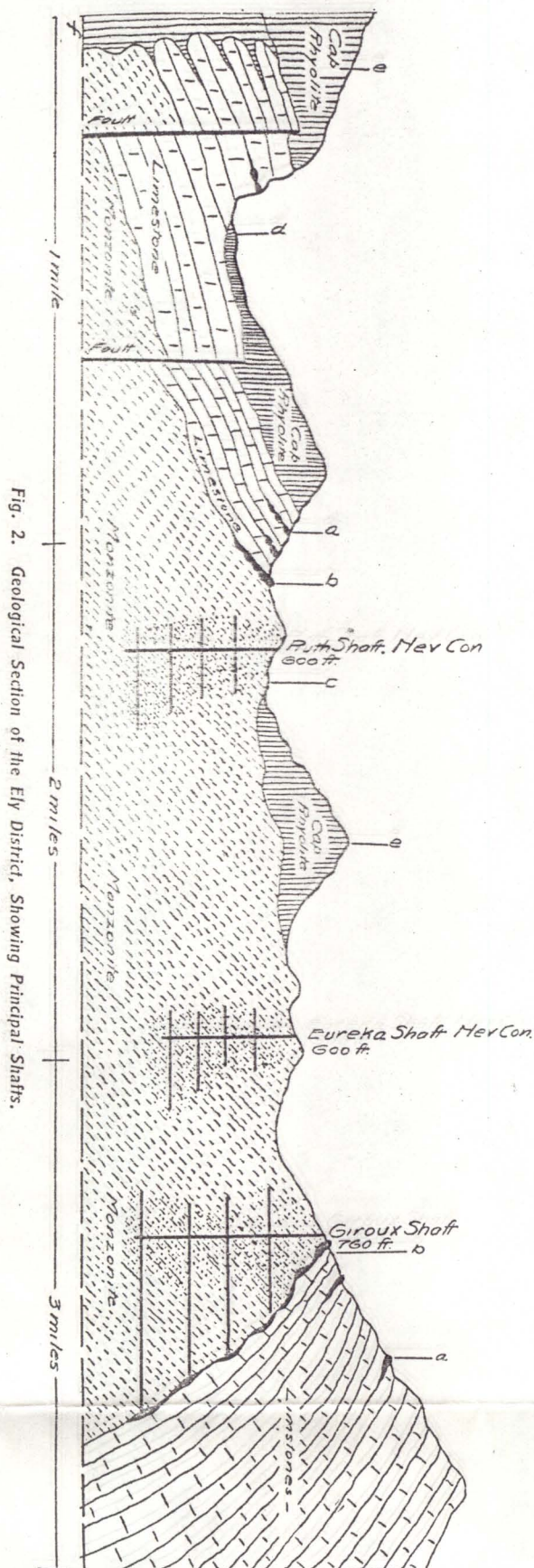
Perhaps the ore was precipitated between the lime and rhyolite and these overlying formations subsequently eroded away, leaving the mass exposed here and there. The very immensity of the orebodies would seem to preclude the theory of fissuring and subsequent filling, and indeed no distinct fissuring can be detected except in places remote from the known orebodies. Whatever the genesis of this colossal ore-zone may have been, the fact of its existence and magnitude is plain to anyone who comes here, and of its possibilities as a future factor in copper production, there can be no question.

Just a word as to labor and business conditions: Ely can be reached either by the Nevada Northern railway from Cobre on the Southern Pacific or by stage from Eureka, the southern terminus of the Eureka & Palisade railway, about 75 miles distant. If the all-rail route is chosen, the visitor to Ely, on alighting at Cobre, is at the mercy of the Nevada Northern railway, which mulets him in the sum of ten dollars for carrying him from there to Ely, 150 miles south. When he gets to Ely and tries to get a room and is lucky, he may find a cot at his disposal for one dollar per night. He can now get a decent meal for fifty cents, although it was but a very short while since that it was almost impossible to obtain

anything fit to eat in the town. In common with the Western country generally at present, labor is rather scarce. Good mechanics, miners, and laborers are in demand. It is very difficult to obtain the necessary supplies to carry on mining. The only sure way to get

stantial structures; nice residences and office buildings are being erected and hotels of no mean pretensions are going up for the accommodation of the traveling public.

That the town of Ely is destined to occupy a place among the mining centres of note in this country, there



what you want is to bring it in from outside, and this takes a long time, owing to a congestion of freight on the roads. The settlement is typical of a mining camp; whatever else is wanting, there is always whisky to be had. Ely is now entering the transition stage; tents are giving way to frame buildings and shacks to more sub-

can be no doubt, and it is to be sincerely hoped that its citizens will not, in their mad rush after wealth, overlook those matters of sanitation, a pure water supply and other things of a kindred nature, which are so essential and indispensable to a healthy, progressive, and well-ordered community.