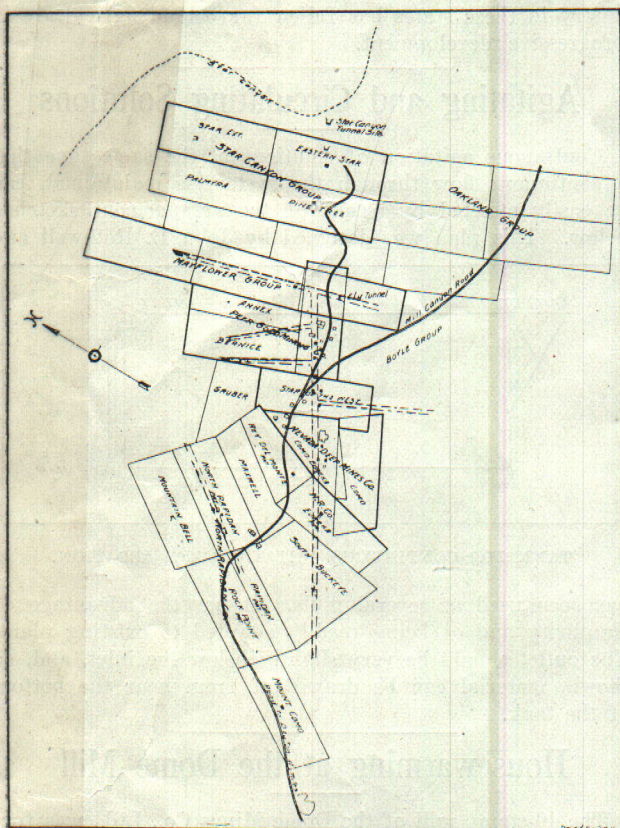


Como, Nevada

By H. C. CUTLER

Como is in the Palmyra mining district, in the Pine Nut range, some ten miles in a southerly direction from the old town of Dayton, the nearest railroad point. It was discovered in the early sixties and its first boom was contemporaneous with that of Virginia City. At one time the population was several thousand and the busy main street was lined with stores and saloons; even a brewery, to keep the inhabitants from getting thirsty, could be found. Some surface work was done on the large quartz outcroppings, and several shallow shafts sunk, but the greater attractions of Virginia City gradually drew the whole population away before the area was thoroughly prospected. After this, mining was carried on in a desultory manner, with some success in one or two properties, until 1910, when there was absolutely no activity whatever. Guffy



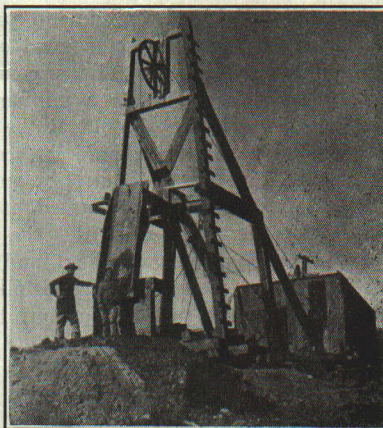
COMO DISTRICT, LYON COUNTY, NEVADA.

& Galey, large Pennsylvania oil operators, after having spent nearly a quarter of a million in developing the Buckeye and North Rapidan properties to the point where they were ready to produce, got into financial difficulties in the East and went into the hands of a receiver. This resulted in the shut-down of the mines. The Como-Eureka, with a shaft down 300 ft., and a patched-up second-hand mill, produced over \$250,000 in bullion, and then for several causes succumbed. During this general discouragement the Holly-Logan mine, bonded for a large sum, was abandoned, and the mine and 10-stamp mill have been idle ever since. A number of other promising prospects have been held for years with a minimum amount of work.

It was supposedly a dead district, with a bad past and an unpromising future, when Edwin Baruch and C. O. Erixson took a bond and lease on the old Como-Eureka in November 1910. The property was then owned by a Mr. Rea of Dayton, Nevada, who still had faith in the district and had hung on for years. The lessees started cleaning up the old workings, and by spring had opened some shoots of high-grade ore as well as a large amount of milling ore. In September 1911 control of the prop-

erty was sold to H. L. Taylor, of New York and Toronto, for a figure approximating \$75,000. The mine was then opened to the 300-ft. level by a shaft, but with no stoping below the 200-ft. Development work has shown that the old shoots are persistent, and has also disclosed new high-grade ore-shoots. At the present time the mine is opened by a double-compartment shaft 360 ft. deep, with levels at 115, 200, and 300 ft. Stoping is in progress above the 200-ft. level and the 300-ft. is being unwatered. The main power-line of the Truckee River General Electric Co. crosses the property, and all the equipment is electric. A 50-hp. electric hoist, an Aldrich electric sinking-pump, and the mill are run by electric motors. The old mill, consisting of one 3-stamp and one 5-stamp battery (750-lb. stamps), with plates and an outdoor cyanide tailing plant, is still used, although it is understood that the present owners will erect a complete up-to-date plant in the spring.

So far as I can learn, no complete geological survey of this district has ever been made, and no mention of it in any of the bulletins of the U. S. Geological Survey can be found. The principal properties lie in a basin at the head of the east branch of Eldorado canyon. This basin is surrounded on three sides by high ridges and peaks, the topography in some respects resembling that of Virginia City. There is considerable second-growth pine in the hills, and, unlike the desert country surrounding, water and verdure abound. The main mineralized zone, several hundred feet in width, strikes northeast. Cross-



HEAD-FRAME, PEER G. M. CO.

fissuring, as evidenced by north-and-south quartz dikes, is frequent. These quartz dikes are mineralized in several instances; in the North Rapidan and Ely properties, enough to make commercial ore.

The entire district is in the later eruptives, and the 'lode porphyry,' to use a Nevada term, is hornblende andesite, similar to that found in the hanging wall of the Comstock. Several later flows of andesite can be recognized in the higher portions of the range, and in many places these are capped by a still later flow of basalt. In the mineralized portion of the district, situated in the basin above mentioned, these later flows have been eroded, exposing the lode porphyry and the mineral-bearing veins. It has not as yet been determined whether the hornblende andesite is intrusive or a flow. The volcanic breccia, which is quite prominent in Gold canyon on the road from Dayton to Virginia City, shows again on the east side of the Pine Nut range below Como. It is believed that this range is contemporaneous with the Virginia range and the period of mineralization of both the same.

At Como the fissuring has been extensive, and at least two periods of ore deposition can be distinguished. The ore is similar to that generally found in the later eruptives, in that it is a silicified and replaced country rock. At and near the surface, gold is the chief valuable mineral. This is especially true of the main east-and-west veins. The silver minerals are more prominent in the north-and-south fissures, and the gold and silver are more nearly equal in the deeper ores. Some evidence of copper appears in spots

in the oxidized zone, but not enough to indicate a quantity sufficient to interfere with milling, even in depth. Plating and cyaniding now secure an extraction of over 90%, but it is quite probable that concentrating will have to be added to secure this percentage when the base ores are milled.

Having lain practically dormant for so many years, the district has now taken a new lease of life, considerable activity is being displayed, and, stimulated by the success of the Como-Eureka, which is now known as the Nevada Deep Mines Co., prospectors and mining men are investigating and in several instances developing some of the more promising prospects. The Star of the West claim, adjoining Nevada Deep Mines Co. on the northeast, is being developed, and high-grade ore showing considerable free gold is being taken out and sacked for shipment. Some of this ore assays as high as \$1500 per ton.

The Peer mining claim, directly northeast of and adjoining the Star of the West, together with two adjacent claims, has been incorporated as the Peer Gold Mining Co., and development work is in progress. The northeast mineralized zone traverses this property for its entire length, and ore assaying up to \$3000 per ton has been found on the surface. A 30-hp. electric hoist has been installed, a head-frame, blacksmith-shop, and all necessary buildings erected, and a crew of ten men is working steadily. The shaft, 4 by 7 ft. in the clear, is down about 40 ft. and will be sunk to the 200-ft. level, at which point the veins shown on the surface will be cross-cut and driven.

The Paramore, Ely, Oakland, and Logan properties are all promising prospects, showing some good ore in strong veins, and no doubt will be developed this coming summer. This is an interesting district from a mining standpoint, and, judging from the amount of gold at the surface, the finding of extensive ore-shoots should be comparatively easy for the modern prospector. Supplies and wages are reasonable, and, as the district is situated at an altitude of 6500 ft., the summers are cool and the winters not severe. The road to Dayton is excellent and automobiles can be driven directly into town. Its accessibility is a great feature, and all indications point to a considerable boom this summer.

Copper Producers' Association Report

The Copper Producers' Association April statement shows a decrease during the preceding month in accumulation in this country of 572,431 lb. The details are as follows:

	Pounds.
Stock of marketable copper of all kinds on hand at all points in the United States March 1, 1912	62,939,988
Production of marketable copper in the United States from all domestic and foreign sources during March	125,694,601
Deliveries of marketable copper for consumption and export during March	67,847,466
Stock of marketable copper of all kinds on hand and at all points in the United States April 1.	62,367,557
The changes in surplus since April 1, 1911, have been as follows, in pounds.	
	Increase. Decrease.
April 1911	3,547,974
May	440,024
June 8,561,768
July 19,695,306
August 4,297,357
September	7,453,355
October 5,897,214
November 23,212,454
December 22,330,493
January, 1912 22,173,252
February 3,301,944
March 572,431

RECEIPTS of the United States Government from the sale of mineral lands in the Western states during the past

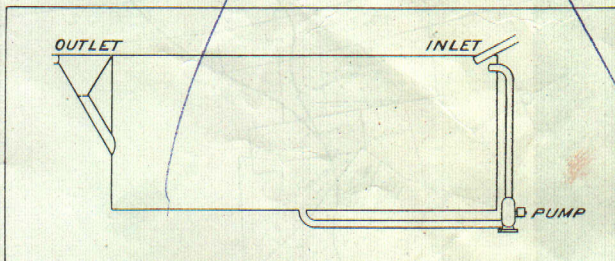
ten years, according to the *Bulletin* of the American Mining Congress, have been as shown in the accompanying table.

Coal Lands, Separate.	Mineral Lands, Separate.	Coal and Mineral Lands, Aggregate.
\$ 200,116.35	\$ 162,516.50	\$ 362,632.85
171,641.81	291,081.39	462,723.20
486,176.54	303,907.02	790,083.56
385,276.97	300,391.68	685,668.65
269,458.55	282,518.25	551,976.80
523,905.72	275,983.55	799,889.27
288,092.82	282,322.94	570,415.76
599,920.44	287,022.25	886,942.69
471,088.08	321,413.58	792,501.66
618,828.04	271,557.87	890,385.91
\$4,014,505.32	\$2,778,715.03	\$6,793,220.35

During these ten years the entire fund arising from the sale of public lands has amounted to \$65,357,107, which has been devoted to the upbuilding of agricultural interests in the public-land states. During this time the mining industry in these states has fallen far behind agriculture in progressive development.

Agitating and Circulating Solutions

Continuous agitation of solutions at the same time that a continuous flow through the system is maintained, can be easily effected by means of the arrangement sketched below. This plan was designed by John E. Rothwell and



TANK FOR CONTINUOUS AGITATION AND AERATION.

has been used at several mills. It has the advantage of simplicity and of being readily adapted to existing plant. The outlet should be very slightly below the inlet, and, as shown, material can be drawn off from near the bottom of the tank.

Housewarming at the Dome Mill

The 40-stamp mill of the Dome Mines Co., Ltd., was formally started on March 30, though the stamps had been dropping since March 21. The crowds of visitors were taken underground and through the mill, after which the management entertained the party at lunch. On Saturday evening the distinguished visitors were given a banquet at the Majestic theatre, South Porcupine, which was greatly enjoyed. Among the guests were A. Monell, president of the Dome Mines Co., Ltd.; W. S. Edwards, C. L. Denison, Captain De Lamar, John Wilson, W. W. Mein, C. W. Merrill, of the Dome staff; J. L. Englehart, Fred Dane, Denis Murphy, R. T. Shillington, C. B. Flynn, J. H. Black, H. C. Meek, A. T. Cole, Wallace Nesbitt, S. B. Clement, W. A. Griffin, and George Lee.

Addresses were made by Messrs. Monell, Merrill, and others. Mr. Merrill announced that it was expected to make a recovery of over 95% of the gold content of the ore. It is reported that the latest results show that this figure has been greatly exceeded and the mill bids fair to establish a record for high extraction. The flow-sheet of the first Dome mill was published in the *Mining and Scientific Press* of May 20, 1911, and during reconstruction after the fire no essential changes were made in the design. The principal features of the mill are forty 1250-lb. stamps, four Pachuca tanks, 8 by 40 ft., Dorr thickeners, and two 76-frame Merrill presses, making a 4-in. cake.