THOMAS M. BAINS, JR.* asks

Will Radar Aid Our Ghost Camps?

WITH the revival of the War Production Board's gold order, L-208, there may be several of our present "ghost" camps active again. The Whitlock district in Mariposa County, California, is leading off with a geophysical survey of one of its principal properties already known. It was a noted placer producer in the early days. A half century later, it was one of the camps in which the Tendron Mining Company of London operated. That company was one of the world's largest gold operating companies of the last century.

A thorough geophysical survey of the Spread Eagle claim in the Whitlock district of Mariposa County is being conducted by the Fisher Research Laboratory, manufacturer of M-scopes. These instruments are a modification of the radar sets used by the U. S. Signal Corps.

The property now being surveyed was owned recently by the Reconstruction Finance Corporation. It was sold to Mack C. Lake, a San Francisco mining engineer, who has leased it to the Fisher Research Laboratory, Palo Alto, California, manufacturer of the Signal Corps radar sets and of the M-scopes. A thorough geophysical survey is being conducted by Charles Dobbel, one of the mining professors of Stanford University. Surface contouring trenches will follow the M-scope survey.

A typical cross-section of the high-grade portion of an oreshoot may show the following structure: (a) an inch or two of "chocolate" gouge; (b) ribbon quartz carrying both free gold and fine sulphides, principally pyrite, galena, and chalcopyrite; (c) massive sulphide assaying several thousands dollars per ton in gold; and finally (d) a band of white quartz with free gold in splotches or specks and little sulphide. Treatment of this type of ore in a stamp mill results in sliming of the high-grade friable sulphides and fine free gold, which attaches itself to the sulphide slime. This slime passes over plates and concentrators. High recovery is only possible with flotation or cyanide units. No such units have been used in the Whitlock mills. Had the stamp mills of Whitlock been equipped with either flotation or cyanide units, the gold production figures would have been much higher.

Whitlock and Sherlock creeks had rich placers in the early days of California, and some of the earliest U. S. patents were issued in these regions. The Whitlock and Dilts lode claims were patented in the seventies. A point of interest here is that both were patented with only 300-foot widths. With the numerous vein systems, one would imagine that the district would have been tied up with mining litigation, but that phase of mining seems to have missed this district.

It was not until two stock-raising homestead entries were filed in 1919 and 1920, than any conflicts occurred. After several "adverse" proceedings had been filed against the two entries, the local Land Office finally sent surveying parties and special mining engineers into the district to carefully check matters. The legality and seniority of the mining claims were upheld by the Land Office. However, lately, the Land Office has granted grazing leases covering the unpatented locations in the district. It claims that such leases in no way interfere with the miner's right to prospect, locate claims, patent same, etc. At the same time, cattle wander around the claims, doing some good in keeping down the vegetation, but also some damage to structures and personal belongings of the miners. In addition, any mining improvement can be prevented by the lessees until court action settles the dispute.

The Whitlock mine of the Tendron Mining Company was a well-known gold pro-

Figure 1. The Whitlock mine of the Tendron Mining Company, a gold producer between 1896 and 1901. In the upper left is a 20,000-ton dump, principally waste rock from development faces where the vein had split into stringers. Ore was transported by gravity tram from the tunnel portal to a 20-stamp mill.

*Mining Engineer and Principal Economist. War Production Board.

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And, office shoot: too, until about the third level to the sixth level which, as made to it a future source of ore for a small cyanide or flotation operation. The location of the main shaft is shown by the two boiler stacks photographed in the upper right-hand corner of Figure 1. The mine and mill power was steam, generated in the wood-stoked boilers at the shaft cellar and at the mill.

There are no maps of the Whitlock mine. The tracings were destroyed when the office of the Tenorion Mining Company in San Francisco was burned during the fire of 1906. Blue prints were lying around the blacksmith shop as late as 1915, but no one kept any of them and they were destroyed by fire and weather. The mine was worked to the sixth level which, as some levels were 175 feet apart, represents about 900 feet in depth on an inclination of about 70°.

The large oreshoot on the steep vein pitched steeply northerly and the location of the main shaft at the south end of the shoot was a mistake. This shaft was sunk on the vein about 800 feet deep. The drift to the north had to be extended further and further from the shaft stations to reach the south boundary of this shoot, as the shaft was sunk deeper. The Flat or Mill vein, dipping 30° also to the east, intersects the steep vein at an acute angle. Crosscuts were driven from the steep vein workings on the second and third levels to the flat vein. The high-grade shoot of the flat vein pitched south-100 or, the opposite to the shoot in the steep vein.

In 1901, a crisis occurred in the London office of the Tenorion Mining Company and the American properties were closed down. Wood for fuel was also getting scarce and expensive at Whitlock. The property was finally sold to Jacob Tents, who, in 1901 owned the Spread Eagle claim which at present is being surveyed by geophysical methods. At Tents' death in 1908, various groups of his holdings in Whitlock were sold at auction. No mining has been done in the Whitlock mine since 1901.

The Spread Eagle claim was bought by Mullins from the Tents' estate and he mined the northern shaft workings of the claim with a man or two. In 1928, he optioned the property to the Whitlock Mines Corporation, a Massachusetts corporation. A shaft was sunk by this corporation, and during the drilling on the 300 level north, some very high-grade ore was struck.

This bonanza was so spectacular that the mine was visited by hundreds of local and outside parties, who were allowed to climb down the 300 feet of ladder and inspect the ore. Some of the high-grade was packed on five burros and taken to San Francisco by representatives of the county, including the sheriff. The governor of California and the mayor of San Francisco welcomed the delegation at the Civic Center. This stunt by the officials of Mariposa County did more harm to the good name of the county and district than anything that ever happened before or since. It resembled too much the wildcat oil stunts.

However, the mining company was not interested in such wildcat methods, as the Whitlock Mines Corporation turned down an offer of $150,000 cash and the same amount in 90 days. The party in control in Roston figured that the bonanza had a half million or so in it. When he found out differently, he ordered the pumps pulled and the mine has been shut down since. He also allowed the shaft collar to cave, so that there is no way to get to the lower levels at this time.

The Whitlock Mines Corporation then started to develop the Miners' Hope property of the group. After some good ore had been milled in the Mullins' five-stamp mill from this property, a Class B mining loan was secured from the Reconstruction

**Figure 2.** The new type M-scope which geophysical survey of the Spread Eagle district of Mariposa County, is being used in the claim in the Whitlock California.

**Figure 3.** The semi-portable field type of M-scope which is used for depths below 30 feet and up to 250 feet. Under favorable conditions, good results have been obtained at greater depth.

**Figure 4.** Reproduction of the only claim map of the Whitlock area. The Whitlock claim, indicated by W, is at the extreme right; The Miners Hope by M H, near the center; and the Spread Eagle, indicated by S, to its right.
Finance Corporation, all property both real and personal being mortgaged to the RFC. Electric power was brought in from Sheepocks and a fine shaft was sunk on the vein to the 326-foot level. The RFC funds and mint returns from the ore from a stop was used for further development.

Just about the time the known ore shoots worked by old-timers were being reached on the 300 level, the mine was shut down, as the RFC could not see a class A mining loan for the property. A lease was given to two Mariposa miners by the RFC and some shallow ores was mined in the 18 months the lease was in effect. These men cleaned up $10,000 in 10 months.

A watchman was placed on the property by the RFC, but no repair work was done by this man. During the winter season, the collar of the Miner's Hope shaft caved. A few hundred dollars expended in timbering at either the Miner's Hope or the Spread Eagle shafts would have saved the shafts and kept the workings open. No caving would occur below water level, which was at the tunnel level at both properties.

Finally the RFC foreclosed the mortgage and the sale of the Whitlock Mines Corporation's property was ordered by the federal judge in Los Angeles. The "master" appointed by him to sell the property at the county seat, the town of Mariposa, sold the property at public auction. The RFC had a law firm of San Francisco represent it and this firm offered $15,000 as the first bid. Although local miners would have gone almost that high, they did not care to bid against the party representing the RFC. So the one bid closed the sale. The property was conveyed to the RFC and the equipment was sold by the RFC to a second-hand machinery dealer. The property then remained without a watchman and the state taxes were not even paid on it. A mining engineer bought the property from the RFC and then optioned it to the manufacturer of the M-scopes, who intends to use this property as a "laboratory." An illustrated lecture on the use of the M-scopes at Whitlock and other mines was given at the January meeting of the San Francisco Section of the American Institute of Mining and Metallurgical Engineers. It was interesting to note how accurate the ore shoots, with which the writer has had close contact since 1912, were plotted by this method. The old stopes have been inaccessible for many years and no indications of some of them show on the surface. The rich Neville shoot, which produced ore plating $120 per ton, needed thousands of dollars in specimen gold mortared by the lessees, does not show its location on the surface. The survey, however, picked up the location accurately. The ore has been mined, but for some reason, the survey shows where it was before being mined.

The portable M-scopes should not be used for depths below 30 feet. For greater depths, up to 250 feet, the semi-portable field equipment is used. This requires at least two men for operation. It consists of a power radio transmitter and a receiving set. If the electrical field of the transmitter is distorted, due to the proximity of a highly conductive body, it will have an effect on the waves being received at the receiving end. The depth of successful operation depends on the distance of the receiver from the transmitter and on the power output of the latter. The practical depth is about 250 feet, although it is claimed that good results have been obtained from greater depths when conditions have been favorable. This semi-portable set is shown in Figure 3.

Following the geophysical survey, a follow-up with a builder is planned at this Whitlock property. Due to the great number of veins and intersections on the Spread Eagle group, a better site for such work with geophysical instruments would be hard to find. By economic mining and milling methods, following those now being planned for the Spread Eagle group, this district should again enter the productive stage. Outside of the Whitlock shaft, which is not over 800 feet deep on a 70° inclination, there are only three shafts which have reached a depth over 300 feet, and none the 400 level.

U. S. CHAMBER OF COMMERCE URGES METALS SAFFEGUARDS

In a set of policies recently adopted by the United States Chamber of Commerce, a measure to uphold and safeguard the stockpiling of strategic metals was proposed, as follows:

"The war has demonstrated the soundness of the principle of accumulating stockpiles of critical and strategic materials for military purposes. Minerals that do not deteriorate through stockpiling lend themselves particularly to this program. The policy of stockpile reserves of critical and strategic materials for military purposes must not be used for the purpose of stimulating or regulating industry or to control prices."

The declaration, with others covering a wide range of economic subjects, was voted on by the membership in a mail referendum taken on a set of proposals advanced by the chamber's standing committee on policy. Ordinarily, their policies are adopted in an annual meeting. This year the meeting was abandoned because of transportation difficulties.
Negotiations, also, are reported to be under way between the United States and Canada for the creation of a new extradition treaty and a revised form of the existing treaty may be presented to the twentieth Parliament for ratification when the newly elected legislators convene this month. This may have a healthy effect in clearing up the question of mining profits between the two countries.

MINE PROPERTIES TO BE GIVEN BACK TO OWNERS BY THE ARMY

MINING properties located within the Camp Beaus training area in Yuma and Yaquapai counties, Arizona, will be turned back to the owners, including mining and cattle operators, according to word received from Senators McFarland and Hayden. As soon as the Camp Beaus area, which is no longer used by the army for training purposes, has been completely checked for unexploded bombs and shells which must be removed and neutralized, the area will be returned to the owners.

This information was given to Senators McFarland and Hayden by Major R. B. Daugherty, Corps of Engineers, chief of the management and disposal branch, real estate division, office of the division engineer of the war department.

It is the army's intention to compensate mine operators for occupancy of the property and to allow them to resume mining operations permissible under present regulations, according to Major Daugherty.

CALIFORNIA CONCERN RESUMES PHOSPHATE MINING IN IDAHO

T he Waterloo phosphate mine in Bear Lake County near Montpelier, Idaho, is being returned to production by the San Francisco Chemical Company which has held the long-cide mine for many years.

The chemical company is a wholly owned subsidiary of the Mountain Copper Company, Ltd., of California, and is headed by William F. Kett of San Francisco, general manager of Mountain Copper.

The company expects to produce between 40,000 and 50,000 tons of phosphate this year and intends to expand operations as soon as possible. The announced schedule, however, can only be kept if the weather permits operations until mid-November. D. L. (Lowrie) King, for the past three years mill superintendent of the Gray Eagle Copper Company, a Newton subsidiary at Happy Camp, California, has been appointed superintendant of the Waterloo. King, formerly of Montpelier, is a graduate of the University of Wyoming, Class of 1931. He was employed 11 years by the Mountain Copper Company, Ltd., prior to joining the Gray Eagle staff.

J. G. Huseby, mine superintendent of the Mountain Copper Company's Iron Mountain Unit at Matheson, California, has been in charge of the preliminary exploratory work at Montpelier. J. M. Basham, who does consulting engineering work for the Mountain Copper Company, headquarters at Shingle, California, to Ltd., recently went to Montpelier from his examine the property.

The Hunsaker Sand and Gravel Company, which had the contract for the exploration program, also holds the contract for the mining and hauling of ore to the shipping point. A. G. Harmston is foreman for the contracting company.

Part of the phosphate rock production from the Waterloo mine will be sent to California and the balance will be used for the production of superphosphate fertilizer to be used in Idaho.

The Mountain Copper Company, parent of San Francisco Chemical, has been engaged in the manufacture of fertilizers and chemicals since 1900, but as its part in the war effort, for the last two years the company also has produced copper and zinc from its mines in California.

CRITICAL LABOR SHORTAGE IN COPPER MINING INDUSTRY

The critical labor shortage in copper mines resulted in a 72,000-ton decrease in crude production for the month of June, with indications that reports for July will show even a smaller output.

The copper mining industry was short about 9,000 workers, a new high total, for the month of June. At one time, the industry had about 4,000 furloughed men from the service working in the mines. By July 1, that total had dropped to about 500.

During the summer months, many miners usually leave the mines to work in the fields. However, the WMC has urged all miners to stay on the job this year.

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Mining operations have been resumed at the National Mercury mines and the first furnace was started July 11. James P. Vannar of Sunflower, Arizona, is in charge of work. The property, formerly known as the Arizona Quicksilver mines, and more recently worked by the National Mercury Mines, Inc., is located in the Sunflower district northeast of Mesa, Arizona.

The electrolytic copper precipitation plant of the Inspiration Consolidated Copper Company, Tucson, Arizona, which was destroyed by fire last October with a loss of approximately $1,000,000, has been rebuilt. It had been estimated that the reconstruction project would take the principal part of a year, but it was finished in eight months. The work was done under contract. P. D. J. Honeymon, Inspiration, is assistant manager of the company and T. H. O'Brien of Inspiration is vice-president and general manager.

Production is being maintained at the rate of 1,000 tons per three months at the Abell mine, located on the west end of the Dragoon Mountains near Tombstone, Cochise County, Arizona. The property is being operated by the Bargain Mining Corporation, comprised of Chester B. Higgins, Frank Higgins, and George Barron, all of whom may be reached at Tombstone. Principal values are in zinc and copper. The lease and option on the mine were purchased by the present operators early this year, and the former lessees, Adrión Skinner and Dan Lewis, Box 106, Willcox, Arizona, have remained with the mining venture.

E. C. Nummelley, Route 5, Box 533, Tucson, Arizona, is reopening his San Juan mine, which he closed down several months ago because of poor health. The San Juan is a tungsten producer, comprising three claims in the Whetstone mining district southwest of Benson, Arizona.

A crew of 20 men is employed at the Hi-Peak tungsten mine of the U. S. Flure Corporation at Inyokern, California, and the company's 50-ton gravity concentration plant is now in operation. The mine is developed by a tunnel, winze, and raises, and equipment includes a gasoline-powered compressor and a hoist. Company headquarters are located at 12300 Montana, San Fernando, California. Victor J. Hayek, 650 South Grand Avenue, Los Angeles 14, is manager of the mining division and Norman Whitmore is engineer in charge.

The Central Eureka Mining Company will reopen as soon as the manpower situation permits, according to a recent statement by C. C. Prior, president, 111 Sutter Street, San Francisco, California. He stated that reports circulated to the effect that the property would not be reopened are unfounded. The company's mining holdings, located at Sutter Creek, California, have been closed down since October 1942.

Fire at the St. John mine in the Alta Hill district near Grass Valley, California, is reported to have destroyed one of the buildings before it was brought under control. The mine had been reconditioned preparatory to reopening prior to the outbreak of the war and was shut down at that time for the duration. It has been under lease for some time to Ed. C. Jacobs of 221 North Vail Avenue, Montebello, California.

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Write for Bulletin 3-44

SYNTRON CO., 165 Lexington, Homer City, Pa.
The Twin Pines Milling and Mining Company, Box 712, Big Pine, California, is operating a 75-ton gravity concentration unit near Big Pine in Inyo County, treating custom ore from tungsten properties in the district. The plant is owned and operated by Dr. Irving E. Earl of Hollywood, and Clayton Durand of Big Pine is mill superintendent.

The 50-ton gravity concentration plant of the Beebee Mining Company at Isabella, Kern County, California, is handling tungsten ore from its own properties, which include the Black Mountain King, Regan, Grandad, and Blue Diamond mines. No custom ore is being treated. The mill is Diesel powered and mining equipment includes air compressors and jackhammers. Concentrates are shipped to Los Angeles by truck. A crew of six to eight men is employed in the mines and three men are working in the mill. W. P. Stratton, 1897 North Lima Street, Burbank, California, is general manager. Clyde Roe is mill superintendent and Tom Bulley, mine superintendent, both at Isabella.

The Gold Hill Mining Company, Mae Tartar, president, Box 9, Big Bear City, California, has encountered milling-grade gold ore on its No. 3 ore body, and a large tonnage has been blocked out. The vein, which extends for 2,800 feet east and west and intersects a 16-foot vein running north and south. A 1,000-foot tunnel was run to cut the junction of the two veins, and ore has been encountered which assays from $75 to $200 per ton. The tunnel is being cleaned out and reconditioned and when that work is completed diamond drilling is planned. A 100-foot crosscut will be run to cut the ore body at the 500-foot level. The property has adequate housing facilities and a good water supply, it is stated. The mine is located on the state highway between the old Lucky Baldwin and Rose mines, four miles east of Big Bear City. A. L. Rose is general manager.

The Shoshone Mines, Inc., W. Buford Davis, manager, Tecopa, California, is producing lead oxides at its Columbia No. 2 mine, also known as the Noonday, with a crew of 25 men employed. The property is opened by a 750-foot inclined shaft, drifts and raises, and is equipped with a Diesel electric power, Ingersoll-Rand compressor, and other mining machinery. Ore is trucked to the Union Pacific at Dunn.

The Navy is acquiring the失眠 property of the King Mining Company, Cone Junction, California, to enlarge the Naval Ordnance Test Station at Inyokern. The open-pit operation had been under way for just two years, with L. W. King in charge.

Eleven men are employed at the Markle tungsten mine, 13 miles southwest of Bishop, California, which is being developed by A. H. Peterson and John Utter. The property is opened by a 750-foot vertical shaft, and 100 feet of drifts and stopes, and is equipped with a 50-ton mill and regular mining machinery, all Diesel-powered.

The Opah mine near Trona, California, has been purchased by the Thomson Divide Mining Company of Reno, Nevada, from A. L. and Lawrence E. Damon of Trona. The mine is producing lead-zinc ore which is treated at the 150-ton bull mill of Damon and Damon at Trona. Production is expected to reach 50 tons per day as soon as sufficient manpower is available. The company is making an 80 per cent recovery from its ore, producing a 50 per cent concentrate. A flotation-gravity concentration process is used in the mill. The Thomson Divide firm also is testing a large yardage of placer ground in Trinity County and preliminary reports are said to show values ranging from 30 to 70 cents a yard. W. Harry Mitchell is general superintendent at the property. Damon and Damon are operating the Gold Bottom mine in the Slate Range near Trona and are making extensive plans for further development of this gold-silver property. At present about 30 men are employed at the Gold Bottom and Opah but additional men are needed.

Tailings from an old chlorination plant once located near Nevada City, California, are being shipped to the Selby Smelter of the American Smelting and Refining Company for use as flux in the treatment of other ores. The tailings are said to be yielding $1 per ton in gold and 71 cents in silver to M. Jordan and J. Glennan of Nevada City. The tailings are residue from the old chlorination process of recovering gold from concentrates, widely used some years ago, the plant from which the tailings are being recovered having ceased operation about 50 years ago. It is estimated that there are approximately 2,600 tons of tailings available in the present operation. When located they were covered with about 15 inches of overburden. Last winter Jordan and Glennan shipped tailings from Drytown to the Selby plant and at present are checking other dismantled chlorination plants in the area in search for additional tailings.

Henry M. Allen and associates of Fresno, California, are operating a suction gold dredge on the Henry Baschi placer.
about two miles from Lotus, El Dorado County, California. The suction drill pump works to a depth of 30 feet and the recovery equipment has a capacity of 35 cubic yards of gravel per hour. The dredge can be dismantled, assembled, and moved to new locations easily and can be operated profitably on small deposits, it is stated. Allen plans construction of a larger plant after the war.

Operation of its Pine Creek tungsten milling plant at Bishop, California, has been resumed by the U. S. Vanadium Corporation. The unit had been closed down since early in January because of an insufficient tonnage of custom ore. All operations at the Pine Creek unit are managed by M. N. Shaw, Bishop, general superintendent. U. S. Vanadium is headquartered by John B. Van Fleet, 36 East Forty-second Street, New York 17, New York.

I. L. Brownell of Orland, California, plans to reopen his Lost channel mine located in western Plumas County near Morris Lake, north of Belden, California. It is said to be an early day producer of placer gold. Brownell also owns asbestos claims in the same area. The asbestos, with fibers ranging from two to eight inches in length, is found in a well-defined vein. A parallel vein is said to carry mill-grade gold ore.

With the lifting of the gold mining ban, preparations are being made for an extensive mining and milling program at the Brush Creek mine near Goodyear Bar, California. The property is being operated under lease and option by Alfred L. Merritt, 2010 Garber Road, Berkeley, California. A Caterpillar Diesel electric generator set has been purchased and will furnish power for the individual motors driving the crusher, ball mill, jigs, and other equipment. As the result of a development program initiated recently, substantial ore reserves have been blocked out in the upper adits. A new adit also is being driven which is expected to cut the vein at an additional vertical depth of 110 feet. Allowing for the dip of the vein, this will give stoping backs of 175 feet. The ore now being blocked out in the upper adit is said to be of exceptionally good grade. Work at the mine is directed by Dannor Dorro, mine superintendent, Box 55, Bowman, California. The property is owned by Fred F. Cassidy, president and general manager of the Alpha Hardware and Supply Company, Nevada City, California.

A survey is being made of the Bowman group of four lode mining claims for the purpose of securing a patent to the property. The group is held by the Gold Meadows Mining and Milling Company, John W. Ross, president, 2210 1st Street, San Francisco, California, and is located in the Spring Garden mining district of Placer County about six miles from Forest Hill, California. Arrangements are being made to sink a new vertical shaft to prospect the downward extension of the vein system, from which a substantial production was made near the surface.

V. F. Rodgers of Berry Creek, California, has resumed work on his Sunset man-
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Black Sheep

Stock control of the Joe Dandy Mining Company of Cripple Creek, Colorado, has been acquired by a group of men, some of whom leased the mine in 1934 to 1936, operating as the New Zealand Gold Mines, Inc. Albert S. Konselman, 1010 Wood Avenue, Colorado Springs, who was engineern for the New Zealand concern, is in charge of present operations. All available power has been removed from the underground workings of the mine, but a considerable tonnage remains in the open pit. This, however, will not be mined for the present, but all available labor will be used to reopen the old workings and carry on an extensive exploration program. The 800-foot shaft has been cleaned out and repaired, work having commenced March 7, when the group started at the Joe Dandy. Five men are employed at present, but 10 more are needed. A diamond and power drill are being used underground to prospect for ore. The group hopes to have the property ready for production by the time sufficient labor is available.

The Mint mine at Empire, Colorado, is expected to be the first in the Empire district to resume operations since July 1, 1945, when the gold closing order was rescinded. Karl W. Du Bois, Box 102, Empire, is leasing the lower portion of the property from Henry C. Nelson, Box 24, Empire. Although considerable work has been done in the upper levels of the mine, little development has been done below the main tunnel level. Du Bois has installed a compressor and hoist preparatory to sinking from the main level and blocking out ore below that point.

Reorganization of the Magnolia Gold Mining Company of Alma, Colorado, is proceeding, no objection to the proposed plan having been raised by creditors, most of whom are residents of Detroit, Michigan. The company holds the Magnolia gold mine and 60-ton flotation mill in Park County near Alma. H. L. Wilson, 8153 West Jefferson Avenue, Detroit, is one of the company officials and W. E. Van Cooten of Alma was general superintendent when the company was in operation.

Development of the Lead Carbonate mine on Cement Creek near Silverton, Colorado, is being continued this season by Vaughn Jones and H. L. Roff, both of Silverton. Production averages 20 tons of ore a day, values being in lead, zinc, silver, and gold, and comes from the Mockett Bird vein.

The NWLB upheld the decisions of the Nonferrous Metals Commission on all counts in the case of the Climax Molybdenum Company and the International Union of Mine, Mill and Smelter Workers (C. I. O.). The union had appealed from the company's denial of a general wage increase of not less than 50 cents a day, contending that Climax wages should be comparable to the Coeur d'Alene, Idaho, wage scale. The company's denial of sick leave was affirmed. The issue of severance pay was remanded to the commission. Operations at Climax are under the general management of W. J. Coultier, 421 Continental Oil Building, Denver 2, Colorado, president, and the Wickwire-Spencer Steel Company of New York and San Francisco. Both firms engage in iron and non-metallic mining and in the manufacture of a wide variety of wire and wire cloth products.

According to reports, the Minerals Reclamation Service, headed by Richard Charles King, Box 1459, Colorado Springs, Colorado, has purchased the Alma Zinc Company which has been operating the Walker zinc mine in Backskin Gulch near Alma, Colorado. The lease was conducted with the aid of an RFC loan, which the new owners plan to liquidate. The Minerals Reclamation Service is the largest stockholder in the Homestake Zinc Company, operator of the Hilltop mine; owns the Reciprocal mill at Alma School Section lease and the Robbins and Palace Buildings at Cripple Creek; holds an interest in the North Alma Mining Company; and is negotiating for the Caledonia mine at Cripple Creek.

It is reported that talks material on the Lost Day property in the Iron Todd district near Ouray, Colorado, is being mined by bulldozer and trucked to a nearby mill over a recently completed half-mile access road. Earl A. Alexander of Ouray owns and operates the property which father, Jacob Alexander, located. Predominant values are in lead.

Production has been resumed for the season at the Micky Green mine in Poughkeepsie Gulch five miles from Ouray, Colorado, which is owned and operated by M. Covel, E. W. Covel, and E. E. Wheeler, all of Ouray. Production averages 25 tons of lead-zinc-silver ore daily.

During the past winter, the Micky Green was inaccessible because of snow,
CALIFORNIA TUNGSTEN AND CHROMITE OUTPUT REPORTED

Press Bulletin Nos. 297 and 298, containing data on California production of chromite and tungsten in 1944, have been published by the California Division of Mines. The information was compiled under the direction of Walter W. Bradley, state mineralogist.

During 1944, the state department reported, there were shipped from the state's mines 28,811 long tons of chromite, averaging 49.58 per cent Cr₂O₃. This production was worth $1,190,513 f.o.b. mine and came from 183 properties in 22 counties. Principal production came from nine counties, with Del Norte County leading with an output of 11,046 long tons of chromite valued at $491,141.

The division also has announced California's production in 1943 amounted to 27,741 long tons of ore, averaging 43.8 per cent Cr₂O₃, and valued at $2,334,838 f.o.b. mine. This production came from 151 properties in 21 counties. In 1942, it was further reported, California had a total output of 47,521 tons of ore, averaging 42.85 per cent Cr₂O₃, valued at $1,741,086 and coming from 95 properties in 17 counties. The 1942 and 1943 statistics on chromite have not previously been released owing to restrictions by the Office of War Information.

Shipments of high-grade tungsten ore and concentrates in California during 1944 amounted to 203,965 units of WO₃, or an equivalent of 3,399 net tons of 60 per cent WO₃ concentrates valued at $4,335,810. Inyo County had the largest production in California, with an output totaling 163,099 units with a valuation of $3,849,015. The 1944 output of tungsten showed a decrease in amount and value as compared with that of 1943, which amounted to 254,118 units of WO₃, or an equivalent of 4,325 tons of 60 per cent WO₃ concentrates, valued at $5,910,745.

COLUMBIA, CALIFORNIA, BECOMES CAPITAL OF THE STATE FOR A DAY

This historic gold mining town of Columbia, California, which in the days of the gold rush missed becoming the capital of the state by only two votes, received that belated honor on July 15, 1945, when it was the capital for 24 hours. Governor Earl Warren and his staff reside there and signed the bill which saves this town for future generations by making it a state park.

Here are preserved the old stone buildings, St. Anne's Church, built by the miners, in which are housed in the hundredth anniversary of the discovery of gold.

NEIHART OPERATORS FINED BY NONFERROUS METALS COMMISSION

SEVERAL mining operations in the Neihart district of Montana were interrupted when the Nonferrous Metals Commission ordered the operators with violation of the wartime wage code. The Bennett Mining Company, Carroll E. Bennett, Box 1135, Great Falls, Montana, general manager, and L. B. Stark of Neihart, operator and manager of the Star mine, were fined a total of $3,300. The Montana Leasing Company was assessed approximately $6,000 for similar violations.

The Bennett company employs between 25 and 30 men in its mine and 100-ton mill. From October 1943 to September 1944 Bennett paid $7.50 a day for miners, mill operators, and truck drivers. After September 1944 the firm was ordered to cut back to the area rate of $7 a day.

The Montana Leasing Company operates the Lexington, Benton, and Snowdrift groups of claims near Neihart and treated ore in the 100-ton Lexington flotation mill. F. Clayton Keane and James A. A. Allen, both of Wallace, Idaho, are the principals of this operation.

Permission has been granted since by the NWLB to resume contracting in the district and an adjusted satisfactory scale has been approved for truck operators and mill men. The district is again comparable to other sections of the state relative to wages for these various types of work.

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PINE CREEK AND ADAMSON MINES STUDIED

A new report on the tungsten deposits of the Pine Creek and Adamson mines of the U. S. Vanadium Corporation near Bishop, California, has been completed by the U. S. Geological Survey. This survey is part of the general comprehensive investigation of domestic tungsten, molybdenum, and copper deposits which the USGS has been conducting.

A preliminary report, USGS Bulletin 591-E, "Tungsten Deposits in the Sierra Nevada near Bishop, California," was published in 1941, and the new report brings the data on the two mines up to date. Although not yet available for general distribution, the report, which is illustrated by 25 maps, has been placed in open files. These copies may be consulted at the following offices: Geological Survey Library, Federal Works Agency Building, Washington, D. C.; Geological Survey Western Regional Office, 506 Federal Building, Salt Lake City, Utah, and was signed by State Division of Mines, Ferry Building, San Francisco 11, California.

USE OF SILVER ALLOYS IN THE POSTWAR AIRCRAFT INDUSTRY

In the opinion of O. A. Perry, process engineering engineer for Douglas Aircraft at El Segundo, California, many metals will assume unexpected positions in future aircraft.

Among those specially mentioned were the silver alloys which he believes likely to replace molybdenum and tungsten in the manufacture of parts which require considerable tensile and stress strength.

The installation of induction heating equipment on a large scale is becoming more and more prevalent throughout the aircraft factories, Perry said. This in turn makes an excellent line of control for cooling units for the fixtures as well as more and more inclusion of silver in aircraft designs.

"The old conception that brass and other alloys are superior to silver alloys has been definitely disproved, not only in the past, but in actual production," he explained. "For example, our use of silver alloys for induction heating on Corbier boiler tips not only makes a better finished job, but one that is more easily melted down for further repairs. In many stress sections where localized hardening is required, silver is an excellent alloy material. Western metals will find a much more extensive market in the aircraft industry of the postwar era than has been experienced previously."

WORKMEN'S COMPENSATION BILL PASSED IN CALIFORNIA

A WORKMEN'S compensation bill, which provides for permanent disability benefits to California persons suffering temporary and permanent disabilities, was passed by the state legislature and was signed by Governor Earl Warren on July 14. Under the new legislation, costs of the temporary disability are deducted from permanent disability benefits under the old law, and the new law states that no more than 25 per cent of permanent disability deductions may be made.

ALUNITE AT MARYSVILLE

RE Duel has been announced by the U. S. Geological Survey of geologic and development maps of the Winkelman alunite deposit in the Bullfrog District of Marysvale, Utah, in Pine County. Study of this property is part of the survey's strategic mineral program, started in 1942, and carried on each summer since that time.

The Winkelman deposit is considered a possible source of both aluminum and potash. The ore occurs in tufts as slanlified and silicified masses replacing the tuff. The highest grade material is gray and fine grained, varying in color from white to pink to yellow-green, usually mot tled with black, and has a conchoidal fracture. The report gives an indicated reserve of over 1,000,000 tons of alunite, 10 per cent of which is approximately 1,000,000 tons of inferred ore for near-by unexplored deposits.

BUREAU ISSUES 1944 FIGURES ON GOLD AND SILVER PRODUCTION

The Bureau of Mines, with the cooperation of the Bureau of the Census, has released final estimated figures of refinery production of gold and silver in the United States during the calendar year 1944 as follows:

<table>
<thead>
<tr>
<th>State</th>
<th>Gold</th>
<th>Silver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>27,084</td>
<td>1,424,119</td>
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<tr>
<td>Arizona</td>
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<tr>
<td>California</td>
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<tr>
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<tr>
<td>Wyoming</td>
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</table>

Production of gold in 1944 totaled $37,397,300, with a value of $85,575,300, contrasted with $1,941,522 ounces valued at $84,808,270 for 1943. The largest production of gold in the U. S. was reached in 1944, when the output of 6,003,815 ounces had a value of $219,108.

Silver production decreased from 40,000,121 ounces with a value of $29,084,500 in 1943, to 35,651,049 ounces with a value of $22,851,067 in 1944. Silver reached its highest production level in 1915 with 74,961,075 ounces valued at $87,397,590.

THE MINING JOURNAL for August 15, 1945
GOLD OPERATORS IN CANADA AHEAD OF U. S. GOLD MINES

Like those in the United States, the gold miners of Canada are finding their progress impeded not only by lack of machinery and parts, but also by lack of manpower. In Canada, however, the gold miners are in a better position to make the most of whatever labor and equipment are available, since the Canadian government never ordered the gold mines to be closed. There was the Metals Control Order, which was lifted recently and which restricted the extension of gold mining and the expansion of existing operations.

During the war period, Canadian operators continued exploratory and development work in their gold properties, in contrast to those in this country who are now having to expend time, money, and labor in deadwork preparatory to resuming mining.

Although first priority on machinery and equipment is given to war and highly essential civilian requirements in the dominion, certain obstacles confronting the Canadian gold operator in respect to obtaining these supplies have been removed, both in Canada and in this country. All this combines to put the Canadian gold miner in a favored position as soon as sufficient manpower is available. Meanwhile, Canada is looking forward to an early easing of the labor situation, with the discharged veterans returning to civilian life and occupations and the war workers going back to peacetime jobs.

PRODUCTION AND SHIPMENT OF MANGANESE ORE DECREASE DOMESTIC production of manganese ore containing 35 per cent or more manganese (natural) during May of this year amounted to 15,400 short tons, compared to 18,400 short tons for April. Shipments decreased to 15,300 tons from the 18,200-ton figure for April, according to a report issued by the Bureau of Mines. The monthly rate of shipments averaged 20,635 tons in 1944, when the total amounted to 247,616 tons. Output in 1944 was second only to the record year of 1918 when 342,572 short tons were shipped from domestic operations.

Arizona, Arkansas, Montana, Nevada, New Mexico, Virginia, and Washington reported shipments of manganese ore in May. Montana shipped 70 per cent of the total.

ARIZONA DEPARTMENT GOES ON CURTAILED SCHEDULE EFFECTIVE July 1, 1945, the Arizona Department of Mineral Resources, with headquarters at 304 Home Builders Building, Phoenix, Arizona, reduced its force of field engineers from four to two men. The state, as a result, has been divided into two districts instead of four. The change was made necessary by the reduction in the department's appropriation, authorized by the recent session of the state legislature.

Under the new program, one engineer will serve the southern and eastern districts of the state with headquarters at Tucson, while the second will cover the northern and western sections with headquarters in Prescott.

Other functions of the department will continue as before and the organization's Washington contacts will be maintained. A comprehensive program has been worked out to aid the state's small mine operators, including assistance in making applications for mine loans, gasoline for mining purposes, and supplies and equipment.

ECONOMIC MINERAL REPORT IS ISSUED IN CALIFORNIA THE California Division of Mines has announced publication of Bulletin 130, titled "Economic Mineral Resources and Production in California—A Survey with Reference to Postwar Employment." The report is made to the State Reconstruction and Reemployment Commission, Col. Alexander R. Heron, director, pursuant to the provisions of the special appropriation made by the legislature last year.

Samuel H. Delbourn, consulting mining engineer of New York and Los Angeles, made the survey and prepared the report. He was assisted in this work by staff members of the Division of Mines and other contributors, including George Foster Bain, Walter W. Bradley, Hadley E. Bramel, S. B. Coglan, Robert M. Bearis, J. Clark Sutherland, Roy E. Tremoureaux, and Herbert Waterman.

The past production of 60 or more mineral substances commercially produced in California is reviewed in the bulletin, and...
CATES ANNOUNCES PRESENCE OF ALUMINUM AT MORENCI MINE

This first announcement of the presence of aluminum in the copper ore at Morenci, Arizona, and details of a development process for handling it, was made recently by Louis S. Cates, president of the Phelps Dodge Corporation. "There is a large amount of aluminum in the copper ores at Morenci," he said, "but it cannot be considered an asset at the present time, and any value must depend upon changing conditions in the future."

"The aluminum content now is included in the tailings or material rejected from the copper concentrator," Cates explained. "The Morenci tailings contain approximately 17 per cent aluminum. This should be contrasted with the 24 to 30 per cent in the Oregon and Washington aluminum-bearing clays. The only type of aluminum-bearing ore of importance at the present time is bauxite.

"The great heaps of tailings at Morenci could be reclaimed at any time. We have worked out a successful process for reducing the aluminum from the tailings, but only on a laboratory scale. A large scale test would have to be inaugurated before the process could be depended upon. At the present time and undoubtedly for a number of years to come, it would be impossible to compete with aluminum produced from bauxite ores or from clays and other sources existing closer to points of cheap power."

Cates stated that the cost of producing alumina from clays, bauxite, tailings or other similar materials is above that of the production from bauxite. So, as long as bauxite of high grade is available, the development of these other sources of supplies will be postponed.

Cheap power also is essential to production, Cates said, but "Morenci is not located at all close to any of the low-cost plants." However, during the period when the War Production Board was concerned over aluminum supplies, the company undertook a research program to develop a process to extract alumina from the Morenci tailings. While all so-called porphyry copper deposits contain aluminum in varying percentages, the Morenci ores are said to contain a slightly greater amount than usual.

"A satisfactory process was developed on a laboratory scale and the results were reported to the War Production Board. By the time the advisory committee of the board had turned in its report, however, the submarine menace had practically disappeared, so any further test work was not deemed necessary."

Cates explained that the submarine menace had practically disappeared; however, he said, "The submarine menace was not of real importance and was of little known part in shoring up the nation's defense, but it did mean for our currency, backed by gold, that we have not free at this writing.

In the near postwar future, the American Government may be required to restore private ownership of gold, thus making currency once more redeemable in tangible worth, as a means of stabilization. The government's obligations and thus aid international liquidation of trade balances by making our figure conform to the levels established by world demand, lessen the danger of drainage here, take account of the rising price-index against gold. A figure somewhere between $50 and $150 an ounce would restore the gold-commodity price equilibrium, provide a greater coverage for more of the government's obligations, and thus aid in the maintenance of public confidence."

THE New York Times (March 2, 1945) from its ivory tower was horrified at the prospect of a higher figure. "Nothing could possibly be more mischievous at this time than the proposal of several members of Congress that the price of gold be raised to $56 per ounce. Even the discussion of such a proposal would undermine faith abroad in the integrity of the American dollar." (When the British raised their gold price in June 1945 the Times had no criticism. The editor was nodding.)

Gold is selling in Lisbon and Cairo, from Bagdad to Bombay, at from $58 to $90 per ounce (against American paper money in many cases), not in token lots, but in unlimited demand. After the war the demand for our currency, backed by gold, will be so great throughout the world that a price of twice $50 would not deter checks, which are transfers of credit on the books of commercial banks, and may be replaced by currency on demand. There are also $16 billion of deposits in Federal Reserve Banks, secured by $4 billions in gold. The banks estimate that by the end of 1945, at the present rate of increase of circulation and deposit, the gold reserves may be insufficient to meet the lawful rate, at current price and reserve ratio. Gold also plays an important if little known part in shoring up the national debt, which will reach $300 billion by the spring of 1946. The rise in price and increasing demand for gold abroad, with certainty will accelerate in the wake of the war, must be met here, if we are not to see our reserve siphoned off by more realistic nations as loans, settlement of trade balances, etc. The measure to slash our tariffs will produce unfavorable trade balances, which we can settle—in gold. Brettton Woods may obligate us to ante six billions, six billions that we have not free at this writing.
Drifts and Crosscuts

Now that V-E and V-J days are behind us, the mining industry is facing the necessity of immediately finding the proper answers to many questions on which too little thought and deliberation have been expended. The probable postwar economic problems of the mining industry have been known to us for some time, but, as the demands of production for the war effort were keeping us very busy, we did not give as much study to the postwar picture as we should. Now we are actually in the postwar era and we must find the answers without delay.

We very definitely are going to face a demand that Congress extend its recent action in providing a non-annulment clause in the premium-price plan for copper, lead, and zinc. This action, not popular with some members of the House and President Truman made a special point of expressing his disapproval of that feature when signing the bill. While the premium prices are (illegible until authorized until) June 30, 1946, and aggregate a relatively small amount of money, the demand to rescind is going to be based upon principle.

Those making such demand are not going to take into consideration the intent of Congress in enacting this legislation. The intent was to give positive assurance of continuation of prices for a period sufficiently long to allow planning for additional production for war purposes and, if V-J day did come, to carry over during reconstruction and provide stabilized employment in the industry. Manufacturing has a job to do in converting plants to a new use as quickly as possible. Manufacturing, the demand to rescind would mean large scale unemployment in the mining industry temporarily and long term since it would require the raw materials for use in those plants. Hence, raw material demand would normally lag behind industrial reconstruction.

The mining industry is going to have to exert a lot of effort and do a lot of arguing with Washington policy-makers to keep them from upsetting the orderly reconstruction of the copper, lead, and zinc mines and still leave them in position to take up their task in being ready to supply the postwar metal requirements of the nation.

Here are but a few of the hundreds of questions on which answers must be found in the next few months. The burden is on those engaged in the industry to see to it that the solutions are as such to provide a future stable mining industry in the United States. There has been no time in many years when it has been as necessary to do thinking, planning, and work to see to it that the mining industry is properly launched on the right road. We must remember that there are interests which are deliberately trying to steer the course down roads other than those which will permit domestic metal production.

What about stockpiling? Are we to remove surplus and store them for a future emergency, or are we going to dump them on the market and stop all mining until they are consumed? If we have stockpiling we are going to have an adequate "Buy American" clause, or is it going to be for the purpose of providing employment in foreign countries? Is the stockpiling principle to be merely that of national security, or is that angle to be combined with policies of a stable and self-sufficient economy? Is the stockpiling policy to be fixed definitely by congressional action, or is it to be so flexible that it can always be the "Sword of Damocles" over the head of the industry?

Is production to be controlled, as we know the present capacity of the world to produce metal is far in excess of even the most optimistic peacetime requirements? If production is to be controlled, will it be international or domestic control? Are we to revert to the policy of "the survival of the fittest and the devil take the hindermost"? Are we to have government financing and subsidies? Can we have subsidies without controls? Are prices going to be given a free swing with a view to the ultimate finding of economic levels without regard to employment provided? Are we going to have subsidies paid to individual mines rather than tariff protection to the industry?

Is the tax situation going to be adjusted so that development and maintenance, neglected during the war because of the demand for maximum production, can be done to bring the mining industry back to more nearly normal conditions? Are the financing conditions going to be relaxed so that we can make an attempt to replace the resources which have been expended for war purposes? Are we to have continuation of government mining regulations? Or, to discount the argument against domestic mining, do we again go in for survey and see what we still have that can be economically used? What is to be the place of gold and silver in the postwar picture? Is gold and silver to be used for war income and reversion is to be to a precarious measure? Are we to give positive assurance of continuing prices for gold and silver to be kept in a world picture, or is each nation to handle them in its own way regardless of others? Are gold and silver to revert to commodity use?

Are the mines to have an opportunity to recover wartime capital investments? Are they to be permitted to replace or get paid for their exhaustion reserves? Are we to be dependent upon foreign-produced metals and minerals in the future? Are we going to survey and see what we still have that can be efficiently and economically produced and used? The above are but a few of the questions assembled in a hit-or-miss fashion.

There are hundreds of other questions which we have been thinking about, but on which we have not thought too deeply because we were not pressed for an early answer. We now have reached the time when an answer is going to be found and it is up to us as to whether we find the answer which will preserve the domestic mining industry or whether some other one will find an answer which will fit into his view of world economy. It is up to us as to whether we are going to have a continuation of the free enterprise which developed United States mining, or whether we are to be a small part of a completely controlled economy.

There is probably no industry that has been as weak in long-range planning as this mining. There is an industry that has been as negligent in participating in its own program for the future in a broad way. It is an industry that always has made its plans and programs on the basis of individual production units and ignores the national or worldwide picture.

However, right now we are on the threshold of an era that demands something more than individual initiative and planning. It requires collective thought and cooperation and it is to be hoped that those engaged in the mining industry will find leading the procession rather than sitting back and merely taking the crumbs which drop from the table of someone else. It is a time when we get in and work and think and see that post-war mining starts off on the road to a stabilized economy in which will minimize the hazards. We have enough hazards in mining now without letting others be created. Let's go to work!
A NEW type of mining for cinnabar has been introduced by the Enterprise Engineering Company of Oakland, California, at its James Creek placer operations in the historic Aetna Springs mining district of California. This project is said to have proved that finely divided cinnabar, as found in the James Creek placer, can be recovered profitably by large-scale dragline dredging methods as developed by the company.

During the tuning-up period, May 1 to June 2, 1945, the company's Diesel-electric dredge, working only one shift a day, handled 1,000 to 2,000 cubic yards of gravel per shift at an average cost of 10 to 15 cents per yard. Assay reports show the recovery to be 70.8 cents per yard. At the submittal of a report for clearing the land with the dragline shovel, for refueling, and for mechanical adjustments.

The test run further showed that the dredge was operating at a much greater degree of efficiency than had been expected. Instead of the calculated burning off of 8 to 10 tons of concentrate daily, it was indicated that burning would have to be from 18 to 25 tons a day in order to make a constant full recovery of the cinnabar in the concentrate and that this would be possible without additional concentrating.

In addition, chromite was found to be a substantial byproduct. A composite sample of the black sand of the concentrate, assayed by Pan-American Engineering Company, was reported to show 22.55 percent Cr₂O₃.

So successful were returns from the tuning-up period, the management for Enterprise Engineering took steps immediately to effect the indicated increased recoveries through further expansion of the working program. This stepped-up program calls for the complete electrification of the project and purchase of a bulldozer for land clearing. The 10-ton Herreshoff furnace and condensing plant, on order from Pacific Foundry Company, Ltd., of Oakland, was increased to one of 20-ton capacity. A second shift was employed and a third is scheduled to follow electrification and furnace installation.

Contract for the electrification of the project was awarded to the Crown Electric Company of San Francisco which is to erect a company-owned high-tension line to connect the company's operation of the Pacific and Electric Company's 3-phase 6,000-volt power service. From the submittal of a report, the electric line will go to the furnace in the camp and then down James Creek two miles to a portable shore station opposite the dredge. When the Diesel-electric power unit is removed, power will go by cable directly to the main dredge transformer, on Deck B, from the portable shore station. The dredge transformer will step the current down to 440-, 220-, and 110-volt. The circuits then will pass through breaker and resistor panels to the main switch panel. At five points on the boat electric push-buttons are available to stop all machinery in event of accident or other emergency.

Henry D. Ott, company engineer, who pioneered dragline gold dredging in Nevada in 1937, is said to be largely responsible for the development of the idea of utilizing dragline dredging methods for cinnabar. Despite considerable professional skepticism as to the practicability of profitable large-scale recovery of the James Creek cinnabar, he proceeded carefully with his plans. The company now claims to be the world's only cinnabar dredging project, with mining procedure marking a new milestone in the economic recovery of quicksilver. R. Lee Cate, president, adds that the stepped-up program will make for an over-all economy through increased production at decreased cost per yard because of continuity and smooth flowing operation.

THE James Creek plant is a 50 by 40-foot Bodinozen dredge, constructed of five steel pontoons and redesigned for jigging. It is equipped with a 10-inch Fairbanks-Morse dredge pump; a revolving trommel, 8 by 48 feet inside measure, with a 23-foot screen section of ¾-inch perforation; a steel stacker with a 50-foot by 30-inch rubber belt conveyor; five two-cell, 48-inch end-flow Pan-American placer jigs; pressure head tank; a 2½-inch Wilfley sand pump; main concentrate sump built into pontoon; a sand drag, classifiers, and de-waterer; concentrate hopper, and water feed lines.

The dredge pump is driven by a 60-horsepower Western Electric motor. A 40-horsepower Westinghouse gear-head motor operates the trommel, while a 15-horsepower General Electric gear-head motor works the stacker. Three jigs have 2½-horsepower United States motors; the other two are driven by one 5-horsepower motor. The sand pump operates on a 3½-horsepower General Electric motor, while another motor drives the sand drag and classifiers.

Approximately 6,000 gallons of water a minute are delivered through the boat by the dredge pump. This is accomplished by a stepped-up program of mining.

Enterprise Engineering Company reports that the results achieved by its dragline dredging during the test period, were so successful that arrangements have been made for a 30-ton Herreshoff furnace and condensing plant and greatly expanded operations. This company proposes to dredge the James Creek placer, estimated to contain 2,000,000 cubic yards of cinnabar-bearing gravel.

**San Francisco, California.**
through a 12-inch suction line equipped with a 12-inch check-valve and revolving screen at the intake. A 12-inch main feed line lifts the water about nine feet above the pump for distribution to the six-inch trommel feed and a six-inch sub-feed line for jigs, feed hopper, and pressure head tank.

The dragline, a heavy-duty Koehring unit equipped with a two-yard shovel, is handled by Dean Sewell. It delivered gravel to the feed hopper of the dredge at the rate of 215 yards per hour during the test period.

As the gravel drops into the feed hopper from the dragline shovel, it is washed down onto the upper hopper and two in the lower hopper. A three-inch line delivers water to the rougher and cleaner jigs on port side. The total concentrate discharge of the rougher jigs is deposited into gangue pots under each jig from which it is washed through rubber hose to the main concentrate sump.

Hutch water is delivered to each cell of the three rougher jigs on the starboard by two-inch lines off the six-inch sub-feed; a three-inch line delivers hutch water to the rougher and cleaner jigs on port side. Hutch concentrate discharge from the rougher jigs is deposited into gangue pots under each jig from which it is washed through rubber hose to the main concentrate sump.

The concentrate sump is elevated by the sand pump to Cell No. 1 of the cleaner jigs. Water in this cell is kept at constant uniform pressure by the pressure-head tank located on the upper deck. Cell No. 2 of the cleaner jigs takes only overflow from the first cell, and its hutch concentrate discharge is returned to the main concentrate sump. Hutch concentrate discharge from Cell No. 1 is lifted by sand drag to the preliminary classifier where whatever is dropped back to the bottom of the classifier and dewaterer, where in a revolving worm reduces the water content from 20 to 8 per cent, approximately, as the concentrate travels upward to the concentrate hopper. Water from the dewaterer and classifiers is collected in a drainage sump for return to the main concentrate sump.

The concentrate drops by gravity into one-yard skips under the concentrate hopper. These skips are swung over to shore by dragline for transportation by truck to the farmase.

The company estimates that even at the increased rate of mining proposed by the increased program it will take at least three years to dredge out the property.
also has reported a net income, before depletion, of $591,069 or 50 cents a share for the six-month period ended June 30, 1945. This compares with an income of $991,540 or 84 cents a share for the first six months of 1944. T. H. O'Brien of Inspiration is vice-president and general manager.

A second compressor has been installed at the Sullivan or Crosby claims located near Hilltop in Cochise County, Arizona. The Sullivan property is a lead producer, worked by A. R. Byrd, Jr., Box 5226, Tuscon, Arizona, who holds a long-term lease from the owner, George H. Crosby, 2925 East Superior Street, Duluth, Minnesota.

The St. Louis Smelting and Refining Company of St. Louis, Missouri, has qualified to do business in Arizona. Jean McCullum, 725 Chestnut Street, St. Louis, is vice-president of St. Louis Smelting, and I. L. Hunt of Tucson, Arizona, has been named the company's statutory agent in Arizona.

C. H. Manly, Crown King, Arizona, is reported to have a crew of 100 engaged in constructing one mile of access road to the Mohawk mine about 9½ miles from Crown King, preparatory to mining operations. The Mohawk comprises five patented lode gold claims, known as the Mohawk, Midway, Hudson, Pittsburgh, and Aulaplaus, and two mill site claims, all located in the Bradshaw mining district of Yavapai County, Arizona. The property has been credited with a production of some $10,000 in gold when it was last worked in 1929. Extensive development work was completed by farmer operators, but when the claims were purchased by Manly last year an open-pit operation, which is more than 200 feet long, was accessible.

Construction of a new ore bin at the EI Oro mine is reported to be nearing completion, and it is expected that shipments to the Keystone mill will be started as soon as the project is finished. Construction work is being directed by Karl Hall. The EI Oro is a lead-silver property located near Chloride and about seven miles from the Keystone plant of the Mineral Park Milling Company. Some 15,600 tons of ore are said to be blocked out in the EI Oro. The property is operated by A. Dibert of Chloride and George N. Foster, 364 South Spring Street, Los Angeles 13, California, partners.

William C. King of Hereford is starting work at a tungsten property located in Ramsey Canyon in the Hereford mining district of Arizona. The property will be known as the KH mine, and development work is proceeding on a small scale. It is reported that production is being maintained at the Elma mine at the rate of five cars of copper-silver ore per month, and shipments are being made to El Paso. The mine is a part of the old Central Copper holdings at Dos Cabezas, Arizona, and is operated by C. A. Wembacher, Box 43, Dos Cabezas; and George S. Stickradt, Box 44, Dos Cabezas, partners. It is worked under lease agreement with Edwin I. Tout, owner, Dos Cabezas.

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THE MINING JOURNAL FOR AUGUST 30, 1945

Sampling operations are proceeding at the old Sidewinder mine, a gold property northeast of Victorville, California, preparatory to making milling tests. The mine was leased recently to the Valton Mining and Exploration Company, E. P. Dorr, 3220 Lemon Avenue, Long Beach 6, California, general manager. In addition, the Valton concern controls several tungsten claims in the Shadow Mountain District of Adelanto, California. These claims also have values in titanium and molybdenum. A small pilot plant has been in operation at the Shadow Mountain claims, and the company is planning to install a 150-ton mill in the near future.

The U. S. Smelting and Refining and Mining Company is conducting an exploration program at property in the Meadow Lake district northwest of Pioche Lake near Colfax, California. Principal values are reported to be in copper and gold, and the project is under the field engineer, Miles P. Romney, Box 990, Salt Lake City 13, Utah.

It has been reported that E. P. Smith of New York City and A. H. Haller, 412 West Sixth Street, Los Angeles, California, are planning on reopening the May Lundy mine. The May Lundy gold property is situated in the Homer mining district of Mono County, California. The mine has been shut down for several years, and in the summer of 1942 all equipment was sold as the result of a judgment and decree of foreclosure entered in a suit by the RFC against Thomas R. Hanes and Wanda May Hanna, Martinez, California, owners of the property. The May Lundy has a production record of some $3,000,000 in gold during the period ended June 30, 1944.

The Newmont Mining Corporation has reported a net profit of $679,663 for the period ended June 30, 1945. The figure compares with earnings of $644,743 for the similar period of 1944. A total of $797,467 was paid by the company during the period in cash dividends. The mining concern maintains head offices at 14 Wall Street, New York 8, New York. W. A. Simpkins of Grass Valley, California, is western representative.

One carload of barium ore is being shipped daily from the Savercool claims to the plant of Barium Products, Ltd., at Modesto, California. Mining is by open-cast methods and equipment includes a double-drum dragline and loading bin. The group of claims, owned by Kenneth Murray of Greenville, California, is located in Plumas County about 16 miles from Greenville. G. P. Gaylord is in charge of mining operations.

A small pilot plant has been installed at the Plumas Quartz property by Charles Cassebaum, and shaft sinking work is proceeding. The mine is located three miles north of Crescent Mills, California, and is one-half owned by K. B. Murray of Greenville, California.
Gold mining operations are being conducted by F. W. Schultz, Box 428, Greenville, California, at the Comeback mine. The property is situated 12 miles from Greenville.

The Mesa Mining Company is reported to have developed its flotation clean-up method for dirty tungsten concentrates to the point where it can simultaneously remove iron and zinc sulphides in one operation. The sulphide concentrates are the rejects of the clean-up operation and show, from scheelite loss or carry over, about 0.20 per cent WO3, while the scheelite concentrates run more than 70 per cent WO3 with a carry-over sulphur content of about 0.35 per cent. The company's mine, known as the Moonlight, is located in Inyo County about eight miles west of Bishop, California. Company officials include William C. Longmecker, Detroit, Michigan; Floyd Brown, Box 581, Bishop; and John L. Peters and Glen Kiefer.

Testing of old dredge tailings properties near Oroville, California, will be undertaken in the near future by Andrew J. Molinari, 29 Laura Street, San Francisco, California, and Alan Dunbar. It is planned to conduct redredging operations at the properties if the tests prove satisfactory. Molinari and Dunbar secured leases on about 150 acres of tailings property owned by the City of Oroville and private parties. The tailings, left by dredging operations years ago, will be handled at the Bechtel-Kaiser rock crusher plant near Oroville, also being leased by Molinari and Dunbar.

Harry M. Allen and associates of Placerville, California, have started operation of a suction gold dredge at the Henry Bacchi placer property about two miles northwest of Lotus, Eldorado County, California. The dredge is equipped with a suction drill pump which burrows while it sucks up material and works to a depth of 30 feet.

It is reported that Hoefling Brothers has completed construction of a portable washing plant at the Spud Patch tungsten placer operation at Atolia, California. The new unit is expected to handle 60 cubic yards of material per hour at capacity. Over-all placer work at the Spud Patch is being done by Hoefling Brothers, but production is augmented by subleasing on lode ground. The operations are directed by Milo W. Hornor, Atolia, superintendent, and Allan E. Jones, Box 786, Sacramento, California, is general manager in charge of all Hoefling Brothers mining activities.

Satisfactory placer mining is reported to be progressing at the You Bet gravel mine located near Nevada City, California. An average of 1,000 cubic yards of gravel is being treated per eight-hour shift by the company's dredge, which is powered by a Diesel unit. The material is hauled by trucks from the dredge to the washing plant. The You Bet comprises some 1,100 acres, which were taken over last fall by Phil P. Frecker of San Francisco and Harold Ferrin, owner of the Pacific Diamond Drilling Company, Box 462, Grass Valley, California. Carl Thomason, president of the Thomason Drift Digger Com.
The National Lead Company, 111 Broadway, New York, has declared a regular quarterly dividend of 12 1/2 cents on common stock, payable September 29 to stockholders of record September 10, 1945. Also declared were regular quarterly dividends of $1.75 on 7 per cent preferred, payable September 15 to holders of record August 27; and $1.50 on 6 per cent Class B preferred, payable November 1 to stockholders of record October 15, 1945. For the six months ended June 30 of this year the company and wholly owned subsidiaries show a net profit of $1,856,296, or $79.50 a share, and comparable to $2,881,028 or 60 cents a share for the like period of 1944. The company's western mining interests are handled through the St. Louis Smelting and Refining Works in Colorado and New Mexico, the St. Louis Smelting and Refining Company in Arizona, and the Bar-old Sales Division in California and Wyoming.

According to reports, eastern interests are negotiating for the Rawley property near Bonanza in Saguache County, Colorado, which is owned by A. J. Hall, now of Aztec, New Mexico. The property is an old producer which has been worked by several operators in recent years.

A dividend of 50 cents a share has been declared by the New Jersey Zinc Company, 160 Front Street, New York, New York. Payment will be made September 10 to stockholders of record August 20, 1945. The report states that the company operates its Empire Zinc Division, with holdings in Colorado and New Mexico.

Henry Christensen of Cripple Creek is associate director of mining operations at Climax, Colorado, is resuming leasing operations in the Coeur d'Alene region in Idaho. The company has been warned that the only rock he would find in that district would be a tombstone. The first successful prospector in the Cœur d'Alene region in Idaho was looked upon as a promoter and the venture would be a failure. He located the Homestake claim in the Tombstone area. This area was so named because he was warned that the only rock he would find in that district would be a tombstone. The first successful prospector in the Cœur d'Alene region in Idaho was looked upon as a promoter and the venture would be a failure. He located the Homestake claim in the Tombstone area. This area was so named because he was warned that the only rock he would find in that district would be a tombstone. He located the Homestake claim in the Tombstone area. This area was so named because he was warned that the only rock he would find in that district would be a tombstone. He located the Homestake claim in the Tombstone area. This area was so named because he was warned that the only rock he would find in that district would be a tombstone.

In 1876, George Westinghouse discovered a quartz vein on the Mullin road in the spring of 1876. In 1891 discovered gold telluride by testing a gulch-like piece of ore. He located the Independence mine at Cripple Creek. The company, and Stockholders of record August 30, 1945.

Answers to Questions Will Be Found on Page 28

LUCKY STRIKES

Unfortunately, Lucky Strikes are not so common as they were in the good old days. To test your knowledge of some of the historical strikes, fill in the blanks in each description with the full name of the You Bet Mining Company.

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Page 20

THE MINING JOURNAL FOR AUGUST 30, 1945

has been declared for the quarter ending September 30, 1945, and an extra dividend of 20 cents a share on capital stock, both payable September 28 to stockholders of record September 14. Company operations are at Climax, Colorado. Max Schott of New York is president.

A jigging plant is being added to the equipment of the Colorado Fluoroper Mining, Inc., near Salida, Colorado, which currently is producing acid-grade spar. The company, H. D. Tudor, 56 Sutter Street, San Francisco 4, California, president, previously doubted the capacity of the flotation plant, making possible the treatment of 100 tons of ore daily. F. Wickham, Box 311, Salida, is general manager. The company also is progressing
IRON MOUNTAIN-SILVER LAKE
MINE PURCHASED BY KAISER

The continued expansion of the Kaiser Company, Inc., Iron and Steel Division, at Fontana, California, is evidenced by deeds which were recorded recently in the San Bernardino County recorder's office for the transfer of iron property known as the Iron Mountain-Silver Lake Group. The property formerly was owned by the Colorado Fuel and Iron Company of Denver, Colorado, and revenue stamps attached to the deeds indicated a total purchase price of $125,000.

The deposit is located in the southeast portion of the Avawatz Mountains about 22 miles northwest of Baker, California, and approximately 13 miles west of Silver Lake, California. For many years the property has been known as the Iron Mountain-Silver Lake Group to distinguish it from the Iron Mountain-Bessemer Group, which is situated 50 miles east of Victorville, San Bernardino County, California.

Locations originally filed by John G. Osgood, as early as March 4, 1901, showed the foresight of old-timers relative to the eventual coming of steel to the West Coast. At that time, five shafts and two claims were staked and revenue stamps attached to the deeds, but development work was not completed.

After the property was acquired by the Colorado Fuel and Iron Company, six lode claims and placer claims covering approximately 160 acres were surveyed and patented. In 1944, the deposit was drilled by the U. S. Bureau of Mines, and its report indicates that there are about 4,000,000 tons of high-grade Bessemer ore in the deposit.

From an operations standpoint, the deposit is said to be geologically ideal. Carried on the crest of a tremendous upheaval of earth thrust of ancient time, the ore virtually was stockpiled in a convenient flat, requiring little more than power-shovel operations for handling.

The nearest shipping point is Dunn, California, some 25 miles southwest of the property, on the Union Pacific Railroad. Construction of a road would be necessary for this distance, or trucks could be routed via Baker, California, using the Barrow-Las Vegas highway with a longer haul.

The Iron Mountain-Silver Lake deposit is situated about 50 miles northwest of the Vulcan iron mine, nine miles south of Kelso, California. The Vulcan was purchased by the Kaiser Company from C. Colcock Jones in 1843, and has furnished almost all iron ore used at the Fontana steel plant since the start of operations.

Large-scale stripping just completed at the Vulcan property made available a considerable amount of additional iron ore.

It is expected that complete conversion of the Fontana steel plant to the manufacture of postwar commercial steel products will commence in the near future. One of the principal projects proposed is the installation of a strip mill for the production of all types of sheet metal.

Henry J. Kaiser, president of the Kaiser Company, Inc., Latham Building, Oakland 12, California, lately proposed the formation of a syndicate of West Coast financiers, with the express purpose of developing western steel, propose to purchase, or lease, the DPC-owned steel plant at Geneva, Utah, and other western enterprises of a similar nature. This syndicate would continue to operate these plants at maximum-possible capacity in the postwar era. In the meantime, the Kaiser concern continues development and expansion of the steel industry in the West. At present, it is reported that several other valuable ore deposits are in various stages of investigation and negotiation.

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can steel mills since the beginning of the war. Furthermore, the project was considered as "effective insurance" against a threatened shortage of manganese during the height of the submarine warfare.

Another subsidiary of Freeport Sulphur is the Nicaro Nickel Company of Nicaro, Cuba, which built and operates a plant at Nicaro for the RFC. Constructed during the early days of the war to provide the United States a second substantial source of supply of nickel, the company is producing at the rate of approximately 2,000,000 pounds of nickel a month.

MEXICAN MINING COOPS HAVE ECONOMIC TROUBLES

The Mexico City newspaper, "El Nacional," recently admitted the shaky economic condition of mining cooperatives in Hidalgo and the State of Mexico. The account indicates that the situation has prevailed for several months.

The city of Pachuca, Mexico's pioneer mining cooperative which was organized by the Cardenas government eight years ago, and the San Rafael cooperative, both operating at Pachuca, Hidalgo, Mexico, as well as the Dos Estrellas society in the State of Mexico, are reported to be able to meet only about 60 or 70 per cent of their payrolls. All three groups are said to be in debt for materials, etc., and also owe many of their members for indemnities ordered by the federal board for failure to produce. Moreover, other such claims, the newspaper reported, are pending before the board.

From another source, comes the report that the economic situation of the Dos Carlos and San Rafael cooperatives has become worse, following the recent demand by the government that they supply them with electric power for prompt payment of a bill of more than 600,000 pesos ($135,000 U. S.). It is said that it is very unlikely that the societies will be able to meet the latest demand, and it is feared that, unless some aid is forthcoming, the power company will suspend service, forcing closure of some of the mining and milling operations.

REVISED DATA AVAILABLE ON CALIFORNIA MINERALS

REVISED magnesium ores are available on chrome, manganese, quartz, quicksilver, tin, and tungsten, which will replace earlier ones on these minerals in Bulletin No. 124, have been released by the California Division of Mines. The revisions are in line with the division's policy of keeping the bulletin up to date on the occurrence, preparation, uses, tests, markets, and lists of possible buyers of California's critical ore minerals needed for the war program.

The bulletin, which contains information on about 50 California minerals and in a loose-leaf form, may be purchased for $1.00, or for $1.20 with the binder, plus 5 cents sales tax for California residents. Copies may be obtained through the division offices in the Ferry Building, San Francisco 11, California, the State Office Building, Sacramento, and the State Building, 217 West First Street, Los Angeles.
PHOENIX

The Manufacturers Tell Us

High Speed A-C Generators—Two new four-page folders have been prepared by the Electric Machinery Manufacturing Company, Minneapolis 13, Minnesota, to describe its A-C synchronous generators.

Publication 177 describes 3,750 to 9,900 kva. generators and publication 179 covers 250 to 5,000 kva. generators. The speeds may be either 50 or 60 cycles and all standard voltages are available. The generators can be supplied in two-bearing type for belted or geared drive and a single-bearing type is available for close-coupled drive.

Liberal design in the electrical and magnetic circuits permits cool and efficient operation and provision has been made for easy access to exciters for inspection. Economical operation and low maintenance are featured in the two bulletins.

Amaco Scraper Buckets—The American Manganese Steel Division of American Brake Shoe Company, long a leading designer and builder of manganese steel scrapers as well as dipper and dragline bucket parts, has announced a new line of scraper buckets. Made in two types, the American 25 and 30 scraper, precision cast to exacting high capacity, all manganese-steel construction, simplicity of design, readily removable scraper bar, and the proper balance. The curved back, it is stated, aids in quickly "rolling up" capacity.

The ¾ box bucket is 30 inches wide and made with sides cast integral with the back. A wearing shoe protects the ball against abrasion wear. The ¾ box bucket is 66 inches wide, 72 inches over-all, and has removable 3¾-inch long side plates. Wearing runners on the pulling bail afford ample protection against abrasive wear.

Details on the new Amaco scraper buckets may be secured from the main offices of the company at Chicago Heights, Illinois.

Sterling Engines—A new edition of its catalog describing the specifications of engines now in production has been prepared by the Sterling Engine Company of Buffalo, New York. Of outstanding interest is the Viking Diesel, marine and stationary type, in six and eight cylinders, supercharged and unsupercharged. This newest engine in the Sterling line is the result of many years of development and experimentation and it has received wide recognition for many power needs. Also included in the catalog are the Sterling Petrel gasoline engine, the Sterling Viking gasoline and gas engine, and the Admiral gasoline engine in 6 and 12 cylinders.

Mining Catalog—Lake Shore Engineer ing Company, Iron Mountain, Michigan, has announced publication of a new 16-page catalog on skips and cages. Thirteen different types of skips and seven different types of cages are described in detail with construction features. The Lake Shore combined skip and cage also is shown. Orders, it is stated, No. 4, may be obtained from the manufacturer.

COLUMBIA STEEL PLANS TO EXPAND CALIFORNIA PLANTS

According to an announcement by Benjamin F. Fairless, president of United States Steel Corporation, the directors of that corporation have decided that a further action will be taken to acquire the government-owned steel plant at Genoa, Utah. At the same time Fairless disclosed that his corporation would authorize a further step in the modernization program of U. S. Steel's subsidiary, Columbia Steel Company, through the installation of improvements at Pittsburg, California, as soon as equipment is available. The improvements will include modern cold reduction facilities having an annual capacity of more than $325,000 tons of cold reduced sheets and tin plate.

Columbia's cold reduction plant is the first such mill to be authorized for erection on the Pacific Coast. It will be designed to produce sheets and tin plate comparable in quality to those manufactured anywhere in the country. In addition, a study is being made looking to the modernization of the company's facilities at Torrance, California.

Fairless added that if any future operator of Genoa decided to manufacture hot rolled coils, U. S. Steel would be glad to negotiate for the purchase of a substantial amount of such coils to be used in producing cold reduced products at Pittsburg, providing the Genoa operators were prepared to see that in sufficient time to insure that the coils will be produced at Genoa concurrently with the completion of Columbia's new facilities. This would mean a stable volume of business for the Genova plant.

The Genova plan was constructed by the government in 1941 to produce plate and structural steel for its huge shipbuilding program on the Pacific Coast. Actual construction, and later the operation of the plant, was handed for the government by U. S. Steel without charge or fee.

Before the war, Columbia Steel Company maintained the only integrated steel operation west of the Rocky Mountains with a blast furnace and byproducts coke ovens at Provo, Utah, and had its own plants and facilities in Utah and California, and has a capacity of 597,000 tons for a year, approximately equal to the government-owned mill at Genoa, Utah.

LOS ANGELES C. OF C.

PUBLISHES MINE SURVEY

The Mining Division of the Los Angeles Chamber of Commerce has announced that the 1945 edition of "Southern California Mining Sales Opportunity," has been released from the printer. The bulletin was published following a comprehensive survey of active mine locations in the state, and lists nonmetallic as well as mineral production of 10 Southern California counties. Names of operators, address of mines, and identification of about 115 enterprises are provided in the edition. The mine survey, which is the eleventh of its kind, was conducted by E. D. Arthur, manager of the mining division.

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1-11 Flexor Loader 18" to 20" Ga.
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6-Ingersoll SBR 120 Stoppers
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VIVIAN CLARK Writes of
PHILIPPINE INTERNMENT

From Vivian V. Clark, former dean of the College of Engineering, University of the Philippines, comes the good news that he is safely back in the United States, trying to forget the three years he was interned at Santo Tomas in the Islands. After getting back to normal health he expects to return to his field work, but in the meantime may be reached through Box 124, Downey, California.

The first two years of Japanese internment were not so bad, according to Clark. "I did some constructive thinking, writing, and teaching during that period," he writes, "and was a member of the Discipline Committee, whose job was to keep law and order in the camp. . . . It finally resolved itself into the institution of a jail and regular court procedure for trial and sentence. After that I secured a limited pass to go outside the camp compound and sented during that period. . . ."

...and sentence. After that I secured a limited pass to go outside the camp compound and sented during that period.

Adults and children in the camp lost weight and strength, gradually at first, and then more rapidly, Clark says, until in the end an increasing number of them were hospitalized. In January 1945, there were 32 deaths in camp from starvation, and he himself had collapsed in August of 1944. He reports that a prompt transfusion saved his life, but that he was still convalescing when "Uncle Sam rolled into camp on the night of February 9, 1945. That was the most eventful hour of my life—knowing that we were really free and were to have real honest-to-goodness food again," says Clark. He was repatriated in early May 1945 on a hospital ship arriving in San Francisco a month later.

In a postscript, Clark adds that "the University of the Philippines was completely destroyed. I lost all my private library there, manuscripts, notes, maps, models, too numerous to try to recall. All contents of my office, and all other departments in the College of Engineering were put in a pile in the patio and the torch applied, with plenty of gasoline to make it burn better.

Clark first went to the Philippines in January 1936 to report on a gold dredging property in Mindanao. In the fall of that year, he became associated with the Marshall interests and later was appointed to head the department of mining engineering at the university. He had been promoted to dean of the college only shortly before the Jap invasion. Clark received his engineering education at the New Mexico School of Mines and Stanford University. Since that time, his work has taken him to many parts of the world, including Mexico, South America, British Columbia, sections of the United States, the Netherlands East Indies, and finally the Philippines.

"GOLD RUSH DAYS OVER"

"Gold production in California during 1944 was the smallest since 1848, the year James W. Marshall discovered the ore at Sutter's Mill. The total was 113,500 fine ounces, valued at $5,972,000."

The above Associated Press dispatch failed to explain why California gold production was the smallest since 1848, the year it was discovered in that state. When you shut down all the gold mines in the country by federal edict it is really remarkable that the state did produce as much as in the gold rush days of '48.

The A. P. would leave the impression that the gold rush days are gone forever. Just watch California in 1946!
The Natomas Company, California dredging firm, has reported a net loss of $1,744 for the quarter ended June 30, 1945, which compares with a profit of $37,002 for the corresponding quarter of last year. During the war, the company operated only two of its seven dredges in the Folsom district of California, but hopes to increase production substantially as soon as labor is available. The Natomas Company also controls dredging properties in Colorado and Nevada, through its subsidiaries, the Manhattan Gold Dredging Company of Manhattan, Nevada, and the South Platte Dredging Company, which only recently resumed operations at Fairplay, Colorado. Thomas McCormack, 697 Forum Building, Sacramento, California, is president and general manager; R. G. Smith, Natoma, California, is manager of the gold dredging department.

B. T. Wilkie, Los Angeles, California, is making plans to start large-scale dragline dredging operations in the Del Loma region of Trinity County, California. He recently purchased equipment, including a dragline dredge, from Oscar R. Batham, Weaverville, California, dredge operator, at a reported price of $25,000, and the machinery has been moved to the mine site. Wilkie expects to employ three full-time crews, under the direction of Malcolm M. Bengist, superintendent. Wilkie formerly was interested in the Oro Grande gold mine in Shasta County, California.

The Newmont Mining Corporation has declared a regular quarterly dividend of 871/2 cents per share on common stock payable on September 15, 1945, to stockholders of record on August 31, 1945. The company paid a similar dividend to stockholders on June 15, 1945. Newmont maintains head offices at 14 Wall Street, New York 5, New York, and Charles F. Ayer is president. W. A. Simpkins of Grass Valley, California, is western representative.

Construction is well under way at the antimony smelter and oxide plant being built by the Harshaw Chemical Company at its Menardi Metals Division, El Segundo, California. The project, which is said to involve an expenditure of about $400,000, will be conducted under the direction of Harold B. Menardi, 681 South Ingewood-Redondo Road, El Segundo, local division manager. When the plant is in operation, some 1,000 tons of antimony concentrates will be shipped to the unit monthly from the Yellow Pine mine of the Bradley Mining Company at Stibnite, Idaho. Menardi has been engaged in antimony research for many years, and on the basis of his success the Harshaw company purchased his plant at El Segundo and retained him to design and operate the new plant now being constructed. Many years ago, Mendari began treating living-stone ore from Mexico in his Los Angeles plant, which he had designed, recovering both antimony and mercury. Later he expanded his operations to include the purchase and treatment of antimony ores at a new plant at El Segundo. At the beginning of the war, he began treatment of antimony concentrates from the Yellow Pine gold property.

The U. S. Vanadium Corporation announces that it expects to have its Pine Creek tungsten operations at Bishop, California, on a normal basis during August, with some 200 men employed. The company purchased its Pine Creek tungsten plant, which had been closed down since January because of an insufficient tonnage of custom ores. During the shutdown period considerable repair work was done in the plant. A new 4,000-foot tunnel project, a continuation of the tunnel driven some time ago at the Pine Creek mine, is proceeding satisfactorily under the direction of R. W. Sullivan of Boulder, Colorado. Pine Creek operations are managed by M. N. Shaw of Bishop, general superintendent for U. S. Vanadium.

The dredge and other operating equipment of the Golden Feather Dredging Company have been dismantled and moved to the new site on the Middle Fork of the American River in Placer County, California, where the firm expects to start actual mining immediately. The acreage extends six miles from Mormon Bar and is situated some eight miles from Auburn, California. One of the claims is said to be in undeveloped territory, with ore run-
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ning high in gold values, and testing of the entire ground is reported to have been satisfactory. Considerable road construction work was completed by the Golden Feather concern preliminary to moving in equipment. The company estimates that the present project will run for about six years, but some one ore has been blocked out since that time.

Sonoma Quicksilver Mines, Inc., plans to resume mining at the Hathaway property, which it holds under bond and lease from John E. Noia, Auburn, California. The firm has completed considerable development work at the mine since the war, including dewatering of the 800-foot shaft, special permission having been granted by the War Production Board for examination of the lead and zinc values. The Hathaway is in the Ophir district of Placer County near Auburn. Sonoma Quick­ silver's principal operations since the war have been conducted at the Mount Jackson quicksilver property near Guerneville, So­ noma County, California. H. D. Tudor, 58 Sutter Street, San Francisco 4, California, is president of the operating company.

Development work is being accelerated by Western Empire Mines at the Castac mine, which the company leased last fall. Preliminary sampling of the historic gold producer was started early this year, and it is reported that ore running as high as $88 per ton has been recovered. The property is situated in the Santa Barbara National Forest in Ventura County, Cali­ fornia. Western Empire is headed by A. L. Mecham, Box 262, Santa Barbara, California, and N. H. Rice is vice-presi­ dent and general manager.

Vernon Jay, Barstow, California, is engaged in moving in mining machinery and equipment to the Rio Hondo mine, which he is reopening. The property is in the Goldstone mining district of San Bernar­ do County, California. The gold mine has been closed down since the beginning of the war and Jay was employed in de­ fense work at Long Beach, California, un­ till recently. It has been reported that Dorothea Reddy Moroney, Klamath River, Califor­ nia, who has been engaged in operating several chrome properties in California, is opening a new mine in the Someetar region of Siskiyous County, California. Charles Whitaker will be associated with her in the new venture.

The Cripple Creek Builders, Inc., is re­ opening the portion of the School Section mine at Cripple Creek, Colorado, which it recently acquired under lease. Charles A. Zaring, formerly of Colorado Springs, is at Cripple Creek as manager of the company and Carl F. Zaring of Cripple Creek is also on the staff. R. C. King, Box 1459, Colorado Springs, is president.

The Buckskin Jos Mines, Ltd., a co-part­ nership made up of John Harvey of Lead­ ville, Colorado, and Charles Jordan of Buena Vista, Colorado, is applying for patents for 1,500 linear feet on the Gold
viosly had been charged off as uncollectible. Sales for the second quarter were $7,359,358, an increase of $48,001 above the second quarter of last year. Operation expenses were increased $109,024, the major part of which involved expenditures for labor. There was no material change in the labor supply at any of the company’s properties, the greatest shortages existing at the Dumas, Texas, and Metalline Falls, Washington, units.

A group of Seattle, Washington, men has organized the Referendum Gold Mining Company, capitalized for $300,000. Incorporators of the new concern are Thomas Conway, 1302 John Street; Dr. J. M. Rice, 17 West Mercer Street; and G. E. Barker, 2503 North Sixty-fourth Street, Seattle.

According to reports, the Great Lakes Carbon Corporation, 22 East Forty-ninth Street, New York, has purchased the silica plant of the Kittitas Diatomite Company at Kittitas, Washington. The Great Lakes Carbon concern’s western operations prior to this deal have been located at Terrebonne, Oregon; Walla Walla, California; and Mt. Montgomery, Nevada. McKinley Stockton of Walleria is production manager and E. T. Frankenheff of the Los Angeles office, 740 South Broadway, Los Angeles 14, is assistant general manager. It is understood that John C. Sorensen, president and manager of the Kittitas Diatomite Company, will continue to be in charge of the plant operations for the new owners.

CALIFORNIA BUREAU URGES NEW USES FOR MINERAL RESOURCES

UNLESS concerted efforts are made to develop new uses for California’s huge mineral resources, postwar employment in California’s mining industry will drop below that of 1940. This is one of the important conclusions of a report by the State Division of Mines, State Mineralogist Walter W. Bradley announced that the report, issued as Bulletin No. 150 of the Division of Mines under the title “Economic Mineral Resources and Production of California—A Survey with Reference to Postwar Employment” is ready for distribution.

The danger of a postwar loss of employment in the mining industry, the report states, may come about because gold mining may not be up to prewar volume, due to increased costs which may prevent the reopening of many of these mines. Maintenance of a high level of employment in the mining industry, which always has been one of California’s basic economy assets, therefore, will depend on ingenuity and planning, which will discover and develop new uses of the state’s minerals.

The report reviews the past yield of the more than 90 mineral substances commercially produced in California. It points out that the 1940 employment in mining, quarrying, and related operations totaled 32,628 and that the postwar figure is expected to be 26,500. The drop is attributed largely to gold mining. It is stated that increased costs, difficulties and cost of rehabilitation may prevent the reopening of many of these mines.

AMERICAN SMELTING REPORTS

The American Smelting and Refining Company has reported for the six-month period ended June 30, 1945, a net income of $6,466,746, after all charges. This figure is equivalent to $2.15 per share and compares with an income for the similar period of 1944 of $4,225,000 or $1.3. The company reports also that its excess of current assets over current liabilities amounted to $88,947,713, as of June 30, 1945.

During the first six months of this year, American Smelting and Refining Company paid $875,000 in dividends on preferred stock and $2,191,069 on common stock, totaling $3,066,069. For the six months ending June 30, 1945, the board of directors of the firm also declared the regular quarterly dividend of $1.75 per share on the preferred stock, paid on July 31, 1945, and a dividend of 50 cents per share on the common stock, which was paid August 31, 1945.

A. S. and R. headquarters are maintained at 120 Broadway, New York 5.

SOUTH DAKOTA SCHOOL OF MINES OFFERS EX-SERVICE MEN

RECOGNIZING the critical shortage of technically trained young men as a result of the war, the South Dakota School of Mines and Technology at Rapid City, South Dakota, is making every effort to do its part in alleviating this difficulty. H. Merle Parsons, secretary and registrar of the school, says “American industry is confronted with the task of completely rebuilding the technical forces upon which, to a large measure, the progress, prosperity, and wealth of the nation depend. Before the war most large industrial organizations had developed definite policies of hiring young technical men each year. Military service demands of the war not only completely disrupted these plans, but also have in many instances largely depleted the staffs built up before the war.”

He believes that special facilities should be offered to ex-service men who desire to complete their training as rapidly as possible. At Rapid City the ex-service men are permitted to attend regular classes during 48 weeks of the year. Under this plan, a regular four-year curriculum can be completed in 36 months. War veteran students will be permitted to enroll at the beginning of any quarter or during a quarter, if review and refresher instruction will help them to take up their regular work at the beginning of the next term.

War veterans whose registration expenses are not covered by Federal education benefits are exempted from the payment of tuition at South Dakota School of Mines and Technology by an act of the state legislature of 1919, amended in 1945.

New equipment to increase the growing demands of technical education is being obtained by the school, one of its latest acquisitions being a complete unit of commercial electronics equipment assembled especially for engineering laboratory instruction. New equipment in other fields of engineering will be added as soon as it is available.
MONTANA PHOSPHATE OPERATION TAKEN OVER BY PARENT CONCERN

THE Consolidated Mining and Smelting Company of Canada, Ltd., has taken over operation of the property of its subsidiary, the Montana Phosphate Company. The property is composed of the Anderson-Grawley-Lake phosphate mines near Garrison, Montana, which have been operated under contract by William Anderson of Garrison.

Output ran as high as 660 tons of phosphate rock daily, nearly all of which was sent to the parent company's plant at Trail, British Columbia.

FOREIGN MINE PRODUCTION TO BE LARGELY EXPANDED

IGNORING the possibilities for increased production in the United States, lead companies in this country are preparing to open new titanium mines in Ceylon, the Malayan Peninsula and Australia in anticipation of a huge expansion in the paint industry, according to recent announcements.

Titanium ore is manufactured into pigments which, according to lead company officials, today are essential in the production of paint. The pigments produce a higher quality and cheaper paint, it is stated, and they replace zinc oxide, white lead, leaded zinc, and lithopone in paint.

Plans also are under way by the members of the lead industry to import approximately 25,000 tons from Norway, the first imports from that country in six years. New mines in the South Pacific will be opened as soon as machinery can be transported there.

Titanium is quoted at about $35 a ton, according to metal interests, who emphasized that the ore was developed commercially only within the last twenty years, and that many new uses can be expected in the future. In addition to its value as an ingredient in paints, titanium also is utilized by the rubber industry to manufacture white walls in automobile tires and by the paper industry for the whitening of its products.

At the outbreak of the war, supplies from Europe and India, which approximated 400,000 tons annually, were shut off. American interests thereafter developed mines in Essex County, New York State, which now are producing annually about 200,000 tons of ore. These interests emphasized that even though supplies will have been increased 50 per cent over prewar years they will not be sufficient to take care of the pent-up demand for titanium pigments from the paint industry.

SISKIYOU CHROME MINERS RECEIVE NEW INSTRUCTIONS

CHROME producers in Siskiyou County, California, have been advised of a new order issued by the Metals Reserve Division of WPB instructing the ore dept at Gratace Pass, Oregon, to accept deliveries in Yreka, California. Production in that area has been almost at a standstill since a previous order requiring miners in the Siskiyou district to ship ore to Sacramento without benefit of a local engineer to grade and accept or reject it before shipments. Under the new arrangement the ore will be graded at Yreka by a federal engineer before shipment.

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THE MINING JOURNAL for September 15, 1943
Memorializing Vs. Mining

While the story of the Joshua Tree National Monument covers many aspects, it is typical of the practice of various government agencies in setting aside national monuments and national parks without continuing the mining rights in the area.

In Industry proved many times, do mining men, or the deplorable situation is epitomized in the famous Dale mining district—no once famous Dale mining district—and the actual, legal creation of the monument by Congress, the investigation of this large area of tractless land and adequate inspection of 7,000 to 10,000 mines must have been a Herculean task for hard working government experts.

Included within the area are such large mineral deposits as the Eagle Mountain "Iron Chief" claims, purchased by Kaiser Company, Inc., from the Southern Pacific Land Corporation in 1942, which is comprised of 2,300 acres of patented claims. This property, notably the largest single iron deposit in the Southwest, is tax assessed on the Riverside County tax roll at $954,000 bringing an annual tax payment of approximately $12,000. Federal revenue stamps attached to deeds at the time of purchase indicated $1,000,000 was paid for the property. Although this is virtually the only land in the area protected under patent rights, numerous other smaller deposits of high-grade iron, copper, gold, and other metallic and nonmetallic areas are known to exist in the area.

Another ironic feature relative to the Joshua Tree National Monument, exemplifying lack of proper consideration by government officials, is that for the general sight-seeing public supposed to journey endless miles for a view of the Joshua tree, the entire area is practically inaccessible with the only hard-surfaced, modern highway—Highways 60-70 from Indio to Blythe—being several miles south of the southern-most extremity of the monument with a sturdy range, the Cottonwood Mountains, standing as a bulwark against entry.

The Joshua Tree National Monument of Riverside County, California, is only one outstanding demonstration of governmental weakness towards the mining industry of the West, costing private individuals and enterprising corporations millions of dollars annually. Quoting Harry Parsons, guest speaker at the Riverside County Chamber of Mines and prominent mining attorney of Montana, Idaho, and California:

"The mining industry has been made 'the footstool' of politicians and poor legislation for the most part from the beginning of our mining laws."

"In Yellowstone National Park we have carefully preserved a herd of approximately 5,000 buffalo for posterity," said Parsons, "but why, in heaven's name, should it be necessary to put an area approximately 60 miles square, (almost inaccessible area, rich in minerals, but studded with millions of an identical type of desert flora which no one would think of planting in his front yard), 'off limits' to the world's greatest and most essential business!"

"The time has come, in the great reconstruction period ahead, when honest, hard-working mining men should be able to
make their most honorable living with all the help a great government can give them. Your method, by organization and cons­
stant devoted work to bring about the pro­

per type of legislation," concluded Par­
son s, "is the only way eventually to lift the yoke from the mining industry placed so securely there by ignorance, political trea­
tres, and lack of consideration by legisla­
tors who do not know limestone from granite. Concur in your decisions, co­
operate with other organizations with a common cause, select your legislators with care, and fight ceaselessly for the great future which is bound to come in mining."
The meeting was presided over jointly by Joseph Seymour, well-known Southern California attorney, and Elmer E. Dunn, prouminent in Southwest mining circles.

COPPER LEADERS BELIEVE PROSPEROUS FUTURE AHEAD

TEN years of the greatest prosperity in the industry's peace-time history is pro­
duced by officials of leading producing and fabricating companies. Their opinion was tempered only by the present labor shortage in mines and smelters, com­
petition of our producers in foreign lands, and the unsolved problem of how Europe can pay for the copper products so essential to reestablishment. Lesser prob­
lems to be solved include the proposal for a huge government stockpile for future de­
Fence needs, and the uncertainty as to the government's continuation of premiums for marginal mine production in the U. S.

According to Louis S. Caton, president of Phelps Dodge Corporation, one of the largest domestic producers, "The domestic outlook is very bright. There is a large backlog of civilian demand and with plen­
yty of labor the domestic copper mines could meet the expected peacetime demand. Pro­
ducers could use 4,500 to 5,000 more men now. Our huge open-pit mine at Merenci, Arizona, is running at 75 per cent of capac­
ity due to lack of men. In spite of the large number of persons laid off by war industries on the West Coast, none has shown up for work at our Arizona mines where they are badly needed."

Anacoda Copper Mining Company, with mines fricated, feels Shambaugh in South America, would increase its domestic pro­
duction but for the tremendous labor shortage in South America, D. O. Sowerwine, vice-president, estimated that the domestic copper industry was short 9,500 men at present, despite the fact that twice during the war the army released men to work in the mines. There were no signs, he added, that veterans and former defense plant workers were returning to the industry.

Officials of the Copper and Brass Re­
search Association said that the nation's fabricators expected to employ 15 per cent more men than they had in any peacetime. They further predicted that, because copper had been devoted exclusively to war demands for the past four years, the pent­up demand for peacetime industries would hold up until 1955 at least.

The government's present stockpile of 20,000,000 tons, worked by the Cup­
per Institute at 370,000 tons, with an additional 89,316 tons held by producers.

The information gathered by the bureau reveals that Japan has a vast variety of minerals, but the country is not ade­
Fately self-sufficient in any class to support the vast industrial state that had been established before and during the war. Even with the addition of minerals from Korea, Manchuria, Formosa, and the mandated islands, Japan still was depen­
dent upon other countries to keep its in­
dustrial machine working.

In sulphur and pyrite, the home islands were self-sufficient, and elsewhere the Em­
pire produced such things as arsenic, bis­
mith, coal, fluor spar, graphite, magnesias and tungsten. But in the vital metals and minerals that make a modern industrial state, Japan did not have enough. These included the ferrous metals, copper, zinc, lead, bauxite, petroleum, mica, mercury, tin and many others.

The pamphlet includes extracts from United States mining laws and safety rules and regulations. Under the terms of the codification law as passed by the legisla­
ture, a special edition was prepared for the pub­
cation. Copies may be secured at the office of the state mine inspector in Boise,

BUREAU OF MINES RELEASES MAPS SHOWING JAP RESOURCES

WITH the defeat of the Japanese Empire and the unilaguent occupation of the home islands by American and Allied troops, the Bureau of Mines has made pub­
lication of two large maps of Japan proper showing the location of the important mines and metallurgical plants, oils refin­
ers, synthetic gasoline plants, and chemical works which fell to the United Nations as prizes of war.

From the oil fields of Hokkaido, the northermost of Japan's four larger islands, to the industrially barren area around what was Nagasaki on Kyushu, the big south­ern island, the bureau's maps reveal the magnitude of the mines and plants that helped Nippon to fight a long war.

PRESIDENT TRUMAN ENDORSES STOCKPILE PRINCIPLE

Following are extracts from President Truman's message to Congress on Re­
conversion Plans, September 6, 1945:
"During the war years we have ex­
pended our resources both human and natural—without stint. We have thrown into the battle for freedom everything we have."
"The depletion of our natural re­
sources is even more startling. We have lost from the north copper, potas­
ium, iron ore, tungsten and every other mineral required to fight a war, without regard to our future supplies. We have taken what we needed. We were not able to, and we did not, take account of tomorrow."
"At the same time, our splendid pre­
war program to build up our national resources was badly neglected during the war. We were diligent and constant search for the produc­tion of the materials of war. *
**
"We must make a diligent effort to discover new deposits of the precious and indispensable minerals upon which our national life is founded. We must develop for the use of industry new technologies so that the vast deposits of low-grade ores that have so far not therefore considered usable may be put to work for the good of all of us.
"One of the costliest lessons of our unpreparedness for this war was the great danger involved in depending upon foreign sources for supplies of raw materials necessary in times of na­tional emergency. The United States should never again permit itself to be placed in a position where its defense may be jeopardized by the fact that it has been cut off from the source of strategic raw materials.

"I recommend that the Congress en­
act legislation to bring about the ac­quisition and retention of stockpiles of materials in which we are naturally deficient but which are necessary to supply the needs of the Nation for defense."

EXTRACTION AND PREPARATION OF BERYLLIUM IS DESCRIBED

The bureau's publication points out that the production of beryllium metal and its alloys is one of the most difficult tasks in metallurgy because of the physical na­
ure, as well as the chemical behavior of the metal and its alloys.


MINING LAWS OF THE STATE OF IDAHO ARE PUBLISHED

MINING laws of the State of Idaho have been codified and published and are now available, according to an announce­ment by Arthur Campbell, state mine in­
spector, Boise, Idaho. Compilation and codification of the laws were authorized by the last state legislature and the work was done by Carl C. Kitchen of Boise.

The pamphlet includes extracts from United States mining laws and safety rules and regulations. Under the terms of the codification law as passed by the legisla­
ture, a special edition was prepared for the pub­
cation. Copies may be secured at the office of the state mine inspector in Boise.
MINING IS A BUSINESS

Of great importance is the business side of mining. Here the engineer compares the stock value of a mine with the actual value. He gives some pointers on computing operating profits from the original investment, outlining the factors to be considered.

As an illustration I am taking from my files the case of a gold mine that existed when there was such a thing as gold mining and when gold was more than a memory.

Mining Engineer, Berkeley, California

THE MINING JOURNAL for SEPTEMBER 30, 1916

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ANOTHER SQUINT

WITH ADDISON H. CLARK

* * *

Squints at the financial pages of the newspapers impel me to harp a bit more on the wide gulf between stock-market trading in mining shares (plain everyday speculating) and sound commonplace financing of mine development and production.

* * * In mid-September there appeared published opinions that the recent boom in Canadian mining stocks (which isn't shown faded out yet) is likely to be ended before the United States and Canadian government managers get to together on a set of rules and regulations as to the pooling of Canadian mining information. It is in fact a celebrated unfortified border. It was a fact that at the zenith of that boom—that carniv­

eral attack—daily the Bulletin of the Super­

intendents-General of the Super­

visory Bureau of Guardianship for Stock­

holders (more commonly known as the Securities and Exchange Commission, or SEC for short) had a collective headache and was sitting up nights trying to figure out ways and means for making the Canuck brokers behave according to Yankee SEC standards.

* * * A report from up Toronto way says that Ontario is getting a new securities act, but that it goes only part way toward bridging the views as to what the respective governments should do to protect con­

sumers, naive citizens from the perils of speculation. The Ontario way is to register brokers and underwriters, and the act will pro­

vide for fines and for investigations of sations of fraud. Details of financing promotions must be submitted, but securities need not be registered in the SEC man­

ner.

* * * For years California has managed handsomely along lines similar to those of Ontario's. It has had any man or group of men with a mining property that will stand the scrutiny of the state investigation and report will get a square deal from the Department of Investment, Divi­

sion of Corporations. Similar conditions regulate Arizona financing. In Nevada the�ings are much looser, but all mining men know. In Delaware they're looser still. However, shares of Nevada or Dela­

ware corporations can't be offered in Cali­

fornia without meeting up to the stand­

ards set by her commission.

* * * Now let's take one good square squint at the picture. The existent code of laws and regulations of the SEC wasn't born of the horse-texas, rational, honest breed of men in mining financing. It was born of out-and-out rotten stock-market gambling, as far re­

moved from decent mining financing as are the shooting-crops of a far-off moonflower.

* * * Mining offers such striking opportun­

ities—when financed and managed in a sane and businesslike manner—that the stick­

genny (called brokers by courtesy) pick on it instead of some manufacture of business as a channel for their talents. Hence the SEC. If the operators of the promotion­

ers of mining stocks, Dummy, have their heads on, this state corporation commissions won't have to buy so much aspirin.

Company, Miami, Arizona, died September 25, 1945, after an illness of several months. Stebbins was born in Connecticut and went to the Globe-Miami area in 1909.

Frank Stone, 62, died suddenly August 16, 1945, while on a prospecting trip with a friend in the Four Peaks Mountains of Arizona. Stone was born in Cornwall, England, and had followed mining and prospecting in the Globe area for the past 37 years.

Richard Klessatell, 59, mining engineer of Elk City, Idaho, died recently at a Lewiston, Idaho, hospital after a brief illness. Klessatell had spent most of his time looking after his mining interests in Idaho, particularly in the Elk City region. He was president of Mary K. Mines, Inc.

Roxco Texts, 65, mining engineer of Denver, Colorado, had been in charge of the Globe plant of the American Smelting and Refining Company at Denver, died in late August at Tacoma, Washington. He had been ill for several weeks. A native of Illinois, Kirk had resided in California for the past 16 years, during which time he was identified with mining operations in the Copperopolis area.

R. R. Foster, identified with mining ac­

tive in New Mexico for many years, died at Silver City on July 23, 1945. Foster was a native of Texas. He had been active in the Silver City area for the past 10 years, and was connected with the development of such mines as the Houston­

Thomas Group, the Cramer claims, and the Cleveland property. He also had Arizona mine interests.

Edmund Morris Hobart, 35, mining en­

gineer of the American Smelting and Re­

fining Company, died of a heart attack in Taxco, Guererro, Mexico, recently. Hobart was a native of Silver City, New Mexico, and received his engineering education at the New Mexico School of Mines. He had been employed for the past 29 years in various branches of A. S. and R. as a safety engineer.

Stuart J. Bjorklund, mining engineer for the U. S. Bureau of Mines until his enlistment in the Navy about a year ago, was killed in action in the Okinawa area on May 4, 1945, when a suicide plane struck and sank his ship. Bjorklund was an ensign serving as gunnery officer on the amphibious LST-190 (Landing Ship Me­

dium Rocket). His last assignment for the Bureau of Mines had been in Alaska, where he was transferred in 1942 from the Tucson, Arizona, office.

Marvin A. Holmes, well-known mining man in Silver City, died recently in Los Angeles, California, at the age of 67 years. Holmes, with his sons, George A. and Kenneth, had been interested in the mining industry for many years in their large mine holdings in Kern County, Cali­

fornia, including the famous Silver Queen mine at Mojave, and many others which they discovered. After selling out their interests in that

Hugh Harris Fink, captain in the cavalry, was killed in Philippine waters on December 16, 1944. He was one of 941 other prisoners of war were aboard a Japanese transport which was bombed and sunk in Sibol­

Bay near Manila, at which time Captain Fink and 941 others lost their lives.

Hugh Harris Fink of Mines. He left his position as mining engineer for the El­

Potosi Mining Company in Mexico to join the Army in 1946. He was sent to the Philippines in July 1944 and was sta­tioned at Fort Stotsenburg when the Japa­

nese attacked Clark Field. He served with a consular regiment in the home Ba­

tian campaign, and received the Silver Star, and later the Purple Heart post­

humously. After the surrender of Re­

ta, he was taken prisoner, and at various

times was interned by the Japanese at the O'Donnell, Cabuanauan, Davao, and Hill­

bid prison camps.

district, the Holmes became interested in the Castle Dome mine northeast of Yuma, Arizona, and operated successfully for sev­

eral years under the name of the Arizona Lead Company, a partnership.

Ben D. Goodlier, Sr., mining engineer, is reported to have lost his life when a Japa­

nese ship on which he and other prison­
er were transported was sunk on Decem­

ber 16, 1944. His wife and children were liberated from a civilian internment camp in Manila early this year and now are residing in Denver, Colorado. Goodlier was a graduate of the Colorado School of Mines and had been engaged in mining operations in New Mexico before going to the islands about 15 years ago. He had been employed as a consulting engi­

eneer for Gunnar Goldfield, Inc., Manila, for three years before the war, and the last report in March of 1941 indicated that he was serving with the Navy.

J. P. Svecik, mining engineer who joined the staff of Parsons-Gumaus Consolidated Mining Company in the Philippine Islands in 1939, is reported to have been killed on Bataan. After Pearl Harbor, he and his wife, with their six-month old son journeyed from Paracale to Manila, and Mrs. Svecik, leaving her husband in Mani­

la, joined the American forces as a first lieutenant in the 202nd Engineers. His wife was held prisoner for 27 months at the time of the Santo Tomas prison camp. The baby died before his second birthday and was cut up for survival, weighed only 79 pounds when liberated. She has re­

ceived the Victoria Cross and the Honor­

The MINING JOURNAL FOR SEPTEMBER 30, 1945
Concentrates from Western States

Brief items covering the mining industry in the Western United States and Mexico.

ACAO

The St. Eugene Mining Corporation has completed the unwatering of the Hawk Inlet property of the Alaska Empire Mining Company at Hawk Inlet, Alaska, and development will be resumed as soon as general conditions warrant. A mill on the ground is being rebuilt and a road from the beach to the mine is under construction. Frederick A. Ersp, metallurgist, designed the flowsheet for the new mill. Riderway R. Wilson, 215 Bank of Nova Scotia Building, 602 West Hastings Street, Vancouver, British Columbia, is president of the St. Eugene concern which is a subsidiary of Ventures, Ltd.

ARIZONA

One 1,500-foot hole and three 600-foot holes already have been put down at the Silver King mine, where the new operating interests are conducting a diamond drilling project. Plans call for another hole of 1,400 feet, which is to cut at greater depth a mineralized area encountered in the 1,500-foot hole. Bud Mayberry is in charge of the work. The Silver King mine is located near Superior, Arizona, and was acquired early this year under bond and lease by William A. Nelson, consulting engineer of Washington, D.C.; Francis B. Speaker, also of Washington; and the firm of Sprague and Hendrew, Inc., Scranton, Pennsylvania. The Silver King is owned by Bat Gays, Box 713, Superior.

A second shutdown of the Tennessee mine in the Chidston district in Arizona is feared following the recent announcement of cancellation of premiums in the near future and a controversy over contract terms which has arisen between the operating and owning companies. The War Production Board has announced that the B premium on lead and the A premium on lead on the first 50 tons of ore mined, and the C premium on zinc will be canceled on October 1. In addition, the Tennessee Schuykill Corporation has demanded a higher royalty from the Mines Operating Company, which is working the property under three-year contract agreement. Tennessee Schuykill Corporation suspended work last October because of financial difficulties, and its indebtedness is said to have been in excess of $80,000. It is reported that all the large creditors originally agreed to the contract, but that some are demanding their royalties. Mines Operating Company is said to have conformed to all the terms of the contract and is producing an average of five cars of lead and zinc concentrates per month. The company is composed of some 25 former employees of the Tennessee, who are equal partners in the project. J. Robinson, Box 1, Chloride, is mine superintendent. Nye A. Winner, 726 North Bedford Drive, Beverly Hills, California, is president of Tennessee Schuykill.

Articles of incorporation have been filed with the Arizona Corporation Commission by the Ryland Mining and Engineering Company of Phoenix. Incorporators of the new firm include John C. Blair, Box 1281, Prescott, Arizona, and Byron J. Wilson, Dan F. Burban, Edgar L. Parkin, Arthur P. Pinner, Walter E. Rogers, and A. Stewart Cumming, all of Detroit, Michigan. Wilson, Burban, and Rogers, all of whom are officials of the Ryland Engineering and Exploration Company of Detroit, purchased the Colossal gold mine in Arizona. The property, which also has considerable lead, is located about 12 miles from Wagoner, Arizona. The address of the Detroit company is Box 452, 231 West Lafayette, Detroit 31, Michigan, and the concern engages in tool and aircraft design and metal mining activities.

The San Manuel Copper Corporation, incorporated under the laws of the State of Delaware, has applied for a license to do business in the State of Arizona. When the corporation has been duly qualified in Arizona, it will take over the San Manuel property near Tiger, Arizona, which the Magma Copper Company of Superior, Arizona, has been exploring with churn drills. Officers of the San Manuel Copper Corporation are A. J. McNab, president; E. H. Dodge, vice-president; Philip Kraft, vice-president; Gus Mirkwich, secretary and treasurer; W. P. Schmidt, assistant secretary and treasurer; and John R. Mays, agent in the State of Arizona. Principal place of business is at Superior. The Magma Copper Company is the principal stockholder of the San Manuel company, and exploration work will continue at the low-grade copper property under the direction of the Magma concern. W. B. Ross, Superior, is general manager of Magma.

Clara Osborne Botum and Harry M. Osborne, both of Box 1587, Parker, Arizona, are making plans to start operations as soon as possible at the old Lion Hill mine, which they hold under lease agreement. The mines, once famous copper producers, is owned by the Lion Hill Gold Mining Company, O. N. Leng, Philadelphia, Pennsylvania, president. The property is located east of Parker in Yuma County, Arizona.

The Shattuck Dunn Mining Company has reported for the six months ended June 30, 1944, a net income of $205,236 after all charges except depletion, and income and excess profits taxes. Sales of metals, ores and concentrates, and price premiums on over-quota production for the period amounted to $1,787,718. A total of 556,602 was allowed for depreciation. Shattuck Dunn mines. Their head office is at 124 Broadway, New York, New York. J. A. Wilcox of Bisbee, Arizona, is general manager; H. F. Mills is manager of the Iron King Branch at Humboldt, Arizona; and T. W. Newbell, Bisbee, is superintendent of the operation. Donald A. Warner is superintendent of the company's subsidiary, Zuni Milling Company, Albuquerque, New Mexico.

The Emerald Isle Copper Company has reported that it expects to resume regular copper production at the Emerald Isle operation early in September. The company has been operating on a limited basis for some time while extensive changes have been made in the grading and classifying of the concentrate. The property is located 15 miles north of Kingman in Mohave County, Arizona. Oden C. Chase, 405 Valley National Bank Building, Tucson, Arizona, is president of the company and C. F. Weeks of Kingman is general superintendent.

Arnold H. Johnson reports that he has left Phoenix and will reopen his copper-molybdenum property in the Kelvin area of Arizona. His mailing address is Box 19, Kelvin. The mine is known as the Rare Metals property.

Some preliminary work of entry rehabilitation is being done at the Suroose mine toward approval of the problem of reopening. The mine was stripped and permitted to flood since the gold property was closed down by Hoefling Brothers on November 15, 1942, following a 30-day extension of the rock-breaking deadline set by the War Production Board on gold mining. The 125-ton Suroose mill, however, has been treating copper-lead-zinc ores from the company's Big Bend operation. The Suroose property is in the Orovile area of California. Allen E. Jones, Box 786, Sacramento, is general manager of all Hoefling Brothers mining activities.

A small crew is starting work at the gold claims now held by A. T. Robison, Box 192, Nogales, Arizona, under lease from the Gold Meadows Mining and Milling Company of Butte County in the Berry Creek district of California. Russell formerly engaged in copper mining in Arizona, Gold Meadows Mining and Milling is headed by John W. Ross, 2210 I Street, Sacramento, California.

All news appearing in The Mining Journal is obtained from sources believed to be reliable, but the accuracy cannot be guaranteed. However, every item has been sent to the person or company mentioned for verification before publication.
The Northwest Mining and Engineering Company of Seattle, Washington, is starting a gravel operation on the South Fork of the North Fork of the Yuba River near Downieville, Sierra County, California. The company plans to be in regular operation by November. A crew of from 14 to 20 men will be employed and the company will handle an average of 5,000 cubic yards of gold-bearing gravel daily. The project will be under the direction of the company's engineer and mine superintendent, F. E. Nenci, 502 Fifth Avenue, Los Angeles 6, California, and E. C. Dut­law. A supply of 22 and 24-inch pipe, a 19-foot Allis-Chalmers bulldozer, and two hydraulic monitors are being moved in to the property and some ditch repair work already is under way. The mine was ac­quired from Ed A. Humphreys and John Romona.

The Natoma Company, California dredging firm, has reported a net profit of $35,467 for the six-month period ended June 30, 1945. The company's profits for the same period of 1944 amounted to $33,002. During the war, the company operated only two of its seven dredges in the Pollock district of California, but a third dredge was put into operation on August 28, 1945. Natoma also controls property in San Benito County, California, and is president and general manager.

The mill, blacksmith shop, and other buildings at the German Ridge mine were completely destroyed recently when a forest fire swept through a section of Calaveras County, California, some six months ago, for many years was one of the world's largest grizzly bear subsides. The Manhattan Gold Dredging Company of Manhattan Gulch, Nevada, the South Flattle Dredging Company, which recently resumed operations at Fair­play, Colorado. R. G. Smith, Natoma, California, is manager of the gold dredg­ing department. Thomas McCormack, Forum Building, Sacramento, California, is president and general manager.

It is reported that the mine is being worked by the Western States Gold Mines Consolidated, of which the late Clifford McClellan had been president.

Horse V. Underwood, mining man of Hollister, California, has reported the dis­covery of a new gold body in San Benito County, California, about one mile and a half from the old Dales mine. The mine comprises three acres and is expected that development work will be started in the fall. It is planned to lease the prop­erty, and eastern interests are reported to be investigating the deposit. Part owners in the property are Mr. and Mrs. C. H. Root.

There has been a report to the effect that the Carrville Gold Company, 807 Lonsdale Building, Duluth, Minnesota, is planning to resume operations at its riffel mill property at Trinity Center, Trinity County, California. If the company decides defi­nitely to resume mining operations, it is expected that actual operations will not be started for some six months because of the neces­sity of shipping new equipment and machinery and a mine crew. Before the war, the Yuba Consolidated Gold Fields, which was acting as operating agent, was mining from 9,000 to 10,000 cubic yards of gold gravel daily at the Carrville ground, but the WPB Order L-298 forced closure of the mine in 1942. M. B. Phelps of Trinity Center was mine superintendent for the Carrville concern. F. C. van Deime, 351 California Street, San Francisco, is general manager of Yuba Consolidated Gold Fields. Emmet J. Norris, 1824 Fifth Avenue, Oakland, California, is reported to have purchased the old Ruby Hill placer mine 21 miles northeast of Columbia in Tuolumne County, California. Plans call for early installation of necessary machin­ery. The Ruby Hill is a drift gravel mine with a 760-foot inclined shaft, reported to be in good condition. Norris also is inter­ested in reopening another gold mine in the Grants Ridge district.

George E. Poore, Nevada City, Cali­fornia, is reported to have filed application on his behalf and for his co-owners for patent to the Buckeye Hill placer mining claim. The property comprises 160 acres in the You Bet mining district of Nevada County, California.

Resumption of operation is expected in the near future at the Hayden Hill prop­erty of the Lassen Eagle Mining Company. The Hayden Hill comprises 24 mining claims located 15 miles southeast of Adin, Lassen County, California, and all neces­sary mining machinery and a small cyanide milling plant are on the ground. Mining operations at the gold property will be directed by F. H. Brown of Adin, resident manager for Lassen Eagle. The operating company is controlled by the Gold Eagle Mining Company, C. C. Anderson, Symsons Building, Spokane 8, Washington, presi­dent.

Reopening and reconditioning of the old Uncle Sam mine by the High Divide Min­ing Company of Nevada is reported to be proceeding satisfactorily. Former operators of the gold property are said to have re­stricted production to shipping-grade ore and the present company is planning extensive development of the lower work­ing levels. The company will install new concentrating equipment. If a large enough ore reserve can be stocked out the firm will continue with plans for concentration mill. The Uncle Sam prop­erty, which is located near Redding in Shasta County, California, was taken over by the firm only recently by the High Divide concern, which also has mine interests in Nevada. It is reported that the company also is en­gaged in sampling operations at a Trinity County, California, prospect, and will start a dredging operation at the site if investi­gation proves satisfactory.

An article in the San Francisco Examiner reports that the company is proceeding with plans for expansion of operations. The company plans to install new concentrating tables, two new jigs, and new liners for a larger mill as soon as possible. It is ex­pected that the company will treat some 75 tons of ore daily when installations are completed. Development work plans by the company include two new 100-foot drifts. The company has been hauling con­centrates by truck to Los Angeles, Cali­fornia, Richard M. Poe, president of Randburg, California, is owner of the mine.

The Pacific Mining Company reports that it is proceeding with its Union tail­ings operation at Copperopolis, California, while preparations for reopening of its gold properties are being made. Before the war, the company operated the Pine Tree, Josephine, and Jenny Lind gold mines in California, but entered the copper­ mining field after the gold shutdown order. The Union mine, discovered some 85 years ago, for many years was one of California's leading copper producers. The Pacific concern has been working the Union under lease agreement and also has been operating the Newton copper mine near Jackson, California. Regular ship­ments of copper ore and concentrates from both operations have been going to a nearby tailing plant.

An extensive geophysical survey is being conducted at the Spread Eagle group of claims by Charles A. Dobell, 1129 South Seventh Street, Palo Alto, Cali­fornia, under lease by the Fisher Research Labora­tory, 1961 University Avenue, Palo Alto, from the present owner, Mack C. Lake, 200 Seventh Avenue, San Francisco, California. The property was acquired by Lake from the Reconstruction Finance Corporation. The Fisher recondition­ ing work has been completed since a lease was obtained by Fisher Research Laboratory and a dredge located some five miles northwest of Mariposa, California, in the Whitlock district, a noted placer mining camp in the early days.}

MILL SLEUTHING

Would you make a good detective? Here is an opportunity to test your skill. Below are fifteen clues. Your problem is to fill in the blanks with letters. Each of the fifteen words thus formed is an article used in a mill. The following example may make your sleuthing a little easier - abl - An­suer: table, ladle.


Answers to Questions Will Be Found on Page 22
FOSTER COMPANY FORMED TO EXPLOIT NEW LEACHER

THE Foster Engineering Company, 2641 West Avenue 31, Los Angeles 41, California, has been formed to exploit the U. S. patents taken out by B. F. Mason on the "Hydrotuleachers." The company will have exclusive license under the patents and will carry on manufacturing in Los Angeles.

The Hydrotuleacher is a new type of batch leacher in which, the company claims, temperature, pressure, and reagents can be positively controlled, and which greatly cuts down the leaching cycle. Mason, a well-known mine operator and engineer, carried on extensive tests with pilot equipment up to 5 tons' capacity per batch, reducing the leaching time on mixed carbonate and sulphide copper ores to less than one hour. The unit was designed primarily for small mines, or those in the development stage where ore is too low-grade to ship, and is intended to promote a large group of properties in the Southwest, now considered marginal.

At present, the new company is engaged in constructing a pilot plant, which will be given exhaustive tests at the Foster Mines Laboratory at Shadow Mountain, California. Two Hydrotuleachers will be used there, one for cyaniding and one for brine leaching of carbonated lead ores. It is expected that the first copper plant will be installed at the Copper Belt mine at Aguila, Arizona, in November. The plant will be a 60-ton unit, which can be operated by one man per shift.

WORKABLE ENGLISH IN 15 WEEKS

The Colorado School of Mines has achieved notable success in giving non-English speaking foreign students a working knowledge of the English language. The unique course covers a period of 15 weeks. The aim of the school is to prevent its foreign student from wasting the first year or more because of inability to read, write, and understand the courses as they are presented, geared to the language understanding of the average North American student. The Colorado School of Mines has a normal enrollment of up to 10 per cent of foreign students. The new language classes consist of all enrolled foreign students, regardless of language background, and are conducted without the use of translating. Dependence upon the visual and aural senses is the key to the success of the new technique.

If those of us who consider ourselves at home in the English language will listen closely, we will hear a wee small voice warning us that if we aren't careful the "hurries" will beat us at our own game—and no tariff wall can help us.

E. D. Foster, geologist and geophysicist, will have charge of examination and survey work conducted by the new firm, and Marshall Foster, production engineer, will direct manufacturing, installations, and

mine production during preliminary runs. The company's engineering staff will include Harold K. Thomas, metallurgist; J. E. Mekkin, chemist and mechanical engineer; and Frank Hamerschlag, mechanical engineer.

PURCHASE CONTRACTS FOR BOLIVIAN TIN ARE RENEWED

PURCHASE contracts for Bolivian tin, covering deliveries from July 1, 1945, to June 30, 1946, have been signed with all Bolivian producers except the Patino interests, according to an announcement by the Foreign Economic Administration. As in the previous year, the contract was signed by the U. S. Commercial Company for the United States Government and by the Bolivian Government and the leading Bolivian tin producers, except for the Patino interests. The Bolivian mining bank signed for the smaller tin producers.

The new contract provides for purchase during the first three months at the price of the previous contract, with successive reductions in price thereafter. The price for the three months ending September 30, 1945, is based on 63.5 cents per pound of refined tin in the United States. In the three succeeding quarters this will be reduced to 62 cents, 61.5 cents, and 58.5 cents respectively.

Half of the Patino tin production for 1946 is being purchased by the U. S. Commercial Company under separate contract, and discussions are being held regarding a similar purchase in 1946.

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MIAMI, ARIZONA

Lead and Copper Smelter

TOOELE, UTAH

Page 32
In the introduction of the booklet the author reviews the services offered by the Territorial Department of Mines at the main office in Juneau and at the assay offices at Ketchikan, Anchorage, and College. Assaying, engineering, and lapidary services are offered, and the department offices welcome visits and inquiries. Files of reports on Alaskan properties, maps, and a mineral display are maintained for those interested.

The glossary itself is in language readily comprehensible even to the layman and is of value not only to Alaskans, but to anyone interested in the occurrences and uses of minerals.

5 PER CENT DECREASE SEEN IN JULY COPPER PRODUCTION

DOMESTIC mine production of copper in July 1945 decreased 3,064 short tons from the output in June, according to preliminary estimates issued by the Bureau of Mines. The July figure was 65,062 short tons, with an average daily production of 2,099 tons, compared with 2,289 tons in June.

Contributing factors to the decrease were the continued scarcity of labor and the closing of most mines for several days in observance of the Fourth of July.

The copper output of the combined western states decreased 3,510 tons (5 per cent) from June. The Arizona output decreased 2,010 tons (8 per cent). Montana copper production declined in June and again in July with the July output 1,018 tons (12 per cent) under the June figure.

A decline in quantity of material treated at the Kennecott Copper Corporation smelter at Hurley accounted for an 886-ton decrease in the New Mexico production. Utah reported a 529-ton increase in production in July against the trend in most major copper-producing states. The output of copper in the other western states remained approximately the same in July as in June.

REPORT PUBLISHED BY NEVADA ON GROOM MINING DISTRICT

THE Nevada State Bureau of Mines and the Mackay School of Mines have published a new bulletin on “Geology of the Groom District, Lincoln County, Nevada.” Also known as Geology and Mining Series No. 42, it is obtainable from either of these institutions, both addressed at Reno, Nevada, for 25 cents. The report is based on field work done late in 1944 by Frank L. Humphrey, one of the engineers of the state bureau of mines, the project being part of the plan of Nevada to explore and develop the mineral resources of the entire state.

In his report, Humphrey has included a detailed description of the geology of the district, giving maps, pictures, and sections. He discusses the Groom, lead-silver mine, being operated by the International Mining Corporation of New York and Dan Sheahan of Caliente, Nevada, in partnership. The Groom is the only producing property in the district.

CALIFORNIA MINE OUTPUT COVERED IN NEW BULLETIN

The total value of the mineral production in California in 1943 has been placed at $436,445,280 in the newly issued Bulletin 128 of the California State Division of Mines, Perry Building, San Francisco, California. The bulletin, which is entitled “California Mineral Production and Directory of Mineral Producers for 1943,” also reports that the year’s output represented an increase in value of $17,706,846, over the total of 1942, which was $408,738,484.

The report was issued by the division statistician, Henry H. Symons, and was compiled from direct returns received from operators throughout the state. The new bulletin is available at the offices of the Division of Mines at San Francisco, Sacramento, and Los Angeles for 75 cents, plus 2 cents sales tax for California residents.
and power for light-metals production. A rate in the Pacific Northwest, Tennessee Valley, and other areas of low-cost public power production, lower than 1 mill per kilowatt-hour, would be desirable, and would seem to be feasible.

Revisions of rates for firm power should also be made in the lowest possible base cost, taking into account the anticipated normal requirements. The present rate of the Bonneville Power Administration, $1.50 per kilowatt-year, seems reasonably low for continuous operations through the year, but would be too high for intermittent operation. Rates for TVA and Boulder Dam power, which are materially higher than the Bonneville rates, should be reexamined. Discriminations by public power agencies in rates charged one user against another, such as the higher rate charged by TVA to Reynolds than to Alcoa for similar power supplies, should be immediately corrected.

MONOPOLY has characterized most of the history of the light-metals industry. In aluminum, the monopoly of primary metal by Alcoa was maintained for more than 50 years. Included in this history was the early participation by Alcoa, directly or indirectly, in three cartel-like agreements. On March 12, 1945, Alcoa was declared by the court of final appeal (Circuit Court of Appeals, Second Circuit) to have been, as of 1944, a monopoly in primary production in violation of the Sherman Act. The question of dissolution was left to the lower court, depending on the outcome of the program for disposal of government plants.

The monopoly of aluminum has been aided by the limited domestic reserves of suitable bauxite, controlled largely by Alcoa, also by Alcoa’s large holdings of the best deposits of high-grade bauxite in South America, its ownership and control of cheap hydroelectric power, and its 56 years of know-how.

No patents are now of controlling importance.

The monopoly of primary aluminum has restrained consumption by some potentially large users. Fabrication companies circumvented the committee, and witnesses who testified at the hearings, indicated they would expand their uses of aluminum more if alternative sources of supply were available.

Reynolds now provides more aggressive competition in aluminum production, but it is too new in the industry to have demonstrated how extensive will be its competition. Reynolds has only 14 per cent of the privately owned capacity, while Alcoa has 86 per cent.

In magnesium, Dow gained a monopoly position in 1927 through the withdrawal of other producers. Henry Kaiser, through Permanente Metals Company, is now a competitor, but this competition is as yet new and on too small a scale to demonstrate its effectiveness.

Competition has yet to show what it can do in the light-metals industry in rendering service to the economy of peace and

(Continued On Page 56)
Seattle last January to become manager for the Washington and Oregon district.

F. O. Case, formerly general manager of Basic Magnesium, Inc., at Las Vegas, Nevada, has been appointed assistant to the president of the Anaconda Copper Mining Company with headquarters at 26 Broadway, New York. He succeeds E. O. Soverwine who became a vice-president of Anaconda recently. Control of Basic Magnesium was acquired by Anaconda in 1942.

Arthur T. Newell, mining engineer and technical adviser for the Chrome Chemicals Company at Parramatta, New South Wales, Australia, is returning to the United States in December and will be addressed in care of Mrs. M. E. Newell, 439 West Broadway, Missoula, Montana. Before going to Australia, Newell was chemical engineer for Basic Magnesium, Inc., at Las Vegas, Nevada.

Frank McDonough, Box 1048, Albuquerque, New Mexico, recently purchased the Don A. Carpenter and Company, 900 Francisco Street, El Paso, Texas, a mining equipment firm, and has named Alfred W. Heusler as manager. The Carpenter firm was founded by the late Don A. Carpenter in 1909, and was sold to McDonough by Willis H. Shontz. The new owner of the company also is manager of the Mountain Equipment Company.

E. W. Newman has resigned as district engineer of the U. S. Bureau of Mines at Helena, to accept a post as geologist with the American Smelting and Refining Company at Salt Lake City, Utah. He established the Montana branch of the bureau in 1941 and prior to that had been with the organization in Nevada. Until Newman's successor is named, George Bennett will direct the Montana bureau. Although 12 of the 23 district offices will be discontinued, the branch at Helena will continue to function.

Raoul G. Bergman and his wife, who recently were released from a Japanese prison camp in the Philippines Islands, are back in the United States and temporarily may be reached through the American Institute of Mining and Metallurgical Engineers, 29 West Thirty-seventh Street, New York 18, New York. Bergman joined the staff of the International Engineering Corporation in Manila late in 1941 and before that had been employed as consulting engineer for the Union Management Company in the Philippines Islands.

A. H. Richards has gone to Galveston, Texas, where he has taken up his duties as consultant and supervising engineer for the Metals Reserve Company at the Longhorn smelter of the Tin Processing Corporation. Richards, for many years head of the American Smelting and Refining Company smelter at Selby, California, retired at the end of 1941, after about 42 years of service with the company.

He came out of retirement early the next year, and was associated with the War Production Board and later the Foreign Economic Administration in various capacities.

Fremont E. Wood, mechanical-electrical engineer, resigned late last year to take his resignation to the California Institute of Technology, effective October 15. Since leaving Basic Magnesium, Inc., in Nevada five years ago, he has been plant engineer in charge of the mechanical, electrical, and drafting departments for both the China Lake rocket motor and the Salt Wells explosives plants, operating under the California Institute of Technology at Inyokern. One of the remarkable features of Wood is that the company has announced that Wood expects to return to the mining and milling field, and in the meantime is being paid $10,000 for the service he is giving.

SHERWIN M. F. Kelly, president of the Sherwin W. Kelly Geophysical Services, Inc., was scheduled to return to the United States from Toronto, Canada, the latter part of September to look after some experimental work being conducted in Missouri by his firm. His Canadian company, Geophysical Services of Canada, Ltd., has been conducting several surveys in the Noranda area of Quebec and shortly will undertake work in the Cariboo peninsula, and also near Port Arthur, Ontario, which Kelly will supervise. Upon his return from South America last winter, Kelly spent the spring in Arkansas on a magnetic survey of nearly 400 square miles. Mail reaches him addressed to Rooms 218, 900 Market Street, Los Angeles 9, California.

$120 GOLD CLUB ISSUES PAPER TO PROMOTE CAUSE OF GOLD

A NEW publication, The $120.00 Gold Club News, has made its debut with Volume 1, Number 1, dated September 10, 1945. It is published by Kenneth K. Ash, Yreka, California, secretary of the $120.00 Gold Club, and will be devoted to the education of the general public in the importance and necessity of retaining gold in our monetary system.

Ash states that in citing the very real and imminent danger that threatens our currency he is not crying "wolf," but has given the hard, cold facts and some of the behind-the-scenes moves that have taken place in an effort to foist a printing-press currency, without gold or silver backing, on the people. The principal article in the "News" deals with the importance of gold currency as an aid to liquidation of our huge public debt. Other articles give interesting and pertinent facts regarding gold mining and urges adjusting the price of gold to existing economic conditions.

CALLING ALL FLAPJACK FLIPPERS

Come on, you flapjack flippers, here's your chance to get your flapjacks in order and turn in those applications. As you know, the big world flapjack convention is coming up and your flapjack supplies should be forthcoming. Better get your applications in, boys, and start limbering up your flapjack arm.
A Siskiyou County property which is expected to be back in operation soon is that of the Midland Mining Company, F. H. Hoyt, general manager. The dragging and dredging firm formerly owned a property near Sawyers Bar on the North Fork of the Salmon River, handling some 285 cubic yards of water every 24 hours on a three-shift basis. However, the company has not been operating since the issuance of the L-208 order.

A gold property on Humbug Creek in Siskiyou County recently was optioned to J. E. Haller, 817 East Colorado Street, Pasadena, California, and his associates, John Estes and M. E. Magill. It is reported that sampling and other work already is under way.

The Golden Key Mining Company, which formerly worked property in the Whitlock mining district of Mariposa County, California, expects to start operations as soon as title difficulties have been straightened out. When the war started, the property was being operated under lease by the Western Mining Association.

The Central Eureka Mining Company, Room 301, 111 Sutter Street, San Francisco, California, has announced that an assessment of 10 cents per share has been levied on the capital stock of the company, payable immediately. Any shares for which the assessment shall remain unpaid as of October 22 will be delinquent, and as such shares may be necessary will be sold at the company office on November 7, 1945. The gold mining concern also reports that the repeal of Government Order L-208, under present conditions, does not permit the reopening of its property at Sutter Creek, California, due to the manpower shortage. When the closing order was issued, the firm’s cash position was $478,247.14. Central Eureka feels it is advisable to retain the government bonds and found the assessment necessary as remaining cash assets will not be adequate to pay for continued upkeep and reopening the mine when practicable. It is reported also that the potential future of the mine from developed ore is estimated at more than $1,600,000, and diamond drilling indicates that an additional $1,500,000 is possible from production above the 4,000 level. C. C. Prior is president and general manager of Central Eureka.

A copper operation, to be known as the El Dorado mine, is being started in the Garden Valley district of California by H. A. Weiler and Hal Hall, both of Georgetown, California. A diamond drill crew is on the ground engaged in a testing program.

C. N. Burrows of Randburg, California, has sold his New Deal claims, Nos. 1 and 11, to Robert B. Johnson and Cecil Chalmers, both of Randburg. The two groups of gold claims are located in the Randburg district, and the new owners are starting to remine and otherwise recondition the mine for early operations.

The Red Bird and Quail claims in the Stringer district of California were sold to William Harvey Scott for a reported price of $150. Sale of the property was ordered to satisfy a judgment against Austin Landes, Randburg, who at one time operated the mine on a co-partnership basis.

The Rand Mining Company announces that its new mill plant has been put into operation, following several months’ work of installing machinery and constructing a water pipe line from the Yellow Aster mine. The plant is located on the Sonora claim, in the Stringer mining district, adjoining the company’s Battle claim, which is providing ore for the mill. Mining is carried on with a 4½-pound shot and 340-foot bid. At present seven men are being employed, but a night shift will increase the crew to 12 men in the
ASSESSMENT SUSPENSION
No assessment work prior to July 1, 1943, will be required of holders of mining claims. The act of May 3, 1943, suspended assessment work "until the hour of 12 o'clock meridian on the first day of July after the cessation of hostilities in the present war as determined by proclamation of the president or concurrent resolution of Congress." However, those desiring to hold their claims must file notices of "intention to hold" in the office where the location notice or certificate is recorded, on or before noon of July 1 of each year that the act remains in effect.

The date for "the cessation of hostilities in the present war" has not been determined officially.

estimated that the project will run another two years and a half in addition to any reserves which may be developed by further prospecting. John A. McDonald, 912 Russ Building, San Francisco 4, California, is president, and Estey Julian, 1 Montgomery Street, San Francisco, is general manager.

Louis Palmer, Cecilville, California, is reported to have uncovered a body of free milling high-grade ore at his quartz mine in Graham Gulch between Cecilville and Forks of Salmon, California. Palmer has been developing the mine for several years, and last year completed a spur road up the mountainside to the property. It is said that in the past a large quantity of gold was taken from Graham Gulch, from small quartz veins and placer mining.

Sinking of a winze is being started and crosscutting also is proceeding at the Alaska gold mine situated in Sierra County near Pike City, California. More extensive operations are planned when the manpower situation improves. The mine was reopened by R. J. Kohlen, formerly mine superintendent, last June, and a small crew completed dewatering of the property. The ground is held under lease and option by Harvey L. Sorenson, 686 Sixth Street, San Francisco, California.

Mr. and Mrs. Errol MacBoyle, Russ Building, San Francisco, California, recently filed deeds to a half interest in the Champion, Reagan, Red Hill, Gold Tunnel, and Mountaineer mining properties at Nevada City, California. The deeds were

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PACIFIC-WESTERN

THE MINING JOURNAL for OCTOBER 15, 1945
executed by Carl P. Jones in February 1946, shortly before his death, and the other half interest in the mines is held by the Jones Estate. The mines comprise some 1,200 acres, and the Champion and Mollie Kathleen have good gold production records. MacBoyle is vice-president of the Idaho Maryland Mines Corporation and his wife is a director.

Thomas S. Robinson, Box 3, San Mateo, California, and G. C. Dickerman, 1412 Cornell, Berkeley, California, were in Jackson recently conducting considerable sampling and examination work at their Quarts Mountain holdings. It is expected that they will start gold mining when operational and metallurgical problems are solved. They are particularly interested in developing some 50 acres on Quarts Mountain, a prominent landmark about nine miles north of Jackson and east of Drytown, California. Many workings left by former operators are reported to be accessible. Ore was treated in a 26-ton stamp mill intermittently over a period of five or six years until 1899, and the property has been abandoned since, except for small-scale operations about 10 years ago, when a 100-foot shaft was sunk.

Ligation of nearly six years' duration was ended recently when Judge Frank H. Norcross of the U. S. district court attached to the Mount Gaines Mining Company, a Nevada firm, the right to a 10-year extension of its lease and option on the Mount Gaines gold mine at Hornitos, California. The original company, A. G. Feng, Inc., was formed in 1952, and was reorganized the following year as the International Mining and Milling Company. The Mount Gaines concern was formed in 1954, as an International subsidiary, and the newest company later acquired a one-sixth interest in fee title, securing a 10-year extension of the lease and option. The mine, which was closed down in 1911 as worked out, was reopened under Mount Gaines management, and litigation of the concern is treating some 100 tons of lead-zinc-silver ore daily. Ray La Plant will superintend work for the new owner.

A shipment of high-grade gold ore weighing 1,365 pounds, made from the Ward-Rader lease on the Mollie Kathleen mine near Cripple Creek, Colorado, is reported to have returned $1,717. The lease, located on the lower levels of the Mollie Kathleen, extends upward approximately 300 feet and has been yielding high-grade ore for some time. The mine is owned by the Tenderfoot Mining Company of Cripple Creek and the lease is operated by Fred Ward and Bill Rader on a split-check basis. Denver, Colorado, interests are reported to have acquired a lease on the Amy Paul group of mining claims and the Amy Paul millsite in Boulder County near Eldora, Colorado. The lease was granted by Bay Bennett of Eldora. Work is to start soon on rehabilitation of the tunnel preparatory to a resumption of ore shipments to the Golden Cycle mill at Colorado Springs, Colorado. The property is stated to have been a consistent gold producer before war conditions forced a shutdown for the duration.

The Defense Plant Corporation has been asked to install approximately $60,000,000 worth of additional facilities at the Genesee steel plant, Geneva, Utah, under a five-year lease arrangement proposed by the Colorado Fuel and Iron Corporation. The C. F. and I. proposal states that if the facilities are added to convert the plant at peace time use, it will supervise the in-
Day pointed out that both the No. 6 and No. 4 Callihan levels, the latter 450 feet above the former, have been extended to intersect the Nipsic vein. Continuation of either of these crosscuts another one-half mile northerly would cut the Silver Tip-Parrott vein system at comparatively great depth. The Silver Tip-Parrott ground is owned by Monitor and has been productive during the war period, mainly through leasers. There is a horizontal gap of some 5,000 feet along this vein system which has been only superficially developed.

MEXICO NATIONALIZES ALL ITS RADIOACTIVE DEPOSITS

The Ministry of National Economy in Mexico has announced that all deposits of radioactive metals, including uranium, thorium, and actinium, have been classified as "national mining reserves." As such, the metals have been placed under federal control and are assessed to private exploitation. The decree follows:

"The Ministry of National Economy, in exercise of the authority conferred by Article 126 of the Mining Law for the purposes established by Section IV of the same act, and taking into consideration the surprising new applications of radioactive substances, which must in the future be utilized for the general welfare and progress of mankind, declares:

"The fields of uranium, thorium, actinium, and other elements with radioactive properties to be found in this country, as well as all natural substances from which these can be obtained, are hereby incorporated as national mining reserves."

In addition, the ministry reports that studies made by the Mexican Bureau of Mines have disclosed the existence of uranium in the states of Chihuahua, Durango, and Guerrero. The Committee for the Investigation of Mineral Resources already has sent a group of geologists to the Chihuahua uranium zone for the purpose of further investigation, and studies of the Durango and Guerrero deposits also are planned.

MINING GEOLOGY JOURNAL

WALTER W. BRADLEY, state mineralologist and chief of the California State Division of Mines, announces that the October 1944 issue of the "California Journal of Mines and Geology" is ready for distribution. Besides the biennial report of the state mineralogist, the bulletin contains articles on "Pellet Phosphate from Carmel Valley, Monterey County," by Austin F. Rogers; "Geology of the Quartz-Crystal Mines Near Mokelumne Hill, Calaveras County," by Cordell Dunsrell; and special articles on strategic mica and marketing vermiculite. Henry H. Symons, statistician, has compiled for the bulletin a table on the "Total Recorded Value of Mineral Production in California."

The quarterly is available at the offices of the Division of Mines at San Francisco, Sacramento, and Los Angeles, California, for 60 cents postpaid, plus 2 cents sales tax for California residents.

MINING CONGRESS COMMITTEE REVIEWS LEGISLATIVE MATTERS

At a recent meeting of the tax committee of the American Mining Congress to review prospective tax legislation, the committee took the position that the excess profits tax credit carry-back should be continued as of December 31, 1945, and that the unused excess profits tax credit carry-back should be considered as being earned by the carry-back feature which was first proposed by the Treasury in response to urgent representations as to the need for annual fist reserves for deferred maintenance and for under-development of mines, the committee maintained that the extraordinary high rates of wartime taxation could only be justified on the basis that there would be a carry-back feature. The tax committee also took the position that the corporate normal and surtaxes for 1945 should be at least 33 1/3 per cent, with further reduction to be made in subsequent years. With regard to individual incomes, the committee stated that "there should be a general revision of the individual income tax rate structure so that no individual will be subject to an income tax liability in excess of 50 per cent of his taxable income; but if it is impossible to revise the rates in a manner practicable for any reason, then we favor a reduction of at least 20 per cent in all individual income tax should be terminated as of January 1, 1946, unless action is taken.

FREE GOLD IS REPORTED IN ANOTHER ALASKAN DISTRICT

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FREE GOLD IS REPORTED IN ANOTHER ALASKAN DISTRICT

A new locality in which free gold is present in a bolder deposit has been found in the Kuskokwim region of Alaska, by Robert E. Wallace of the Geological Survey. According to an announcement by William E. Wright, director of the survey, the location is on the ridge which forms the divide between the Tuluk River and California Creek, approximately one-third of a mile northeast of the junction of those two streams and about three miles by airline north of Nyack, Alaska.

The free gold was found in small veinlets of quartz in a granitic porphyry dike which cuts older volcanic rocks. The amount of the deposit has not been determined. So far as is known the locality is on an unclaimed ground although placer deposits in the immediate vicinity are held by a gold dredging firm.
MITCHELL TELLS OF CIVILIAN CONDITIONS IN PHILIPPINES

A LETTER to The Mining Journal from Charles A. Mitke is well worth publishing in part because of the conditions it gives of the situation under which civilians in Manila have been living. The letter was written early in August and prior to the Japanese surrender. Mitke, who was one of the Santo Tomas Internees, has elected to remain in the Islands to continue with his prewar work in the consulting engineering field.

Mitke reports that "there is a very gradual business improvement since I last wrote you, as a number of banks were opened up a few weeks ago. Transportation is available, although limited, and we have a continuous supply of water for home consumption. We are informed that generators will be arriving in the course of a few months and, if this is so, things will pick up a little faster as power will then be supplied to homes, factories, and small shops."

In spite of his apparent optimism about the general situation, Mitke does admit that they are having considerable difficulties. With regard to mail service, they were not permitted, for civilians, to use APO address, and at that time without an APO nothing could be sent airmail. Steamship mail has required two months and more, each way, thus handicapping attempts to revive business in the Islands.

The few remaining American civilians in the Philippines, Mitke says, "are having a tough time of it, as many obstacles have been put in the way of their rehabilitation. Most of the office buildings and many of the better homes are occupied by the Army. There is electricity everywhere, but not for civilians. No civilians may have a telephone, or purchase ice, and transportation is difficult. There are no stores, and no commissary privileges for civilians. We are allotted small rations each week, for which we pay, but there is no selection and there is not enough."

Staples, Mitke says, cannot be purchased in the city, and the prices of native beef and pork, fish, chickens, fruit, and vegetables have soared to about 10 times the prewar prices. However, he reports that night clubs and restaurants are flourishing everywhere, having in some way obtained considerable supplies.

Mitke, in discussing mining conditions, says it is really interesting to read your comments on gold. People here in the Orient are more or less confused on the issue on account of the inflation we are undergoing at present. Most of them have the idea that gold and silver will command a high price in the future, and the buying and selling of any form of gold or silver jewelry was rampant among small individual traders throughout the city last year."

One of the early ventilation engineers in the Bisbee, Arizona, mines, Mitke went to the Philippines a number of years before the war, engaging in consulting work for several large mining companies. At present, he is being addressed through the American Chamber of Commerce in Manila.

SILVER PRICE INCREASE IN U. S. WILL AFFECT CANADIAN MINES

Canadian silver production in 1945 is estimated at 12,000,000 ounces, the bulk of which will be a byproduct in the mining of nickel, copper, lead, and gold. About 2,000,000 ounces will be shipped in concentrates to the United States, raising the total to 14,000,000 ounces.

During the war years, a pool was formed by Canadian silver producers for the purpose of supplying the domestic need of about 9,000,000 ounces a year for commercial use at the ceiling set in 1941 by the Price Board at 40 cents an ounce. At that time, the world price of silver was approximately 40 cents.

NORTHWEST MINING STARTS CALIFORNIA OPERATIONS

The Northwest Mining and Engineering Company, 415 Hope Building, Seattle 4, Washington, has secured by lease and purchase contract the property near Fort McKinley along the South Fork of the North Fork of the Yuba River, commencing about one-half mile east of Sierra City, California, and extending approximately four miles downstream. The company also has acquired the Marguerita and one-half mile long, with the water rights.

The second ditch, known as the Humphrey, has been completely overhauled and rebuilt for the entire length of 8,001 feet. From the penstock of this ditch to the point of gravel operation a pipe line is being laid, with 3,500 feet of 24-inch, 23-inch, and 22-inch steel pipe. Two six-inch giants under a head of 182 feet will be set up in the ancient channel, which is 465 feet wide at this point.

The Northwest Mining company reports that the rated capacity of the equipment being installed is 4,000 cubic yards per 24-hour day, and the gravel is said to assaysub about 40 cents per cubic yard. Sluice boxes are to be 60 feet long with iron rails for riffles, mounted on solid rubber strips to give vibration to keep the riffles from packing with black sands. At the end of the riffles is a 24-inch pulsator jig, and then to a 24-inch pulsator jig. An Allis-Chalmers Diesel bulldozer has been purchased and the ground is being prepared for hydraulicking. Generators for lighting and power and other small equipment also will have to be installed. A crew of 10 men is being employed to put the property in shape for production.

Northwest Mining and Engineering also is investigating other placer properties in the mining journal for October 15, 1945.
California, the entire program being under the general management of F. E. Nemec, Seattle. Frank Redmond, a graduate of the University of Alaska, and employed for eight years on the engineering staff of the U. S. Smelting Refining and Mining Company, will be in charge of the Northwest Mining and Engineering Company's California engineering operations. He will make his headquarters at Sierra City, E. C. Outlaw of Seattle is consulting engineer, and W. B. Clarke, also of Seattle, will be business manager at the Sierra City mine.

RFC CANCELS ALCOA LEASES ON GOVERNMENT-OWNED PLANTS

ALUMINUM Company of America has completed arrangements with the Bonneville Power Administration for sufficient power to start the fifth production unit at its Vancouver, Washington, plant. The unit went into operation September 28. C. S. Thayer, works manager at Vancouver, said that the RFC's unexpected termination of the company's operating leases on five government-owned aluminum reduction works has necessitated closing down all current operations in those plants and, as a result, the company feels it should start operating the fifth unit at Vancouver. The Vancouver plant is owned outright by Alcoa.

The Reconstruction Finance Corporation has canceled, effective October 31, 1945, all the wartime leases on the aluminum smelting plants and related facilities built by the company for the government and leased to the company for terms which would have expired in 1947 and 1948. The Aluminum smelting plants affected include those at Jones Mills, Arkansas; Los Angeles, California; Massena, New York; Spokane, Washington; and Troutdale, Oregon. Aluminas plants at Hurricane Creek, Arkansas, and Baton Rouge, Louisiana, also are included in the cancellation. These, together with three smelting plants previously closed, those at Masseth, New York; Burlington, New Jersey; and Riverbank, California, bring to a conclusion the wartime activities of all government-owned aluminum smelting and alumina plants operated by Alcoa. The plants have a total annual capacity in excess of 1,250,000,000 pounds of aluminum and 2,500,000,000 pounds of alumina.

Head offices are at 801 Gulf Building, Pittsburgh, Pennsylvania. Roy A. Hunt of Pittsburgh is president.

OROVILLE GROUP URGES RESOLVING ORDINANCE

DIRECTORS of the Oroville Chamber of Commerce in California have named a committee to meet with the Butte County Board of Supervisors to urge the adoption of an ordinance regulating gold dredging in the Oroville area. The plan proposed calls for replacing top soil on dredged areas, but allows for exemption of lands certified by the board of supervisors as of little or no agricultural value. The plan is similar to the Dillinger bill, defeated at the last session of the state legislature, and will follow provisions of regulations in operation in Merced County.
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U. S. SMELTING PLANS WINTER's WORK AT ALASKA HOLDINGS

It is reported that the U. S. Smelting Re-
fining and Mining Company has com-
pleted plans for thaw drilling on some of its properties in the Fairbanks, Alaska, dis-
- trict this winter. The program will be undertaken the latter part of October and will continue throughout the winter with a crew of from 30 to 40 men employed.

The company's No. 8 dudge at Goldstream is to be operated until the end of the sea-
son and the No. 10 dudge on Cripple Creek near Ester also is working. It is
planned to operate the shop and power plant throughout the winter, Roy B. Earl-
ing, Fairbanks, is vice-president and gen-
eral manager of the company's Fairbanks Department.

LOW COST BARITUM PROCESSES

DISCUSSED IN KROLL REPORT

In a report entitled "Processes for Re-
fining Barium and Its Alloys," W. J. Kroll,
consulting metallurgist for the Bureau of
Mines at Albany, Oregon, discusses the possibilities of producing barium at a cost of less than 45 cents a pound by a large-scale operation using processes reviewed in a recent publication by Dr. R. R. Sowers, director of the bureau.

Barium is plentiful in nature, but is ex-
pensive to prepare in metallic form, and is
now selling in small lots at the nominal price of $18 a pound. Search for new
commercial uses for elemental and alloyed barium might be stimulated by the new processes, according to Kroll, who states that barium alloys can be made readily. Chemical methods for producing the alloys would compete on the cost basis.

The cost estimates are based upon pres-
ent raw material prices and production costs in silicothermic distillation plants operated for production of magnesium from dolomite, a similar process.

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of each mine, particularly in the matter of labor, operating costs, and taxes.

Another phase of the silver picture in Mexico relates to the silversmiths who claim to be hard hit by the price increase. Mexico relates to the silversmiths who claim to be hard hit by the price increase. The government has been encouraging the silverware trade for some time and has considerably increased its exports of silver products to the United States and South America.

PIG LEAD IMPORT AND EXPORT FIGURES RELEASED BY BUREAU

A MODERATE decrease in imports of pig lead during 1944 was noted in figures compiled by the American Bureau of Metal Statistics from reports recently released by the Department of Commerce, with imports for the last year totaling 222,758 net tons against 244,510 tons for 1943, and 369,254 tons in 1942. Of the total 222,758 tons reported for last year, the largest portion or 167,704 tons came from Mexico while only 8 tons were imported from Canada. Of the 244,510 imported in 1943, the report shows that 213,724 tons were from Mexico while 1,605 tons were from Canada. Out of the total imports of 369,254 tons of pig lead imported in 1942, 192,044 tons were brought in from Mexico while 70,502 tons came from Canada. Exports of pig lead last year amounted to 18,525 tons of which the majority, or 14,315 tons, was sent to Russia. Small tonnages were exported in 1943 and 1942.

MAGNETOMETER PROVED TO BE VALUABLE IN OREGON TESTS

THE VALUE of the magnetometer as a tool of exploration when used in conjunction with other prospecting methods has been established by the Bureau of Mines as a result of a series of cooperative surveys on black sands of the northwestern coast of Oregon. The research, described in a recent publication of the Bureau of Mines, was done in the spring of 1942 during the wartime search for domestic sources of chrome ore, in cooperation with the Oregon Department of Geology and Mineral Industries. The surveys proved the efficiency of magnetic methods in detecting, tracing, and outlining known deposits of minerals and in prospecting for new deposits. Although drilling is the primary method for directly testing black sands, these tests indicated that the magnetometer would be useful as a means for exploration of known deposits in eliminating non-productive holes, finding unknown extensions of black sand, and for setting up an integrated drilling program in advance. A wide area extending from Coos Bay southward to Port Orford, Curry County, was studied.

Exploration in the Oregon coastal area since about 1852 had disclosed the presence of fine gold and metals of the platinum group, and although extensive mining and prospecting have been done for these precious metals, the amount of electric power available for mining operations, determine the proximity of the deposits to rail transportation, and gather information relating to the amount of power available. The survey was in progress from August 8, 1942, to June 30, 1944.

WESTERN DOLOMITE DEPOSITS MAPPED BY GEOLOGICAL SURVEY

A MAP showing the location and age of the dolomite deposits in the western United States, with a brief text describing some of the more important producers, may be obtained from the director, Geological Survey, Washington 25, D. C.

The map is the result of an investigation of 116 dolomite deposits in the western states. The reconnaissance examination was made in order to determine the grade, quality, and tonnage of the dolomite deposits, describe the local topography and amounts of over-burden that would affect mining operations, determine the proximity of the deposits to rail transportation, and gather information relating to the amount of electric power available. The survey was in progress from August 8, 1942, to June 30, 1944.

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THE MINING JOURNAL for OCTOBER 15, 1915
FIGURES ON VANADIUM ARE RELEASED BY MINES BUREAU

INCREASED receipts of domestic vanadium ores at mills and increased ore imports were reported by the Bureau of Mines in statistics made public following the termination of censorship. July 1945 consumption, however, was reported as 17 percent below the June figure.

Vanadium ore and concentrates received, in pounds of contained vanadium, are as follows:

<table>
<thead>
<tr>
<th>Domestic Ore Received at</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period</td>
<td>Mill</td>
</tr>
<tr>
<td>1941</td>
<td>2,619,051</td>
</tr>
<tr>
<td>1942</td>
<td>4,459,130</td>
</tr>
<tr>
<td>1943</td>
<td>5,886,492</td>
</tr>
<tr>
<td>1944</td>
<td>6,527,054</td>
</tr>
</tbody>
</table>

* Also includes ore received at government stockpiles.
** Recorded by Department of Commerce.
*** Data not available.

OWENS LAKE PLANT ENLARGED BY NATURAL SODA PRODUCTS

A COMPLETE new unit for the recovery of sodium carbonate has been placed in service by the Natural Soda Products Company at its Owens Lake property, at the feet of Mount Whitney, near Keeler, California. It is designed to increase the company's output to between 60 and 60 tons daily.

The wooden brine towers, formerly employed for processing the sodium products, have been replaced by welded steel towers considerably larger in size. Mushroom baffles on the inside of these structures are said to increase their efficiency considerably over the old type of towers.

In bringing the salts from the brine for processing, a continuous stream of brine is pumped from the dry lake bed into large tubs of clay. These side rably over the old types of towers.

From the vats the brine solution is conveyed is
to the tops of the two towers. The speed with which the brine is conveyed is gradually lowered, causing the solution to break up on the baffles inside the towers. The conversion process is composed chiefly of sodium carbonate, sodium sulfate, and sodium carbonate.

From the vats the brine solution is carried through heat exchangers where further evaporation takes place. From the heat exchangers, pumps carry the solution into the tops of the two towers. The speed with which the brine is conveyed is gradually lowered, causing the solution to break up on the baffles inside the towers. The conversion process is similar to that employed for most carbonate salts.

Natural Soda Products Company has been mining sodium carbonate and other salts from the Owens Lake region for more than 35 years. The chief uses for the products are in glass, distinctive of soda, soap, mining processing fluids, insulation, cleaning compounds and for water treatment.

BANNER MINING COMPANY WORKS MISER'S CHEST MINE

The Banner Mining Company, which recently took over the old Misers' Chest mine near Lordsburg, New Mexico, has an extensive mining and development program under way.

The Misers' Chest adjoins the Bonnec mine of the Banner company, and the properties are among the best known mines in the Virginia section of the Lordsburg mining district. The area was famed as early as 1870, when principal interest was centered around silver production. However, during the present century attention has been directed mainly to mining for copper in the Virginia district in the northern part of the Pecos Mountains from 3 to 10 miles southwest of Lordsburg. The copper deposits of the district are low-grade, but highly siliceous, and large-scale operation of the mines in the region was due largely to the need of siliceous ore at nearby smelters.

Since the fall of 1945, the Miser's Chest property was controlled by the former New Mexico State Senator Charles J. Hutchison, Box 415, Lordsburg. Under the Hutchison management, a 75-ton hoist, compressor, and ore bins were installed, and the double-compartment shaft was rehabilitated and sunk to the 500-foot level.

Besides mining on the 400 and 500-foot levels of the Miser's Chest shaft, the Banner concern reports that it also is cutting to the Miser's Chest veins from the 900 level of the Banner mine's 1,500-foot three-compartment shaft. The company plans to continue most of the Miser's Chest development work through the Banner workings.

The Banner Mining Company has operated in the Lordsburg field for many years and at latest report was producing some 300 tons of copper, gold, and silver ore daily, including dump ore. The crew in the Banner mine and mill has been numbering about 80 men. Operating officials include E. S. Bowman, general superintendent, and A. R. Bowman, superintendent of the Lordsburg operations. Head offices are at 1901 First National Building, Oklahoma City, Oklahoma. The operating staff at the mine includes C. Dunkerson, mine foreman; George Stone, mill foreman; Richard Matti­nai, mine and safety engineer; E. E. Bray, master mechanic; William Daily, chief electrician; and David M. Rock, chief chemist.
MURIEL V. SIBELL* tells of
Nevadaville’s Church

ONE MILE beyond Central City, tucked away at the head of Nevada Gulch, stands a deserted city, a scene of utter disintegration. Fragments of its past which have survived only make it appear the more desolate. Bald Mt. Postoffice is there with boarded windows; the City Hall, barely large enough to shelter the town’s fire company, stands opposite the brick hall of the Rising Sun Tribe. Beyond what remains of the two churches stood the frame schoolhouse with books, maps, a clock, and a tattered flag strewn on the floor.

Yet in its day Nevadaville had a brilliant outlook. Lack of sufficient water limited its development—it is even whispered that a rival company diverted its proposed water supply to the adjoining town. At any rate, Nevadaville died a slow death and today only its skeleton remains.

Fifteen years ago High Church stood at the top of the hill and crowned the city just as St. Aloysius’ Academy did in Central City. However, in a heavy storm the steeple blew down and lay rotting on the ground. The next year the interior of the church was one mass of buckled floor, velvet kneeling cushions, mouldy and water-soaked, and hymn books strewn about. Houses in the town were in a similar condition. Broken windows or sagging doors permitted one to enter. With its ruins—an armchair with its upholstered broken and sagging, old newspapers, a few books with their pages gummed together, tin cans, wash basins, old bottles—and always the loud inexplicable noises of empty rooms, the flapping wallpaper, the dropping plaster, the rattle of corrugated iron. But inclosing it all is the stillness and lifelessness, broken only by the rush of wind or the tinkle of a distant cowbell. One by one the buildings, the visible monuments of a pioneer culture, are disappearing. And someday the ghosts alone will remain.

*Head, Department of Fine Arts, University of Colorado, Boulder, Colorado.

MOUNTAIN KING COPPER OPERATIONS BEING STARTED

THE Mountain King copper mill recently was converted to a gold milling plant and preparations are being made to start an open-pit operation at the mine. The announcement was made by Charles W. Stewart, partner of Stewart and Nuss, building materials company, which operates the mine and mill through its subsidiary, Sierra Metal Co.

The Mountain King mine is located at Hudson, six miles from Copperopolis in Calaveras County, California. During the past two years the mill has been operated by the Keystone Copper Corporation, but that concern has recently completed its contract with the Metals Reserve Company. During the two-year period ended July 31, 1945, it has been reported that the Keystone company produced 9,424,192 pounds of copper, a total of 225,453 tons of copper ore having been hauled from the Keystone shaft at Copperopolis to the mill.

The Keystone mine is a part of the old Calaveras Consolidated Copper Company holdings, and the Keystone Copper Corporation negotiated a lease on the North Keystone shaft in 1942. The Keystone Copper concern was backed by the Lava Copper and Mining Corporation of Nevada, City, California.

Main offices of Sierra Metals are located at 410 Thorne Avenue, Fresno, California, and the Fresno mailing address is Box 380. Stewart is general manager and Claude E. Nuss is assistant manager of the Mountain King operations.

ANAconda SUBsidiary CANCELS LEASE ON COPPER CANYON MINE

The Anaconda Copper Mining Company has announced that its subsidiary, International Smelting and Refining Company, will, on November 30, 1946, terminate its lease on properties of the Copper Canyon Mining Company in the Battle Mountain district of Lander County, Nevada. Under the terms of the lease, acquired in August 1940, Anaconda was to develop and operate the Copper Canyon property and held an option to buy 2,000,000 shares, a majority of the Copper Canyon company’s stock.

J. J. Lillie of Rio Tinto, Nevada, has been manager of Copper Canyon and F. A. Wardlaw, Jr., 815 Kearns Building, Salt Lake City 1, Utah, is manager of operations for International. It is stated that the mine, although opened originally as a copper producer, now is principally a gold producer, and the gold content of the ore is increasing with depth.

In connection with the Anaconda announcement, L. E. Whischer, president of the Copper Canyon firm, issued the following statement:

“Regarding announcement of the cancellation of Copper Canyon Mining Company’s lease and option agreement with International Smelting and Refining Company, a wholly-owned subsidiary of Anaconda Copper Mining Company, this cancellation was mutually agree upon to eminently satisfactory to Copper Canyon Mining Company. “Copper Canyon company will be benefited immensely as it will probably cause the greater part, if not all, of the advanced due the Anaconda Company and in the same time cancel the option on 2,000,000 shares of Copper Canyon Mining Company’s treasury stock.

“Translated this means that Copper Canyon company will then have among its assets the equipment, mill, etc., that was installed by the Anaconda interests at cost of over a million dollars.”

MINING INTERESTS OPPOSE CONSTRUCTION OF IDAHO DAM

The PROPOSED construction of a government dam at Springfield, Idaho, to impound the waters of the Coeur d’Alene River, is reported to be arousing a great deal of opposition in the Coeur d’Alene mining district. According to army engineers, the dams would back up water as far as Kellogg and would necessitate the rebuilding of the O. R. & W. railroad between Kellogg and Coeur d’Alene and the rerouting and rebuilding of the present highway system. It also would threaten the mine in the district by possibly flooding underground workings to such an extent that it would be unprofitable or impossible to handle the increased flow of water.

A protest is being circulated throughout the district by mine operators, business men, and property owners, urging that vigorous protests be filed at the hearing to be held by army engineers at Coeur d’Alene, Idaho, on or about November 20, 1945.

According to army engineers, a large part of the lower Pine Creek mineral belt would be flooded, making transportation of ore from that district a difficult problem, if it did not close the area entirely to any further mining operations. The Osburn fault also would be affected by the water with the possibility that this might have an effect on the Page mine of the Federal Mining and Smelting Company and the deep workings of the Bunker Hill and Sullivan Mining and Smelting Company. If the protest were to be successful, it is believed that the mine operations would eventually be stopped.

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a trip to Canada to arrange silver shipments to that country. Stark reports that his company is ready to export silver to Canada at the rate of $26,000 U. S. dollars per week. While in the Dominion, Stark also is expected to contract for heavy machinery for Mexican mines.

Robert F. Petit, Jr., has been named head of the Mining Department of the New Mexico School of Mines at Socorro, New Mexico, and has moved from Carlsbad to Socorro. Petit, a graduate of the University of New Mexico and of the New Mexico School of Mines, formerly was with the U. S. Geological Survey at Silver City and the U. S. Potash Company, Carlsbad.

Guy J. Coffey, who has been manager of the Los Angeles district office of the Chicago-Pneumatic Tool Company at 625 Santa Fe Avenue, has been appointed vice-president in charge of sales. Coffey joined the company in 1929 as a salesman in the Philadelphia branch, next being advanced to the Cleveland office, and finally became manager of the West Coast office in 1939.

R. O. Fife, who has been chief mine engineer for the Darwin Mines at Darwin, California, is reported to have remained as mine superintendent for a new operating firm, Anaconda Copper Mining Company. J. L. Lobken, formerly mill superintendent for Anaconda's Millidallon and Mountain City Copper Company, Rio Tinto, Nevada, will be mill superintendent at the Darwin operations.

Paul A. Bundy, who has been engineer in charge of equipment and machinery problems in connection with U. S. strategic metals production, has gone to the new operating firm, Arequipa Consolidated Mining Company, at Arequipa, Peru, Bolivia, and Chile, with Metals Reserve Company and the Foreign Economic Administration, returning from Lima, Peru, late in September. In the future, he will again be associated with the Bradley Engineering Company, with headquarters at Nevada City, California.

John W. Barnes has gone to Middleton, Tennessee, where he will be associated with the Steel Corporation, a new manufacturing company. Barnes returned to the United States in May of this year, after having been liberated from a Japanese internment camp in the Philippines, and until the present time was connected with the Stanolind Oil Company in Texas. Before the war, he was employed as assistant mine superintendent for Suyoc Consolidated Mining Company in the Islands.

H. M. Prooper has left the employ of the Miami Copper Company at Miami, Arizona, and is located at 568 Fosythe Avenue, Calumet City, Illinois. His new position is that of designing engineer for the Bates Expanded Steel Corporation located at East Chicago, Indiana. Prooper spent 12 years in Chile with the Chile Exploration Company and Braden Copper Company before joining Miami Copper as plant engineer, a position he has held for the past three years.

Raymond D. Ziegler has been discharged from the U. S. Army and is interested, with Del Sanderson of Kingman, Arizona, in the development of some property in the Cerbat Range north of Kingman. Ziegler enlisted in the Army in 1942 and served

QUICKSILVER PRODUCERS STRIVE TO SAVE INDUSTRY

SAM H. WILLISTON, 703 Mechanics Institute Building, San Francisco 4, Cali.

has been selected by a group of California, Nevada, and Oregon quicksilver producers to act as their representative in Washington in the present crisis in that industry. The group represents approximately 60 per cent of the nation's entire quicksilver production.

Williston, who is president of the Oregon Mining Association, will attempt to remedy the present glutted market condition by having the government take the 76,000-flask surplus off the market and place it in a military stockpile. Producers state that they have already sold some mineral rights auctioned by the government, but it has been claimed by the producers that the mineral rights have already been sold and the government has been offered the mineral rights for less than one-tenth of those prevailing in California.

with the Eighty-second Airborne Division, U. S. Army and is interested, with Del Sanderson of Kingman, Arizona, in the development of some property in the Cerbat Range north of Kingman. Ziegler enlisted in the Army in 1942 and served

HARVEY S. MUDD DISCUSSES MINING AT EL PASO MEETING

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Though optimistic about the future of mining operations, Harvey S. Mudd, president of the American Institute of Mining and Metallurgical Engineers, believes the industry faces two dominating problems. He made this statement before the mining committee of the Chamber of Commerce at a luncheon given in his honor in El Paso on October 8. These two problems, according to Mudd, are taxation and the preservation of the right to search for and acquire new fields for operations.

"The outlook for the mining industry is good," Mudd said. "The condition which may weaken us is taxation. We must be relieved of the heavy burden of taxes. A man who can afford to take a chance on the development of a new mine might better put his money into an investment which would yield from 5 to 6 per cent because at the end of 10 years he would be as well off as he was when he found it. It is folly to invest in a new mine if no adequate reward is in sight."

Discussing the second problem, Mudd conceded that the Government has a right to demand heavy taxes from mining corporations. However, he continued, "The best conservation is not to keep metal in the ground, but to attract it and use it in the most economical manner. The right to search for and develop mines must be preserved. Likewise, there is friction between the prospector and the Government. If the Government continues these policies, it will undermine our security."

As regards mining operations, he rejected the theory that we are entering an "exhaustive cycle." He continued: "If we are given a chance and offered a suitable reward, mining will perform in the future as it has in the past and will meet all demands. If not, our progress in civilization will be arrested."

He admitted, however, that some smelting operations in Utah were conducted from dumps because underground operations were off by about 25 per cent. Nevertheless, he expressed confidence that mineral deposits would be discovered, because industry is prepared to take greater chances. He particularly mentioned zinc in his optimistic prophecy about new deposits.

"I have never seen greater rivalry for new mines than exists today," Mudd said. "This is particularly true of big companies that have augmented their research staffs and have men out in the field."

Although confident that the demands for metal will be met, he said that price adjustments were necessary and he expected "some dislocations."

Referring specifically to copper, Mudd continued: "We are all trying to get all the copper we can use for some time. I do think, however, that some of the smaller mines in the United States and certainly cannot undersell 80 per cent of our domestic copper without taking a loss. Postwar

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For Auxiliary Ventilation of Metal Mines...Use MineVent Flexible BLOWER PIPE with the patented DEMOUNTABLE COUPLING

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and associates also are proceeding with preparations for dragline dredging at the Manfield property at French Gulch, and they will use a 1 1/2-yard dredge in the operations.

Mining activity in the Lonely Camp region near Ridgecrest, California, is said to have taken a decided spurt since the report of an excellent gold discovery at the Dampier mine property. Records indicate that the mine was worked as early as the 1870's, when it was known as the Lost Pedro property. The mine is owned by DeMayo and Dampier of Ridgecrest, and it is rumored that New York interests are considering development of the property.

Ed Benefiel, Box 183, New Pine Creek, Oregon, is continuing ore shipments from his Klondyke mine to the American Smelting and Refining Company at Garfield, Utah, and ore is said to run about $200 per ton after sorting. Benefiel is mining a high-grade ore in the center of a 10-foot sulphide vein, which assays approximately $20 across its width, and also is taking out a considerable amount of low-grade. The sulphide vein runs east and west for 1,500 feet across the property, and is cut at right angles by a large quartz vein. A number of smaller veins cut toward the intersection and it would be possible to mine a strip 500 feet wide by the open-cut method. Benefiel had hoped to ship lower-grade silicious ore to the Tacoma smelter, but reports that he was unable to obtain a WPB rating. At present, he is planning installation of a 50-ton mill to treat the medium and high-grade ores sometime next year. The Klondyke gold mine is located in Modoc County, California.

The Golden Feather Dredging Company has started operating its bucket line dredge at Mammoth Bar on the Middle Fork of the American River near Auburn, California. It is expected that the company will work ground for a distance of six miles up the river, and much of the territory is virgin. The concern estimates the project will run for about seven years. The dredge has a capacity of 7,000 yards per day, and 20 men will be employed in day and night shifts. S. J. Norris, Jr., Auburn, is superintendent of operations.

Actual mining operations will be started at the Rio Hondo mine by the middle of October. Considerable machinery has been moved in to the gold property in the Goldstone mining district of San Bernardino County, California, and a recent test run is reported to have been satisfactory. The Rio Hondo is being developed by two partners, Harvey Crawford and Vernon Jay of Barstow, California.

Bonadiman-McCain, Inc., engineers and contractors, have started a three-year program at the Singleton claim of the Spanish bartle mine near Washington, California, and it is understood that the company plans a total production of about 100,000 tons of bartie. The company has opened a field office at the Spanish quarry and, as soon as road improvement work can be completed, heavy machinery and equipment will be moved in. When regular operations are under way the firm expects to handle about 350 tons of ore daily, with 50 men employed. Bonadiman-McCain, which also has barite properties in Wyoming and Nevada, ships to the National Lead Company, which now holds a lease on the property. Officials of the concern include Joseph Bonadiman, president, and M. McCain, secretary. L. N. Benson, Washington, has remained as mine superintendent. The Spanish property is owned by E. R. Morett, manager of the Industrial Minerals and Chemical Company, Sixth and Gilman Streets, Berkeley, California.

Resumption of dredging operations by the Junction City Mining Company at Junction City, California, is expected soon. The company's nine-foot bucket line dredge, which has been inactive during the war, is reported to be in good condition.

Harvey L. Sorenson, 665 Sixth Street, San Francisco, California, is president of the company, and Derby B. Wilson, Junction City, is returning as mine superintendent.

The Marter-White property 15 miles north of Victorville in Lucerne Valley, San Bernardino County, California, is being developed by open-pit mining methods by the Marter Mining Company. Crude aluminum silicate ore is being shipped to custom plants in Los Angeles. The firm is headed by Laurence H. Martin, attorney, 530 West Sixth Street, Los Angeles, and R. M. Richter, San Gabriel, California, is vice-

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**THE MINING JOURNAL for OCTOBER 30, 1915**
president and general manager. Consulting engineer for the concern is Henry Mulryan, 724 South Spring Street, Los Angeles 14.

Underground mining at the Joe Stokes quicksilver mine is proceeding satisfactorily, with values increasing at depth. New tables and other machinery are being moved in to the property, which is situated in San Benito County, at the mouth of Griswold Canyon. Previous operators conducted mining at the Stokes mine by surface methods, but G. W. Knepper, Idria, California, who took over the mine recently, has started a new development program.

The Empire Star Minos Company, Ltd., is carrying on a program of dewatering and reconditioning at its Pennsylvania mine in the Browns Valley district of Yuba County, California. Following completion of pumping, a crew directed by Walter Renyer, Grass Valley, California, will retimber and otherwise place the property in condition for operation. Empire Star is headed by Fred Sears, 14 Wall Street, New York, New York, and John R. C. Mann, Grass Valley, is general manager.

Installation of a 50-ton mill is nearing completion at the Brush Creek mine near Goodyears Bar, California, and it is expected that the plant will be in operation by the middle of October. A one-stamp mill has been handling 100 tons of ore monthly, averaging about $25 per ton. The Brush Creek is operated under lease and option by Alfred L. Merritt, 3015 Garber Road, Berkeley, California.

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RESEARCH FOUNDATION IS PROPOSED TO PROMOTE WEST

PLANS to solicit funds for the establishment of a $6,000,000 Pacific research foundation to promote the West's economic and scientific future have been laid before the Chairman of Commissions on Interstate Cooperation of the 11 western states. In outlining the proposal, Ernest L. Black, formerly with Lockheed's engineering staff, explained that the original plan called for departments devoted to chemistry and metallurgy, but that the foundation would add new ones as the demand developed. He estimated that the foundation would employ from 600 to 1,000 persons in research chiefly for western private industries, but would also take contracts, up to 25 or 30 per cent of its total load, for governmental units.

According to the proposal, industries will be asked to give one-tenth of 1 per cent of their gross income for one year, and each industry will be entitled to one trustee upon making a "substantial" contribution. The big West Coast war plants which feverish years ahead will be asked to make their contributions now.

Black added that universities had been consulted as to the possibilities of offering scholarships in connection with the foundation's work. He reported that the University of California was developing a project involving three years of teaching and one year of work in industry in every four.

WASHINGTON

A regular quarterly dividend of $1.375 a share on 51/2 per cent cumulative preferred stock was paid by the Reynolds Metals Company on October 1, 1945, to stockholders of record September 30, 1945. Western operations of the company are at Langview, Washington. R. S. Reynolds of Richmond, Virginia, is president.

WYOMING

The sponge iron plant of the U. S. Bureau of Mines at Laramie, Wyoming, has been ordered closed, according to an announcement by Theodore L. Johnston, engineer, but it is to be left in a standby condition. The plant had been making experimental test runs since February 1944 and was on its thirty-ninth test run. It is stated that most of the 25 men laid off because of the shutdown are now employed on the bureau's oil shale laboratory building at the University of Wyoming.

Approximately 600 tons of aluminum-bearing material are being trucked daily to the DPC aluminia experimental plant at Laramie, Wyoming, by the Monolith Portland Midwest Company. The company, H. D. McBride, manager, 810 Flint Street, Laramie, is making plans to open the $4,500,000 plant soon for test operations. About 20 trucks are being used regularly by Peter Kierul Sand Company, hauling contractor. The process to be used, worked out by Monolith chemists, employs sodium sintering.

Construction of a 100-ton basket mill near Casper, Wyoming, is planned by Thomas Halden of McCracken, Kansas. An effort is being made to promote an interest in Wyoming minerals such as vermiculite, asbestos, talc, barite, and kaolin.

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**THE MINING JOURNAL FOR OCTOBER 30, 1945**

Page 28
WARTIME EXPLOSIVES CONTROLS
RELAXED BY BUREAU OF MINES

WARTIME federal regulations governing non-military explosives and certain ingredients of explosives are being relaxed and individual licenses no longer are required for transactions in explosives, Dr. R. P. Sayers, Director of the Bureau of Mines, has announced.

One of the most important home-front emergency security measures in effect since the declaration of war by the United States on December 8, 1941, the Federal Explosives Act, is no longer necessary as a wartime measure and the Explosives Control Division of the Bureau’s Health and Safety Branch, which administered the Act during the war, is being liquidated, Dr. Sayers said.

The publication of a “general license” by the Department of the Interior (Federal Register, October 9, 1945, pages 1267 and 1268) automatically relieves thousands of individuals and organizations dealing in explosives or their ingredients from the necessity of having individual licenses and suspends the authority of the Bureau over more than 3,000 volunteer licensing agents to issue licenses. However, the record-keeping, storing and posting provisions of the regulations under the act continue in effect.

In nearly four years, these volunteer licensing agents, serving without federal pay or other than nominal licensing fees, have issued or renewed nearly 800,000 licenses, including annual renewals, in the 48 states and Alaska, authorizing more than 800,000 persons or organizations to engage in transactions involving explosives for non-military use.

Placed in effect during 1917 as a war measure and revised on December 26, 1941, after becoming automatically operative on December 8, 1941, upon the declaration of war, the Federal Explosives Act was designed to maintain strict control over non-military explosives and certain of their ingredients and to prevent blasting materials from reaching the hands of persons hostile or disloyal to the United States or persons who were not reliable or experienced in the use of explosives.

Hundreds of millions of pounds of explosives have been used by American industries since Pearl Harbor, but so effective has been the control over the handling of blasting materials that not a single clear-cut case of sabotage involving them has been reported to the Bureaus, Dr. Sayers said. This is in marked contrast to what occurred in World War I when there were numerous cases of sabotage with attendant heavy loss of life and property involving explosives in this country.

Although the Explosives Act excluded military explosives and certain of their ingredients from reaching the hands of persons hostile or disloyal to the United States or persons who were not reliable or experienced in the use of explosives, it remained in effect during the war, is being liquidated, Dr. Sayers said.

The Bureau of Mines or when the Federal Explosives Act and the regulations are of no further force or effect by congressional act or presidential proclamation or other procedure.

R. P. WILSON PURCHASES
FAMOUS WALKER MINE

THE Walker mine at Walkermine, California, at one time the state’s leading copper producer, has been purchased by R. P. Wilson, formerly of Port Worth, Texas, and now living in Nevada. Wilson has been active for many years in western mining and industrial enterprises and in 1936 was credited with opening the Trinity River in Texas to navigation.

The purchase is reported to have included the Walker mine of 790 acres with mining rights on adjoining claims, standing timber, a large number of houses, 54,000 feet of lumber, and mine equipment and supplies. Wilson also is said to have an option on the Walker copper concentrator at Portola and is believed to be considering reopening the mine.

The Walker property was closed down in October of 1941 because it was believed that there were no ore deposits of sufficient importance to warrant continued work by the Walker Mining Company at the prevailing copper market prices. Since that time, the Walker company conducted extensive development and core drilling work and incurred considerable expense in maintaining the mine and plant in good repair.

Last year, however, the International Smelting and Refining Company, an Anaconda subsidiary, served notice on the Walker company, demanding payment of a loan of nearly $500,000. Walker Mining Company then filed proceedings for reorganization under federal bankruptcy law and Willard H. Davis of Sacramento was named trustee. Earlier this year, however, the federal district court in Salt Lake City, Utah, sustained International’s claim against the Walker Mining Company, holding that, although controlling interest in the Walker concern is owned by Interna-
ENGINEERS.

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few Mexico's Research. His study is reported to have been exhausted soon if some such action is tal investment in tional, the latter company had advanced the by a representative of the by a presidential decree authorizing tion of the economy of the se lave labor and has resulted in the disrup tion and other Montana min ing groups SEEK AID FOR GOLD MINING INDUSTRY THE Last Chance Gulch Mining Associa tion and other Montana mining groups have appealed to western congressmen for aid in providing a program under which gold mining can be resumed as a profitable industry. E. J. Keeley, president of the association, pointed out that even after the gold mining ban was lifted miners were unable to resume operations because the cost of shutdowns had depleted their funds seriously. "It has been necessary to secure new money to unwater and retin miners," Keeley said. "This and restrictions of the Securities and Exchange Commission make it almost impossible to reopen many properties. Taxes, labor, and materials essential to mining are much higher than they were at the time of closing of the gold mines." Asking that the industry be given a "new lease on life," the association president said, "Unless there is some immediate and definite change in the picture, there are many returning veterans, who have fol lowed gold mining and who own claims, who will return to find a more or less der mast industry. "Our people have confidence in hard money, supported by gold and silver, for they know that this money is the reserve money of free men and that paper money is and has been used in foreign countries to pay slave labor and has resulted in the disruption of the economy of these countries."

EXPLORATION SUBSIDY IS PLANNED BY MEXICO FURTHER Mexican government aid to mining in the form of a fund to subsidize exploration and prospecting for deposits of metals and minerals is provided for by a presidential decree authorizing the ministry of finance to supervise establish ment of such a fund. The plan is to obtain the fund from proceeds of the special excise tax on silver exports. The program was suggested by the results of a survey of Mexico's metal and mineral situation recently completed by a representative of the U. S. Metals Research. His study is reported to have indicated that ore reserves in Mexico will be exhausted soon if some such action is not taken, because of the fact that most of Mexico's mines operators have concentrated on mining high-grade ores during the past few years.

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The Manufacturers Tell Us

"Portovent"—Portovent is a new type of ventilating hose developed by the American Ventilating Hose Company, 19 Park Row, New York City, to supplement its more rigid spiral wire reinforced Flexaust and non-reinforced Bloflex. It meets the need for a metal reinforced, light weight, large diameter duct which can be compressed into small space for transportation, yet stay open around sharp bends.

A special feature is its sectional construction, allowing the assembly of any desired length from 2½-foot sections which will not be broken by jerks or pulls encountered in service. Special attachments for coupling to blowers or other air handling apparatus are provided and these fittings couple interchangeably with either end of any section.

"Portovent" Flexible Ventilating Hose

Portovent is offered in sizes from 5 to 24 inches in diameter and compression for packing is 6 to 1 over-all.

Western Representative Detroit Diesel—

The appointment of Anderson-O'Brien Company of Los Angeles as retail sales outlet for the GM series 71 Diesel engine has been announced by V. C. Geen, general sales manager for the Detroit Diesel Division of General Motors Corporation. The Anderson-O'Brien Company, with headquarters at 748 East Washington Boulevard, Los Angeles, will assume responsibility for sales and service of the GM Series 71 for mining and contractors' machinery, for irrigation and oil field equipment, in the following California counties: San Diego, Orange, Inyo, Imperial, Los Angeles, Kern, Riverside, San Bernardino, Santa Barbara, San Luis Obispo, and Ventura.

A. N. Anderson will serve as sales manager for the company. He brings to the organization over 10 years' experience in selling and servicing Diesel engines in all lines of industry. For the past seven years he has been associated with the sales department of Detroit Diesel, supervising applications of its Diesel engines to diverse industrial products.

Milt O'Brien will direct the service activities of the Anderson-O'Brien Company. He is well qualified for the assignment, having served in executive service capacities for the Pontiac and Buick divisions and on the service staff of General Motors Corporation.

The Detroit Diesel Series 71 engine achieved an enviable record in tanks, landing craft, tractors, bulldozers, shovels, and other implements of war. It is now available for industrial and marine applications. A wide range of sizes, from 84-horsepower 2-cylinder engines to the 800-horsepower 24 cylinder "Quad," is now offered.

Liquid Meter Valves—Morganite Valve Company, Inc., Long Island City 1, New York, is distributing a well-illustrated six-page bulletin descriptive of its liquid meter valves and slides. These devices are constructed of Morganite which is available in diversified grades and compositions for high temperatures, high pressures, and high speeds.

The bulletin discusses the physical and mechanical characteristics of Morganite, its chemical proprieties, and its advantages.
Net profits from ore treatment can be predetermined on jobs engineered by Western-Knapp Engineering Company. Accurate prediction of milling costs and results, based on foreknowledge provided by WKE planning, enables you to schedule future operations advantageously. Careful engineering, with close attention to the small, often unconsidered details of processing and flow, selection of exactly the right materials, and recommended utilization of economical methods are integral parts of WKE service.

Experience gained in design and construction of over half a hundred mills makes possible WKE visualization of your mill at work. WKE engineers are able to adapt proven, cost-cutting methods to your milling operation. Trouble-shooting is done in the drafting room before the plans leave the tables. Operational "bugs" are ironed out while your plant is still on paper, and seldom appear once operations begin.

WKE offers these services:

**Design Analysis**—enables WKE engineers to recommend cost-cutting rearrangement of flow, or retooling. This analysis does not interfere with current production.

**Construction**—includes efficient plant design, actual plant construction, and selection and installation of machinery. The complete plant is turned over to you, ready to operate at previsualized capacity.

**Engineering**—the services of the WKE staff of engineers are available for design and planning to companies having their own construction facilities.

WKE-Built Mills always equal and frequently surpass the stipulations of their contracts as to recovery and tonnage.

For complete information on Western-Knapp Engineering Company service, write for the bulletin "Turn Key Mills."
What do your screen plates cost, not the initial price per pound but on a yardage basis?

Yuba ARS screen and liner plates are economical to use on any cost basis. Like all Yuba dredge parts, they are built to meet an important dredging requirement, "high operating time." Their cost, on a yardage basis, may be surprisingly low to an operator who has not tried them.

Send your drawings or specifications for quotations. A full line of USS Abrasion Resisting Steel plates is stocked at Yuba's plant to serve users of this wear resisting steel.

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I see by the Congressional Record that the address made by President Lincoln to the miners in 1863 was read by you in the House of Representatives, and that you had it placed in the records. Like all utterances by Mr. Lincoln, it is just as applicable to existing conditions as it was 80 years ago. It was a fine gesture on your part and one which I feel sure, will be greatly appreciated by the entire mining fraternity.

Another address made by Mr. Lincoln, while President, to a group of working men—published in a recent issue of The Mining Journal—is of equal significance during the present labor crisis. It follows:

"The strongest bond of human sympathy outside the family relation should be one uniting all working people of all nations and tongues and kindreds; nor should this lead to war upon property or the owners of property. Property is the fruit of labor, property is desirable, is a positive good in the world. That same should be rich shows that others may become rich and hence is just encouragement to industry and enterprise. Let not him who is homeless pull down the house of others, but let him work diligently and build one for himself, thus by example assuming that his own shall be safe from violence when built."

It is a convincing argument on the side of right and the American workman that the un-American policy being re-disputable facts wide publicity unquestionably much good would result. It would tend to convince many an American workman that the un-American policy being resorted to by alien-minded labor leaders is certain to spell ruin to the cause of labor, with the ultimate abolishment of all labor unions.

The practice of many of the states—which policy now also is vigorously sponsored by the present national administration—to pay men not to work, undermines the in-born desire of every true American to serve, own his own house, get into business on his own and eventually become independent of others, as Mr. Lincoln advocates. Such a policy tends to make loafers of otherwise enterprising individuals to the detriment of themselves, their families, and the country as a whole. Thousands have been thrown out of employment by the closing of war industrial plants; yet it is next to impossible to find a man who is willing to accept a job.

Many of our mines and other enterprises are obliged to operate on a greatly reduced schedule owing to management's inability to secure sufficient help. During these critical times every industry should be going full blast in an effort to stave off all the depression that is certain to result if the labor leaders continue their present tactics, and the workmen are allowed to live on a dole for an indefinite period.

Inflation is staring the country in the face unless the American workman awakens to the realization that one of gaining the workman's vote, thus perpetuating themselves to the detriment of all working people of all nations and tongues and kindreds; nor should this lead to war upon property or the owners of property. Property is the fruit of labor, property is desirable, is a positive good in the world. That same should be rich shows that others may become rich and hence is just encouragement to industry and enterprise. Let not him who is homeless pull down the house of others, but let him work diligently and build one for himself, thus by example assuming that his own shall be safe from violence when built."
LYNN SAWYER ELECTED VICE-PRESIDENT OF COLORADO SCHOOL OF MINES

LYNN SAWYER, general manager of the dump division of the Byrom Jackem Company, was elected a vice-president of the company at the October meeting of the board of directors, according to an announcement made by E. S. Dunlin, president.

Sawyer, formerly chief engineer of the Roosevelt Water Conservation District in northern Arizona, entered the employ of Byrom Jackson Company on June 1, 1929, as a local salesman in the San Francisco Bay area. He was made manager of the mid-continent division at Port Worth in 1935, manager of the New York office in 1939, and, in November 1945, was recalled to the head office and promoted to general manager of the dump division. He enjoys an unusually wide acquaintance with pump engineers throughout the United States, Canada, Mexico, and in Europe.

M. F. COOLBAUGH RETIRES AS HEAD COLORADO MINES SCHOOL

AFTER 20 years as president of the Colorado School of Mines, Dr. McVille F. Coolbaugh has tendered his resignation effective January 1, 1946, although he will remain after that time if a successor has not been selected.

Since his period as president began, the Colorado School of Mines has taken a foremost place among the engineering schools of the world and has concentrated its training on mineral engineering exclusively. The curricula have been strengthened, entrance requirements made more rigid, and the scholastic standards of the school generally raised. Summer field courses in the major fields and in plane surveying have been inaugurated or emphasized so that they now characterize the school. During his tenure the Department of Geology has been organized, and two separate options, refining and production, have been developed in the Department of Petroleum Engineering.

During the past three years, research has been conducted that has resulted in the establishment of the Intensive Course in English for foreign engineering students which has received national and international acclaim in the field of rapid language teaching. The summer session has been organized as an integral part of the school year and the Quarterly of the Colorado School of Mines has taken its place as one of the recognized scientific publications of the country.

More than $1,000,000 have been spent in additions to the physical plant; state financial support for the school has been greatly increased and placed on a more permanent foundation through additional mill levies. The enrollment of the school has increased from about 375 students to a capacity size of from 750 to 800.

As a member of the State Planning Committee, the State Mineral Resources Board, and secretary of the Colorado Geological Survey, Dr. Coolbaugh has been prominent in mineral and other industrial developments of Colorado. He is chairman of the organization of Presidents of Institutions of Higher Learning of Colorado which was organized nearly 20 years ago. During the war he was regional representative of Region 11 of the War Production Board Commission for the Engineering Science and Research Management War Training Program. He has been treasurer of the board of the Colorado Industrial Development Research Program since its establishment early in 1943.

MEXICAN GOVERNMENT TO REDUCE MINING TAXES

LIC. EDUARDO SUAREZ, Mexican secretary of finance, recently announced that the administration soon would reduce taxes on mining for the express purpose of aiding operators who have suffered losses through the cancellation of war contracts by the U. S. Metal Reserve Company.

ANOTHER GOLD PROPERTY IS RETURNED TO PRODUCTION

MINING operations have been resumed by the Davion Consolidated Mines Company of Virginia City, Nevada. Work will be confined for some time to an open pit on the common's Keystone property in the Silver City section of the Comstock Lode and underground work through the New York shaft will be deferred until spring or until the labor supply improves.

The mill, which has a capacity of 200 tons per day, is operating now on Keystone pit ore and on custom ore. Homer L. Gibbon of Carson City, Nevada, is president and managing director and W. A. Hensley of Virginia City is general manager.

BURNT RIVER GOLD DREDGE IS AGAIN IN OPERATION

The Burnt River Division of the Sunshine Mining Company, Operation October 16, 1945, at Whitney, Oregon. The property is owned jointly by the Idaho Canadian Dredging Company of Butte, Montana, and the Sunshine Mining Company of Kellogg, Idaho. H. R. Murphy of Butte is manager and William E. Cox, formerly of Rogue River, Oregon, is Whitney dredgemaster.

The dredge was built on Burnt River during the summer of 1941 and operations were started later in the same year. However, war conditions soon forced a suspension and the four-foot bucket line dredge has been idle until recently.

HORSESHOE DAM IN ARIZONA SCHEDULED FOR COMPLETION

MAJOR construction work on the Horseshoe Dam across the Verde River in Arizona is scheduled for completion about the middle of November and the structure is expected to be ready for final inspection shortly after December 1. The dam, located 15 miles above Bartlett Dam, is being erected for the Salt River Valley Water Users Association by the Phelps Dods Company in exchange for use of water from the Black River. The new dam will cost approximately $2,000,000 and will retain 60,000 acre feet of water.

In exchange for construction of the dam, Phelps Dods is entitled to divert water from a point on the Black River about 40 miles from Moreno, Arizona, for use at the company's Moccni branch.

THE MINING JOURNAL for NOVEMBER 15, 1945
John Allen Hilton, 66, died at Hermosillo, Sonora, Mexico, September 28, 1945, following a long illness. He had engaged for many years in mill management work in California, Nevada, and Mexico.

Bernard Maguire, well-known Nevada City, California, man who had been engaged in placer and quartz mining most of his life, died recently. He had been part owner of the Mammoth Springs mine near Liberty Hill.

Mark Henry Daugherty, long interested in the Whitedelph property at Clark Fork, Idaho, and for several years mine superintendent of the Whitedelph Mining and Development Company, died in Spokane, Washington, during September.

Samuel T. Shaw, Jr., who had been interested in the Casino mine at Plymouth, California, died August 13, 1945, at the age of 49 years. Shaw was a native of Oyster Bay, New York, and had lived for many years in Europe, particularly in Paris.

Converse J. York, 78-year-old Downville, California, native, died at Nevada City on October 11, 1945. Death followed a heart attack. During his mining career, he was interested in the Red Lilly, Honeystake, Oro, and other mines in Sierra County, California.

Norman N. Byke, consulting mining engineer and geologist of Salt Lake City, Utah, died October 10, 1945, after being in ill health for the past seven months. Prior to that time he was examining engineer for the Mine Loan Division of the Reconstruction Finance Corporation.

Edwin M. Mohrman, 59, mining engineer and mine operator of Boise, Idaho, died October 5, 1945, in a Boise hospital. Until his death he was district chief of the War Production Board, Production Division, in Idaho. Before the war he operated as the E. M. Mohrman and Son Mining Company.

Ray Brown, who owned extensive mining interests in Mexico, died suddenly in New Orleans on October 3, 1945, after he underwent a major operation. The well-known mining man made his home in El Paso, Texas, until about five years ago, when he moved to Chihuahua City, Chihuahua, Mexico. He was 52 years old.

George J. Jones, 64, who had been employed for 10 years in the Phelps Dodge Corporation smelter at Douglas, Arizona, and for the past 11 years in the company's power house at Ajo, Arizona, died October 1, 1945, as the result of a heart attack. A native of Brackettville, Texas, Jones had resided in Arizona for the past 30 years.

Frank Dillon, Nevada City, California, mine owner and operator, died October 6, 1945, in a Grass Valley hospital. Dillon was born west of Grass Valley 73 years ago, and resided for many years at Nevada City. His recent operations were carried on under the name of Dillon Mines, for which he served as president and general manager.

Malcolm Fleming, 77, mining man of Beaverhead County, Montana, died October 10, 1945, in Hood River, Oregon, where he had gone several months before in hopes of regaining his health. Born in New Zealand, Fleming came to the United States in 1900 and for the past 20 years had been residing in Beaverhead County where he was active in mining.

Ervin J. Young, mining engineer of Reno, Nevada, died October 8, 1945, at Lovelock, Nevada. Young had been leasing the Red Bird mine near Lovelock and formerly was associated with the Harold's Club Mining Company in Nevada and the Raymond J. Smith dredging interests at Hayfork, California, both of which were backed by the same group.

Louis F. Block, 71, of Salt Lake City, Utah, died October 9, 1945, at his home in Salt Lake. He was president and general manager of the Frisco Silver Lead Mining Company. Born in Germany, Block was brought to this country as a child. He attended the Colorado School of Mines and later was employed by mining and equipment concerns in Washington, British Columbia, Colorado, and Mexico. Since 1902 he had been a resident of Utah.

Captain Ralph Keeler, well-known mining editor in the Philippine Islands, is reported to have been on the Japanese prison ship sunk on December 15, 1944. He had been taken prisoner early in 1942, shortly after having been wounded by a sniper's bullet. He entered the armed services as a lieutenant in 1940 in the military intelli-

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Simplicity is the keynote for the Braun Type UA pulverizer—so efficient in design that it tackles the most difficult crushing tasks with ease: yet operates at a minimum of expense.

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THE MINING JOURNAL FOR NOVEMBER 15, 1945
It is reported that mill tests have proven that a recovery of about 96 per cent can be done at very low cost, since all values are released at a grind of minus 20 and the results of analyses are very promising. It is believed that profitable mining can be carried on for some time from the tunnels and stopes, before any abandonment of sinking operations will be necessary.

The Black Jack Gold Mining Company, Ltd., a limited partnership, has been organized to work the holdings, and operating officials include John C. P. Skottowe, 1517 North Curson Avenue, Los Angeles 46, general manager, and Luigi Ressell, 6675 Franklin Avenue, Los Angeles 28, assistant general manager.

NEW STOCKPILING BILL IS INTRODUCED BY JOHNSON

As a result of recent government ences, Senator Johnson of Colorado has introduced a new stockpiling bill, S. 1481, which differs substantially from the Thomas-May bills, S. 752 and H. R. 2624, introduced last March. The new bill authorizes and directs the president to determine from time to time the following:

1. Which materials are strategic.
2. The quality and quantities of such materials.
3. The date by which such quantities should be acquired.

This procedure would be in contrast to the policy of taking the lists of strategic and critical materials published in the Army and Navy Munitions Board report of January 2, 1945, and basing the stockpiles on the minimum and maximum quantities recommended in that report.

The new bill sets up a strategic materials stockpiling board of eight members, namely, a chairman appointed by the head of the government agency designated by the president to carry out the program, and the Secretaries of State, Treasury, War, Navy, Interior, Agriculture and Commerce. Special concern to them is to whom the provisions relating to release of materials from the stockpiles. Such release is provided for in S. 1481 "(a) an order of the president at any time when in his judgment such release is in the interest of the national defense, or (b) in time of war or during a national emergency proclaimed by the president on order of gath agency as may be designated by the president." Materials in excess of revised determinations as to quality or quantity shall be disposed of upon publication in the Federal Register of a notice of the proposed disposition, safeguarded only by a provision that "the plan and state of disposition shall be fixed with due regard to the protection of the United States against avoidable loss on the sale or transfer of the material to be released and to the protection of producers, processors, and consumers against avoidable disruption of their usual markets."

A wide field for administrative discretion in selling minerals or metals from the stockpile is allowed by the Johnson bill, which in contrast to the Thomas-May provisions requires that mineral materials be held exclusively for use in a future
NORTHWEST MINING GROUP
TO MEET DECEMBER 7 AND 8
CHARLES E. MARR, president, Northwest Mining Association, has announced that the association's annual convention will be held in Spokane, Washington, on December 7 and 8. While details of the program have not been completed yet, a number of committee chairmen have been appointed.

Bliss Moore of Spokane is chairman of the committee which will nominate the officers of the association for next year; C. O. Dunlop, Spokane, is chairman of the finances committee for the convention; J. B. Haftner of the Bunker Hill and Sullivan interests in Idaho is chairman of the resolutions committee; and James L. Leonard, past president of the association, is chairman of the program committee.

ENGLE BILL FOR RELIEF OF GOLD MINERS IS ENDORSED
SUSTITUOTION of the text of the Engle bill, H. R. 1790, with some amendments, for S. 27 was recommended by the subcommittee on precious metals of the House Mines and Mining Committee, when it is now discussing legislation to raise the enforcement of certain obligations against mine operators forced to close down during the war. The subcommittee reported that it is to be submitted to the full committee and an attempt made to obtain early action by the House.

S. 27, introduced by Senator McCarran of Nevada, has been passed by the Senate and referred to the House. The Engle bill is somewhat broader in scope and provides for equitable relief by court action for any person holding mining properties or is or has been prevented by wartime regulations or requirements from performing certain work or making expenditures required by the contract under which he holds such property.

Witnesses appearing before the committee pointed out that there is real need for the relief provided in the measure, and that while such a bill had been urged more than two years ago, it still has not been acted on by the House. Many gold mine operators, and holders of small properties under lease or fee-lease contracts, are said to be faced with accumulated obligations which they are unable to fulfill as a result of labor shortages, wartime deterioration of inactive workings, and other factors. The pending legislation would allow the suspension of such obligations, where a court finds such action justified, for a period not extending more than one year beyond the termination of the war.

LEAD IMPORTS MAY STOP DUE TO OPA CEILINGS

No imports of lead can be made in the near future by private industry if the present OPA ceiling price of 6.00 cents is maintained in the face of the Wall Street lead interests. The former chief of staff of the WPB, in outlining the lead situation.

Foreign producers are aware that domestic production is sold to our Government at prices in excess of 8.5 cents per pound in accordance with the government contract. These producers are receiving offers from Switzerland, Sweden, and the liberated countries for pig lead at prices in excess of our ceiling. Under the current ceiling, private importers would be subject to payment of duty on their imports.

The WPB has announced that the imports will not be sufficient to support the recreation program unless action is taken to encourage the purchase of foreign stock by private industry, since foreign supplies of lead are being diverted elsewhere.

If the ceiling price is maintained, the Government will have to continue to purchase, waive duty, and sell at the ceiling price until the supply-demand situation is adjusted and foreign producers will be unable to contract for our import requirements at below ceiling prices. According to the Small memorandum, this is unlikely unless there is a total collapse of the economies of the countries in Europe or unless the requirements for that area are small.

Approximately 85 per cent of the current production can be supplied by domestic mine output and it is estimated that from 125,000 to 345,000 tons of imports per year would be needed for recreation demands.

NEW COMPANY PROPOSED TO MEET CALIFORNIA TIN

The possibility of commercial tin production from the Cajalco deposit in Riverside County, California, again came to the attention of the Northwest Mining Association when a memorandum of a company known as the California Tin Corporation was presented at the convention.

The new company plans to start an extensive core drilling program at the Cajalco property as soon as possible, and, if results are favorable, to install a 100-ton milling plant.

Head offices have been established at 602 Fifth Street, Northwest, Washington, D. C.

The company is capitalized at 2,950 shares of 8 per cent cumulative preferred stock at $100 per share par value and $900,000 shares of common stock with a par value of 1 cent a share, for $100 per unit.

The Cajalco Hill property, also known as the Tenario Mine, comprises 10,000 acres, and is owned in fee simple by California Tin, successor to the old American Tin Corporation. About 50 years ago, San Jacinto Land Company, an English firm, acquired the property and conducted considerable development. A concentrat­ ing and smelting plant, with an initial capacity of 50 tons per day, was constructed and some 900 tons of tin were smelted and refined on the property in 1890. It is claimed that the operation was stopped when Congress, attempting to protect an infant U. S. industry, duty on imported tin, thus jeopardizing the interest of the company's huge Cornish tin holdings in Cornwall, England, in recent years the property was acquired by the American Tin Corporation, and some work was done.

Officers of the California Tin include Marion Allen, president of Allen Products Company, Inc., Washington, D. C.; President W. Joe Allen of Petersburg, Virginia, real-estate man, vice president; and W. Joe Allen of Petersburg, treasurer.
Nuggets from the Western States

Brief items covering the mining industry in the Western United States and Mexico.

**Operations at the DeCourcy Mountain mercury mine in the Kuskokwim district between Flat and Crooked River, Alaska, have been suspended for the time being.** Robert F. Lyman and associates have been working the mine, with Lyman in personal charge. During the mining season mail is received at Crooked River, but from November 1 to April it should be directed to Flat, Alaska.

**The Cornwall, a gold producer, once known as the Silver Bell group, and was operated for many years by the Cornwall Mining Company of California. Lentine acquired the ground in 1942. An amendment to the articles of incorporation of the Arizona Copper Bell Mines, Inc., has been filed in Tucson, Arizona, increasing the company's authorized capital stock from $1,000,000 to $2,500,000. The company is headed by H. L. Berkey.**

**Tom J. Rodgers, Wenden, Arizona, is reported to have a copper-lead ore ready to ship from the Red Hill property. The mine is located in the Cunningham Pass near Wenden, and was reopened this spring, following suspension of army bombing range operations by the Army.**

**It is reported that the crosscut tunnel at the Mineral Hill mine has been started to intersect the ore body at depth, as part of a general development program at the mine. The property is a lead prospect, which carries some lead, silver, and copper values as well. It is located in the Black Canyon district of Yavapai County, Arizona. Arthur Throsby, Cleator, Arizona, operates the Mineral Hill.**

Articles of incorporation were filed recently by the Moss Canyon Mining and Milling Company, naming Phoenix, Arizona, as its principal place of business. The total authorized capital stock of the corporation is $1,000,000, divided into 1,000,000 shares of common stock with a par value of $1.00 per share. H. R. Stuxton, 385 North Palm Drive, Beverly Hills, California, has been named president and director, and A. H. Cleves, 2000 Miramar Street, Los Angeles 4, California, secretary-treasurer and director. Other directors are Ura Buckanan, A. W. Miller, and Floyd Morgan, all of 928 Valencia Street, Los Angeles 15. Louis B. Whitney, Suite 1096, Lufts Tower, Phoenix, Arizona, is the company's legal agent in Arizona. Olin Marshall, Bouse, Arizona, and his partner are reported to have sunk the shaft at the Happy Jean group to a depth of 106 feet.

**The Big Spar Mining and Milling Company is starting operation of its floor oar plant at Wickenburg, Arizona, and expects to reach regular capacity production soon. The plant has a capacity of 50 tons per eight hours and will treat ore from the company's own mines and also custom ore from nearby mines. The Big Spar mine is being operated by A. J. Campbell, superintendent, and associates. About 10 men will be employed.**

**Boy Cornel, Dewey, Arizona, has sold its interest in the R. and A. mine to the Willamitho Company. The R. and A. is located about 14 miles southeast of Wicken­ bu, Arizona, in Yuma County, and is owned by John Ramsey of Vicksburg, Values are in silver and lead. E. Paul Jennings is superintendent of Willamitho operations in Arizona, which have included the Quartzsite tungsten and the Night Hawk scheelite mines.**

**Articles of incorporation were filed recently at Kingman, Arizona, by the Mohave Mining and Milling Company. Incorpor­ orators are listed as A. B. Gold of Kansas City, Missouri; E. F. Cotton, Kingman; and W. P. Goss, Superior, Arizona.**

Application for a U. S. patent on several mining claims located in the Harvard mining district of Cochise County, Arizona, was filed recently by the Corn­ wball Mining and Milling Company. Incorpor­ orators are listed as A. B. Gold of Kansas City, Missouri. A total of $2,500,000.00 in common stock with a par value of $1.00 each, and 5,000 shares shall be common stock, without any nominal par value. Main offices will be main­ tained at Kingman, Arizona.**

**The Magma Copper Company, Superior, Arizona, has been ordered by the Arizona Tax Commission to pay $25,567.35 plus 6 per cent interest due for the years 1939 and 1940. The action settled a four-year controversy over the method of computing the company's taxes, centering around the payment of taxes on income assignable to the state. Magma Copper is a Newmont controlled firm with head offices at 14 Wall Street, New York 5, New York. W. P. Goss, Superior, is general manager.**

Development of the Delva-Zinder asbestos deposit is being continued satisfac­ torily by J. C. Kemvanne, western repre­ sentative for the Powell Mining Company, Box 432, Auburn, California. The property is situated in the Iowa Hill district of Placer County, California. Kemvanne also reports that he is shipping asbestos from a property near Shady Cove, Oregon and Dunsmuir, California. Fred A. Mert, Wood­ lawn, Baltimore, Maryland, is president of the Powell Mining Company.**

Joe Hendrika, owner of the Hendrick smelter at Hawthorne, California, has been maintaining production at the rate of about 3,600 pounds of alloyed aluminum daily, and his entire output is shipped to

**THE MINING JOURNAL for NOVEMBER 15, 1945**
THE GREEKS HAD A WORD FOR IT

No doubt the Greeks had a word for each of the American mining terms on the left, but so have the Spanish and the Filipinos. How many of the words in those two languages can you match up with the Americas one? Allowing one point for each foreign word right, you should have 28 for a perfect score. If you are from the Southwest you should get 14 right with very little effort. The Filipino words will be more difficult, but it should be worth a try.

English | Spanish | Filipino
---|---|---
1. adze | lanza | pangbutas
2. axe | hacha | panghata
3. ladder | escalera | pangbutas
4. timber | lampa | daldag
5. wall | wall | wall
6. lamp | lampara | hagadanan
7. auger | tamizo | walaya
8. gold | oro | platita
9. silver | plata | plata
10. tin | escoria | sittig</dd>

Answers to Questions Will Be Found on Page 28

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* DUST, SUNLIGHT
* EXPOSURE to Harmful Rays
* WELDING, BRAZING
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foundries in the Los Angeles area. Hendricks may be reached at 129 East 11th Street, Los Angeles, California.

Recovery difficulties are reported to have caused a temporary shutdown of the old Castec mine of Condor Mines, Inc., and plans are being made for installation of improved milling equipment. The property is reported to have substantial ore reserves, much of which is free milling gold, but the company has been unable to recover more than 50 per cent of values with its present plant. The mine is a historic gold producer in the Santa Barbara National Forest in Ventura County, California, and is reported to be opened by approximately three miles of tunneling. Condor Mines is headed by A. L. Mecham, Box 262, Santa Barbara, who is also general manager. Others connected with the operation include Roy Wilbur, Camarillo, vice-president; J. R. Scott, San Diego, superintendent; and Roy Moffit of Summerland and Klamath Falls, Oregon, who is mill superintendent. William C. H. Dibblee is secretary-treasurer.

A contract for construction of loading ramps at the Darwin mine and at an undesignated Inyo County location, and for building work at the mine, has been awarded by the Anaconda Copper Mining Company to the Camas Engineering Company of Bishop, California. Anaconda acquired the Darwin lead holdings this summer, and, in addition to the 2,000 acres of mining property, the deal included the 125-ton flotation plant. R. O. Fife is mine superintendent and J. L. Lukken is mill superintendent. D. M. Kelly of Butte, Montana, is vice-president in charge of western operations for Anaconda.

Harry Odgers of Mariposa, California, who has just taken over the old Permit mine, reports that he is planning on opening an inclined shaft on the hanging wall vein. Grading work is under way and a 40-ton mill to be installed. The gold property is situated in the Whitlock mining district of California.

The Golden Feather Dredging Company has one dredge in full operation at Mammoth Bar on the Middle Fork of the American River near Auburn, California, and plans to have a second bucket line dredge operating by January 1. The company started working the ground this fall, after closing order was issued by the War Production Board. The company, which has one dredge in full operation at Mammoth Bar on the Middle Fork of the American River near Auburn, California, and the present venture is expected to run for about seven years. All work is being directed by J. S. Norris, Jr., of Auburn.

Retimering, cleaning up of drifts and other workings, and rehabilitation of buildings, are being started at the Oro mine by the Associated Metals, Inc., in preparation for regular gold mining operations. The Oro comprises three claims and a millsite, a total of 47 acres, located at Downieville, Sierra County, California. A 40-ton milling plant is on the ground now, but the company plans to install a ball mill to increase capacity to 75 tons. Development work will include a 250-foot raise, and the Associated Metals also has made application for power facilities. Head offices of the company are maintained at 611 American Building, Seattle, Washington, and Ira Mahon is president and general manager.

Associated Metals also controls the Fine Grove mine in California, and has property in Oregon and Idaho.

Gold dredging is commencing at the ground of the French Gulch Dredging Company, Etherege Walker, president, 971 Mills Building, San Francisco 4, California. The company has a three-foot bucket line dredge at the mine site in Trinity County, California, and has one dredge in full operation at Mammoth Bar on the Middle Fork of the American River near French Gulch, and Ed Shuford, French Gulch, has returned to the operation as dredgemaster. Before the gold mining order was issued by the War Production Board the company employed a crew of about 19 men. Extensive diamond drilling work will be started soon at the property of the Gold Hill Mining Company, following completion of a reconditioning and development program. The company reports that considerable milling-grade gold ore, particularly on the No. 3 claim, had been locked out, and working includes a 1,000-foot tunnel and crosscut. The Gold Hill mine is situated between the old Lucky Baldwin and Rose mines, four miles east of Big Bear City, California. Mae Tartar, Box 9, Big Bear City, is president and A. L. Bear is general manager.

Hydraulic gold mining operations are being stepped up at the Loftus Blue Lead Mines, near La Plata, in Shasta County, California. The property comprises approximately 1,500 acres of ground controlled by theAnaconda Copper Mining Company, and J. R. Scott, of Shasta County, California, is superintendent. A crew numbering 25 men is working now at the Ansel-Erie Mining Company property, near Spanish Springs, Nevada County, California, under the direction of Fred Anderson of Grass Valley.
quartz claims. The Sunmar company on several mining claims in the town district of California. The properties are expected to be in production soon is the Kate Hardy property, and the company is said to have developed substantial ore reserves. The Kate Hardy is operated by John Manassero of Jackson, California, from Mrs. A. B. Schaffner and Roy E. Schaffner to Louis L. Coffer. The claim is located in the Volcano mining district of California.

The Dredge Placer Mining Company reports that it plans to resume testing operations at its placer property near Sierra City, California, about May 1, 1946, and the company expects to purchase some gravel handling equipment for the project. Work already completed at the gold property includes 60 feet of open cuts, three shafts some 50 feet in depth, two 10-inch eased wells drilled to bedrock, and three open pits, all of which were conducted on the 60 acres to determine the gold values. Lloyd L. McNeill of Downsville, California, is president and general manager of Dredge Placer Mining Company, and Martin J. Mognett is assistant general manager and master mechanic. Ed Reisvig of Vallejo, California, is purchasing agent. Mognett reports that the company's season will last from next May until about the end of October of next year, during which time he will receive mail at Sierra City, California, instead of at his present address, Box 639, Benicia. F. W. Nobs of Grass Valley, California, is purchasing agent. Five men will be employed when the company resumes operations.

One of the Alleghany, California, mines expected to be in production soon is the Kate Hardy property, and installation of machinery and equipment is proceeding. The Kate Hardy is operated by John O'Dannel, Forest, California.

Plans are being made for a considerable increase in production at the property of the Original Sixteen-to-One Mine, Inc., near Alleghany, California. The famous gold mine was operating during the war on a limited production permit from the War Production Board and the company is said to have developed substantial ore reserves. Original Sixteen-to-One is headed by U. H. Maxfield, 1611 Russ Building, San Francisco, California, and Clayton Bennett of Alleghany is general superintendent.

John Manasero of Jackson, California, and associates recently filed notice of location on several mining claims in the Drytown district of California. The properties include the Irma, Weldon, and Mary Ann quartz claims.

From Bridgeport, California, comes the report that the Summar Dredging Company has completed installation of a dragline dredge at the Kelley-Dogtown gold placer property, which it now holds under lease. The property, which has not been operated for many years, is located in Mono County at Willow Springs. The project is said to be the first dragline dredge operation to be started in Mono County. Until the war, the Summar concern operated at Oroville, California, and J. H. Frasher, Box 229, Oroville, is general manager. The mine is owned by Mr. and Mrs. Tom Munn, and R. C. Kelley, Box 34, Eureka, Nevada.

George G. Morse, 708 Equitable Building, Denver 2, Colorado, and Reno, Nevada, and associates are engaged in reopening the old Silverado mine of the Sierra Consolidated Mines, Inc., in the Sweetwater district near Silverado, California. The property comprises a group of claims, including the Silverado and the Kentuck, which were producing at the rate of about 150 tons daily until 1941, when the mine was closed and all assets, including the 150-ton flotation-cyanide plant, were sold. Later the property was operated for a short time by Ernie Marx and associates. Samuel Platt, Box 1065, Reno, Nevada, is secretary of Sierra Consolidated.

Development of the main lead at the Red Cloud mine at Coulterville in Mariposa County, California, is said to be progressing satisfactorily. The gold producer was reopened last year by R. A. Fredricks, Box 57, Clevis, California, and associates of New York, and considerable rehabilita-
The Snelling Gold Dredging Company is reported to be resuming gold mining with two dredges and will operate on a three-shift basis. It is expected that the crew will number about 45 men under the direction of Ray Estep, president, Snelling, California.

The Snelling Gold Dredging Company of Nevada City, California, has been awarded the Navy-Navy "P." Large Cap, following its closing in 1943, after the War Production Board closing order, utilized its blacksmith and machine shop facilities for making navy forgings, and for repairing pumps, cargo winches, and other equipment for damaged naval ships. Employees of the organization were presented with certificate awards by Rear Admiral Mahlon S. Tisdale of Mare Island Navy Yard.

The War Eagle mine of the Stratton Cripple Creek Mining and Development Company has been leased by Hereford Pfeffer and Andy Anderson, both of Cripple Creek, Colorado. The property is located on Bull Hill near Cripple Creek and formerly was leased by the late J. Munn Hemby of Cripple Creek and Electra, Texas. The new operators are cleaning out a tunnel which will be equipped and used to gain access to a known low-grade ore body.

The Lava Cap Gold Mining Corporation of Nevada City, California, has been awarded the Navy-Navy "P." Large Cap, following its closing in 1943, after the War Production Board closing order, utilized its blacksmith and machine shop facilities for making navy forgings, and for repairing pumps, cargo winches, and other equipment for damaged naval ships. Employees of the organization were presented with certificate awards by Rear Admiral Mahlon S. Tisdale of Mare Island Navy Yard. The company is proceeding with its plans to enlarge the mill in view of the easier labor situation. The present plant has a 600-ton daily capacity and construction of a new unit to handle 500 tons of ore a day is now being undertaken. Company operations are conducted through the 11,500-foot Tournament tunnel. Oscar H. Johnson, Box 5270, Terminal Station, Denver, is president and Charles W. Plum of Ouray is general manager. The company is about 90 per cent owned by the Newmont Mining Corporation.

Employing about 140 men at the present, the IdaRado Mining Company of Ouray, Colorado, is anticipating the return of more miners to the district and the company is proceeding with its plans to enlarge the mill in view of the easier labor situation. The present plant has a 250-ton daily capacity and construction of a new unit to handle 500 tons of ore a day is now being undertaken. Company operations are conducted through the 11,500-foot Tournament tunnel. Oscar H. Johnson, Box 5270, Terminal Station, Denver, is president and Charles W. Plum of Ouray is general manager. The company is about 90 per cent owned by the Newmont Mining Corporation.
holds a bond and lease on the ground from J. J. Hylton and the A. W. Henson and Thomas Hunter estates.

In the near future the Hoosier Mining Company of Manhattan in Johnson County, Nevada, expects to resume mining operations. William C. Hooper of Manhattan is president and general manager of the company.

ROPE FOR SCAPER MUCKING? In this service the wire rope must pass around small sheaves and wind on small drums. For such applications, Farm-Set (preformed) rope is recommended. It's longer lived, and it's easy to handle — an important consideration in cramped quarters. Where flexibility is a major item, ask for Farm-Set. Bethlehem makes it.

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Ask our nearest representative for information on these and other mining ropes. No matter what size or type you need, Bethlehem makes it.

BETHLEHEM STEEL COMPANY on the Pacific Coast

The Merrick Conveyor Weightometer

for thirty years has been weighing crude ores and fines in mills and concentrators throughout the world, thereby increasing efficiency of operation.

MERRICK SCALE MFG. CO.

MINING COMPANY SAVES NEWSPAPER

A new combination has been announced in southern Nevada. A mining company is going into the newspaper business. Last June, in an effort to save the Goldfield News and Weekly Tribune, the sole voice of the versatile old camp of Goldfield, Nevada, a mining concern known as the Prospects' Friend, Inc., purchased a half interest in the paper. Recently the remaining half interest in the paper was bought by Hendricks estate, and the Prospects' Friend again came to the rescue and picked up the paper.

The mining company, which is headed by Harold V. Lankford of Goldfield, says Esmeralda County needs a newspaper in which to tell the world that "Goldfield is on the way back."
THE MINING JOURNAL for November 15, 1915

JOHN D. MITCHELL tells of

Lost Mines and Buried Treasures

The Lost Golden Eagle Mine

T N THE summer of 1902, Alkali Jones, old time prospec-
tor, and desert rat, set out across the desert from Skidoo,
California, to Searchlight, Ne-
veda. His route lay across one
of the hottest and most deso-
late regions in the United Stes-
ates—Death Valley. For centuries it has been known to
the Shoshones and Pah-Ute as To-ne-ba (ground on fire).

Alkali was in a hurry to reach Searchlight and was traveling
with one pack burro. He carried a .22 caliber rifle and a small
prospecting pick and put it in an empty coffee pot, some
hardtack, coffee and sugar, a small frying pan, coffee pot
and an old army kit. This, together with a large canteen
of water and his bedroll, made a pack of less than 100 pounds.

Two or three days after leaving Skidoo, and while crossing
a narrow strip of the valley he was attracted by mountains
that lay overhead. He found some hardtack, sugar and
a small army kit. This, together with a large canteen
of water and his bedroll, made a pack of less than 100 pounds.

When the storm had abated and the sun came out again,
Jones left his shelter beside the huge granite boulder and
in order to get a better view of the surrounding country started
to climb toward the summit of the little butte. When about half
way up the north side his attention was attracted by some pieces
of milky white quartz that lay scattered along the hillsides. With
the small prospector's pick that he carried in his hand he broke
some of the quartz and found it to be heavily impregnated with
bright yellow gold.

Running along the hillside in a northeasterly and southwest-
ely direction was a white quartz vein about three feet wide.
It outcropped for a distance of about 1,000 feet before disap-
ppearing under the sand at the foot of the little granite butte.
The vein was a fissure in pink granite and showed free gold
wherever it was broken open.

From a pouch Alkali carried at his belt he took a location
notice and while engaged in filling it out looked up into the
sky and saw a huge bird wheeling high overhead. It was so
far above him he was unable to tell whether it was an eagle or
one of the huge California condors that was dogging his foot-
steps waiting for a chance to pick his bones. At any rate he
called the claim the "Golden Eagle." When he had finished
the location notice he signed his name to it, placed it in an empty
smoke can and put it in a monument that he had made of huge
quartz. When he had finished building the monument, he
gathered up about 10 pounds of the rich quartz and placed it in
a small sample sack.

It was late in the afternoon when Jones reached the foot of
the little butte and headed for the higher mountains that lay
overhead. After traveling a distance of about one mile, he
started climbing, and when a few thousand feet up, sat down
to rest himself and his burro. The map that he carried in his pocket
showed that he was in the Funeral Range sitting on Coffin Moun-
tain and looking down into Death Valley. And to make things
worse his burro was thirsty and he had only a pint of water
left in his canteen.

As Alkali sat there making a crude map of the location
of his mine, the valley below him suddenly filled with water.
It danced and sparkled in the evening sunlight as the gentle
shimmering waves broke into spray against the granite boulders
around the foot of the now distant butte. Beautiful trees and
fairy castles sprang up along the shore. Jones, being a man of
the desert, knew that it was only beautiful mirage that had led
hundreds of less experienced men to a horrible death on the
burning sands.

So instead of heading out into the desert wastes to search
for water, he turned his footsteps toward the higher points in
the Funeral Range. When he had traveled a distance of about
two miles he came to the edge of a deep canyon. Pausing on the
brink of the canyon he looked into its bed far below. As he
stood there he saw doves and white-tails in pairs and small
flocks flying swiftly up and down the canyon. This he knew
to be a sure sign of water not far away. Leading his burro down
into the canyon he continued to walk along its bed for a dis-
tance of about one mile and suddenly came to a large tank that
nature had scooped out of the rock in the canyon bed. The
tank was filled with clear water and was surrounded by thousands
of birds and doves. A small bed of sand under a shelving rock
offered an ideal place to camp for the night. Jones could have
killed some of the doves or quail for his supper, but did not have
the heart to destroy the little friends who had saved his life by
leading him to their secret watering place. When he had beb-
held his burro and filled himself with hardtack and coffee, he
lay down in the soft sand to rest.

Early the next morning Jones prepared a breakfast of jerky,
hardtack, and coffee and was well on his way down the east
side of the Funeral Range with his canteen full of water and the
sack of rich ore stowed away in his pack when the first rays
of the sun tinted the east and Death Valley again was flooded
with golden sunlight.

After leaving the Funeral Range, Jones passed into the Ar-
ragosa Mountains and camped one night on the Arragosa River.
From here he made his way to Charleston Mountain, Good-
springs, Crescent, and the little mining town of Searchlight.
Upon his arrival at Searchlight Jones took about one pound of
the ore to an assayer at the Quartz mine where he had it as-
sayed. It ran $41,000 per ton in gold.

The remaining nine pounds of ore were ground in a mortar
and with the $180 in gold Jones purchased three burros from
Winfield Sherman, a desert character well known in Searchlight
and Crescent. At a store in Searchlight he purchased provisions
and some mining tools. He then wrote a letter to a sister in
the East and was ready to return to Death Valley to work his
mine.

While in the mining town of Searchlight, Jones took his
meals at Jack Wheatley's eating house and it was there that this
writer saw the wonderful ore and heard the story from Jones'
own lips.

Three days later Jones loaded his outfit on two burros,
mounted the third and set out across the cactus-covered flats
in the direction of Crescent and Goodsprings. He spent the first
night at the Gus Halfpenny gold mine down on the west side
of Crescent Mountain and a few days later passed through Good springs headed for Death Valley.

The years passed and no word of Alkali Jones or his Golden Eagle mine ever came out of the desert. Then one day two Shoshone Indians making their way across the desert along the east side of the Funeral Range came upon the remains of an old pack outfit under a mesquite tree. Scattered in the sand were some old rusty mining tools, but the body of the owner was nowhere to be found. He is believed to have run out of water and some of the legal difficulties, an adequate water supply was developed and present work was against its holding to the scale, but scarcity of water and some wind that covers a rich deposit of gold may uncover it some day. So the search for Alkali Jones' Golden Eagle mine goes on and on.

RABBIT HOLE AREA IN NEVADA BEING OPENED SYSTEMATICALLY

Two large-scale placer operations are being started in the Rabbit Hole-Rosebud area of Pershing County, Nevada. For years this district has been frequented by individuals or small groups who conducted dry washing operations on a very small scale, but scarcity of water and some trouble over clear titles combined to make the area uninviting. With the settlement of the legal difficulties, an adequate water supply was developed and present work was started.

Rosegold Placers, Inc., is beginning a development campaign and has leased a portion of its holdings to the Paxton Brothers of Montana who have moved in equipment and are handling some 2,000 yards of material daily, using water from the Reo Seal well. Behind the Rosegold company are M. T. Vandersticke of California and Robert L. Schneider, who is vice-president of the company. The small operations of the past have produced over $300,000 worth of gold from the area, but no systematic prospecting or development work had been done until the present operators started work.

George L. Holmes of San Francisco, California, one of the pioneer placer dredge engineers of California, recently completed an examination of Rosegold ground to determine the quickest and best methods of prospecting the property. A portion of the holdings was surveyed for the company by W. A. Pray, mineral surveyor of Fernley, Nevada, and some new roads were built to facilitate the contemplated work. The company expects to thoroughly prospect and blaze out an area of values sufficient for a major operation to be started as soon as adequate machinery and labor are available.

COPPER-ZINC OUTPUT DROPS IN SEPTEMBER, LEAD INCREASES

Production of refined copper in September dropped to 45,145 tons, a decline of 25,982 tons from August, and the smallest for any month since August 1938, according to Copper Institute figures. The decline is attributed partly to difficulties in some of the refineries. Total output for the first nine months of 1945 amounts to 636,470 tons, which is 203,000 tons below the corresponding period of 1944 and represents a decline of 24 per cent.

Crude production totaled 61,369 tons in September, a decline of approximately 1,000 tons and the smallest monthly output since the latter part of 1938. Aggregate output for the first nine months of this year was 644,396 tons as against 820,588 tons in the same period of 1944, a decline of 176,000 tons or 21 per cent.

Refined copper deliveries in September aggregated 85,362 tons, 55,870 tons being domestic and 29,492 tons foreign copper delivered to consumers by Metals Reserve Company.

Production of zinc in September totaled 61,600 tons, a decrease of 3,153 tons from August, according to figures released by the American Zinc Institute. The daily production rate in September was 2,053 tons compared with 2,080 tons in August. The peak production for the year was in March when the total was 71,739 tons.

Editor’s Note: The above is one of a series of stories on Lost Mines and Buried Treasures, compiled by a most competent researcher on the subject. These stories, along with many others, will be published later in book form and thus made available as a complete collection.

Shipsments of zinc in September dropped sharply, with the total amounting to 41,825 tons, a decrease of 6,427 tons from the August total. September shipments were the smallest for any month since June 1939.

Domestic deliveries dropped to a total of 41,367 tons, a decline of about 6,700 tons from the preceding month, and the smallest reported since April 1939 when they aggregated 40,641 tons. Total deliveries during the first nine months this year amounted to 383,643 tons, 618,316 tons in the like period of last year.

Lead output gained 2,282 tons in September, when the domestic production of refined lead aggregated 33,923 tons compared with 32,691 tons in August, according to American Bureau of Metal Statistics figures. Refined output for the first nine months of 1945 totaled 383,643 tons, as against 408,727 tons for the same period of last year, a decrease of 23,084 tons.

Of the September output, 34,899 tons came from domestic ore, a gain of 7,147 tons over August, while refined output from secondary and foreign ore decreased to 2,224 tons in September, a drop of 3,015 tons from the preceding month. A gain in shipments of domestic refined lead in September was reported, with 33,923 tons, or 6,184 tons over the preceding month. These figures do not include the shipments of foreign lead released each month by Metals Reserve. For the nine months of the current year, the shipments came to 366,586 tons, compared with 415,727 tons a year ago.

INCREASE IN SILVER CEILING BEING CONSIDERED IN CANADA

The Canadian government is considering an increase in the ceiling price of silver to bring it to approximately the American ceiling of 71.11 cents, it is reported. The Canadian ceiling of 40 cents an ounce (Canadian funds) was in line with the United States price of 35% cents. However, the American price was raised to 44 cents in September 1942 and more recently to 71.11 cents.

Adding to the Canadian difficulties is the fact that, while their government has held the price line, it has failed to control the use of silver. Silver can be bought in Canada at the lowest price in the world, and sold outside its borders at twice or three times the price, which has resulted in a shortage of silver there.
Present-Day Bonanzas

The days of the so-called bonanzas are not necessarily over, nor as long as there are men with vision and sound business ability. It is not always the rich, sensational strike which pays the highest return on the investment. A low-grade project, with proper management, can be made a profitable venture.

Small stope in this mine produced in round figures a million dollars within a year of the time the new owners started development.

Interesting and romantic as these cases are they are no more so than the stories that go with the making of many of the mines of today which bid fair to return to their owners more real money than many of the so-called bonanzas of the past. Then there are these old mines which have been brought back from idleness into profitable production by the application of good business and engineering sense and the advanced technique of the profession.

About the turn of the century there was known to exist in one of the old mining camps an enormous body of copper-bearing rock. If we accept the technical definition it was not ore, as the copper could not be extracted at a profit in view of the technology of the time because of the very low content. An engineer of vision conceived the idea of low cost for this deposit through mass production and succeeded in selling his idea to men with sufficient capital to see it through.

After thorough tests in a large pilot plant a 6,000-ton mill, a size never attempted before, was built and in some cases new machinery was designed for this particular ore. The venture had its ups and downs and many a bungling mine could tell you why it was doomed to failure. But it did not fail and the 6,000-ton capacity was increased to the point where, under the pressure of the war emergency, mine and mill were handling as high as 180,000 tons of ore per day and the general principles of mining and milling evolved have become the model for many similar deposits and account for a substantial portion of the total copper output of the country.

People still talk about the "Great Bonanza" of the Comstock. It was rich and it was additional but its total production was less than the dividends paid by the mine which was brought into being by the application of business principles and sound technique.

Now for a story of rejuvenation of an old mine and this time we go to a well-known gold district in California. After a considerable production this mine was shut down a generation ago — "worked out." In 1926 a new organization took it over, equipped it in first-class manner and started an active campaign of exploration and development. It was not until 1925 that it was fully on production but thereafter it was paying substantial dividends with substantial ore reserves and a production record, in this country, only to the Homestake. All because the original promoter had foresight, the directors had nerve and the project was run with an eye to business and the best mining practice.

Surface plant of the Bonanza mine, Barber Asphalt Corporation, in Utah. After an explosion, which occurred about 9 p.m., October 5, started fires which raced through the company's 15 mine shafts. No one was injured and the fire was extinguished by 4 a.m., October 16. The company already had made plans to sink rock shafts and use other methods of mining gilsonite. According to Utah officials there were no violations of the Utah safety code and the explosion of gilsonite dust which started the fire, presumably touched off by underground blasting, is considered accidental. Meanwhile production has been resumed by the company at another property.

Bonanza mine and town are furnished with power and lights by six Caterpillar Diesel-powered electric sets, the power plant showing in the extreme right background of the above picture. The mine and mill had a 400-ton daily capacity, although operations had been averaging less than half of that. L. D. Barry, who receives mail at Craig, Colorado, is manager of Barber Asphalt.

*Mining Engineer, Berkeley, California

LEROY A. PALMER* considers

EVEN before the days when the desert rat turned "old long ears" out to pasture and bought himself a gasoline burro the hardy prospector had poled his nose into almost every nook and cranny even of the most inaccessible regions of this country and it was the general opinion that the day of the bonanza was past. In general no doubt this is true and we can hardly expect to see another Goldfield or another Comstock. Even so, startling discoveries are not entirely a matter of too ancient history and some of them have been made in the most unexpected places.

The Randband district in Kern County, California, is one of these. The story of the Randband in the nineties. It produced many millions in gold, principally from the famous Yellow Aster. The district was almost ignored. After years of quiescence the sleeping gold camp was suddenly awakened. An inquisitive prospector, fumbling around with a rusty looking outcrop right on the edge of town discovered that it was rich silver ore and Randeberg added another $20,000,000 to its production record.

Ten or a dozen years ago we had a similar case, and again the scene was laid in Kern County. Five miles south of the little town of Mojave, Soledad Mountain, is an old mine and this time we go to a stretch of desert town of Mojave, Soledad Mountain, an old mine and this time we go to a...
MAGMA COPPER SHOWS RISE IN NINE-MONTH PROFITS

For the nine-month period ended September 30, 1945, the Magma Copper Company, Superior, Arizona, has reported a net profit of $392,503 after deducting federal income taxes. A non-recurring profit of $20,058 resulting from the sale of securities is included in the profit for the period.

In addition to the above profit, the company received in May of this year $330,287 for premium price plan adjustments on its 1944 production. After estimated federal income taxes, the net profit from this source is approximately $284,287. For the first nine months of this year, the company's profit is equal to 90 cents a share of common stock, and compares with earnings of $164,728, or 41 cents a share, for the similar period of 1944.

During the nine-month period, the company operated its mine at Superior with a crew of approximately 60 per cent of normal because of the labor shortage. Owing to this condition, the smelter is being operated only intermittently. The milling of zinc-bearing ores was discontinued in July 1945, and will not be resumed until general conditions become more favorable. The actual smelter production of copper during the period amounted to 12,881,520 pounds and there was produced and shipped 5,119 tons of zinc concentrates.

Magma Copper also has formed the San Manuel Copper Corporation to continue development of the San Manuel low-grade copper mine near Tigner, Arizona. Magma now owns or holds options to purchase all of the authorized capital stock of the new corporation except such shares as the vendors have received or may be entitled to receive under the terms of the agreement.

Drilling at the San Manuel property has continued as rapidly as suitable drill rigs are available. In addition to the 17 holes drilled by the Bureau of Mines, Magma has deepened six holes started by the bureau and has completed 14 more, with six others incomplete at this time. This drill-

ing is reported to have extended considerably the mineralized area. While sufficient data are not now available to permit an accurate calculation of tonnage or grade of deposit, a large tonnage of mineralized rock is indicated, probably averaging somewhere between 0.7 and 1.0 per cent copper. Recent drilling also indicates that the percentage of the sulphides has considerably increased as compared with earlier work.

Dear Mr. Willis:

Marquis Childs states the true reason for the "positiveness of the actions of both houses of Congress" you rave about in your recent editorial. You might hire him to take over your editorial page and let us have a rest from your tirades against Honest Harold, Henry Wallace, the New Deal, and everything that is progressive and forward looking, you old Tory, you.

(signed) S. L. GILLAN.

October 20, 1945.
MCDONOUGH vs. SOUTHERN OREGON MINING CO.

159 Pac. 2d (Ore.) 829, June 1965

When "damages" are granted in preference to "specific performance" of a contract.

The plaintiff McDonough owned a 300-acre tract which she leased to defendants for gold dredging. Lessees were to pay a 10 per cent royalty on gold recovered together with $20 per acre as damage for any hay land mined anywhere to restore property to good condition after a cessation of dredging. The Southern Oregon company failed to do this to the satisfaction of plaintiff and suit was brought to enforce specific performance in leveling the ground, replace fence, straighten a certain stream, remove brush, etc., as well as to account for any gold taken out.

The lower court entered an interlocutory decree ordering performance as stated which order was not obeyed following which the court ordered a judgment for plaintiff for $1,730, in lieu of further performance. Upon defendant's appeal to Oregon Supreme Court the decision of the lower court was affirmed, saying: specific performance will not be ordered since damages are adequate and the court is not equipped to supervise the work, including complicated details possibly not clearly expressed in the contract.

If the inadequacy of damages (money award) is great, and the difficulties not extreme, specific performance will be granted and the tendency in modern times has been increasingly towards granting relief, where under the particular circumstances of the cases damages are not an adequate remedy. The modern test is whether the difficulties of supervision outweigh the importance of granting specific performance because of the inadequacy of damages.

ALGER vs. BRIGHTER DAYS MINING CORP.

160 Pac. 2d (Ariz.) 346, June 1965

Minority stockholders of an insolvent company must act promptly to protect their legal rights.

The Samoa Gold Mines Corporation was organized in 1931 and operated until 1938 on three patented and seven unpatented claims in Mohave County, Arizona. Plaintiff Alger, a stockholder, sued out a lien against the Samoa company resulting in a sheriff's sale of the property with sheriff's deed assigned to the Commercial Company, who gave original stockholders an option to rebuy.

Upon failure to make more than one payment, forfeiture followed and in July 1938 the Commercial Company sold the property to Attorney Beas of New Jersey and a new corporation, the Brighter Days company, was organized taking title and of which several of the Samoa company stockholders became officers and directors in Brighter Days company.

This action was brought in September 1941 to void the deed to Brighter Days company, for an accounting and damages and that Samoa company be declared the owner of the property.

The Arizona Supreme Court held that no fraud was shown; that the Samoa company had lost all right, title, equity, and interest in the property by original stockholders failing to act within a reasonable time to protect their rights, being aware of the facts and conditions and the re-organization of the Brighter Days company.

A stockholder who wishes to sue must act promptly after acquiring knowledge of the conditions of which he complains or he will be deprived of his rights and his interest lost. The length of time during which a stockholder may delay in bringing his suit varies with each case according to circumstances of that case. Judgment of lower court affirmed in favor of Brighter Days.

FLICK, ET AL. vs. DUCY & ATTWOOD ROCK COMPANY

160 Pac. 2d (Calif.) 669, July 1965

Owners of unused pit owe no duty as "trespassers."

Defendant company had been operating a rock and gravel business near Pajaro. A private road led to the property from the highway, but a sign or notice at the entrance of "Private Property" was broken in two at the time three boys in a car at night, seeking a crossroad, entered upon the property. The road following in a quarter of a mile was more or less ungravelled and actual crushing and mining operations had been discontinued. The boys inadvertently drove into an open pit twelve or fifteen feet deep and were injured and sued for damages.

The court held that the injuries were the result of an unavoidable accident with no negligence by defendants and that the boys being trespassers contributed to their own injury and the court said, "Nor am I justified in making excavations either on the path which I have permitted other persons to traverse, or so near a public road that travelers in the ordinary obstructions or casualties of travel, may stray or be driven over the line and be injured by falling into the excavation."

"But beyond this my liability to trespassers, voluntary or involuntary, does not go. I may make what excavations I choose on my own land, without fencing them in, provided they are not on a line over which I permit travelers to pass, or so near a public road that in them a traveler may unwittingly fall."

The judgment of the lower court was in favor of the defendant company and was affirmed by the higher court.

The Outlook Grows Brighter

During the past four years we have been obliged to turn down large numbers of requests for telephone service. About 50,000 orders are now being held in the Mountain States territory alone because of war-induced shortages.

Now, the production lines of Western Electric Company, our manufacturer, are turning out an increasing flow of equipment, and telephone people are integrating it into the telephone system as rapidly as possible.

We are eager for the day when no one will be waiting for telephone service.
Kaiser’s Steel Program for Postwar Industry

With a vast market already existing for the Kaiser Company’s products, a new steel plant is now being constructed at Fontana, California. The plant will be the fifth largest in the world. Under the supervision of Peer Nielsen, the new plant will be completed by late 1945. The plant will produce steel for the construction of ships, tanks, and other military equipment. The Kaiser Company has committed itself to utilizing western raw materials for its products. Nielsen believes that this will be a great contribution to western industrial development.

Nielsen, who has spent over 20 years in the steel industry, is well known in the construction field. He has held various positions with the Kaiser Company, including superintendent of the National Tube Works and vice-president of the Kaiser Steel Corporation. Nielsen has been a strong advocate for utilizing western raw materials in the steel industry, and he believes that this will help to build a greater world.

The Kaiser Company has been active in the steel industry since the early 1940s. During World War II, the company constructed shipyards and other facilities to support the war effort. The company has continued to expand since the war, and it now operates in several industries, including steel manufacturing, shipbuilding, and defense.

Nielsen’s appointment as superintendent of the new plant is seen as a significant step forward for the Kaiser Company. The company is committed to utilizing western raw materials in its products, and Nielsen’s appointment is a testament to this commitment. The new plant will be a major addition to the Kaiser Company’s operations, and it is expected to create many jobs and stimulate economic development in the region.

The Kaiser Company is one of the largest steel producers in the United States. The company has a long history of innovation and economic development, and it continues to be a leader in the steel industry. With the construction of the new plant at Fontana, the Kaiser Company will be able to further its commitment to utilizing western raw materials and building a greater world.
makes the West. * Until the western states have the basic industries upon which are justified by existing raw materials, available power, population trends, and geographic location, we will continue to fall short of full participation in the advantages for which America stands. In order to accomplish this, many forces must be harnessed. In the spirit of these thoughts, let me present a few factors in the prospects for an industrial West with which I have recently had some experience.

"The first, the steel industry. We are still in the iron age and steel continues to be the prime essential of an industrial economy. Another is the automobile industry, which in time of peace is the largest single consumer of this basic metal. To me, western steel is the key to the fulfillment of our western hopes. Therefore, I want to enter on record a few simple yet vital facts that bear on the past history and the future prospects of the two great western steel plants at Geneva, Utah, and Fontana, California.

"In the summary which I am about to undertake, it is not my intention to indulge in regionalism or to set one state against another in this great area, the interests of which are so obviously identical. It is rather my hope that this review will help us all to see the prospects as well as the problems of western steel in better perspective."

"In comparing Geneva and Fontana, there are marked contrasts and similarities. Both facts and opinions enter into the appraisals of each. Both plants were built in response to a critical shortage of steel for vital war needs. Both plants produced enough steel for the war to justify their construction. Both plants were built under wartime conditions at wartime costs. By the impartial testimony of two independent steel engineering firms, Geneva and Fontana, in future operations, will have approximately the same operating costs.

"Neither plant is equipped to convert its full ingot capacity into the products demanded by the peace market. Both plants require further heavy investment in rolling mill and steel finishing equipment in order to produce the volume and variety of products required for the industrialization of the West. Both plants, in competition with each other or combined under a common management, can help fulfill the hopes of the entire West for a basic steel industry. The contrasts are nonetheless vivid."

"Geneva was built with funds provided by the Defense Plant Corporation and was, therefore, not subject to fixed interest payments. Fontana was built under private ownership with funds borrowed from the Reconstruction Finance Corporation on which interest has at all times regularly been paid at the rate of 4 per cent.

"There were no funds nor earnings pledged against the cost of constructing the plant at Geneva. The Fontana loan was secured by the pledge in full of the net earnings on $1,500,000,000 worth of ship construction and cargo at this immense total, although substantially less (Continued on Page 31)."

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FOREIGN COPPER PURCHASES DISCUSSED IN WASHINGTON

Due to the inadequate production from our own mines, the United States Government is likely to resume purchases of foreign copper. The foreign copper purchase agreements which expired October 31 have not been renewed as yet, but conferences are being held in Washington on new purchase agreements. These discussions mainly concern contracts calling for delivery of 75,000 tons during the first three months of 1946, at the rate of 25,000 tons per month, with a like contract for the second quarter. These conferences cover only the first half of 1946, because the premium price plan for domestic mines expires June 30, 1946.

These proposed purchases would be allocated by Metals Reserve Company as hereinafter and at the ceiling price of 12 cents a pound, with the major part of the copper expected to come from Latin American mines and the remainder possibly from Canada. Before the expiration of the American agreements October 31 and since before the war, the United States had purchased around 50,000 tons a month from Latin America, substantially the entire output; and since the beginning of the current year when the British Government canceled its agreements with Canada we absorbed the excess output of the Dominion, plus about 70,000 tons from Rhodesia in a reverse lend-lease.

The discussions were opened by the State Department because of fears expressed by supply agencies who question the advisability of reducing the copper stockpile below the present level.

Consumption of copper in the United States has been running slightly more than 100,000 tons per month. Actual deliveries for October totaled 104,104 tons, with 65,125 tons of refined supplied by domestic mines and the balance from foreign sources. Allocations for November delivery included 55,000 tons of foreign copper, to come partly from arrivals of foreign copper and the rest from the accumulated government-owned stockpile. It is fully expected that further substantial inroads will have to be made into the government stockpile in December.

THE MINING JOURNAL for NOVEMBER 30, 1945
When this giant stops chewing earth and rock it digs into your profits— "AND HOW"
The first clean-up of 1945 of the Marvel Creek Mining Company is reported to have amounted to $30,000 worth of gold. The company, under the management of Charles Awe of Flat, Alaska, is employing 12 men in its dragline and washing plant operation on Marvel Creek in the Tululukak area.

The Wolf Creek Mining Company of Fairbanks, Alaska, has suspended operations for the winter season. Although short of both equipment and labor, the company operated throughout the summer on a one-shift basis and expects to continue operations on a two-shift basis next summer. The owners of the company are Thure Gustafson and Andrew Anderson, both of Fairbanks, Alaska, and Mannie Olton of 1311 West Sixteenth Street, Seattle, Washington, who is at the mine near Fairbanks during the mining season.

According to reports, it will be at least six months before the Alaska Juneau Gold Mining Company can even start making plans for the reopening of its mine and mill at Juneau, Alaska. A normal cost-income ratio and a much greater supply of experienced miners are two of the prime necessities. Also, it is expected that at least $1,000,000 will have to be expended in repair work before the big low-grade gold mine can be put back into production. In spite of operating difficulties during the war years, the company continued production on a limited scale until April of 1944. After that only maintenance work was attempted in the mine, and the power plants were operated for the benefit of the community of Juneau.

P. B. Bradley, 1022 Crocker Building, San Francisco 4, California, is chairman of the board and C. A. Norris is company president. During normal times the company employed over 1,000 men and trammed 12,500 tons of material daily from the mine.

Concentrates from Western States

A preliminary net income of $1,086,977 for the nine months ended September 30, 1945, is reported by the Magna Consolidated Copper Company, William D. Thompson, 20 Broadway, New York 4, New York, president. This amounts to 93 cents and compares with $1,458,842 or $1.28 a share in the like period of 1944. Company operations are at Inspiration, Arizona, where Dr. H. O'Brien is vice-president and general manager.

The Phelps Dodge Corporation, 40 Wall Street, New York 5, New York, is reported to be redeeming all the corporation's 3 1/4 per cent debentures as of December 15, 1945. Total redemption will amount to $7,587,000 and will clear up all of the company's funded debt.

A dividend of 60 cents a share has been declared by the Natomas Company, Thomas McCormack, 607 Forum Building, Sacramento, California, president and general manager. The company, which holds seven dredges in the Folsom district of California, operates on a three-shift basis and the remainder of the property will be put into operation as soon as the necessary manpower is available. The company operates in Nevada through its subsidiary, the Manhattan Gold Dredging Company, and in Colorado through the Platte Dredging Company, also a subsidiary.

Two hydraulic monitors have been placed in action by the Northwest Mining and Engineering Company, 415 Hope Building, Seattle, Washington, near Sierra City, California. Rated capacity of the equipment is 4,000 yards of gravel daily and the company plans operations on a three-shift basis with 20 men. Westcott B. Clarke, Sierra City, is superintendent and Frank E. Nennec, 1802 Fifth Avenue, Los Angeles 6, is general manager and chief engineer. Since its recent acquisition of the property, known as the Humphrey and Romano placers, the company has repaired ditches and flumes and installed equipment.

The Anaconda Copper Mining Company is reported to be steadily increasing operations at its Darwin mine at Darwin, California, and soon will have the capacity production of 175 tons of ore daily. About 1,600,000 pounds of lead and some zinc and silver are being turned out monthly at present. S. K. Droway is in charge of the property for Anaconda, making headquarters at Darwin.

Between 35 and 45 men are employed by the Red Cloud Mines, Inc., Hecla Mining Company subsidiary which is operating the Blue Moon mine and Jenny Lind mill at Hernisios in Mariposa County, California, and more are needed. The 256-ton zinc-lead mill is in regular operation, with Roy F. Hollis as mill superintendent. Robert Dunn of Hornisios is mine superintendent and L. E. Hanley of Wallace, Idaho, is president and general manager of the company.

Harry L. Odgers of Mariposa, California, has acquired the Cleveland and Aladdin
which has been working at La Grange, California, is headed by John A. McDon ald, 912 Russ Building, San Francisco 4, president. Estey Julian, 1 Montgomery Street, San Francisco, is general manager.

Milling operations have been started by the United Production Corporation at its remodelled Lackawanna mill near Silverton, Colorado. Both custom and company ore will be treated. The company holds the Lackawanna, Caledonian, Burrows, and Scratchton City mines in the area. Proctor G. Milliken of Silverton is manager and Emile R. Abadie, Box 171, Silverton, is mine superintendent. The company is headed by R. E. Wilcoxen of Pueblo.

The Colorado Fuel and Iron Corporation, Continental Oil Building, Denver 2, Colorado, reports for the quarter ended September 30, 1946, net profit of $42,196 or 7 cents a share. This compares with $474.476 or 75 cents a share earned in the September quarter of last year. These figures do not include any operations of the Wickwire-Spencer Steel Company, with which Colorado Fuel and Iron recently merged. At a recent election E. Perry Holder, formerly president of Wickwire-Spencer, was elected president of C. F. and I.; W. A. Maxwell, Jr., of Denver, former president of Colorado Fuel and Iron, was elected president of the Colorado and Wyoming railroad. G. F. and I. subsidiary; L. S. Quig of Pueblo, reelected executive vice president; Charles Allen of New York, chairman of the board; and N. H. Orr, Douglas Millard, S. G. Pierson, and J. D. Sullivan, all of Denver, and R. T. Dunlap, Franklin Berwin, A. G. Bussman, and A. C. Kekarter, all of New York, were elected vice-presidents.

The Champion Mines Company of Cripple Creek, Colorado, is preparing to start operations at its Flying Cloud property which it leased recently from the Golden Cycle Corporation. Surface workings are being rehabilitated, preparatory to the installation of equipment. The company expects to drift from the Flying Cloud shaft on Bull Hill 400 feet along the Flying Cloud vein to the morning Star line, and another 400 feet across the Morning Star property, which is held by Champion Mines Company. A gasoline-driven Gardner-Denver air compressor and gasoline-driven hoist have been installed at the Flying Cloud shaft. Jesse Simmons, 941 Monroe Street, Denver 6, is president and E. A. Ritter, 604 Empire Building, Denver, is consulting engineer.

A compressor will be installed by George H. Bigler of Alma, Colorado, and associates who have taken over gold property near Alma from Orville Adrian of Alma and are preparing for early production. Road improvement also is under way.

Operations at the Terrible mine at Silver Plume in Clear Creek County, Colorado, will be continued throughout the winter months. The property, which produces silver, lead, and zinc, is being operated by H. L. Tedrow, Olin Hotel, Denver, and W. E. Scott, Jr., of Central City, Colorado. Work is directed by George Rowe of Silver Plume.

Recent improvements at the Urad property of the Molybdenum Corporation of America include the construction of a new road to the mine, eliminating a bad grade, and new living quarters and garages. The property is at Empire, Colorado, and is equipped to mine and mill 250 tons of molybdenum ore daily, but as yet the company has been unable to hire a full crew. Walter Ranch, Box 341, Idaho Springs, is mine superintendent and F. C. Blickenderfer of Empire is mill superintendent.

The Lombard Mining Company, organized to operate the Lombard, Gilt Edge, and other properties in the Fall River area near Idaho Springs, Colorado, is reported to be reopening the main Lombard tunnel. The property, owned by the Henry I. Seemans interests of 928 Equitable Building, Denver 2, was recently leased to Texas people. Charles E. Fetchoff of Idaho Springs holds a contract for crosscutting.

Certain leases located on Mt. Bross near Alma, Colorado, and believed to include portions of the Alma Syndicate, Inc., holdings, are understood to be operated as the Mineral Park Account. A. E. Moynahan, U. S. National Bank Building, Denver 2, is the engineer in charge for Rolf H. Luchenback, Lakewood, Colorado, lessee.
Shaft Sinking

by D. H. Platt, bureau mining engineer of Dallas, Texas, may be obtained from the Bureau of Mines, Department of the Interior, Washington 25, D. C.

WASHINGTON MINES & GEOLOGY
CONSOLIDATE UNDER NEW HEAD

A CONSOLIDATION of the Division of Geology and the Division of Mines and Mining is announced by the Washington State Department of Conservation and Development. All activities of both agencies will be combined in the new Division of Mines and Geology under the direction of Sheldon L. Glover, supervisor. The announcement was made by Art Garten, director of the state's Department of Conservation and Development.

Correspondence to the new division of mines should be directed to the new address, Box 207, Olympia, Washington.

MEXICAN MINERS HAVE CHOICE
OF TWO INSURANCE SERVICES

Few miners in Mexico are availing themselves of the benefits of the social insurance service that was started for them on January 1, 1944, it is reported by the Mexican Social Service Institute. This is believed to be due to the fact that the men obtain greater social service benefits from their collective work contracts demanded by current labor laws.

PEOPLE OF EUROPE PRIZE SILVER, REPORTS GILLESPIE

DEMONETIZATION of silver is waged by Dean G. Gillespie, congressman from Colorado, as a result of his experiences with $50 silver dollars during a trip through Europe. He believes that a freer use of silver would aid materially in stabilizing our currency and that a visit in Europe would convince any fair-minded man of the value of silver as money.

When Congressman Gillespie left for Europe he took with him $50 silver dollars, the maximum amount of American money one is permitted to take. On a few occasions, in different countries, he showed these silver dollars and made a few test purchases. He relates the following experiences:

"I soon found that the people were hungry for metal, either silver or gold. In Italy where the stabilization price of the lira is 1 cent and you can buy on the black market probably 200 for $1.00, I was offered 500 for one American silver dollar. The French working people and peasants are being blamed for the lack of spirit to work when the country is so drastically in need of everything, but these men in enlisting talks told me that while they are getting fabulous wages they have no faith in the money for it buys so little and they feel sure there is no use hoarding it because they fear it will become worthless.

"However, in Switzerland the people still have faith in their money and you find lots of silver money in circulation. In Greece, Italy, Spain, and Portugal, the people seem to sense that their money has very little real value, and I feel certain that if those countries would back their money with silver, even to the extent of 25 or 50 per cent, they would find the people again willing to work and produce the goods so sorely needed.

"There is something about silver or gold that naturally makes it valuable. The countries of the world have used these two metals for money for thousands of years, and wherever you find silver money even now in Europe you find a more prosperous people. They will not lose faith in their currency when it is backed by precious metal. The first thing that happens when inflation starts in any country is the disappearance of all precious metals."

NATIONAL LEAD TO INSTALL BARITE GRINDING PLANT

THE Baroid Sales Division of the National Lead Company has acquired a site near Auburn, California, where the company plans to install a barite grinding plant. The company has its own mining and milling operations at El Portal, California, and also mines ore from the old Spanish mine at Washington, California, and other properties.

Baroid Sales Division offices are maintained at 830 Ducommun Street, Los Angeles, California. George L. Retcliffe is general manager. Other operating officials include W. B. Hester, production manager; A. C. Harding, general superintendent; and E. H. Murcichson, resident superintendent of the El Portal operations.

Hot Milling Detachable Bits

We are properly equipped to Hot Mill, Resharpen, Retemper and Harden the popular types and sizes of detachable Rock Bits.

We recondition drill rods, any type, size or length, resharpen and rethread.

We manufacture and maintain a complete stock of new drill steel in all types, sizes and lengths.

We manufacture and stock moil points, chisels, spades, asphalt cutters and small tools for riveters and chipping hammers.

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Page 44
SNAP!

Hammer Away At It
with
Addison N. Clark

*** World War II begat a word, already portentous in form, that has even- tually will make Webster. The word is SNAP. In GI circles it means "Stimulation Normal, All Paced Up." So aptly does it express Army-Navy conditions (especially the plugged-ears, baffled look of most Home Front messes that it's here to stay. Now it has a postwar job. It fits so much of to-day's scene—from atomic-aches on through reconversion, the I-bur-capital w-g trouble, the constant snafus of the masses, etcetera—it just can't be relegated. It does demand, despite the rather distant the American mind is in today.

*** I recall a parallel picture. Think back to the 30's. We had a whole bunch hit us—and split financial atoms all over the world—I was in Phoenix on business. With all thinking Art-supernova, I was astounded. Back in California a fortnight or so later I heard San Francisco, financial and industrial capital of -the West, SNAP, her b-suicide men in a all fire of urgent-ity and bewilder-ment—and never Almighty close to peri~ which got worse till it hit bottom in '33. Do you see the parallel? Isn't it a lovely scene for our victorious fighting men to come home to? As an officer of the VFW I'll use Michie's answer previous—"just stonks!" SNAP!

*** The situation stems from topmen of government, labor, and industry. Goes down through our national structure like a f'lur-e-able virus. Some topmen say, "Let the disease run its course!" Others (Wallace, Aches, etc.) chant whom'doctor..."cures." Daily it grows...the more they throw the ball after ball—and Congress fumbles each one.

*** And (of course) our mining industry is in the middle, catching all splen- ty from both sides. Just now case: Responsive to world demand for silver coins (in lieu of lettuce) our mint has coined tons of American-owned silver for the Spanish—worth 71.11 cents a fine charge. A million-dollar unit is planned for the Denver Mint. More tons are being minted into U. S. dimes, quarters, halfs; (there being no need to be b-d). The warm in that apple is that Uncle Sam takes un-used profit on his nephews virtually doubling his money—while we who mine the silver b-t he bly dog.

*** It really is up to us miners—mager to much—to ass the b-s and emits the breaths, from the president, our sena- tors and representatives, down the line. The costs hit 3 cents per smite, plus a little jok- er matter, and guts. And Remember: The wheel that squeaks the loudest gets first and most grease. Reach for your pen and paper and pounce; theomega squared coves the pegged $35 price of American-minted gold—which is sitting up to $86-plus else-where on the planet. Make another the re- ciprocal-tariff policy's calamitous effects on us who make to export metals which misguided mourners maintain must be import- ed; if the mine is not, who miners are paid in cents-per-dollar, not dollars. And when you write your solons don't pull your punches.

Kaiser's Steel Program
for Postwar Industry

(Continued from Page 8)

than 3 per cent, will return to the government nearly $44,000,000.

"Cost of building Geneva is estimated at $185 per ton of ingot capacity. The cost of building Fontana was $125 per ton of ingot capacity. The government paid all of the costs plus a royalty of 22 cents per gross ton for the iron ore furnished to Geneva. Fontana has sustained the full cost of mining its iron ore as a part of the cost of steel production. Geneva has pro- duced a total of 1,145,000 tons of Ingots. Fontana has produced 1,220,000 tons of ingots.

"As regards the government's investment in Fontana which appears in the form of a Reconstruction Finance Corporation loan of approximately $112,000,000, the govern- ment is certain of a payment from Kaiser Company of approximately $44,000,000 in cash. In addition to this the Kaiser Com- pany has assumed the obligation for the ultimate repayment in full of the cost of Fontana's wartime construction. To fur- ther this end, the Reconstruction Finance Corporation has served to lend the Kaiser Company an additional $11,160,000 for new facilities, the installation of which will shortly be under way.

"Our program at Fontana is oriented on a number of factors in which we have com- plete confidence. The first is that the West is already an important steel produc- tion center. The vast market which already exists in this area, the rapidity of its growth, and the certainty of its future are circumstances beyond dispute. As regards Fontana itself, we share with many, the belief that the industrialization of the West has been advanced by many years because this plant for the production of steel has come into existence.

"By virtue of its location, Fontana will be able to render a product and delivery service with a variety and speed that western man- ufacturers have never before en- joyed. Again I am proud to say that there is not a single large distributor or fabri- cator on the Pacific Coast who is not now established as a customer on Fontana's books.

"Any group or any company which is sincerely interested in promoting the future of western industry is deserving of our sup- port. We are ready to do everything we can to assist in the attainment of the objec- tive.

"It is because of these facts that new steel consuming industries are planning to establish themselves here in increasing numbers. I have personal confirmation of these prospects from industrialists who are already laying the plans to establish them- selves in Fontana's front yard and throughout the western states and between some of our cities within these states, but we are all working toward a common goal. We all believe in western industry, we believe it should enjoy all of the price and cost ad- vantages which efficient operation can assure. The only way we can establish and maintain our western economic inde- pendency and develop our natural resources is by the vigor and courage of our enter- prise.

"We must stand on our own feet, take all the hazards which healthy competition imposes and be as independent and as re- sourceful as were the pioneers who built this grand place, our West.

HIGHER FREIGHT RATES
asked on MINING PRODUCTS

The national railroad workers' union in Mexico has petitioned the ministry of finance to arrange for an increase of rail freight rates on mining products. The union claims that the mining industry will profit by about $20,000,000 (U. S.) a year from the increased price of silver in the United States and that Mexico's rail- roads should share in this profit. The union also has declared that the low pre- ferred freight rates granted the National Railways for metal and mineral transportation would cause bankruptcy of the com- pany.

NEW POWER LINE WILL AID
California mining district

Construction of a power line from Weaverville to Hayfork, California, which is planned by the Pacific Gas and Electric Company, is expected to facilitate mining operations in areas between the two towns, including the Donning City and Brown's Creek districts. The line is to cost approximately $200,000. The re- gion to be served by the new line con- tains many lode and placer properties and has been richly productive in past years.
Dear Mr. Willis:

With all due deference to the gentleman's high office, it must be said by any one who thinks things through that in his November radio speech against inflation President Truman put his own thinking into reverse gear. Just why and how he did is not fully evident, but thoughtful men aver that he had listened too intently to a wrong group of pressure-men-advisors.

Reverse gear? Yes—to the extent that when the president wrenched us up for wages increases and against price increases, as a result of his utterance, he was probably in his count, a program and formulate which, if carried through, would actually bring about inflation.

Price rises are not a cause of inflation. They are merely a measure of it, just as you temperature is a measure of the circumambient best. Yet President Truman said that we must "sustain adequate purchasing power and that every price increase would have inflationary tendencies we must above all things hold the line on prices.

As another part of his nanoscopic program the president prescribed pouring out of money, as wages and governmental blow-in of funds, because (sic) also sick'em.' Uncle Samuel must "sustain adequate purchasing power and raise the national income."

Now take a meditative smoke over that pair of resumptional oars and see where your meditations lead you. Those of the water conservers on the conclusion that the cause of inflation is a policy founded on the fallacious theory of unipping the volume of national buying power (i.e., wages) while actually reducing production (volume of purchasable merchandise) by that very process.

Applying a bewildished chryse, Truman merely got his cart in front of his horse there.

Now he was thinking in terms of manufactured products when he talked prices—even though his native state is a mining state. It is a safe bet at any odds that Doc Truman's radiovaccination of the Body Politic just won't take. If it does, inflation will still.

Very truly yours,

(signed) ADDISON N. CLARK.

MONO COUNTY MINE GROUP PROTESTS LEGISLATION AND ACT

THE Mono County Miners Association, Box 779, Bridgeport, California, has adopted a resolution in protest against an act passed in Congress on June 23, 1945, which authorizes the Secretary of the Interior to sell to the City of Los Angeles certain public lands in California, and grants rights-of-way over public and reserve lands in Mono County. The action follows recent application by Los Angeles to purchase, for $1.25 per acre, some 23,000 acres of land, over and above the given acres it is already owns in Mono County. The resolution states that the "Water and Power Department of the City of Los Angeles has falsely stated that the waters tributary to Mono Lake and the Mono Basin area, are owned by the City of Los Angeles for domestic uses and purposes, although it is and has been evident that the Mono County water never has been so needed, and that it is probable that it never will be needed by Los Angeles for domestic purposes."

In addition the protest claims that the present land and water holdings in the county were largely seized and acquired under false pretenses and contrary to the interests of Mono County and the State of California.

The mining organization expressed belief that sale of present unappropriated government land in the county to Los Angeles will stop practically all mining activity in the county. According to the Mono County Miners Association, the resolution cites the case of Owens Valley in Inyo County as similar in that land, acquired in an "equally questionable" way, "wrecked and ruined the once beautiful and productive valley to the detriment of that county and the State of California." In conclusion, the group has asked specifically that the application of Los Angeles be denied by the Secretary of the Interior.

Officers of the Mono County organization include Charles W. Fulton, chairman, and E. J. Young, secretary.
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JOHN HERMAN PIONEERED IN THE FIELD OF ATOMIC ENERGY

By Newton Wolcott

UNLIKE many other notable achievements in the field of science, the atomic bomb is the result of the combined efforts of a great number of scientists working individually or in groups all over the world. The actual accomplishment of atomic fusion which blasted Hiroshimas and Nagasakis into ravel was a terrible demonstration of principles long known but hitherto unappliqued. The urgency of war merely hastened steps in the development of the release of atomic energy—steps which would have been taken more slowly but no less surely in a world at peace.

The men who actually worked on the bomb deserve all possible praise for their accomplishments which, beyond a doubt, saved thousands of American lives. The public acclaim which has been accorded them is entirely right and proper. It would also seem right and proper to credit the scientists who had the vision and who did the actual experimental work which was the necessary basis for the ultimate success at Oak Ridge and Hanford. Those pioneers laid a foundation upon which the later work was carried to successful completion.

Outstanding among the small group whose thinking was far in advance of their time was a California scientist, John Herman, D.Sc., of Los Angeles, whose long-established business as an assayer and chemist has made him widely known throughout the western states. Probably because of his reputation as an authority in analytical chemical work, few people ever knew of his research in the field of physical chemistry. It is, therefore, most gratifying to be permitted to reveal a few facts concerning this able scientist.

On September 2, 1931, there was written a letter by J. W. Tobiska, at that time an associate chemist, and now head of the Agricultural Experiment Station at Fort Collins, Colorado. This letter was addressed prior to Dr. Alexander Gnets of the physics department, California Institute of Technology, at Pasadena. Tobiska had been associated with John Herman in research work for some time and was asking for cooperation by the Institute. Some of the paragraphs from this letter are quoted here:

"While John Herman has been engaged in the commercial field in chemistry for many years, he has always had a leaning toward research and investigative work. He has invented numerous useful devices for the chemist and his mind is ever at work with some new idea in his chosen field. During spare moments at his laboratory, he once conceived the idea of altering pure carbon into its other (allotropic) forms by the momentary application of extraordinary pressures and temperatures. . . ."

After outlining the procedure which they had been following in their experiments, Tobiska clearly reveals the prophetic line of their thinking when he goes on to say:

"If one were able to change by artificial means, and at will, the atoms of an element from one allotropic form to another, what a variety of new and physical investigation would be opened up. Many questions, such as the following, crowd the mind for answer.

"How many allotropic forms of a given element are possible? Would not it be possible to produce isotopes at present unknown? Also, . . . could we not only 'knock off' electrons but also add them, etc., ad infinitum?"

Such was the thinking of Herman and Tobiska 15 years ago. Even more enlightening and astonishing are some observations which appeared in a paper written by Herm and entitled "Predictions in Chemistry." This paper was published as a copyrighted article in the 1932 edition of the Mining Directory Catalog and Engineer's Handbook by the Los Angeles Chamber of Commerce. The experimental work referred to in the paper was actually done prior to 1928. Space does not permit of extensive quotations, but a few will serve to show how far in advance of the time Herman's reasoning was. Among other statements are the following:

"Experiments are under way to break up the atoms. By knocking off an electron, together with a proton, from the nucleus of an atom, there would be a change of the element.

"By forcing a proton into the nucleus instead of removing it, there would be a heavier element formed.

"Experiments have been made to knock out electrons, but the ballistic method mentioned given promise of adding rather than subtracting." (Herman is referring here to the use of a rifle bullet discharged into an air-tight iron bomb to produce a brief but enormous pressure. This apparatus did actually convert amorphous carbon to graphite and, with the addition of heat, produced microscopic diamonds.)

"Recent developments indicate that the protons, which weigh about 1,800 times as much as the electrons, may, themselves, be made up of particles approximating one-tenth the mass of the electron. Cosmic rays have liberated such particles which have an enormous energy. . . . So, practicable ways may be found to "touch off" enormous stores of energy."

"After the rifle idea, the concentric firing idea was developed in the spherical apparatus. The firing took place from the outside of the spherical hollow shell of explosives towards the center. It was this principle, revealed in Herman's article in 1932, which was responsible for the armor piercing shells. It was also the principle which obviously was used in the last assembly of the A bomb.

"Herman's prodigious interest in scientific subjects has led him into numerous and varied fields of research. In 1933 he received and accepted an invitation to lecture on quantitative chemistry at the Charles University in Prague, and to co-operate with Dr. J. Heyrovsky of that institution in the further development of the polarograph. In recognition of the work which he did at that time, the university conferred upon him the degree of Doctor of Science, an honor which was rendered peculiarly suit-
Announcement has been made that the historic Aftonthought mine at Ingot, Shasta County, California, has been reopened. A crew is now engaged in retimingbering and cleaning out the mine which has been idle since 1927. The Aftonthought, first opened in the 1860's, produced surface copper and silver ores which were smelted at the mine. Successful operations led to the construction of a smelter at Ingot. The Glidden Paint Company operated the Aftonthought and the Bully Hill mines as a combined project from the time of acquisition in 1926 until 1927 when it ceased work at both mines. It is reported that the Coronado Zinc Company, 1206 Pacific Mutual Building, Los Angeles 14, California, with operations in Arizona and Nevada, has leased the Aftonthought from the Glidden company. Lyttleton Price, mining engineer, is in charge of operations.

A new recovery process is being used by the Green Mountain Chemical Industries at Green Mountain mine, located just across the Madera County line in Mariposa County, 22 miles northeast of Madera via Raymond. The mine is developed by an 800-foot tunnel. Charles S. Peake and Robert V. Reed, Box 12, Raymond, California, own the recovery process. The ore is ground to approximately 10-20 mesh and is treated with a chemical, perfected by Peake and Reed who claim that within eight minutes copper is precipitated assaying over 99 per cent pure. The ore is said to run from 3 to 15 per cent copper content.

Operations will be started soon on the hydraulic ground owned by Frank Trubey, 1240 Twenty-third Street, Oakland, California. The property is located 16 miles north of Weaverville, Trinity County, California. Headquarters for operations will be in Junction City.

Long established in the mechanical engineering field, Coastal Engineering, Ltd., 369 Hobart Building, San Francisco, California, is branching into the mining field. It is enlarging its staff to include mining engineers, geologists, and expert operators.

The Ruth-Bobby Mining Company is reported to be actively proceeding in the operations carried on at its Nally Kanyo property two miles from Bear Valley in Mariposa County, California. Development of a ledge of milling ore and a shoot carrying high gold values was reported recently. The mine was acquired last year under bond and lease for $40,000 by Felix F. Kahn, Financial Center Building, and Lewis R. Lurie, 333 Montgomery Street, both of San Francisco, California.

LEMON TREE GROWS IN IDAHO

Funny thing. Some fellows never saw a real lemon tree until they went to Idaho to work in the mines. Of course that wasn't their fault—they had never lived where lemon trees grew until then. And if you think lemon trees can't grow in Idaho, take a trip through the Bunker Hill mine near Kellogg. Unless the boys have moved it recently, you'll find it on the 1,708-foot level of the mine—where, if you care for statistics is 4,000 feet below sunshine.

This tree has never seen sunshine; in fact, its only light has been supplied for years by a 150-watt electric light bulb. Now, however, it has two such bulbs. The tree is 13 years old and five feet tall. The only ting it moved around the mine is when it outgrows one location, and has to be taken to another that affords more head room.

Warning: If you are a lemon picker by trade, don't apply for a job at the Bunker Hill and Sullivan.

Louis Martines, Randsburg, California, reports that he has resumed development on his group of bentonite claims. Known as the Louis Martines claims they consist of the Liberty, Liberty 1, 2, and 3, Ross and Bentoni, and are located about seven miles north of Tonasket. No work has been done on them in the past two years. New work has developed a good showing of a high quality bentonite. Steve Bunker, Bunker Hill, California, is working with Martises.

The Associated Metals, Inc., with headquarters at 611 American Bank Building, Seattle 4, Washington, plans to reopen, retimber, clean, and rehabilitate the buildings at the site of the Oso mine near Downieville, California. The mine has been closed for several years and work will be started as soon as installation of machinery and assembling of a crew can be accomplished. Ira Mahon, manager of Associated Metals, visited the mine location recently to lay plans for preliminary work. Angus James, Downieville, California, is foreman in charge of present operations.

The Yreka Gold dredge Company, Etheredge Walker, president, 974 Mills Building, San Francisco 4, California, has resumed operations near Yreka in the Seid Valley, Siskiyou County, California.

Underground development, involving sinking of a winaise and crosscutting, is under way at the Alaska mine near Pike, Sierra County, California, operated by Harvey L. Sorenson, 685 Sixth Street, San Francisco. The mine was unwaterted last June with R. J. Kohlen in charge. Operations will be expanded as more men can be obtained.

The Lind Mining Company, a subsidiary of the Pacific Mining Company, R. E. Bradley, Jr., president, Jamtstown, California, is engaged in repairing the Jenny Lind mine shaft. During the enforced idleness of the mine, the development of timber has been serious and present operations include contouring of the shaft collar. The property, located near Norton, Mariposa
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company has received no word as to the future operations of the smelter owned by the Bililton Company, its parent organization in the Netherlands. A. H. Richards, Galveston, Texas, is consultant and super­vising engineer for the Office of Metals Reserve, RPC, at the Longhorn smelter. Alex L. ter Brakke is general manager of the Tin Processing company at Texas City.

The board of directors of International Minerals and Chemical Corporation, with operations at Austin, Texas, declared its fifteenth regular dividend of one dollar per share on its four per cent cumulative pre­ferred stock and fifty cents per share on its common stock. Both were payable Dec­ember 28, 1945, to stockholders of record December 14, 1945, according to an an­nouncement made by Louis Ware, presi­dent of the corporation. The company also operates in New Mexico.

A dividend of 3 cents a share has been announced by the New Park Mining Com­pany, W. H. H. Crammer of Kneetly, Utah, president and general manager. Payment, which amounted to about $70,000, was made December 31 to stockholders of record November 24. This is the company’s second 3-cent payment in 1945. Mining and milling operations, located in the Kneetly and in the Bower districts of Utah, employ about 180 men.

A diamond drilling program will be com­pleted at the property before the Cedar Talisman Consolidated Mines Company will resume work on its own account. The property is located in the Star district, near Milford, Utah, and has values in sil­ver, lead, and zinc. J. Walters, Jr., is president of the company and George Bag­lin, Felt Building, Salt Lake City 1, is also one of the company officials.

The American Smelting and Refining Company is resuming operation of its Mur­ray smelter at Murray, Utah, which was closed last May because of an insufficient ore supply. R. A. Perry of Murray is smelter superintendent and W. J. O’Connor, 700 Cascade, Salt Lake City 1, is manager of the Utah department.

Additional development work is planned by the Mamassa Mining and Milling Com­pany at its Utah and J. B. fluorapatite prop­erties in Pine Valley near Milford, Utah. Four men are employed and eight more will be hired as available. Output from the two mines is treated in a 50-ton mill just south of Milford which the company ac­quired for the purpose. The Mamassa com­pany, which is headed by Theodore E. Ste­vens of Milford, also operates the Moos­tue mine in the Star district 18 miles southwest of Milford from which it is shipping out two carloads of high-grade lead-zinc ore a week. Since taking over the Moscove operation in 1943 the company has shipped 82 car­loads of high-grade, besides shipping eight miles of road to the mine, erecting new buildings, rebuilding 500 feet of two-compartment shaft, and doing 660 feet

of development work. Present develop­ment consists of driving toward known ore bodies.

Four more Utah mining companies have filed suits against the state seeking refunds of occupational tax paid on over-quota premiums received from the federal govern­ment. The suits, filed in the Third Dis­trict Court, parallel those instituted by the Kennecott Copper Corporation and the Sb­ver King Coalition Mines Company, which are now slated to have a hearing before the U. S. Supreme Court. The four new suits were filed by the Combined Metals Reduction Company for $4,583; Chief Con­solidated Mining Company, $6,581; U. S. Government Mining Company for $338; and the Montanas-Bingham Con­solidated Mining Company, $682. All com­panies also are claiming a per cent interest from May 1945 until judgment is passed.

SALEM, OREGON, ALUMINA PLANT

BEING READIED FOR TEST RUNS

The $5,000,000 alumina-from-clay plant at Salem, Oregon, which has been completed aand test runs will be started probably in February, it is estimated that six to eight months will be necessary before results can be determined. The plant, DPC fi­nanced, is a demonstration unit employing the potassium carbonate process developed by the Chemical Construction Company, unft of American Cyanamid. Chemical Construction is building the plant and, ac­cording to view, will turn it over to the Columbia Metals Corporation, J. O. Gall­agher, Searlesville Building, Seattle 1, Wash­ington, president, if and when operations are put on a commercial basis.

Construction of the plant was started late in the winter of 1943-1944, its original government approval stemming from the fact that the country was faced with a shortage of bauxite for the production of aluminum. Various processes of extract­ ing alumina from clay have been developed, but to date all of them have been too high-cost to be practical even during the war emergency. Progress of the Salem plant has been hindered by the fact that the equipment was specially de­signed and manufactured, and, further­more, government approval has been given without knowledge of the plant’s site until the beginning. Several times the plant has been listed as surplus property, but political pressure was brought to bear on each time, and power project managers in the Pacific Northwest also backed the project as an outlet for their excess electricity. The ending of the war put additional strain on any favor the alumina-from-clay plant may have found in government cir­cles. Yet the government has been held to its agreement to supply the funds for both the installation and the testing.

It is not clear whether Columbia Metals will follow its original plans and acquire the plant in the event that it is a com­mercial success and can compete with alumina and bauxite. It is also possible that even if the tests are successful, the government will close the plant until such time as the domestic need for aluminum again approaches a crisis.
OREGON REPORTS ON FIELD WORK

AT LARGE BAUXITE DEPOSITS

LARGE reserves of ferruginous bauxite, L d
which may constitute an important
source of aluminum to supply Northwest
aluminum plants, are described in a bulletin
issued by the Oregon Department of Geology and Mineral Industries. The deposits are widespread in
northern Oregon, but are found mainly in
Washington, Columbia, and Marion counties.

Discovery of high-iron bauxite in Washing
ton County about 35 miles northwest of Portland was first announced by the depar
tment in 1944 and a short report on the discovery was issued in August of that year.
Since that time additional field work data has extended the known occurrences into
other counties and revealed an entirely new bauxite area near Salem.

Considerable interest in the aluminum-bearing deposits has been shown by some
of the large industrial companies, and Al
cou Mining Company, a subsidiary of the
Aluminum Company of America, is at present engaged in a large-scale drilling and
exploration project on these deposits in Washington and Columbia counties.

P. W. Libby, W. D. Lowry, and R. S.
Mason of the department staff are the authors of the 87-page publication, which
discusses the geology and economics of the
deposits, and describes the 54 localities
where the bauxite has been found. Not all
of these localities are of commercial grade
or size, however. Descriptions of two ex
ploration projects by the department which
indicated over 5,000,000 long tons of ore
are given. Numerous analyses of the ore,
between with maps and illustrations, are
included in the publication which is avail
able at the office of the department, 702
Wes and Ashland, Portland 5.

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