It has been decided to construct at once four seven-compartment shafts on the Modder State mines, two of which will be located at 2,000 feet on the line of contour and two at 3,000 feet. It is intended to dispense with temporary headgears with the view to economizing time and money.

## AUSTRALIA.

The gold yield of New South Wales during the month of April was 15,381 ounces, valued at £52,149. The yield for the past four months was 75,301 ounces, valued at £269,544.

## MEXICO.

Guadalajara, Mex., May 16th.—The Santa Domingo Mining Company, which is now controlled in Boston, has resumed development work in the Santo Domingo mines in the Hostotipa-quillo district of this state. A party of twelve investors recently visited the mines, and two other parties will visit the properties during the next sixty days. The erection of a reduction plant is planned. But little work has been done in the Santo Domingo mines since the fall of 1908, but during the three years prior to that time several thousand feet of tunnels and drifts were driven. It is stated that since the resumption of development work high-grade ore has been opened in a new drift on the El Favor vein.

## UNITED STATES.

Butte, Mont.—To some extent a curtailment policy was observed by the larger operating companies in Butte during the month of April and the total output, which amounted to 27,451,000 pounds of copper, was nearly 1,000,000 pounds less than for the month of March. The Butte-Ballaklava Copper Company has developed into a permanent producer and during April averaged about 72 tons of ore a day, the average mineral content being 10½ per cent., as no great quantity of second-class ore was shipped.

Butte, Mont.—During the month of April the Alex. Scott shaft was sunk to a total of 106 feet, making a record close to the highest record for deep-shaft sinking in the Butte camp. The shaft is now down about 1,524 feet and by June 1st it is anticipated that a depth of 1,600 feet will have been attained. At the latter depth a station will be cut and an electric pump will be installed. Also a crosscut will be run to intersect all of the veins traversing the property and the work of placing the mine in condition for heavy shipments will be pushed aggressively.

From the 500-foot level to the 1,400 the Alex. Scott has opened up a number of veins carrying copper and silver in commercial quantities. On the 1,400-foot level the main vein has been drifted upon to a considerable extent and an ore body more than 20 feet in width has been developed to the producing stage. The ore carries considerable bornite and copper glance, although in a conglomerate form, and it is believed that on the 1,600-foot level the ore will be found in a more compact form.

Goldfield, Nev., May 10.—The greatly extended scope of development at depth in the mines of the Goldfield Consolidated Company has rendered necessary the employment of a larger amount of electrical power and, to meet the growing requirements, the company is now preparing for the installation of a large storage battery and power equalizing plant at Jumbotown, a collection of houses a short distance from the town of Goldfield, situated near the Clermont and Laguna claims of the Consolidated.

Houghton, Mich.—The Michigan Copper Company in 1909 sold 1,979,305 pounds of copper at an average of 13.16 cents, yielding \$260,551. By assessments its total income was swelled to \$429,577. The annual report shows a deficit of \$8,174, against \$15,392 a year ago. President Brady considers the timber resources as of value, consisting of about 5,250,000 feet of excellent white pine, and an equal amount of hemlock and other timber. "A" shaft has been sunk to a depth of 2,133 feet and underground work tested values of the Minnesota vein, but noth-

ing of interest was exposed. "B" shaft openings were confined to the 14th level east on the Calico lode.

There was opened from "C" shaft 894 feet on the Calico, 471 feet on the North Amygdaloid and 209 feet on the Minnesota vein. Light copper ground was shown on the 7th level west on the Calico. Both the 8th and 11th levels east were driven through excellent copper ground. The character of the copper contents at these points was spotty and its width averaged four to four and a half feet.

Deadwood, S.D.—E. C. Johnson, manager of the Gertie Tin Mining Company of Hill City, has recently received patents for a rock-grinding device which promises to have a marked effect on the ore-milling industry. In point of efficiency it is claimed to be far superior to any of the machinery now in use for the purpose and the demonstrations which have been made with models of smaller size than standard machine, appear to substantiate these claims.

The invention is called the Johnson Rod Tube Mill, its chief feature of difference from other tube mills in use being that instead of pebbles or chilled steel balls the grinding is effected by the use of chilled iron rods extending from end to end of the machine. The standard machine, as it will appear when turned out of the Homestake Company's shop, where it is now being put together, will consist of a metallic cylinder six feet in length by 18 inches in diameter. The inside surface is protected by a casting of corrugated chilled iron, against which the grinding is effected. The rods which extend practically the entire length of the mill, are sufficient in number to occupy one-quarter of the interior space of the cylinder. They are made of chilled iron with a core of rough iron.

Goldfield, Nev., May 16th.—The detailed statement issued by Manager J. R. Findlay, outlining the operations of the Consolidated Mines Company in April, shows that in point of production the record was surpassed in but one month of the company's history and exceeded the bullion output of March last, which heretofore has ranked second. This heavy production was made in the face of most unusual obstacles. On April 8th the mill was damaged by fire to the extent of \$125,000, necessitating the complete closing down of the plant for a period of eight days, and resulting in a reduction of mill capacity since that time of 30 per cent. The great belt conveyor of 1,000 tons daily capacity, which carries the ore to the stamp bins, was destroyed, as were all stores of cyanide, zinc dust and materials employed in treatment, together with thirty of the stamps.

Victor, Colo.—Stratton's Independence, Limited, operating at Victor, Colo., paid on April 29th last a dividend of \$60,000, bringing up the dividends paid during the first nine months of the fiscal year to 15 per cent. per annum on the capitalization of the company.

The cyanide mill is in steady operation, treating by cyanidation and concentration nearly 7,000 tons a month of low-grade dump ore, while the mine is producing better than 2,000 tons a month or one and one-quarter ounces ore.

The combined earnings of mine and mill, as published in London, amounts to 20 per cent. per annum on the capital.

Coalinga, Cal., May 16th.—In another two weeks the Producers Transportation Company's pipe line system, tapping the five big oil fields of the San Joaquin Valley, will be in complete operation, and crude oil from Coalinga, mingling with that from Kern River, McKittrick, Sunset and Midway, will start from the Junction on its journey to the sea, and hence into the markets of the world.

Globe, Ariz.—As a conservative estimate, the first of January, 1911, is set as the date for the beginning of production of ore from the mine of the Miami Copper Company. The concensus of opinion among the members of the management is that within six months from date, or by the first part of November, the concentrating plant, including the power plant and water system, will be completely equipped for handling a daily ore production of 1,000 tons, which output will be increased shortly