

THE MONTANA STATE BUREAU OF MINES AND METALLURGY

DIRECTORY MONTANA METAL AND COAL MINES

> STATE SCHOOL OF MINES BUTTE, MONTANA DECEMBER, 1919

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UNIVERSITY OF MONTANA BULLETIN

BUREAU OF MINES AND METALLURGY SERIES

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STATE BUREAU OF MINES AND METALLURGY STAFF

CLAPP, CHARLES H. - - - Director and Geology PhD., Massachusetts Institute of Technology, 1910

ADAMI, ARTHUR E. - - - - Mining Engineer E. M., Montana State School of Mines, 1907

PULSIFER, H. B.
B. S., Massachusetts Institute of Technology, 1903;
C.E., Armour Institute of Technology, 1915;
M. S., University of Chicago, 1918.

FOREWORD

The purpose of this bulletin is to serve as a directory of all the metal and coal mining companies in the State of Montana. Although every effort possible by correspondence was made in the attempt to get information on every mining company in Montana, it is possible that some companies have been overlooked. However, it is believed that this bulletin contains the names of most of the operating companies of the State, together with some general information on each company, and that the bulletin will serve as a valuable reference book for those interested in the mining industry. This bulletin is supplementary to a report on the various mining districts of Montana which is now being prepared by the Geological Department of the State Bureau of Mines and Metallurgy.

DIRECTORY OF MONTANA OPERATING METAL MINES

ALICE GOLD AND SILVER MINING CO.

Butte.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., John D. Ryan; Secy-Treas., D. B. Hennessy, 42 Broadway, New York, N. Y.

Operating Dept.: Gen. Mgr., John Gillie, Butte; Asst. Mgr., W. B. Daly, Butte; Genl. Supt., C. L. Berrien, Butte. 250 H. P. Steam and 150 H. P. Electric.

No. of men employed: 125.

Ores: Complex sulphides of silver, zinc, lead.

Daily output: 250 tons.

Output for 1918: 32,600 tons.

Miscellaneous Information: Property has been closed down most of the year 1919 on account of poor zinc market.

ALTA MONTANA MINING CO.

Corbin.

Location: Colorado Mining District, Jefferson County, Officers: Mgr., Raymond Guyer, 218 Symons Bldg., Spokane, Wash.

Operating Dept.: Supt., R. E. Snow, Corbin, Mont. 150 H. P. Electric.

No. of men employed: 12. Ores: Lead-Silver.

Miscellaneous Information: Past two years has been spent in opening up and dewatering old works, which work is now about complete. A small amount of ore was taken out in the year 1918 by leasers.

AMERICAN GEM MINING SYNDICATE.

Philipsburg.

Location: Flint Creek Mining District, Granite County.

Officers: Pres., L. M. Rumsey; Vice-Pres., C. G. Ewing; Treas., L. S. Mitchell; all 408 Olive St., St. Louis, Mo.

Operating Dept.: Gen'l Mgr., C. G. Ewing, Philipsburg. Water power.

No. of men employed: 30.

Ores: Sapphire placer.

ANACONDA COPPER MINING CO.

Butte.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., C. F. Kelley; Vice-Pres., B. B. Thayer; Secy. and Treas., A. H. Melin; Gen. Auditor, J. T. Roberts; Asst. Treas., D. B. Hennessy; all 42 Broadway, New York: Asst. Secy., R. D. Cole, Butte.

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Operating Dept.; Mgr. of Mines, John Gillie; Asst. Mgr. of Mines, W. B. Daly; Gen. Supt. of Mines, C. L. Berrien; Asst. Gen. Supt. of Mines, E. M. Noriss, J. J. Carrigan, and J. P. O'Neil; Chief Geologist, Reno H. Sales.

Electric, Steam, and Compressed Air.

No. men employed: 9,000 to 11,000 (normally).

Principal ores: Copper, silver, gold, zinc, and manganese. Daily output: 15,000 tons. 1918 output: 4,925,022 tons.

Miscellaneous Information: This company owns 1,168 acres of mineral claims at Butte, including all the property formerly held by the following companies: Boston & Mont., Cons. C. & S. Mng. Co.; Butte & Boston Cons. Mng. Co.; Red Metal Mng. Co.; Washoe Copper Co.; Parrot Silver and Copper Co.; Trenton (formerly Colorado) Mng. & Dev. Co.; Big Blackfoot Lumber Co.; Diamond Coal & Coke Co.; Original Cons. Mng. Co.; Colusa Parrot Mng. & Sm. Co. This percent includes the following mines and decentments: property includes the following mines and departments:

Anaconda Group.

Badger State	Moonlight	Bell-Diamond
High Ore	Mountain Con	Anaconda
Never Sweat	Original	Steward
St. Lawrence	Gray Rock	Belmont

Leonard

Tropic

Nettie

Alice

Boston & Montana Group.

Mountain View Tramway Silver Bow

Pennsylvania West Colusa Berkelev

Bonanza

Lexington

Zinc Group of Mines

Poulin	
Emma	

This Company also operates a gold property at Southern Cross, fifteen miles west of Anaconda.

Reduction Departments.

Washoe Reduction Works, Anaconda. Frederick Laist, Manager. L. V. Bender, Gen. Supt. Boston & Montana Reduction Works, Great Falls. James O'Grady, Manager.

A. E. Wiggin, Supt.

Coal Department.

-F. W. C. Whyte, Manager, Anaconda. Thos. Snedden, Supt., Diamond Coal & Coke Co., Diamondville, Wyoming.

Thos. Good, Supt., A. C. M. Co., Coal Dept., Washoe. C. A. Sederholm, Supt., A. C. M. Co., Coal Dept., Sand Coulee.

Lumber Department.

Kenneth Ross, Manager, Missoula. M. M. Ross, Supt., St. Regis.

ALLIANCE COPPER COMPANY.

Butte.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., Donald Campbell, Butte; Vice-Pres. and Treas., J. D. Slemons, Butte; Sec y., A. T. Morgan, Butte.

Mine not operating.

AMERICAN SMELTING AND REFINING CO.

East Helena.

Location: Lewis and Clark County.

Officers: Pres., S. Guggenheim; Sec'y, W. E. Merriss; both at 120 Broadway, New York, N. Y. Operating Dept.: Mgr., C. W. Adams, East Helena; Supt., R. L.

Strobel, East Helena.

780 H. P. Électric.

No. of men employed: 300 to 400.

Dres smelted: Gold, silver, and lead. Daily output: 75 tons lead. 1918 output: 27,564 tons lead.

ANGELICA MINING & DEVELOPMENT CO.

Wickes.

Location: Colorado Mining District, Jefferson County.
 Officers: Pres., C. M. d'Autremont, Wickes; Vice-Pres., Chas. D. Horton, Wickes; Sec'y-Treas., C. K. Tibbetts, Helena.
 Operating Dept.: Mgr., C. M. d'Autremont, Wickes; Supt., Chas.

D. Horton, Wickes.

60 H. P. Electric.

No. men employed: 50 to 55.

Ores: Gold, silver, lead, copper, and zinc sulphides.

Daily output: 50 tons.

1918 output: 12,583 tons.

Miscellaneous Information: Developed by shaft 800 feet deep and adit tunnel 4,500 feet in length connecting with shaft. Lead carbonate ore to 400 feet, sulphide zinc-lead ore, with some copper, to 800 feet. Ore shoots 100 to 300 feet in length, 3 to 20 feet wide. Six patented claims, 109 acres. Both shipping and concentrating ore being developed.

BALD BUTTE MINING & MILLING CO.

Marysville.

Location: Bald Butte Mining District, Lewis and Clark County. Officers: Pres., W. A. Stone, Boston, Mass.; Sec'y-Treas., Wm. M. Belcher, Boston, Mass.

Operating Dept .: Supt., Geo. W. Padbury, Marysville. 35 H. P. Electric.

No. men employed: None at present.

Daily output: None. 1918 output: 760 tons from lessees.

BALKAN BUTTE COPPER MINING CO.

Elk Park.

Location: Elk Park Mining District, Jefferson County. Officers: Pres., Chas. Steele, Butte; Sec'y and Treas., T. Tomich,

Butte.

Operating Dept.: Gen. Mgr., Chas. Steele, Butte; Mgr., T. Tomich, Butte.

Not operating at present.

BARNES-KING DEVELOPMENT CO.

Kendall.

Location: North Moccasin Mining District, Fergus County. Officers: Pres., C. W. Goodale, Butte; Vice-Pres., A. J. Davis, Butte; Sec'y., John E. Corette, Butte; Treas., C. C. Swinborne, Butte.

Operating Dept.: Gen. Mgr., Geo. T. McGee, Helena.

Electric power.

No. of men employed: 90.

Ores: Gold and silver.

Daily output: 100 tons.

Miscellaneous Information: Also owns and operates the Shannon Mine and the Piegan-Gloster Mine and Mill, both at Marysville, Montana.

BASIN MINING CO.

Philipsburg

Location: Flint Creek Mining District, Granite County. Officers: Pres., L. W. Rumsey, Jr., 408 Olive St., St. Louis, Mo.; Vice-Pres., C. G. Ewing, Philipsburg; Treas., L. S. Mitchell, 408 Olive St., St. Louis, Mo.

Operating Dept.: Gen'l Mgr., C. G. Ewing, Philipsburg. Water power.

No. men employed: 15.

Ores: Gold placer.

BEAVER CREEK MINING CO.

Location: Little Rockies Mining District, Philips County. Officers: Pres., Chas. Whitcomb, Helena; Sec'y, Notley Thompson, Helena.

Ores: Gold.

Miscellaneous Information: 150,000 tons of ore blocked out, but present conditions are unfavorable to operation.

BEN HUR MINING CO., LTD.

Location: Denemora Mining District, Mineral County. Officers: Pres., D. S. Dickson, Quartz; Vice-Pres., Frank Bell, Saltese; Sec'y, Chas. J. Luedke, Saltese; Treas., Chas. A. Keating, Wallace, Idaho. Not operating at present.

BLUE BIRD MINING CO.

Location: Summit Valley Mining District, Silver Bow County. Officers: Treas., Clarence W. McGuire, 89 State St., Boston, Massachusetts.

Not operating at present.

BLUE VEIN COPPER MINING CO.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., F. L. Melcher, Butte; Vice-Pres., J. F. Charles, Butte; Sec'y., Lewis A. Smith, Butte.

Has not been operating for ten years. Owns following claims: Blue Vein, Blue Vein No. 2, Ozone, Myrahl, North Star, Little Boulder, Bunker Hill, Valentine, and Columbia.

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Saltese.

BONANZA BUTTE MINING CO.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., John Kenoffel, 17 S. Main St., Butte; Sec'y-Treas., W. R. Youlden, N. Main St., Butte. Ores: Silver, lead, copper.

BOSTON-BUTTE COPPER & ZINC CO.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., W. W. McDowell, 46 E. Broadway, Butte; Sec'y-Treas., W. E. Reynolds, 46 E. Broadway, Butte; Vice-Pres., F. J. Dorhofer, Butte.

Property has never been developed and is not operating.

BROADWATER COUNTY MINING CO.

Location: Park Mining District, Broadwater County. Officers: Pres., James J. Fisher, Townsend.

Miscellaneous Information: Short of funds and, therefore, not doing any mining at present.

BUTTE BACORN COPPER CO.

Location: Summit Valley Mining District, Silver Bow County. This company was absorbed by the Great Butte Copper Co., which see.

BUTTE COPPER CO.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., James H. Rowe, Butte; Vice-Pres., E. F. Lawlor, Boston, Mass.; Sec'y, W. M. Hanson, Butte. Operating Dept.: Supt., E. L. Ralston, Butte.

275 H. P. Electric.

No. men employed: 40.

Ores: Silver, gold, zinc, and lead.

Daily output: None.

1918 output: 1,760 tons.

Miscellaneous Information: Development work only being done in 1919. Mine being operated by Anselmo Mining Co.

BUTTE COPPER CZAR MINING CO.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., C. F. Murphy, Anaconda; Treas., John K. Claxton, Butte; Sec'y, L. P. Sanders, Butte.

Operating Dept.; Gen. Mgr., E. C. Meiklejohn, Butte.

Electric power.

No. men employed: 20.

Ores: Copper.

Miscellaneous Information: This mine has not been operated since July, 1918, but plans are being made to reopen work and operations within the next ninety days.

Butte.

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BUTTE COPPER KING MINING CO.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., Chas E. Beebe, Butte; Sec'y-Treas., A. P. Henningsen, Portland, Ore.

This company owns property consisting of three undeveloped claims located north of the Butte Water Company's Reservoir in Butte.

BUTTE COPPER & ZINC CO.

Location: Polaris Mining District, Beaverhead County. Officers: Pres., A. J. Seligman, 61 Broadway, New York; Sec'y-Treas., D. J. Fagensen, 61 Broadway, New York.

Operating Dept.: Gen. Mgr., Glenn Anderson, 46 E. Broadway, Butte.

200 H. P. Steam.

Ores: Silver and copper.

BUTTE & GREAT FALLS MINING CO.

Butte.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., E. Bryant Crump, Lexington, Ky.; Sec'y-Treas., Allen Pierse, Great Falls. Operating Dept.: Gen. Mgr., R. M. Green, Butte.

Electric Power.

No. men employed: 20.

Ores: Copper and silver.

Miscellaneous Information: This mine has not operated in the past two years, but a plan for refinancing same is now under way. Efforts are being made to induce Eastern capital to finance further development work at the mine. The prospects are good for an early reopening of development work. Mr. R. M. Green, the General Manager, above mentioned, died some time ago and his place remains vacant. It will be filled at an early date, as soon as financial arrangements are completed.

BUTTE HILL COPPER MINING CO.

Walkerville.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., Maurice Essenberg, New York, N. Y.; Sec'y-Treas., H. A. Frank, Butte.

Not operating at present.

BUTTE & LONDON COPPER DEVELOPMENT CO.

Butte.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., W. W. McDowell, Butte; Vice-Pres., John D. Haines, Butte; Sec'y., W. E. Reynolds, Butte; Treas., E. S. Passmore, Butte.

Property has been closed down for three years.

BUTTE MAIN RANGE COPPER MINING CO.

Butte.

Location: Summit Valley Mining District, Silver Bow County. This property, consisting of 38 acres, was sold to the Tuolumne Copper Mining Company in 1918.

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BUTTE-MILWAUKEE MINING CO.

Location: Summit Valley Mining District, Silver Bow County. This property, which is under control of the Butte & Superior Mining Company, was never a producer, and has been closed down for several years.

BUTTE-NEW YORK COPPER CO.

Location: Summit Valley Mining District, Silver Bow County. This property is controlled by the Butte & Superior Mining Company, but no operations have been conducted for several years.

BUTTE & SUPERIOR MINING CO.

Butte.

Butte.

Location: Summit Valley Mining District, Silver Bow County.

Officers: Pres., D. C. Jackling; Sec'y, A. J. Ronazhan; Treas., C. W. Peters; all 25 Broad St., New York. Operating Dept.: Gen. Mgr., J. L. Bruce, Butte; Asst. Mgr., Chas. Bocking, Butte; Mine Supt., A. B. McLeod, Butte; Mill Supt., E. V. Daveler, Butte.

7,500 H. P. steam, electric, and compressed air. No. men employed: 1,200 daily.

Ores: Zinc, lead, silver. Daily Output: 1,400 tons.

1918 output: 469,079 tons.

BUTTE & VIPOND GOLD MINING & MILLING CO. Melrose. Location: Vipond Mining District, 16 miles northwest of Melrose,

in Beaverhead County. Officers: Pres., James M. Hinkle, Butte; Vice-Pres., Thos P. Manley, Butte; Treas., William Worth, Butte; Sec'y, W. E. Carroll, Butte.

Miscellaneous Information: This property, which is a gold, silver, lead property, is developed by a 740-foot tunnel tapping a vertical shaft at 200 feet. Work of draining was finished in 1919. The property consists of five claims, formerly known as "Queen of the Hills," but now known as "Martin," "Jenkins," "Shady," "Little Victor," and "Vipond Park" Lodes. Not operating at present.

BUTTE & WILLOW CREEK MINING CO.

Pony.

Location: Mineral Hill Mining District, 4 miles from Pony, in Madison County.

Officers: Pres., P. T. McDermott, Helena; Vice-Pres., James E. Redmond, Butte; Sec'y., James Naughten, Butte.

50 H. P. water and steam.

Ores: Iron pyrites, gold and silver.

Not operating since 1914.

CAPE NOME COPPER MINING CO.

Clinton.

Location: Wallace Mining District, Missoula County.

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Butte.

Officers: Pres., E. Donlan, Missoula; Sec'y-Treas., H. T. Wilkinson, Missoula.

120 H. P. Steam-two 60 H. P. boilers.

Ores: Copper and silver.

Miscellaneous Information: This property has 4,600 feet of development work, including a double compartment shaft 500 feet deep, with drifts on the 100, 300 and 500-foot levels. Property not operating at present.

CASCADE SILVER MINES AND MILLS. .

Neihart,

Location: Montana Mining District, Cascade County.

Officers: Pres., Geo. H. Brabrook, Neihart; Vice-Pres., Lowndes Maury, Butte; Sec'y., Wm. R. McLure, Philipsburg; Treas., W. P. Wren, Great Falls.

Operating Dept.: Gen Mgr., Geo. Hale Brabrook, Neihart; Supt., Thos. Westgard, Neihart.

Electric power.

No. men employed: 200.

Ores: Silver.

Daily output: 200 tons. 1918 output: 2,500 tons.

COLUSA LEONARD EXTENSION COPPER CO.

Butte.

Location: Summit Valley Mining District, Silver Bow County. This property, consisting of 42 acres, was sold to the Tuolumne Copper Mining Company in 1918.

COLUSA-PARROT MINING & SMELTING CO.

Butte.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., W. A. Clark, Butte; Vice-Pres., W. C. Siderfin, Butte; Sec'y, W. C. Messias, Butte.

25 H. P. Electric.

No. men employed: 20.

Daily output: 1,300 tons.

1918 output: 387,073 dry tons.

Ores: Working copper tailings at Butte Reduction Works, Butte. Miscellaneous Information: Tailings are shipped to Timber Butte Milling Co. for concentrating, and concentrates shipped to Anaconda Copper Mining Company's Smelter, Anaconda.

COMBINATION OPERATING COMPANY.

Philipsburg.

Location: Flint Creek Mining District, Granite County.

Officers: Company not organized at this date and officers not officially appointed. However, Geo. C. Crangle, Ray E. Tower, Edward Roach, Harry T. Lewis, Marcus L. Hurley are the owners and operators.

60 H. P. Steam.

No. men employed: At present, about ten engaged in remodeling mill. Operating force will be about 25.

Ores: Silver and copper (subordinate: lead and gold).

Daily output: 100 tons.

1918 output: None.

Miscellaneous Information: Remodeling chloridizing and leaching plant to treat old mill tailings.

CONREY PLACER MINING CO.

Location: Pres., Chas. F. Adams, Boston, Mass.; Vice-Pres. and Consulting Engineer, Hennen Jennings, Washington, D. C.; Sec'y and Treas., F. F. Stanley, Boston, Mass.

Operating Dept.: Business Mgr., G. H. Edmunds, Ruby; Dredge Supt., O. O. Sweeny, Ruby.

1,475 H. P. Electric.

No. men employed: 55 (average).

Ores: Placer gold and silver. Daily output: 15,000 cu. yds. 1918 output: 3,350,000 cu. yds.

Miscellaneous Information: No. 1 dredge operated full year with 7½ cu. ft. buckets; No. 2 dredge operated 4 months with 7½ cu. ft. buckets, and No. 4 dredge operated full year with 17 cu. ft. buckets.

CRYSTAL COPPER COMPANY.

Butte and Basin.

Location: Summit Valley Mining District, Silver Bow County; Cataract Mining District, Jefferson County.

Officers: Pres., B. S. Parker, 31 Milk St., Boston, Mass.; Sec'y, Eugene H. Walker, 31 Milk St., Boston, Mass.

Operating Dept.: Gen. Mgr., Goldsmith Mine, Butte, W. D. Gib-son, Butte; Mgr. and Lessee, Crystal Mine, Basin, A. C. Ray, Basin. 100 H. P. Electric.

Ores: Crystal Mine, Basin, copper and silver; Goldsmith Mine, Butte, silver and gold.

Miscellaneous Information: Both these mines are in the development stage. The Crystal Mine is operated through two tun-nels, each over 1,200 feet long. The Goldsmith Mine is being operated from the 500 and 600-foot levels by a main shaft. Ore is shipped to the Washoe Smelter at Anaconda, and to the American Smelting & Refining Company at East Helena.

DAVIS-DALY COPPER CO.

Butte.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., H. M. Burton; Sec'y-Treas., C. G. Schirmer;

both Boston, Mass. Operating Dept.: Mgr., C. L. Bruce, Butte; Supt., D. J. McGrath, Butte; Foreman, James White, Butte. 1300 H. P. Electric.

No. men employed: 400.

Ores: Copper and silver.

Daily output: 300 tons.

1918 output: 66,158 tons.

EAST BUTTE COPPER MINING CO.

Butte.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., Robt. H. Gross; Sec'y, Wm. P. Everts; Treas., Frank P. Son; all of Boston, Mass.

Operating Dept.: Gen. Mgr., Oscar Rohn, Butte.

Electric power.

No. men employed: 800.

Ores: Copper, silver, gold.

Miscellaneous Information: This company operates the properties of the Pittsmont Copper Company under an agreement entered into on April 8, 1909.

EAST BUTTE EXTENSION COPPER MINING CO.

Butte.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., Chas. J. Schatzlein, Butte; Vice-Pres., Philip A. Breen, Butte. Operating Dept.: Gen. Mgr., Frank H. Cooney, Butte.

Ores: Copper and Silver. Not operating at present.

ECONOMY MINES CO.

Helena.

Location: Lewis and Clark County. Officers: Pres., J. Kessner, Chicago, Ill.; Vice-Pres., S. Rosen-field, Helena; Sec'y, J. Rosenfield, Helena. Operating Dept.: Mgrs., Rosenfield Brothers, Helena.

200 H. P. Electric.

No. men employed: 30.

Ores: Gold and silver.

Miscellaneous Information: Although development work is being done on the property, during the last year a 100-ton concentrating plant has been erected.

ELK GOLD MINING COMPANY.

Deer Lodge.

Location: Racetrack Creek Mining District, 10 miles S. E. of

Deer Lodge, Powell County. Officers: Pres., C. E. Aspling, Deer Lodge; Trustees, I. S. Eldred and J. E. Nevill, Deer Lodge. 30 H. P. Steam.

No. men employed: 4.

Ores: Gold, silver, and copper.

Miscellaneous Information: Recently began sinking shaft.

ELM ORLU MINING CO.

Butte.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., W. A. Clark, Jr., Butte; Sec'y-Treas., W. D. Mangam, Butte.

Operating Dept.: Gen. Mgr., W. N. Rossberg, Butte. 3,000 H. P. Electric.

No. men employed: 500.

Ores: Copper, zinc, and silver.

Daily output: 600 tons.

1918 output: 208,651 dry tons combined zinc and copper ores.

GRANITE-BIMETALLIC CONSOLIDATED MINING CO.

Philipsburg. Location: Flint Creek Mining District, Granite County. Officers: Pres., John P. Meyer; 1st Vice-Pres., Edward S. Orr; 2nd Vice-Pres., L. M. Rumsey; all of St. Louis, Mo.

Operating Dept.: Acting Supt., R. S. Blitz, Philipsburg.

No. men employed: 18; 96 leasers.

Ores: Silver.

Daily output: 30 tons.

1918 output: 27,429 tons.

Miscellaneous Information: 3,000 acres of ground. In early days this property was a large producer, but is now being entirely worked by leasers.

GLENGARRY MINING CO.

Cooke City.

Location: New World Mining District, Park County.

Officers: Pres., J. T. Hamilton, Miles City; Vice-Pres., Charles Daly, Cooke City; Sec'y and Treas., C. H. Loud, Miles City. Operating Dept.: Mgr., Charles Daly, Cooke City.

Hand Power.

No. men employed: 8.

Ores: Gold, silver, and copper.

Miscellaneous Information: Have just started to operate these mines, which have been idle for a number of years. Expect to get 10 cars marketed this season. This company is suc-cessor to the Montana Scotch Bonnet Copper and Gold Mining Co.

GOLDEN CURRY LEASING CO.

Elkhorn.

Butte.

Location: Elkhorn Mining District, Beaverhead County. Officers: Mgr., M. I. Lydig, Elkhorn.

30 H. P. Electric.

No. men employed: 16.

Ores: Iron, gold.

Daily output: 30 tons. Miscellaneous Information: Iron is mined for flux. Shipping to American Smelting & Refining Company.

GREAT BUTTE COPPER CO.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., F. W. Bacorn, Butte; Treas., Charles Hyde, 331 Fourth Ave., Pittsburg, Pa. Steam and electric power.

No. men employed: Average 25.

Ores: Copper and zinc.

Miscellaneous Information: Doing extension work only.

HUGO GOLD AND COPPER MINING CO.

Location: Denemora Mining District, Mineral County. Officers: Pres., R. W. Seideman, Saltese; Vice-Pres., W. W. Woods, Wallace, Idaho. Water power.

Ores: Gold and copper.

INGERSOLL MINING COMPANY.

Neihart.

Saltese.

Location: Montana Mining District, Cascade County. Officers: Pres., Allen Pierse, Great Falls; Sec'y-Treas., E. A. Shaw, Great Falls.

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Ores: Silver and lead.

Miscellaneous Information: Property has been idle for several years, but arrangements are now being made to resume operations.

INTER MOUNTAIN MINING CO.

Iron Mountain.

Location: Iron Mountain Mining District, Mineral County.

Officers: Pres., E. Evans, Post St., Spokane, Wash.; Vice-Pres., R. G. McIntosh, Spokane, Wash.; Sec'y-Treas., E. C. Danfer, Spokane, Wash.

Operating Dept.: Supt., P. L. Hoffman, Iron Mountain.

450 H. P. Electric, and 250 H. P. Water.

No. men employed: 75 (normally).

Ores: Copper, carrying some gold and silver. Daily output: 150 tons.

Miscellaneous Information: At present only prospecting and developing, using 18 men.

JARDINE GOLD MINING & MILLING CO.

Tardine.

Location: Sheepeater Mining District, Park County.

Officers: Pres. and Treas., W. S. Hunnewell, Drummond; Vice-Pres. and Gen. Mgr., H. C. Bacorn, Jardine. 300 H. P. Electric.

No. men employed: 50.

Ores: Gold and tungsten. Daily output: 30 tons at present.

Miscellaneous Information: 40-stamp mill put in operation in 1919, handling about 150 tons of ore per day.

JIB MINING CO.

Location: Cataract Mining District, Jefferson County.

Officers: Pres., A. E. Spriggs, Helena; Vice-Pres., M. L. Hewett, Basin; Sec'y., Sol Genzberger, Butte.

Operating Dept.: Mgr., M. L. Hewett, Basin; Supt., R. Brinlori, Basin; Asst. Supt., Arthur Louiselle, Basin.

KENDALL LEASING CO.

Location: North Moccasin Mining District, Fergus County. Operating Dept.: Mgr., A. B. Fox, Kendall; Foreman, Frank. Bryant, Kendall. 175 H. P. Electric.

No. men employed: 15.

Ores: Gold.

Daily output: Not regular. 1918 output: 7,152 tons.

Miscellaneous Information: The Kendall Mine is owned by the Barnes-King Development Co., successors to the Kendall Gold Mining Co., and is under lease to A. B. Fox and S. D. Whipple, working under the above name.

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Basin.

Kendall.

LAST CHANCE MINING CO.

Saltese.

Location: Denemora Mining District, Mineral County. Officers: Pres. and Mgr., Geo. Champagne, Saltese.

No. men employed: 2.

Ores: Silver, lead and copper.

Miscellaneous Information: Doing development work only.

LEGAL TENDER CONSOLIDATED MINES CO.

Clancy.

Location: Lump Gulch Mining Dist., Jefferson County. Officers: Pres., H. A. Gallwey, Butte; Sec'y, J. H. Heilbronner, Butte; Treas., Wm. Stussy, Butte. Operating Dept.: Supt., D. J. Courtney, Clancy; Foreman, Wm.

Murrey, Clancy.

75 H. P. Electric.

No. men employed: 25.

Ores: Silver.

Output: Irregular.

Miscellaneous Information: Mine producing an average of two cars a month, and extensive development work being done.

LEVIATHAN GOLD MINING CO.

Ponv.

Clancy.

Helena.

Location: Mammoth Mining District, Madison County. Officers: Pres., Chas. E. Morris, Pony; Vice-Pres., J. L. Temple-man, Butte; Treas., Wm. C. Morris, Pony; Sec'y, James A. Flint, Pony.

Operating Dept.: Lessee, Ben W. Wilson, Jefferson Island. Ores: Copper, gold, and silver.

Miscellaneous Information: For past two years this property has been under contract for sale and lease to B. W. Wilson. Matured payments have been made, with the probability of completion, which will put the above company out of business.

LITTLE NELL MINE.

Location: Lump Gulch Mining District, Jefferson Count.

Officers (Operating Dept.): Gen. Mgr., Stanly A. Easton, Kel-logg, Idaho; Mgr., H. H. Mayer, East Helena; Foreman, T. Brownlow, Clancy.

70 H. P. Steam.

No. men employed: 10.

Ores: Silver, lead, zinc.

Miscellaneous Information: At present doing development work only.

LIVERPOOL SILVER MINES CO.

Location: Spring Hill Mining District, Lewis and Clark County. Officers: Pres., John W. Brien, Essex, Ontario; Sec'y., W. G. Burns, 27 State St., Boston, Mass.; Treas., James E. Simpson, 27 State St., Boston, Mass.

Operating Dept.: Mgrs., Frank Eichelberger and Chas E. Fryberger, Helena. 250 H. P. Electric.

No. men employed: 21.

Ores: Silver-lead sulphides.

Miscellaneous Information: Opened old levels and installed new headframe and hoist in 1919; hoisting steadily Dec. 1, 1919.

LUKENS HAZEL MINING CO.

Location: Snow Shoe Mining District, Lincoln County. Officers: Pres. and Gen. Mgr., C. Ed. Lukins, Libby; Sec'y and Treas., Wm. Jennison, Libby.

Miscellaneous Information: At present this company is not working its mine, but is engaged in building a concentrator and power plant, which will use 600 H. P. electric power.

MAGINNIS MINE.

Maiden.

Location: Giltedge Mining District, Fergus County. Lessee: W. A. Young, Maiden. 60 H. P. Steam and gasoline power. No. men employed: 10.

Ores: Gold and silves, with more or less lead and copper. 1918 output: About 150 tons.

Miscellaneous Information: What is known as the Maginnis Mine is owned by A. M. Holter, Helena, one-fourth interest, and Dartmouth Land Company, Great Falls, three-fourths interest.

Sec.

W. D. MARLOW.

Location: Park County.

Livingston.

Officers (Operating Dept.): Gen. Mgr., W. E. Renshaw, Idaho Springs, Colo.; Supt., O. V. Miller, Cooke City, Mont. 25 H. P. Gasoline.

No. men employed: 7.

Ores: Gold, silver, lead. 1918 output: 200 tons.

Miscellaneous Information: Just beginning daily production; mine has been idle for several years.

MONTANA CONSOLIDATED COPPER CO.

Comet.

Location: Cataract Mining District, Jefferson County. Officers: Pres., J. V. Allen; Treas., T. F. Lee; both 51 Wall St., New York.

Operating Dept.: Gen. Mgr., H. J. McKenzie, Basin.

300 H. P. Electric.

No. men employed: 10 (at present).

Ores: Silver, gold, copper, zinc, lead.

Daily output: 40 tons.

Miscellaneous Information: Mine closed down in August, 1919, to allow for reorganization preparatory to starting large scale mining and milling. Crew of 10 men keeping mine unwatered and in good shape.

Libby.

MITCHELL & MUSSIGBROD, INC.

Location: First Chance Mining District, Granite County. Officers: Pres., Louis Mussigbrod, Garnet: Vice-Pres., J. Moken-

land, Warm Springs; Sec'y, Albert Galen, Helena.

Leaser: Louis Mussigbrod.

60 H. P. Steam.

No. men employed: 18.

Ores: Sulphide ores, gold, and silver.

Miscellaneous Information: Installed K. & K. flotation plant in 1913, and started operation in February, 1919.

MONTANA OREWAY MINING DISTRICT.

Jackson.

Location: Big Hole Mining District, Beaverhead County.
Officers: Pres. and Mgr., Wm. P. Jahnke, Wisdom; Sec'y., F. W. Scott, Chicago, Ill.; Treas., John D. Rankin, Chicago, Ill.
35 H. P. Steam and compressed air.

No. men employed: 15.

Ores: Copper, silver, lead, gold.

Miscellaneous Information: Two carloads shipped for demonstration purposes. Company expects to erect concentrator.

MONTANA RADERSBURG MINING CO. Radersburg.

Location: Cedar Plain Mining District, Broadwater County. Officers: Pres., A. E. Spriggs, Helena; Sec'y, B. E. Matthews, Helena; Treas., C. A. Whipple, Helena. Operating Dept.: Mgr., A. E. Spriggs, Helena.

25 H. P. Gasoline.

No. men employed: 4.

Ores: Lead, silver.

1918 output: 200 tons.

MOULTON MINING COMPANY.

Location: Summit Valley Mining District, Silver Bow County.
Officers: Pres., W. A. Clark, Butte; Vice-Pres., W. C. Siderfin, Butte; Sec'y, J. C. Phillips, Butte.
219 H. P. Electric.

No. men employed: 20.

Ores: Copper and silver, zinc and lead.

Daily output: 40 tons.

1918 output: 3,000 tons.

Miscellaneous Information: Principally development work being done.

NORTH BUTTE MINING COMPANY.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., Robert Linton, New York; Vice-Pres., Joseph B. Cotton, New York; Sec'y-Treas., F. R. Kennedy. New

York, N. Y.

Operating Dept.: Gen. Mgr., N. B. Braly, Butte; Supt., L. D. Frink, Butte.

3.600 H. P. Electric and steam.

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Walkerville.

Butte.

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Garnet.

No. men employed: 850.

Ores: Copper and silver.

Daily output: 880 tons. 1918 output: 465,389 tons.

Miscellaneous Information: At present operating at about 60 per cent. of full capacity.

PATTEN MINING CO.

Philipsburg.

Location: Flint Creek Mining District, Granite County. Officers: Pres., A. J. Johnston, Butte; Vice-Pres., Earle B. Pat-ten, Philipsburg; Sec'y-Treas., J. K. Heslet, Butte.

Miscellaneous Information: Not operating at present.

PHILIPSBURG MINING COMPANY.

Philipsburg.

Location: Flint Creek Mining District, Granite County.

Officers: Pres., John P. Meyer, St. Louis, Mo.; Vice-Pres., John H. Dieckman, St. Louis, Mo.; Treas., Firmin D. Fusz, St. Louis, Mo.

Operating Dept.: Supt., R. S. Blitz, Philipsburg; Asst. Supt., A. E. Fritzberg, Philipsburg.

700 H. P. Electric.

No. men employed: 225.

Ores: Manganese dioxide, silver, and copper.

Daily output: 75 tons.

1918 output: 42,480 tons.

Miscellaneous Information: Operating Algonquin, Bryant, True Fissure, Horton, and Hope Mines, and 300-ton concentrating mill.

PIEGAN-GLOSTER MINE (See Barnes-King Development Co.).

PITT COPPER MINING CO.

Location: Mineral County.

Officers: Pres., John A. Lathwood, Pittsburg, Pa.; Vice-Pres., W. S. Markley, Pittsburg; Sec'y, W. D. Brewer, Pittsburg; Treas., J. H. B. Phillips, Pittsburg.

Operating Dept .: Supt., L. C. McHeffey, Keystone, Mont.

80 H. P. Gasoline.

Ores: Copper, lead, silver, gold, zinc. Daily output: Mill capacity, 100 tons. 1918 output: 150 tons concentrates; 450 tons crude ore. Miscellaneous Information: Not operating at present.

PITTSMONT COPPER COMPANY.

Butte.

Keystone.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., Robt. H. Gross, Boston, Mass; Vice-Pres., James H. Reed, Pittsburg, Pa.; Sec'y-Treas., F. Ward Paine, Houghton, Mich.

Operating Dept.: Gen. Mgr., Oscar Rohn, Butte.

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2000 H. P. Electric; 2000 H. P. Steam. No. men employed: 500.

Daily output: 500 tons.

1918 output: 185,000 tons.

Miscellaneous Information: Properties of this company are operated by the East Butte Copper Mining Company under an agreement entered into April 8th, 1909.

POTOMAC COPPER COMPANY.

Potomac.

Location: Missoula County.

Officers: Pres., W. P. Jahn, Milwaukee, Wis.; Vice-Pres., Paul A. Gow, Butte; Treas., Geo. E. Palmer, Butte; Sec'y, J. J. Harrington, Butte.

Operating Dept.: Supt., W. I. Higgins, Potomac. 85 H. P. Steam.

No. men employed: 30.

Ores: Copper and gold.

Miscellaneous Information: Development work only.

REVENUE MINES.

Norris.

Location: Lower Hot Spring Mining District, Madison County. Officers: De West Candee and Howard S. Candee; both 43 Exchange Place, New York. Trustee: G. D. B. Turner, Norris, Mont. Steam Power (installing 250 H. P. Electric).

No. men employed: 18. Ores: Gold.

SCRATCH AWL MINING & DEVELOPMENT CO. Philipsburg. Location: Flint Creek Mining District, Granite County.

Officers: Pres., J. R. Moyle, Butte; Vice-Pres., T. Tomich, Butte; Sec'y-Treas., W. N. Waugh, Butte. Operating Dept.: Gen. Mgr., E. F. Shields, Philipsburg. 125 H. P. Electric.

No. men employed: 16.

Ores: Silver, lead, copper, zinc, and manganese. Daily output: 5 tons.

SHANNON MINE (See Barnes-King Development Company),

SILVER CABLE MINING COMPANY.

Missoula.

Location: Coeur d'Alene Mining District, Missoula County. Officers: Pres. and Gen. Mgr., Jas. D. Corbett, Missoula; Vice-

Pres., J. W. Kennedy, Missoula; Sec'y-Treas., Carl C. Mott, Missoula.

Hand power.

No men employed: 7.

Ores: Lead-zinc, with silver. Miscellaneous Information: Development work only.

SILVER TIP MINING CO.

Location: Lincoln County.

Officers: Pres., J. P. Schmuck; Vice-Pres., Harry Rosenkop; Sec'y, R. H. Hutchin; all 310 Hyde Blk., Spokane, Wash. Ores: Zinc, lead, silver.

Miscellaneous Information: Not operating.

SNOW STORM MINES CONSOLIDATED.

Location: Lincoln County. Officers: Pres. and Gen. Mgr., Leo Greenough, Spokane, Wash.; Sec'y-Treas., W. J. Beaton, Spokane, Wash. Operating Dept.: Asst. Mgr., R. E. Walters, Troy; Mill Supt., L. E. Warner, Troy; Mine Supt., Jack Grills, Troy. 1200 H. P. Electric.

No. men employed: 150 to 200.

Ores: Silver, lead, zinc, gold.

Daily output: 200 tons.

Miscellaneous Information: 1200 H. P. hydro-electric power plant; 51/2 miles 36-inch gauge railroad; 300-ton daily mill capacity.

SOUTHERN CROSS MINE (A. C. M. Co.).

Southern Cross.

Location: Deer Lodge County. Officers: Supt., J. C. O'Brien, Southern Cross. Electric power. No. men employed: 85. Ores: Gold in iron and lime, Daily output: 90 tons. 1918 output: 45,000 tons.

STERLING MINING & MILLING CO.

Location: Heddlestone Mining District, Lewis and Clark County. Officers: Pres., F. W. Rader, Pullman, Wash.; Vice-Pres., W. H. Rader, Ellensburg, Wash.; Sec'y-Treas., L. O. Howard, Pullman, Wash.

Operating Dept.: Gen. Mgr., L. O. Howard, Pullman, Wash.; Resident Mgr., Archie McDonald, Flesher, Mont.; Supt., U. J. Jones, Flesher, Mont. 125 H. P. Steam

No. men employed: 25.

Ores: Silver, lead, zinc.

Miscellaneous Information: Mine ready to produce 100 tons daily; mill running one shift.

ST. PAUL-MONTANA MINING CO.

Location: Gilt Edge Mining District, Fergus County. Officers: Pres., C. W. Amos, St. Paul, Minn.; Sec'y-Treas., Wm. Biadin, St. Paul, Minn.

Operating Dept.: Mgr., W. B. Coolidge, Maiden. 160 H. P. Steam.

No. men employed: 4. Ores: Gold.

Silver Camp.

Maiden,

Troy.

SYNDICATE COPPER MINING CO.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., W. W. McDowell, Butte; Sec'y, W. E. Reynolds, Butte.

Miscellaneous Information: This company was a holding company for the Tuolumne Copper Mining Company and the Colusa Leonard Mining Company.

TARBOX MINING COMPANY.

Location: Denemora Mining District, Mineral County.

Officers: Pres., Richard Daxon, Wallace, Idaho; Sec'y-Treas., John T. Ferguson, Wallace, Idaho.

Operating Dept.; Mgr., Richard Daxon, Wallace, Idaho.

150 H. P. Steam.

No. men employed: 10.

Ores: Lead, silver, zinc.

TENDERFOOT COPPER MINING CO.

Location: Cascade County.

Officers: Pres., John Whitted; Vice-Pres., Dougold McCallum; Second Vice-Pres., Thomas Ashton; Treas., R. B. Noble; Sec'y, R. W. Berry; all Great Falls. Hand Power.

Ores: Copper, gold, silver.

Miscellaneous Information: Developing ten mining claims, four of which are patented.

TIMBER BUTTE MILLING CO.

Location: Summit Valley Mining District, Silver Bow County. Officers: Mgr., W. A. Rossberg; Efficiency Eng., D. W. Buckby; Mill Foreman, R. McGillivray; Asst. Mill Foreman, T. C. Nilson; Research Eng., G. E. Sheridan; Concentration Eng., I. O. Proctor; all of Butte, Montana.

2300 H. P. Electric.

No. men employed: 200.

Ores: Concentrator treats Elm Orlu crude zinc ore, and retreats Colusa Parrot Copper Mining Company copper tailings. Daily output: 700 tons zinc ore; 1,300 tons copper tails. 1918 output: 190,000 tons crude zinc ore; 387,000 tons copper tails.

TRIUMPH GOLD MINING CO.

Location: South Boulder Mining District, Granite County. Officers: Pres. and Treas., L. U. Loomis, Philipsburg; Sec'y, G. D. Loomis, Philipsburg.

40 H. P. Steam.

Ores: Silver, gold, copper, lead.

No. men employed: 20 (building road).

Miscellaneous Information: Installing an air compressor to sink main shaft; in development stage.

TUOLUMNE COPPER MINING COMPANY.

Butte.

Princeton.

Location: Summit Valley Mining District, Silver Bow County. Officers: Pres., Ed. Hickey, Butte; Vice-Pres., Wm. P. Jahn,

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Butte.

Butte.

Saltese.

Monarch,

Milwaukee, Wis.; Sec'y, J. J Harrington, Butte; Treas., Frank K. Nilson, Butte.

Operating Dept.: Gen. Mgr., Paul A. Gow, Butte; Asst. Gen. Mgr., Herbert M. Fay, Butte. 600 H. P. Electric.

No. men employed: 100.

Ores: Copper and silver.

Daily output: 100 tons. 1918 output: 25,000 tons.

Miscellaneous Information: Company owns Tuolumne, Main Range, and Colusa Leonard Extension Mines.

WAR EAGLE MINING CO.

Location: Little Rockies Mining District, Chouteau County. Officers: Pres., J. C. Arbogast, Harlem; Vice-Pres., Ike Duncan, Chinook; Sec'y-Treas., G. M. Everett, Harlem. 20 H. P. Gasoline.

Miscellaneous Information: Development work only.

WESTERN SMELTING & POWER CO.

Location: New World Mining District, Park County. Officers: Pres. and Gen. Mgr., G. L. Tanzer; Sec'y, J. J. Black; Treas., Geo. B. Baker; all Seattle, Wash. Operating Dept.: Mgr., Wm. M. Tanzer; Mine Supt., F. A. Han-

cock; Elec. Eng., Ingvald Gronvold; all Cooke, Mont. 1000 H. P. Hydro-Electric.

No. men employed: 75.

Ores: Copper (Chalcopyrite), galena; all ores containing values in gold and silver.

Miscellaneous Information: Development work only.

WHITLATCH MINE.

Location: Unionville Mining District, Lewis and Clark County. Lessee and Operator: A. R. Shennan, Box 351, Helena, Mont. 80 H. P. Electric and Compressed Air. No. men employed: 4.

Ores: Silicious gold and silver.

1918 output: 300 tons.

Miscellaneous Information: Development work only.

WICKES-CORBIN COPPER MINING CO.

Location: Colorado Mining District, Jefferson County. Officers: Pres., S. A. Balliet, Helena; Sec'y-Treas., L. C. Henry, Helena.

Ores: Silver, lead, and copper.

Miscellaneous Information: Development work only.

YELLOWSTONE MINING CORPORATION.

Location: New World Mining District, Park County. Officers: Pres., W. E. Wolfenden, Roanoke, Va.; Sec'y, Samuel T. Rhodes, Roanoke, Va.

Operating Dept.: Mgr., J. E. Wholey, Cooke, Mont.

Ores: Lead, silver, gold, and copper.

Miscellaneous Information: Shipped five cars from Stump Mine last year; surveying 15 claims for patent at present.

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Union ville.

Cooke.

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Cooke.

Wickes.

DIRECTORY OF MONTANA OPERATING COAL MINES

ANACONDA COPPER MINING CO., Coal Dept.

Washoe.

Armington.

Location: Deer Lodge County. Officers: Gen. Mgr. Coal Dept., F. W. C. Whyte, Anaconda; Supt., Thomas Good, Washoe. 500 H. P. Steam and Electric. No men employed: 200. Daily output: 900 tons. 1918 output: 147,774 tons.

ARMINGTON COAL CO.

Location: Cascade County. Operator: J. O. Rundall. Mule Power. No. men employed: 2. Daily output: 15 tons. Miscellaneous Information: Property just opened.

BAYES COAL MINE.

Owner: Victor Stoban, Bayes. No. men employed: 2. Daily output: 6. 1918 output: 300 tons.

BEAR CREEK COAL CO.

Location: Carbon County. Officers: Pres., Peter Yegen, Billings; Vice-Pres., J. Harry Wright, Bearcreek; Sec'y-Treas., C. P. Hamriet, Bearcreek. Operating Dept.: Supt., C. P. Hamriet, Bearcreek. 250 H. P. Electric. No. men employed: 185. Daily output: 800 tons. 1918 output: 135,000 tons.

BIG SANDY COAL MINE.

Location: Chouteau County. Proprietor: C. C. Mack, Big Sandy. Foreman: Chas. Tivoni, Big Sandy. Hand power. No. men employed: 3 to 8. Daily output: 10 tons. 1918 output: 2,700 tons.

Big Sandy.

Bearcreek.

Bayes.

BROWN COAL COMPANY.

Sand Coulee.

Location: Cascade County.

Officers: Pres., J. W. Freeman, Great Falls; Vice-Pres., John L. Ross, Great Falls; Sec'y-Treas., Ernest Downing, Great Falls. Operating Dept.: Mgr., Ernest Downing, Great Falls; Supt., John Latham, Sand Coulee; Outside Foreman, Carl Schmidt, Sand Coulee. Electric power.

No. men employed: 98 to 105. Daily output: 525 tons. 1918 output: 109,295 tons.

BRIDGER COAL MINING CO.

Bridger.

Location: Carbon County. Officers: Gen. Mgr., W. E. Pinkney, Bridger; Cashier, J. S. Emmett, Bridger. 500 H. P. Electric. No. men employed: 20. Daily output: 40 tons. 1918 output: 9,088 tons.

CARBON COAL & COKE CO.

Location: Cascade County. Officers: Pres. and Mgr., Geo. Wilson, Sand Coulee; Vice-Pres. and Treas., H. E. Dawson, Sand Coulee; Sec'y, Anthony Morton, Sand Coulee; Supt., Wm. Navin, Sand Coulee. 350 H. P. Steam and Electric. No. men employed: 80.

Daily output: 400 tons. 1918 output: 102,248 tons.

CHESTNUT HILL COAL CO.

Location: Gallatin County. Officers: Pres., John Aakjer, Bozeman; Treas. and Supt., William Maxey.

Miscellaneous Information: Development work only.

EAGLE COAL COMPANY.

Location: Carbon County.

Officers: Pres., J. T. Flaherty, Red Lodge; Vice-Pres., H. A. Simmons, Red Lodge; Secy. and Treas., J. V. Flaherty, Red Lodge; Mgr., J. T. Flaherty, Bearcreek; Foreman, J. F. Lobdell, Bearcreek. 60 H. P. Electric.

No. men employed: 30. Daily output: 150 tons. 1918 output: None.

GASS COAL MINE.

Location: Wibaux County.

Yates.

Sand Coulee.

Storrs.

Bearcreek.

Operator: A. R. McCloskey, Yates. 80 H. P. Steam. 1918 output: 1,200 tons. Miscellaneous Information: Closed on account of litigation.

HELL GATE COAL CO.

Missoula.

Roundup.

Bearcreek.

Location: Missoula County. Officers: Pres., S. H. Draper, Missoula; Vice-Pres., E. S. Hathaway, Missoula; Treas., H. L. Shapard. 60 H. P. Electric. Miscellaneous Information: Not operating.

INDEPENDENT MINING CO.

Location: Musselshell County. Owner: G. J. Jeffries, Roundup. 75 H. P. Electric. No. men employed: 30. Daily output: 150 tons. 1918 output: 50,000 tons.

INTERNATIONAL COAL CO.

Location: Carbon County. Officers: Pres., W. A. Talmage, Joliet; Sec'y-Treas., J. Harry Wright, Bearcreek; Gen. Mgr., W. H. Franklin, Bearcreek. 300 H. P. Electric and Steam.

No. men employed: 75. Daily output: 300 tons. 1918 output: 53,620 tons.

JACKMAN COAL MINING CO.

Near Forest Grove at Jackman Spur.

Location: Fergus County. Officers: Vice-Pres., John B. Ritch, Lewistown; Sec'y-Treas., E. W. Mettles, Lewistown. Hand power.

No. men employed: 10. Daily output: 25 to 30 tons.

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MACKTON COAL CO.

Big Sandy.

Location: Chouteau County. Officers: Pres. and Mgr., W. R. Hensen, Chinook; Secy-Treas., Hans H. Lehfeldt, Big Sandy; Supt., L. S. Proctor, Big Sandy. 500 H. P. Electric. No. men employed: 5 to 50. Daily output: 25 tons.

1918 output: 8,300 tons.

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MILK RIVER COAL CO.

Chinook.

Location: Blaine County. Officers: Pres., Jurgen Kuhr, Chinook; Vice-Pres., William Duke, Chinook; Treas., Thomas O'Hanlon, Chinook; Foreman, Clarence Sargent, Chinook. No. men employed: 10. Daily output: 35 tons.

1918 output: 7,765 tons.

MILLARD COAL COMPANY.

Location: Cascade County. Officers: Mgr., H. W. Millard, Belt. 28 H. P. Electric. No. men employed: 7 Daily output: 40-50 tons. 1918 output: 3,292 tons.

MONTANA COAL & IRON CO.

Location: Deer Lodge County. Officers: Pres., Thos. M. Kearney, Racine, Wis.; Vice-Pres. and Mgr., J. M. Freeman, Washoe; Asst. Treas., George McMillan, Washoe.

Operating Dept.: Gen. Mgr., J. M. Freeman, Washoe; Supt., W. R. Freeman, Washoe; Sales Mgr., George McMillan, Washoe.

300 H. P. Steam and Electric.

No. men employed: 564.

Daily output: 1,500 tons.

1918 output: 307,606 tons.

Miscellaneous Information: Operating two mines in Bearcreek field.

NATIONAL COAL MINING CO.

Location: Cascade County. Officers: Pres. and Mgr., Jas. R. Brown, Sand Coulee. 150 H. P. Electric. No. men employed: 52. Daily output: 210 tons.

NELSON COAL COMPANY.

Sand Coulee.

Sand Coulee.

Location: Cascade County.

- Officers: Pres. and Treas., J. W. McClure, Great Falls; Vice-Pres., Geo. E. McClure, Great Falls; Sec'y, M. W. Hanks, Stillwater, Minn.
- Operating Dept.: Mgr., J. W. McClure, Great Falls; Foreman, Geo. Cooley, Sand Coulee; Mine Mgr., Harry Thomas, Sand Coulee.

200 H. P. Electric.

No. men employed: 100.

Daily output: 500 tons. 1918 output: 161,348 tons.

Belt.

Washoe.

PEARCE COAL COMPANY.

Sand Coulee.

Location: Cascade County. Officers: Pres., Dan Tracy, Great Falls; Vice-Pres., H. P. Brown, Great Falls; Sec'y-Treas., Wm. Thornton, Great Falls; Supt., Robert Lindsay, Sand Coulee.

45 H. P. Electric. No. men employed: 22. Daily output: 94 tons. 1918 output: 37,332 tons.

PEERLESS COAL MINE.

Plentywood.

Location: Sheridan County. Operators and Owners: Pierce & Wheeler, Plentywood. 12 H. P. Electric. No. men employed: 3. Daily output: 20 tons. 1918 output: 6,838 tons.

PINE CREEK COAL COMPANY.

Location: Park County.

Officers: Gen. Mgr., George H. Bottamy, Livingston; Mine Supt., Harry Bottamy, Pray; Sales Agt., George H. Brown, Wilsall. Operating Dept.: Operator and P. A., George H. Bottamy, Livingston; Sec'y-Treas., G. Henry Bottamy, Livingston. 100 H. P. Steam, and Mule. No. men employed: 10.

Daily output: 10 to 20 tons. 1918 output: 1,200 tons.

PUTNAM COAL CO.

Owner: Mrs. E. Putnam, Culbertson. Hand Power. No. men employed: 3.

REPUBLIC COAL CO.

Location: Musselshell County.
Officers: Pres., E. D. Sewall, Chicago, Ill.; Vice-Pres., James Needham, Chicago, Ill.; Chief Eng., C. F. Brenn, Chicago, Ill.
Operating Dept.: Supt., Wm. Redshaw, Roundup; Master Me-chanic, Albert Gately, Roundup.
1250 H. P. Steam and Electric.

No. men employed: 525.

Daily output: 3,000 tons.

1918 output: 663,267 tons.

ROUNDUP COAL MINING CO.

Roundup.

Location: Musselshell County. Officers: Pres., G. W. Megeath, Omaha, Neb.; Vice-Pres., W. F. Megeath, Omaha, Neb.; Treas., G. A. Rehm, Omaha, Neb.

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Pray.

Culbertson.

Roudup.

Operating Dept.: Gen. Mgr., H. S. Hopka, Roundup; Chief Eng., L. J. Cake, Roundup; Supt., John Sanderson, Carpenter Creek. 800 H. P. Electric. No. men employed: 600. Daily output: 3,600 tons. 1918 output: 530,000 tons.

SMOKELESS AND SOOTLESS COAL CO.

Washoe.

Location: Deer Lodge County. Officers: Pres., J. F. Brophy, Red Lodge; Vice-Pres., J. S. Brophy, Frostburg, Md.; Sec'y, K. C. Brophy, Red Lodge; Gen. Mgr., J. F. Brophy, Red Lodge. Electric Power. No. men employed: 85. Daily output: 200 tons. 1918 output: 48,385 tons.

STULLER & TRIPLETT.

Location: Sheridan County. Owners: J. C. Stuller and Ira Triplett. Horse Power. No. men employed: 4. Daily output: 12 tons. 1918 output: 2,500 tons.

THOMSEN MINE.

Location: Sheridan County. Owner: Hans Thomsen, Plentywood. Horse Power. No. men employed: 3. Daily output: 18 tons.

WEST BUTTE COAL CO.

Location: Toole County. Owner: P. J. McDermott, Westbutte. No. men employed: 4. Daily output: 6 tons. 1918 output: 981 tons.

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Westbutte.

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Plentywood.