

Coppermines; by 1,800' tunnel in the Smokey, costing \$60,000; by 300' tunnel in the Ely Northern costing \$15,000.

Beginning April, 1920, all effort was concentrated on the Ely Northern, which is developed by 636' tunnel cutting a copper-bearing limonite orebody 420' from portal, and from which a 290' shaft was sunk with levels at 50, 100, 200, and 280'. Workings totaled 2,700' in July, 1921. Vein is 10-15' wide, the ore assaying 5 to 8% copper. By October, 1921, ore reserves were 180,000 tons.

**Equipment:** at Ely Northern includes semi-Diesel compressor and hoists. Outlook for company is considered favorable, as indications on the Ely Northern, possibilities in the Smokey, and proximity (3,000') of the Boston-Ely to the Consolidated Coppermines Alpha mine, give it several chances to make a producer.

#### BOYER COPPER MINES CO.

**Address:** Boyer, Churchill county, Nev. Arthur Howe Carpenter, cons. engr., 210 Noble Ave., Crafton, Pa.

**Property:** 49 claims, 1,000 acres, also a 10-acre millsite and 160 acres of placer lands, at Boyer, about 30 miles from Wonder, Nev., and 75 miles south of the S. P. R. R. at Winnemucca, in the copper belt of the Pinte mountains, controlled by Crofton Umacke, of Reno, Nev., at last accounts.

**Geology:** covers a mile of the western end of a contact between whitish andesite and an underlying greenstone, or andesite, which shows copper pyrite peppering the rock. The ore bed has a dip of but 20° and a thickness of 100' and is much altered, the footwall being a hard, silicious band. The lower 30' carries 5% copper, but the orebody developed was figured by Prof. Carpenter and A. H. Carpenter to assay 1.7% copper and about 70 cts. per ton in gold. High-grade ore occurs in small iron-capped veins which extend up through the porphyry and carry a breccia of rock fragments cemented by copper glance and bornite.

**Development:** by tunnels, now inaccessible. Present company has done about 500' of work on Treasury Box hill and exposed a faulted block of 200' length, 100' width and with 500' depth on the dip, assaying as above. Property promising when railroad facilities are provided.

#### BRISTOL CONSOLIDATED MINES & SMELTING CO. NEVADA

**Dead.** Company owned 21 or more patented claims in the Bristol district, Pioche, Lincoln Co., which in 1911 were transferred to the Day Bristol Cons. Mines Co. See Bristol Silver Mines Co. for later history of property.

**Office:** 220 Felt Bldg., Salt Lake City. **Mine address:** Pioche, Nev. C. G. Gilmore, supt.

**Officers:** W. I. Synder, pres.; W. F. Synder, v. p.; E. H. Synder, sec. treas.; Geo. W. Synder and R. J. Evans, directors.

**Inc.** 1919, in Nevada, and brought larger part of property of the Uvada Copper Co., then under lease to Black Metals Mines Co. **Cap.** \$100,000; par 10c.; 800,000 issued. Stock is closely held. Company owns 550,000 of 990,000 issued shares of Black Metals Mines Inc., the ground of which adjoins. Ownership of this property, or part of it, has passed through many hands, but Snyder interests have been largely in control. Originally owned by Bristol Cons. M. & S. Co., it was transferred in 1911 to the Day Bristol Cons. Mines Co., and in turn to the Cons. California-Nevada Mng. Co. in 1915. The latter after a very brief struggle went into receiver's hands, and property was acquired by the Uvada Copper Co., which in 1918-19 leased it to the Black Metals Co.

**Financial statement:** purchase price of holdings, \$96,000; acquisition of new machinery, \$15,000. Indebtedness as of Oct. 1, 1921, \$20,000.

**Property:** 324 acres, patented, in Jackrabbit district, Lincoln county, 16 miles N. of Pioche, includes Hillside, Gypsy, May Day and 5 other old mines. A series of limestone beds overlying shale and quartzite contains replacement deposits of oxidized and carbonate lead-silver ores, the May Day being

the most important. A typical assay return shows 13 oz. silver, 9% lead, 2% copper and 40c gold, with sufficient iron and lime to make ore desirable as a flux.

**Development:** by former operators totals several miles including a 3,800' tunnel, to a depth of 700'. Present work began May, 1920, and has been centered on the May Day and Gypsy mines, the workings of which are connected, where a rich ore shoot, 4' wide and 125' long has been opened in the main channel; widths increasing to 30' at junction of cross fissures. An incline has been sunk from the 600' to 900' level and it is proposed to connect the Hillside mine with main workings and to continue tunnel. Much of the exploratory work is being done by lessees. Total cost, including smelting, is about \$12.40 per ton of ore.

**Ore reserves:** on Oct. 1, 1921, were 50,000 tons, assaying 40c gold, 11 to 20 oz. silver, 7.5 to 16% lead, and 1.7 to 2.5% copper, as compared with 20,000 tons in May, 1919.

**Equipment:** includes hoist and 2 compressors with 10 drill capacity driven by distillate engines; 9,000' aerial tram connecting mines with the Pioche Pacific Ry. at Jackrabbit; all valued at \$120,000. Company employs 40 men.

**Production:** in earlier days said to be \$6,000,000; by present management, \$161,000 net in 16 months ended Oct. 1, 1921, and now at rate of about \$10,000 net per month.

#### BROHILCO SILVER CORPORATION NEVADA

**Address:** Dr. W. E. Harrison, Fallon, Nev. Geo. Edson Porter, pres., M. B. Wilson and W. E. Harrison control the company. C. R. Olson, cons. engr.; Mr. Keith, supt.

**Property:** 5 scattered groups, 13 claims and fractions in Churchill county, 4½ miles S. E. of Broken Hills, Nye county, and 70 miles S. E. of Fallon, includes the Silver Leaf and Black Reef groups, 1½ miles apart. Gold-silver-copper occurs in veins, 4' wide.

**Development:** consists of trenching and shallow workings, deepest about 100'. Late in 1921, small shipments of high grade ore were made to the Kansas City-Nevada mill at Bruner (or Phonolite).

#### BROKEN HILL DIVIDE MINING CO. NEVADA

**Officers:** John McGee, pres. and mgr.; J. C. Williamson, sec.

**Property:** 4 claims, adjoining the Anaconda Divide on N. E., 3 miles N. W. of Gold mountain. A prospect on outskirts of district.

#### BROKEN HILLS COMBINATION MINING CO. NEVADA

**Address:** 317 State Bank Bldg., Tonopah, Nev.

**Officer:** Wm. Forman, pres.; W. E. Edwards, v. p.; Wm. McKnight, sec. treas.; with Jas. Logan and F. M. Maloney (cons. engr.), directors.

**Cap.** \$150,000; 10c. par; 750,000 treasury shares.

**Property:** 6 claims in the Broken Hills district, 15 miles S. E. of Fairview, Churchill county, and N. W. of the Broken Hills Silver Corp. Supposed to cover the extension of the latter's vein system; main vein 7' wide in andesite. Still in a prospective stage, March, 1921, at which time Tonopah brokers were offering first allotment of treasury stock at 7¢. The same offer was being made in June.

#### BROKEN HILLS MINING CO. NEVADA

Property now owned by Broken Hills Silver Corp., which see.

#### BROKEN HILLS SILVER CORPORATION NEVADA

Successor to Broken Hills Mng. Co., for which see Vol. XIV. An example of what G. G. Rice did with other people's money. Information, from interested sources, is as follows:

**Office:** 259 North Virginia St., Reno, Nevada. **Mine office:** Broken Hills, Nev.

**Officers:** Ed. Malley, pres.; G. C. Ross, v. p.; J. T. Goodin, treas.; Eugene Grutt, sec., with C. E. Bingham and Jas. Boyd, directors. J. T. Whitmire, asst. sec.; Wm. H. Kinnon, mgr.; Otto E. Schiffner, supt.