

## **Book Review: Rock to Riches by Charles H. Dunning**

Sometimes, I prospect and then sometimes I prospect for books about prospecting. One of my favorite old books is *Rock to Riches the story of Arizona mines and mining \*past \*present \*future* by Charles H. Dunning; it was first published in 1959. Mr. Dunning graduated from Yale in 1909 as a mining engineer and soon after moved to Arizona where he worked for the next fifty years as a small mine operator and a consultant on matters concerning mining, geology, mine development, etc. For seven years, he served as Director of the Arizona Department of Mineral Resources. His log cabin at 811 S. Boulder Dr. in Prescott, Arizona is listed in the National Register of Historic Places.

Recently, while rereading and researching *Rock to Riches*, I learned that it is hard to find, out of print, unlisted at Amazon books, and only three copies are on eBay. The eBay copies are listed for \$29.95, \$45.00, and \$57.00. You might want to keep an eye out for this one at yard sales and thrift stores, or your local library. I found a few libraries in the southwest that listed copies of it in their online catalog. I inherited my copy from my father who was a Las Vegas bartender by night and a desert prospector by day.

*Rock to Riches* is divided into Periods and chapters. Period 1 is Prehistory to Gadsden Purchase, Period 2, is 1854 – 1865, and on through Period 9, 1945 -1957. The Periods are followed by chapters on Mining Today and Tomorrow, The Story in Statistics, and Minor Metals and Nonmetallics. There is also a Compendium of Important Arizona Mines, a Glossary, and an Index.

Each Period begins with a map of Arizona showing the location of the mines that will be discussed in that section and a line drawing on the next page depicting a scene representative of that era. These wonderful retro drawings are by artist Larry Toschik who at one time worked for Arizona Highways Magazine. My copy of the book has a tan and turquoise dust jacket with a drawing of a prospector, burro, and distant Saguaro. If you look at the cover long enough, it starts to take you back to a better time when...

*Rock to Riches* is more than just a history of Arizona mines. For example, at the end of an entry about Tombstone, Arizona, Mr. Dunning tells how prospector Ed Schieffelin, though a rich man by 1882, built a steamboat in 1883 and headed up the Yukon River thirteen years before the big gold rush there. He found gold but not enough to justify staying, and he eventually returned to the US and settled in Alameda, California.

In the Compendium of Important Arizona Mines, Mr. Dunning lists almost two hundred mines with a short description of each one. What follows are excerpts from some of those mine descriptions.

### **Total Wreck**

### **Pima Co.**

Situated 7 miles S of Pantano, a station on the Southern Pacific. This silver-lead mine was discovered in 1879 by a cowboy named John Dilden; but little could be done with the ore until the coming of the railroad in 1881. The mine was then acquired by the Empire Mining and Development Co., which installed a 70-ton mill and operated for a year and a half on rich surface ore. Production during this period is estimated at \$500,000, a large portion of which must have been profit.

The mine was idle until 1907, when C.T. Roberts discovered some new orebodies and gleaned several thousand tons from the old workings.

There has been only small and spasmodic production in later years. Total production from the Total Wreck is probably about \$750,000. The mine in 1959 was owned by the Vail estate, Tucson.

### **Richinbar**

### **Yavapai Co.**

Situated on the western side of Agua Fria Canyon, 4 mi. E of Bumblebee. This mine was operated from 1905 till 1922 by three different companies, with a total production during that time of

about \$60,000 in gold. The ore is distinctly low-grade for a small vein mine; thus production has been spasmodic.

The original outcrop of the Richinbar vein was covered several hundred feet deep by a post-mineralization volcanic flow of basalt and was later re-exposed when the Aqua Fria cut its 1,000-foot deep canyon. This mine, therefore, is sometimes used as an argument that there probably are many ore deposits similarly covered and as yet unexposed which might someday be detected by scientific instruments.

Charles A. Martin, of Phoenix, was owner of the mineral rights in 1959.

## **Orphan**

## **Coconino Co.**

Situated  $\frac{3}{4}$  mi. W of Grand Canyon Village, some 1,500 feet below the rim of the Grand Canyon.

John Hogan, who died in Flagstaff in the late 1950's, was one of Teddy Roosevelt's Rough Riders during the Spanish-American War. After the war, he went prospecting in the Grand Canyon, before it had become a national park. He found what he thought were promising copper showings, staked his claim, did his improvement work, and applied for a patent. It was granted, so the story goes, largely because President Roosevelt appreciated what Hogan had done during the war. Hogan then built a trail to the mine and later installed a system of ladders up the canyon wall.

The copper proved disappointing: but Hogan paid the taxes, and maintained the patent. When Grand Canyon National Park was formed, this was one of only a very few patents existing within its boundaries. Part of the land lay on the rim, and on it a small resort hotel was built and prospered through the years.

In 1951 two employees of this hotel, a boy and a girl, were enjoying each other's company, sitting on the edge of the canyon in front of the hotel. Somehow the boy fell, his body hurtling to the ledge 1,500 feet below. A party of rangers and guides finally managed to reach the body via the Bright Angel Trail and the old Hogan Trail, by then overgrown and washed out. While they were there, they inspected the old Hogan prospect workings and noticed a peculiar yellow incrustation on the walls.

This proved to be high grade uranium ore, by then very much in demand. Mining rights and finally the patent were bought by the Golden Crown Mining Co., which later became the Western Gold & Mining Co. This company built an aerial tram from the mine to the rim and began production.

Production in 1956 and 1957 was steady; but figures are not available. The January 1958 issue of "Mining World" contains a complete article on this operation.

### **Frisco**

### **Mohave Co.**

Situated in the River Range, 8 mi. E of the Colorado River, directly W from Kingman. Located in 1894, it had recorded production in gold of \$400,000 up to 1933. The ore formation consists of a lode some 18 feet wide, made up of a mass of small stringers. No record of production since 1933.

### **Harlan**

### **Yavapai Co.**

Situated on the N bank of the Hassayampa River about ½ mi. below the portal of the Senator Tunnel and about 10 mi. S of Prescott. A gold mine.

In 1900 Howard Harlan was operating a two-stamp mill on the Hassayampa nearby. Noticing a good looking vein outcrop (but

which panned very little gold), he decided to put a shot in it. After he drilled his hole, he loaded it with dynamite and vamoosed to a safe place behind a pine tree. After the blast went off, several pieces of rock rattled down through the branches. Howard picked one up and found it was half gold. He hurried to pick up any others he could find, and then he dug with considerable energy at the blasted hole. The result was that he carried away \$45,000 worth of high-grade gold ore in a gunnysack.

The old Harlan (Howard) mine belonged in 1959 to D.C. MacIver of Tunnelton, West Virginia.

Reading this 406 page masterpiece is like taking an easy to understand course in mining. If it is hard to find, well prospectors are use to that.