# THE HISTORY OF GOLD MINING AT GREAT FALLS, MARYLAND.

THESIS PRESENTED TO

MARYLAND BETA CHAPTER

TAU BETA PI

BY

EDWARD M. McMANUS

JANUARY 15, 1932

# HISTORY OF GOLD MINING AT GREAT FALLS, MARYLAND

## SUMMARY

There is doubt as to the date of the discovery of gold at Great Falls, Maryland. Numerous reports dispute the date. However, it is known that the first mine was opened in the year 1867. This was the Maryland Mine.

Numerous mines are mentioned in early records but, considering that each time a mine changed hands it also changed named, it is likely that many names refer to the same mine. At the present time there are names for five of the mines, each having a varying number of shafts. These are: The Maryland Mine, The Montgomery Mine, The Ford Mine, The Huddleston Mine, and The Sawyer Mine.

The history of every mine is: operation for a few years, abandonment, and subsequent reopening when hopes were raised by the coming of new machinery into the mining industry and the wily schemes of promoters. Very few operators of the mines were successful. All in all, it is a history of failures, but failures that are interesting to the extreme, perhaps, because they are entwined with the magic word GOLD.

# THE HISTORY OF GOLD MINING AT GREAT FALLS, MARYLAND.

Great Falls, Maryland, is approximately 16 miles upstream from Washington along the Potomac River and is situated on the fall line of the river. It takes its name from the picturesque falls of the Potomac at this point.

No exact date can be given for the settlement but it is known that Captain Fleet of Captain John Smith's forces sailed up the river to this point to trade with the Indians and that the lands about were patented to early settlers under such names as Brightwell's Hunting Quarter, Thompson's Hop Yard, Goose Pond, and Bear Den.

That gold in paying quantities should be found so close to the national capital is a matter of surprise to many but there is nothing in the geological nature of the territory which renders it improbable. The whole Appalachian Range is gold-bearing and the mines at Great Falls are but a manifestation of this gold-bearing strip in the range. The gold occurs in the rocks in this manner: found in the pure white quartz free from pyrites; associated with the pyrites; and in the pyrites.

Doubt exists as to the exact year of the discovery of gold at Great Falls but early records show that gold was discovered in Montgomery County,in which Great Falls is located, in 1849 at Sandy Spring. Although there is a tradition that gold at Great Falls was discovered in 1848, older residents

in the vicinity of the mines state that discovery was at the time of the Civil War. The story is told that when the California Volunteers were encamped near the falls, and after a swin in the river one of them noticed grains of gold in the sand in a companion's hair. They kept their secret and at the close of the war returned and began operations.

The first operations were probably panning of all the nearby streams and, though there is no definite record, results must have been satisfying.

The history of the mines is a long succession of beginning operations and subsequent abandonments and changing owners. To give all of these would require considerable research through land records, and so the larger mines by the names they are known at the present time will be considered and their more important owner's success or failure given.

The names of five distinctive operations in the vicinity are the Montgomery Mine, the Sawyer Mine, the Huddleston Mine, the Maryland Mine, and the Ford Mine.

The first mine opened at Great Falls was the Maryland Mine in the year 1867. The operations were not extensive and no machinery was used. The workings were abandoned. Periods of operation and abandonment occurred at this mine regularly thereafter and various interests from Scranton, Pittsburgh, Colorado, Washington, and Illinois invested money and machinery for the operation of this mine. Practically all lost money. This mine enjoyed its most successful operation around 1890, when the superintendent was a man named Lloyd. Under his super-

vision machinery was installed and large amounts of gold were taken from the workings to be sent to the mint. This mine was last operated around the years 1914-1915 when ore was taken out and shipped in sacks to another point to be worked. It has been abandoned since then.

Each of the groups working this mine developed it a little more and the result is that it has most extensive underground workings. The shaft here is 350 feet deep with levels running off at about every 50 feet or so. The bottom of the shaft is below the river and an interesting fact is that when this first reached such a depth, operations were abandoned because the problem of the seepage water was too great. Subsequent installments of pumps enabled others to work the mines later, however.

The Maryland Mine is easily found, being directly on Conduit Road a mile from Great Falls and at the end of the concrete road coming from Potomac Crossroads. Machinery, boilers, tracks, ore dumps,etc., may be seen here. There are two shafts here. One is an older shaft, the hoist of which was not operated by engine. A level running off from this shaft has caved in and left a large depression near the gate of the mine;approximately 50 feet from this older shaft is the later shaft which has a tall superstructure and the hoist of which was operated by a steam engine.

The Montgomery Mine began in the year 1871 on the farm of Robert Davidson. Legend has it that as Davidson's son was driving home the cows one evening he discovered a

nugget along the bank of a stream known as Rock Run. This nugget was worth $175. Davidson immediately started mining operations of the manual type. He continued until 1876 when he became dissatisfied and sold 65 acres of his land to a firm for $7,000. This firm continued operations for a time but sold out to a Baltimore concern called the Montgomery Mining Company. This Company employed about 30 hands, used machinery in its operations, and sunk 5 shafts from 20 to 80 feet in depth.

An H. C. Harrison was the superintendent for this group and under his regime gold was produced in plentiful quantities. Philadelphia Mint was the recipient of the gold from this mine and mint receipts are available. Harrison was forced to quit operations because of trouble with his help.

A few years later a new company began operations at this mine but its time of operations was short and it soon sold out to still another group, whose superintendent was named Hocater. He was also successful in the production of gold in considerable quantities. His equipment consisted of a 10-stamp mill, copper plates, concentrator, forge and crucibles.

The use of this equipment and the general method used at nearly all the mines for obtaining the gold was nearly the same.

From the levels of the mine came the ore to be hoisted up the shaft, loaded in cars and taken to the crusher. This machine reduced the ore to small fragments ready for the next step.

The crushers emptied into a stamp mill which was mechanically fed. The stamps were power-driven pistons which alternately rose and fell on the fragments lying on plates beneath the stamps, reducing the ore to "pulp". This pulp was then flushed over copper plates previously treated with mercury. This mercury-gold amalgam was gathered and placed in a distilling apparatus and the mercury distilled off, condensed and used again.

This process took care of the "dust" or "flour" gold, but the concentrator, a form of inclined table crossed by many narrow strips, was used to collect the black sand and the smaller, heavier ore particles containing gold, which had escaped the action of the plates. This concentrate was removed to be mortared and smelted.

The pulp was further treated by placing in a clay crucible, supplied with a flux and reduced by heat. Upon breaking the crucible a "button" of gold was found. These buttons were remelted and poured into conical molds called "plumb-bobs", which weighed from two to five pounds. This was the gold that was shipped.

After Hocater, a certain gold-seeker from Chicago, Parsons by name, leased the abandoned workings of the Montgomery Mine. He made several open cuts and then began operations in Rocky Run, the nearby stream. He built a dam across the stream and constructed "toms", a form of concentrator, and worked the stream bed.

From various sources one learns that, after two or three years of labor, Parsons returned to Chicago and that later, when residents of the county visited the Chicago Exposition, they found him possessed of considerable wealth.

One William B. Russ was the superintendent for the last group to be active in quest of the elusive metal at the Montgomery Mine. During his superintendency the mine suffered many bad falls of rock and considerable propping had to be done. He was hopeful of success, but his company, the Potomac Mining Company, abandoned work and the mine has never been worked since.

This particular mine, the Montgomery, is difficult to locate at the present time because there are no buildings now standing and the mine is in the woods off Persimmon Tree Road, near Potomac. The only evidence of operations are the numerous openings.

The Ford Mine was prospected by Colonel Kirk, a Georgia miner, who also prospected many other properties in the region. He did not attempt workings but prospected and sold out to companies interested in operating. Kirk sold out the Ford Mine to the Allerton-Ream Company.

The Allerton-Ream Company mined gold in various quantities but eventually gave up their lease and two young men, Guilotte and Gibbs, carried on, getting on the average of an ounce of gold per day. At that time they were well paid for their labors, but a misunderstanding severed their

relations and the enterprise ceased its activities.

The Huddleston and Sawyer Mines have somewhat similar histories. Kirk is said to have prospected both of them and considerable gold was removed from each.

Among the various superintendents at the Sawyer Mine were Townsend and Archy. Archy was from the Whitehall mines of Virginia and employed a number of men and worked with considerable energy. He sank 3 shafts, one of them of a depth of 150 feet. It was the opinion that he knew his business and rumor has it that after three or four years of operation he retired, successful.

The Sawyer Mine got its name from the fact that Senator Sawyer was at one time interested in it. The mine, however, did not prove successful and he gave it up.

After Sawyer came Will Kirk, a son of the same Colonel Kirk, the prospector. Kirk obtained gold from the mine, but never paid his help and was eventually forced to shut down.

Kirk sold out to Craven, a butcher, of whom it was said that "He could cut meat but he couldn't mine gold." He was unsuccessful.

The Sawyer Mine has not been worked for considerable time and only shafts and surface cuts are now visible, and these are almost hidden by growth. This mine is situated on the old Milburn property, off the Persimmon Tree Road.

After Kirk had prospected the Huddleston Mine he sold out to Rhinesdale and Purcell. The shaft Kirk had sunk was just off of a vein and after a thaw a huge mass of dirt fell, exposing the vein. Examination showed free gold and a large quantity of it was removed. This mine was never worked by machinery; pan washing and a bucket for raising out the muck being the method employed.

Huddleston, the man from whom the mine took its present name, was a farmer of the vicinity. He was never successful in the operation of the mine and later sold out to another concern, whose success was not marked, either. The mine was finally abandoned.

Around the period of 1912 all the mines were bought up by large interests, thought to be the Dupont Corporation, and consolidated within a farm of 2200 acres. Over this area a man named Hassan operated a diamond drill, sometimes boring to depths of 1700 feet, seeking, it is said, to discover the mother vein. Numerous concrete bases where the drill was set up may be found today, mute evidence to this costly and intense search for gold. Hasson also dug many open trenches across fields. In this manner he would encounter veins on both sides of the trench which could be worked out. Hasson's corporation, however, did nothing beyond these prospecting operations, which are estimated to have cost $2,000,000.

The last operations of mines in the Great Falls area was around 1915, when the Ford and Maryland Mines were

worked. These mines are the most accessible of the lot and some of the buildings are in a fair state of preservation.

Various assays of ore have shown values as high as $522 per ton, but the average value was from $7 to $10 per ton.

Difficulties occurred in mining at Great Falls were of various kinds. One was that the gold was found in pockets and these pockets occurred from 15 to 20 feet apart and so much time and money was spent in unprofitable digging between pockets. Another is that area is old geologically and, unlike the west, the ore is covered with dirt. This same dirt gave the idea of false values, since assays were taken near the surface, and gold being practically indestructible, the dirt has the gold concentrated in it, giving an impression of richness beneath. This dirt also prevented complete study of underlying geological formations.

Mining engineers and geologists who have surveyed the area agree that the only possible profitable way of working the ground on a large scale is to assemble very large quantities of surface ore that has been uncovered by digging open cuts across the fields. A high assay value does not necessarily mean profit, because the ore may cost more to work than it pays. Indeed, there is on record a mine operating in the Black Hills region whose ore only assayed $2.62 per ton, but still operated at a profit since the working cost was only $1.68.

In concluding it may be said the gold mines of Great Falls produced no large quantities of gold compared to other states, since mint records show no listing of gold received from Maryland from the year 1869 to 1891, merely including gold received from there under the heading of "Other States Combined."

It is unlikely that the mines at Great Falls will ever be reopened, but hope is ever present in some breasts and the numerous prospect holes that were dug in the area during various periods of the "gold fever" show the hopes of the past and one resident's of the neighborhood statement that if he could get the six inches of water off the Maryland Mine he could obtain enough gold to satisfy him shows the hopes of the present. Another colored resident of the area told of a young man who visited him in the spring of 1931. This man claimed he had a machine to save 90% or more of the gold mined. The principle of the machine was not chemical. He hired the colored resident to dig him 15 sacks of ore, for which he paid him the sum of $2. per sack. This ore was shipped to Philadelphia, but no word has yet been received as to the success or failure, although the latter seems to be probable.

In all, a considerable sum of gold was removed, but a larger sum was invested in the mines of Great Falls. A few operators were successful, but these were the exception, for most were sadly disappointed.

## BIBLIOGRAPHY

Mr. Sterling W. Edwards, Teacher at
McKinley High School, Washington

Mr. Henderson, Geologist

Bridgekeeper at Great Falls, Maryland

"Uncle Bob", old colored resident who
worked in the mines

Trans. Amer. Inst. of Mining Engineers,
Vol. XVIII, 1890, p.396

American Journal of Science, Vol. 11, p. 126, 1850

American Journal of Science, Vol. XVII, p.202, 1830

Proc. Amer. Phil. Society, Vol. V., p. 85, 1854

Metallic Wealth of U. S. - J. D. Whitney, p. 124

American Journal of Mining, Vol. II, 1866, p.21

Land Records of Montgomery County,
Rockville Courthouse, Maryland

Engineering and Mining Journal
Vol. IX, p. 37, 1870
" XXIX, p. 48, 1880
" XLVIII, pp. 56, 235; 1889
" LI, p.175, 1891

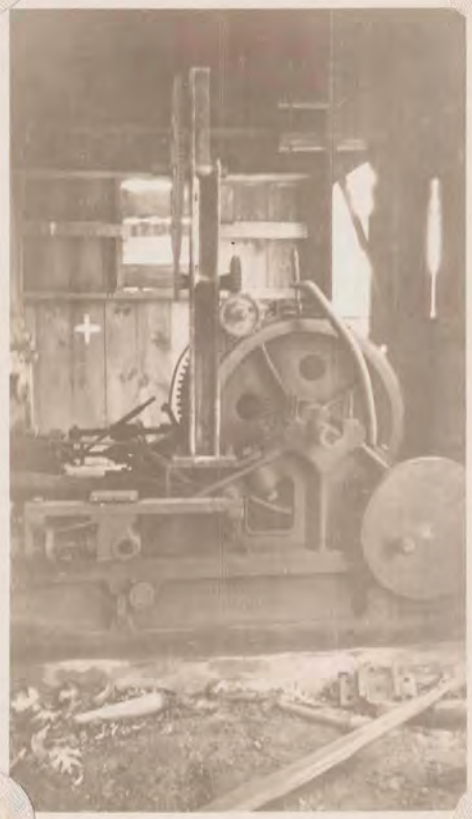
Mineral Resources of U. S., 1889-90- p.49

Articles in the Washington Sunday Star, year 1915

History of Maryland - Scharf

The old shaft at the Maryland Mine showing cave-in of a level directly behind shaft.

View of later shaft-Maryland Mine. Older shaft in background.



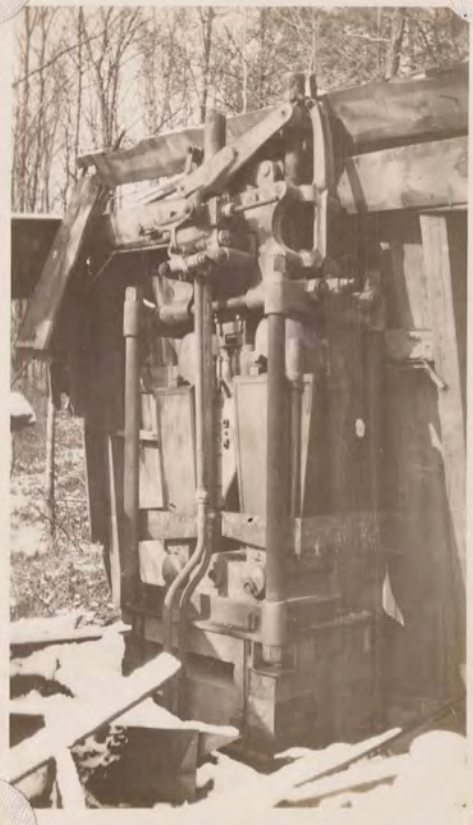
The hoist engine with drum at Maryland Mine.

View of shaft and toppled superstructure at Ford Mine with sheds containing machinery at right.

View of shaft looking downward at Ford Mine.

The old assay office of the Ford Mine.

Open cuts near the Montgomery Mine.



Stamp mill standing near Allerton-Ream property or Ford Mine.


Sandy landing
Potomac
Ford Mine
St Gabriels Church
Montgomery Mine
Sawyer Mine
Persimmon Tree Road
Great Falls
Great Falls Tavern Chs
LOCK 20
LOCK 19
LOCK 18
LOCK 17
LOCK 16
LOCK 15
Maryland Mine
Dickeys Road
Bear Island
Widewater
Cropley
Cupids Bower
Conduit Road
Sandy Landing
Elkins
Fairview
Peacock
Glendale
Prospect Hill
Carper School
Belleview
Spring Hill
Jackson
Hitaffer
Swinks Mill
Herzog Island
Scott Island
Stubblefield Falls
Difficult Run
Rock Run
Bullneck Run
Pond Run
MONTGOMERY CO
FAIRFAX CO
DRANESVILLE
POTOMAC
VIRGINIA
MARYLAND
CANAL
CHESAPEAKE AND OHIO CANAL (ABANDONED)
OLD GEORGETOWN ROAD
WASHINGTON AND
LEESBURG 20 MI.
39°00'
57'30"
N
Scale
2" = 1 mile