

FAINT TRAILS IN THE WASATCH

31. Silver Fork

There is no evidence that Silver Fork was used for a supply of timber during the logging era - that is, before the miners came into the Wasatch. Neither Mill D nor Mill F was close to Silver Fork and both had their own good supply of timber. The name, Silver Fork, is one that would have been used by miners, especially those who were looking for silver. Indeed, the very first claims filed for the upper reaches of Silver Fork, on 18 June and 6 July of 1870 were said to be in the "first south fork below mill known as Mill F," and "the first south fork below Mill F." If a name had been assigned to the fork before then it would surely have been used. But two additional claims filed on 6 July used the name Silver Fork, and the name was used continuously after that time.

On 17 August 1870 miners of the recently formed Big Cottonwood Mining District held a meeting at the Wellington mine at the head of Silver Fork. A committee of three miners was appointed to make a contract with some responsible person or persons to construct a wagon road from the flat immediately below the Wellington mine down to an intersection with the Big Cottonwood Toll Road. It was also resolved that the flat should be called Algiers. Where this name came from is not known, but in the preceding month there were two letters printed in the Salt Lake Tribune from an Alta correspondent using the pen name Algerian. The Algiers name was used only a short time before the flat became known as Rices Flat, named after Hugh L. Rice who was working several claims nearby. While Rice remained only through 1871, his name continued to be used for the flat through the 1890 decade.

While the names of the three miners appointed to the road committee were recorded in the minutes of the meeting, nothing further appeared in either the mining district records or the newspapers. But the road was built and by the end of the summer of 1871 ores were being brought down from mines at the head of Silver Fork to be processed in a newly built smelter at Silver Springs. The map in Figure 1 shows this road as a dark solid line and the modern road as a double dashed line. The segment from the end of the modern road up to the flat has become the hiking trail used today. But the lower half of the old road has a completely different alignment from the dirt road.

The usual route followed into Silver Fork today is the road from the west end of the Solitude parking lot. After it passes the last cabins and crosses an open flat, it enters the forest. At that point the old road can be seen coming over the flat from the northwest. It is little more than a trail today, much used by Silver Fork residents. If it is followed it will be seen to remain on the east side of the Silver Fork stream as it goes down the steep slopes toward the bottom of the canyon. The lower part of this segment has been destroyed by development and expansion of the Silver Fork community.

Heading in the other direction, into the woods, the old road veers off to the left and while the modern road crosses the stream, the original road remains on the east side. It is an open and obvious trail, also much used by Silver Fork residents, until it passes the Honeycomb Fork mining road, seen as a dashed line and labeled "Jeep Trail" on the map. At

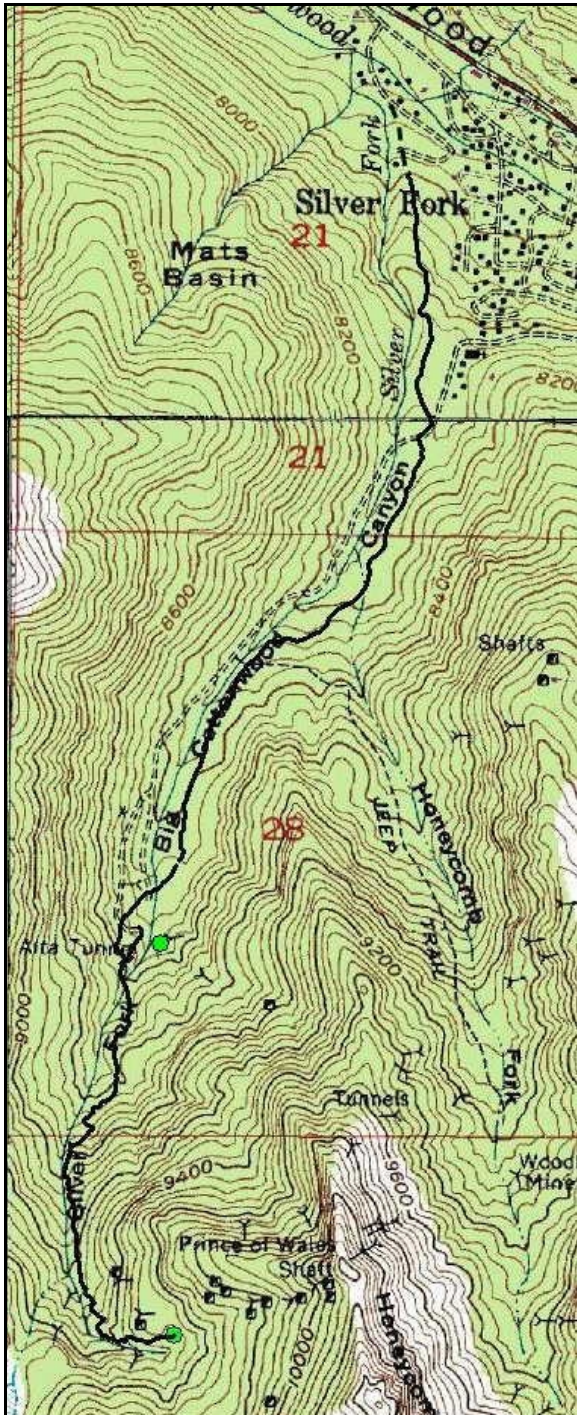


Fig. 1. This map, from the 1955 USGS Dromedary Peak quadrangle, shows the route of the original Silver Fork road running from the flat near the head of the fork down to the Big Cottonwood Toll Road at Silver Springs. The two dark circles show the position of the flat and the Alta tunnel.

that point a spur trail crosses the stream to meet the modern road. The old road, however, continued in the up canyon direction. Beyond this point it becomes an obstacle course of downed trees, but its route is fairly obvious until it reaches the open flat below the Alta

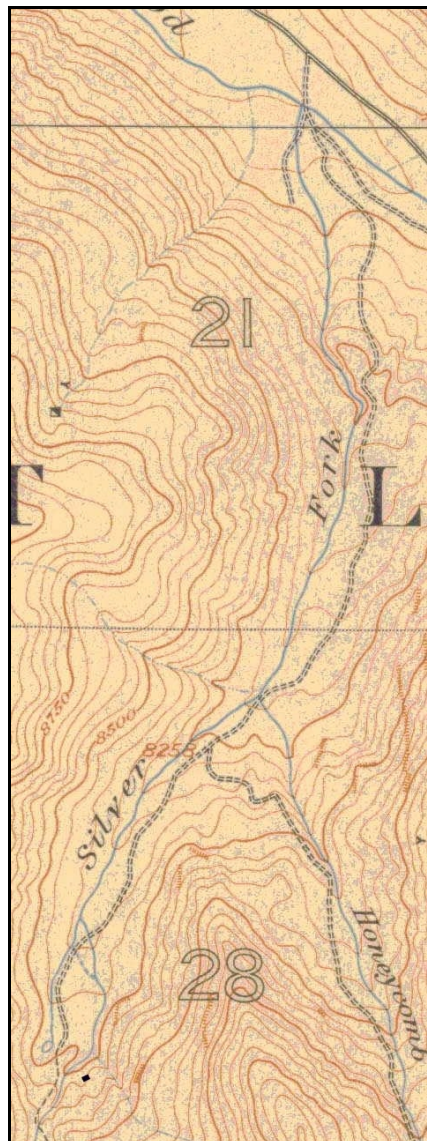


Fig. 3. This portion of the USGS 1903 Cottonwood Special map shows the original Silver Fork road. As a point of reference, the small black rectangle at the lower left is the location of the later Alta tunnel.

where a wooden trough used to hold water, presumably to allow the teamster's animals to refresh themselves. This artifact has all but rotted away.

From this point the hiking trail follows the original road. It has been modified several places, especially with the installation of large pipes to serve as culverts. One other thing to be noticed on the upper part of the old road, today's trail, is evidence of drag trails on one side or the other, especially at the steeper sections. They are the result of dragging rawhides or ore boats to bring ore down from the mines.



Fig. 2. The old Silver Fork road, now only a trail, comes up from Big Cottonwood creek on the east side of the Silver Fork creek to meet the modern road where it enters the forest above the last cabins.

At several places this upper section displays stone walls built to level the road. Also, while the route shown on the map is generally correct, the keen observer will notice evidence of a road off to one side or the other, usually on the lower side, between the road and the stream. Over the years this portion of the road has suffered a number of changes and indignities. When the Alta tunnel was begun the road was modified and slightly relocated to allow heavier vehicles to move up and down the canyon. Then in the past several decades it was used to bury water lines from the Alta tunnel to the Solitude resort.

When the old road reached the open flat it turned and went across the flat, crossing to the west side of the stream. At the upper end of the flat it went up a shallow gully, bearing to the left and becoming one with the present trail above

the end of the modern road. This portion of the old road is not evident except possibly in the shallow gully, but its alignment is shown very well in Figure 3, a portion of the Cottonwood Special map from 1903. Notice a stream shown on the left side of the road as it leaves the flat. This was from a spring that was at the bend in the modern road



Fig. 4. Rices Flat (Algiers) is at the bottom of this photograph with the Silver Fork trail climbing up from the left. Silver Fork is in the near background, while Mount Raymond and Gobblers Knob are on the skyline. (Wm. Nelsen photo)

FAINT TRAILS IN THE WASATCH

32. Honeycomb Fork Trail

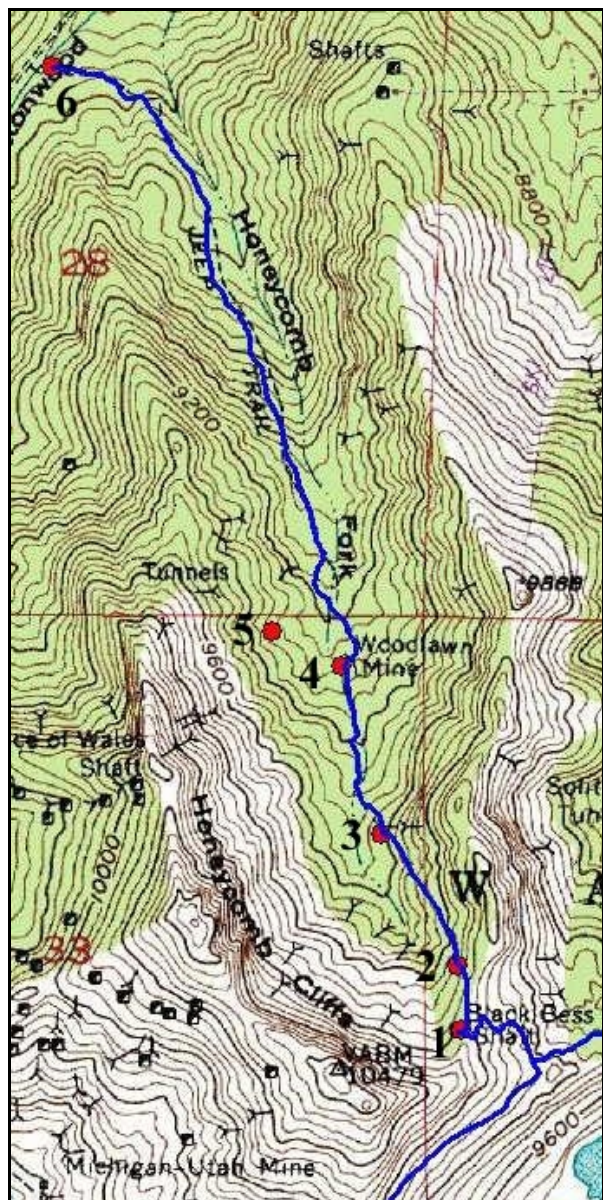


Fig. 1. Honeycomb Fork trail. The trail between Brighton and Twin Lakes Pass crosses the lower right of the map, with the Solitude ski area road going up to Honeycomb Pass (1). Other points of interest are: 2. Dugout cabin site, 3. Clark tunnel, 4. Woodlawn mine, 5. Annie tunnel, and 6. Intersection of Honeycomb Fork trail/road with the old Silver Fork road.

S. Deputy Surveyor who surveyed the Geneseo claim, located in the upper third of Honeycomb Fork, noted that access was by a pack trail from the claim to Grizzly Flat and a good wagon road thence to Alta City. It was not until 1877, in a survey of the Taylor claim located in the same vicinity as the Geneseo, that the surveyor stated there was a road from the mine through Big Cottonwood Canyon to Salt Lake City.

Honeycomb Pass suffered massive changes when the Solitude ski area constructed the upper terminal for the Summit ski lift in 1982. Also, at that time new roads were built and the canyon bottom was graded for ski trails, removing many traces of past mining activities. But some mine dumps, a few faint suggestions of old trails and much of the ledge carrying the Honeycomb Fork trail at the pass still remain. Directly below the pass, at the edge of a graded area, a cement foundation and grill, partially covered with boulders, can be seen. This is the remains of the Oregon shaft, dating back to August of 1873. It operated sporadically through the rest of the nineteenth

Honeycomb Fork could be considered a hidden canyon since its presence is not obvious to the traveler going up either Big or Little Cottonwood Canyon. The head of the fork lies over a high ridge northwest of the Twin Lakes, and the lower end joins Silver Fork a little over eight-tenths of a mile up the latter canyon from the Big Cottonwood creek. Honeycomb was not used as a timber source for the sawmills, and until the road was built up Silver Fork there was but little traffic that would have been treated with a view of this secluded canyon. It is likely the first activity in Honeycomb Fork came about as a result of mining claims filed in Grizzly Gulch. When prospectors staked a claim they did so that its length followed the lode; in Grizzly Gulch the lodes generally followed a northerly and southerly direction, so the claims did the same. With a reasonable length - the mining laws allowed 200 feet of length for each of the locators, plus another 200 feet for the discoverer - many of the Grizzly Gulch claims ran up over the ridge and into the adjacent drainage, which was Honeycomb Gulch. But when they followed their claims to the ridge they found themselves at the edge of a precipice, the top of the Honeycomb Cliffs. To reach the ends of their claims and to prospect new claims in or beyond the cliffs, an alternate means of access had to be developed. And therein rests the origin of the Honeycomb Fork trail.

The source of the Honeycomb name is unknown. By the time the first prospectors recorded claims in that locale the name was already accepted and in use. In 1870 there were at least twenty-six claims recorded in Honeycomb Fork and another sixteen in 1871, although few of them had names that would continue to be recognized in later years. Since most of them belonged to miners from Alta, access was by way of Grizzly Gulch and Twin Lakes Pass. Their original trail traversed the slope above the Twin Lakes, much as the Twin Lakes Pass to Brighton trail does today, but after a short distance began to climb to the pass into Honeycomb Fork. This trail could be seen in its entirety thirty or forty years ago, but today it is very faint; only the upper part can be followed. Also, there were branches that crossed the ridge higher above the pass to access claims under or in the Honeycomb Cliffs. At Honeycomb Pass there was a notch in the ridge that took the trail to a ledge above the Mill F South Fork drainage. After a short distance it went back to the Honeycomb Fork drainage and ultimately continued all the way to the Silver Fork road. However, it took a number of years before that length of trail was built. In 1873 the U.

century, then became the property of the Black Bess Mining Company in 1901 and assumed that name. At the end of 1908 it was taken over by the Utah Mines Coalition Company and thereafter was worked through the tunnel at Lake Solitude. It is said that the boiler that once resided at the Black Bess mine was discarded by pushing it down the open shaft.

Beyond the Black Bess, on the other side of the canyon, is a fairly large mine dump. This was the Bute mine, one of the very early mines in this fork that was operated extensively in the 1870s and early 1880s, as the size of the dump suggests. Beyond the Bute dump several smaller dumps of questionable identity can be seen at the base of the cliffs with a faint trail leading to them. It is likely that one or more of them belonged to the Voltaire mine, which was shipping its ores by horse trail about 1-1/2 miles to Alta as late as 1880.

Starting at Honeycomb Pass, the Honeycomb Fork trail is very prominent and easy to follow for about a tenth of a mile until it arrives at an open slope and seems to disappear. Directly below, at the lower end of the open area, is a small open pit, lined with stones, the remains of a dugout cabin that once served one of the many prospects in the area. Below the dugout is a road cut by the Solitude organization when they were developing the Honeycomb ski runs. The road follows the original trail, dropping on a steep traverse toward the bottom of the fork, arriving there at the site of another large mine dump. This was the Clark tunnel, one of the workings of the Woodlawn Copper Mining Company. It is about a third of a mile from the pass. The trail crosses the top of the dump, then continues down canyon, dropping to the creek level and crossing to the south side. The original trail stayed on that side of the creek the rest of the way down the canyon, but after the Woodlawn company started its Honeycomb tunnel, the trail was modified to cross the creek again and go down to the new workings. There it turns to cross above the tunnel's portal and go around the east side of the dump before dropping to the flat below. There is much to be said about the Woodlawn mine, but that will be covered in a future Faint Trails article.

Below the Woodlawn mine the Honeycomb Fork trail crosses the flat and stream to meet its original route. Here it becomes an obvious road, at one time much used to supply the mines and carry ores to market. While crossing the flat one might notice a large, light colored dump on the opposite side of the fork. This was from the Annie tunnel, a part of the Prince of Wales operations. It, too, made much use of the road, but that was long before the advent of the Woodlawn operations. Below the last stream crossing the road drops steeply through the forest below. It once had a paving of soil, giving it a relatively smooth surface. But all that has washed away over the years, leaving a very rough and rocky right of way. When the road reaches the lower end of the Honeycomb ski runs, there is a trail of modern vintage that traverses around the end of the ridge, going to the Solitude ski area. However, the old mining road stays to the left and continues down through the woods until it joins the old Silver Fork road, a distance of two and three-quarters miles from Honeycomb Pass.



Fig. 2. The Honeycomb Fork trail leaves Honeycomb Pass on a ledge above the Mill F South Fork drainage.

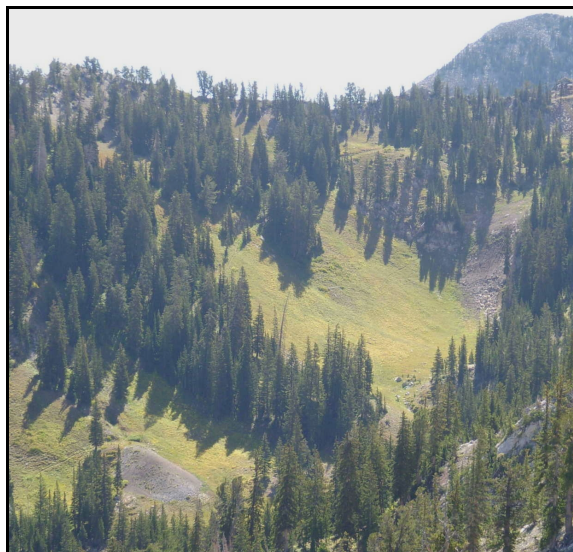


Fig. 3. Upper Honeycomb Fork as seen from the ridge on the south side. Mt. Millicent is at the upper right, with the Summit ski lift terminal in front of it. The Clark tunnel dump is at the lower left.



Fig. 3. View of the Woodlawn mine dump (upper right). The Honeycomb Fork trail crosses above the dump, goes around the far side, then cuts diagonally across the flat below. The Annie tunnel dump is at lower left.

FAINT TRAILS IN THE WASATCH

33. Silver Fork – Richmond & Teresa Mines

When the mining boom took off in 1869-70 the prospectors swarmed up Grizzly Gulch, then crossed the divide and entered the upper reaches of Silver Fork. The first claims filed over there were the Antelope and the Davenport in June of 1870. The following month brought a flood of claims that included the Teresa, the Wellington, and the Richmond. It was at the Wellington mine where the miner's meeting was held on 17 August and the decision was made to construct a road down Silver Fork to the Big Cottonwood toll road. The three men on the committee to contract for the road were Archibald Livingston, Thomas W. Bates and Jeremiah Richardson. Livingston was a teamster who was hauling much of the lumber and supplies for Mill F. While his name was on a number of claims during the 1870 year, most in the vicinity of Mill F, his interest probably had more to do with the road than the mines. Bates was a civil and mining engineer who would become heavily involved in mines at Keslers Peak and would give his name to the tiny, short-lived community of Batesville near the mouth of the South Fork. Richardson was a miner who had more interest in the Silver Fork area than his two partners on the road committee. He was one of the four locators of the Teresa Lode, sharing that honor with Wellington Sprouse who had given his name to the Wellington mine. Also, it is believed Richardson was a brother-in-law of Sprouse, since his wife was the former Theresa Sprouse who, in turn, gave her name to the newly located Teresa Lode.

The Richmond claim was almost at the same place as the Teresa, their discovery points being only about one hundred feet apart. Of course this caused a great deal of litigation over the years that followed, but in the first few years of the two mines' existence this did not appear to be much of a problem. They were located on the steep south slope of the Silver Fork east bowl, not far below the crest of the divide between Big and Little Cottonwood Canyons. Their first access was by way of a trail that came down from the pass between Grizzly Gulch and Silver Fork, but they quickly received access via a road that followed a circular path around the bowl to meet the Silver Fork road at Rices Flat. This road became very important due to events that transpired during the late summer of 1871 when a group of men from Illinois formed the Hawkeye Mining and Smelting Company of Utah and began building a smelter at the small community of Silver Springs. To ensure a supply of ore the company took a three-month option and bond on the Richmond mine and began working it. Almost immediately

two other Chicago men bought the option from the Hawkeye company and the mine from the former owners. There was a bit of collusion involved here because the president of the company, whose signature appeared on the deed, was reported to have been sick in bed at the time, and almost immediately thereafter the secretary of the company resigned and left the territory. To correct this apparent complicity, the new owners of the mine sold half of it back to the Hawkeye company and took a mortgage on the property to cover the purchase price.

Meanwhile the Hawkeye smelter was completed in the incredibly short time of less than two months and began operating using ore brought down on the new road. While it was successful in producing bullion, its owner was not quite as successful in paying its suppliers and workers. Law suits were filed to recover moneys due, but unpaid. They came from business men in the city who supplied materials and tools, the Mill F operator who supplied lumber, Big Cottonwood Canyon miners, businessmen and residents who provided land, charcoal, ore, labor and even cash advances to the workers. There were so many that the court finally combined them into one great lien upon the company. Since the company had no assets to satisfy the claims, the U.S. Marshal was ordered to sell the property at public auction, which he did, selling the Richmond mine to a Salt Lake City merchant who was one of the injured parties, and the smelter, tools, supplies and facilities to various miners and residents. Of course this put an end to the Hawkeye company's short

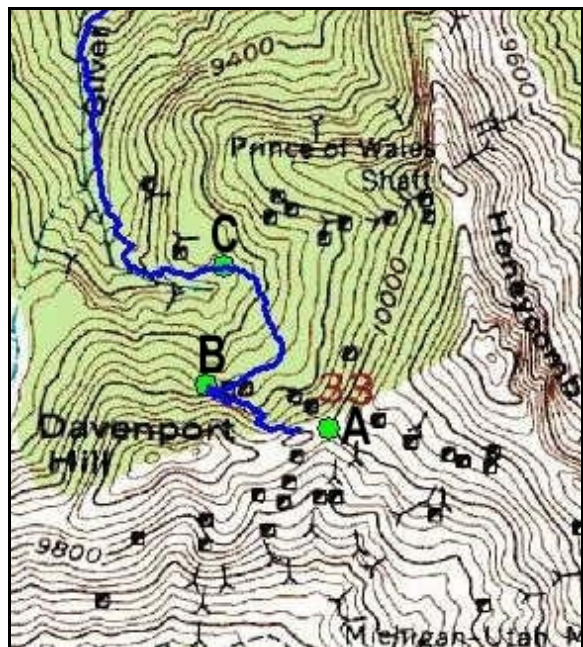


Fig. 1. This map shows the east bowl of Silver Fork with the Silver Fork road/trail entering from the top. Point C is the location of Rices Flat, or Algiers. The Teresa mine is at point B. As a point of reference, A is U. S. Mineral Monument No.1, located in the pass between Grizzly Gulch and Silver Fork. The Teresa trail runs between A and B, while the Teresa road runs from B to C, joining the Silver Fork road at the flat.

lived operations, but did not end the troubles it had caused. The two men from Chicago held possession of the Richmond mine and refused to give it up to the new owner. They also sold the mortgage to a Salt Lake City bank, who in turn sued the now defunct Hawkeye company for its payment. Again the mine went on the auction block and was sold to another Salt Lake City banker who became a third party to claimed the right to the property.

Meanwhile the Walker Brothers became involved in the Teresa mine. Astute businessmen as they were, they tried to resolve the apparent conflict caused by the close proximity of the Richmond and Teresa mines, both very obviously working the same ore body. This caused much legal maneuvering to determine who actually owned the vein common to both mines. What it did accomplish was to combine

forces of the three presumed owners of the Richmond. It was a matter of ‘the enemy of my enemy is my friend.’ The case finally came down to the dates of the original claim notices posted at the discovery sites. The Teresa notice was posted a few days before the Richmond notice, so the Teresa was the senior claim. In an attempt to get all parties together peacefully, the Walkers drafted an agreement that gave each party a share in a newly formed Richmond and Teresa Mining Company, which took over both mines. Thereafter the mines entered an era of peaceful coexistence and were worked both by the new company and by leasers in the years that followed.

The Teresa trail still exists. It starts a short distance, about four-tenths of a mile, west from the pass between Grizzly Gulch and Silver Fork, goes down a steep traverse and makes one short switchback before reaching the mine. It can be followed today, but it is becoming very faint. At one place it crosses a gully that has become deeply eroded, introducing a challenging obstacle to easy passage. The foot of the trail, at the mine, has been cut



Fig. 3. A hiker descends the road traversing the Silver Fork bowl from the Teresa mine to Rices Flat.



Fig. 2. This is a view toward the southwest, looking across the Silver Fork bowl from the Prince of Wales mine. The Teresa mine dump is the level area right of center with the trail going up to the left. The road leaves the mine dump to the left, then drops into the trees. The Richmond mine cannot be seen, it being below the Teresa, hidden by the trees.

away by twentieth century miners who worked the dump, thereby obliterating most, if not all of the artifacts that might have remained. This trail was the place where one of the locators of the Teresa mine, J. C. Smith, lost his life. In December of 1871 he was working at the mine when he decided to go to Alta to get more candles. While climbing up this trail he triggered an avalanche that carried him some four hundred feet down the slope and buried him.

The road from the mine to Rices Flat also can be followed, although there are portions that are quite faint. This road was used by leasers in the middle of the last century which probably accounts for its survival to this date.

FAINT TRAILS IN THE WASATCH

34. Prince of Wales Mine - Part I

Because it is a popular hiking destination the Prince of Wales mine is known to most Wasatch mountain hikers. The boiler, combined with the winch and its coil of rusting cable as well as the menacing vertical shaft, now guarded by a steel framework, give this site a special appeal. However, these mining artifacts scarcely suggest the magnitude of subsurface workings, the wide expanse of past activities above the surface, or the tremendous wealth taken out of the mine through this shaft. Curiously, this historical detritus does not rest at the original location of the Prince of Wales mine, which was some eighty feet down the slope toward the west. The deep shaft seen today is the site of the original Antelope discovery. This was one of the first claims to be filed at the head of Silver Fork in June of 1870. Fifteen men took part in this claim, which gave it considerable length. It extended northeast over the top of the ridge and down into Honeycomb Fork for several hundred feet, and in the other direction ran all the way down to the bottom of the east bowl of Silver Fork. The thing that excited these men was a rather



Fig. 1. Boiler and winch at the Prince of Wales mine in Silver Fork. The framework in the background is a protective cover over the inclined shaft that is at least 700 feet deep. (Wm. Nelsen photo)

obvious fissure that was surrounded by considerable float; that is, ore that had found its way to the surface. It excited other prospectors as well, and the Antelope was quickly followed by the Wellington, Congress, Prince of Wales, Wandering Boy and Highland Chief Lodes, in that order. All were on the same fissure and overlapped one another. The Wandering Boy discovery was less than a hundred feet from the Antelope; it is the shaft seen today nestled against the cliff southeast of the boiler. Also, the Prince of Wales claim coincided with the upper part of the Antelope claim. Which one was discovered first is a matter of conjecture; while the Prince of Wales claim was recorded nearly two months after the Antelope, its record included a statement that it was discovered almost a year earlier, in August of 1869. The situation was ripe for legal problems. But initially their close proximity seemed to be of little concern. Most of the miners went to work on their discovery shafts and inclines, or went down the slope a short distance to start tunnels into their claims. Considerable ore was removed that first year.

Access to the claims was by way of trails from a road in Grizzly Gulch. Figure 2 shows these trails from the pass between Silver Fork and Grizzly Gulch to the various mines superimposed upon an aerial photograph. They later became roads and remain as such today. In the figure the dot labeled number 1 is the location of the Prince of Wales boiler,

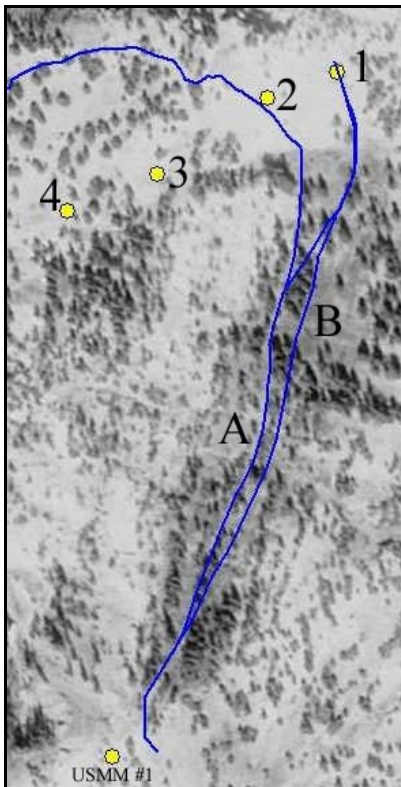


Fig. 2. Roads to the Prince of Wales shaft and tunnel. The dot in the lower left is the location of Mineral Monument No. 1, in the pass between Grizzly Gulch and Silver Fork. The other dots are explained in the text.



Fig. 3. Roads and location points plotted on a USGS topo map provide additional position reference to the image in Figure 2.



Fig. 4. Junction of the Prince of Wales roads, the one on the right going up to the Prince of Wales mine as we know it today, the one on the left going down past the Prince of Wales tunnel and on down into the Silver Fork bowl.

most shares in the latter claim a few weeks later.

Meanwhile similar activity was going on at the adjacent mines, especially at the Highland Chief, immediately below the Prince of Wales. During the winter, while the Walker Brothers were gaining control of the Antelope and Prince of Wales, three men from New York and Boston were doing the same with the Highland Chief.

When winter lost its grip the following spring, work began in earnest. An ore house was built at the portal of the Prince of Wales tunnel and a boarding house was placed a short distance to the northwest where it was protected from avalanches. Down at the Highland Chief they built a boarding house and a building over the discovery shaft. Both groups had their claims surveyed for patent and received patents in 1872. But their two patents overlapped and both companies were running drifts into that area. The Highland Chief owners filed suit against the Walker Brothers to gain control of the disputed region. It was a litigation that grew bitter, involving suits and countersuits, both in Salt Lake City and Washington, D.C., and dragged on for two years with the final result being the withdrawal of a portion of the Highland Chief patent. The battle might have gone on longer, but at that point the Walkers negotiated a compromise agreement wherein the Highland Chief management transferred its properties to the newly formed Antelope and Prince of Wales Mining Company in exchange for a share in that enterprise. The East Coast group had also gained control of the Wellington mine farther down the slope and started the Boston Tunnel below the Wellington. Both were included in the settlement, giving the Walker Brothers control of all the major workings on the fissure. The development of the Antelope and Prince of Wales mines both before and after the important 1875 event will be discussed in subsequent episodes in this series.

essentially the same as the Antelope discovery and the Prince of Wales shaft. Number 2 is the location of the Prince of Wales tunnel, its discovery shaft having been on the slope midway between points 1 and 2. Number 3 is the Highland Chief discovery shaft location, while Number 4 is the Highland Chief tunnel site. The track labeled A was the primary route of access; it split with one branch going up to the Antelope, the other going over to the Prince of Wales tunnel and continuing in a westerly direction, which will be discussed in the next Faint Trails episode. Track B was the route of the Prince of Wales tramway which was not built until 1875. Figure 3 shows the same tracks and location points plotted on a segment of the USGS map, providing some location context for the aerial photo.

The value of these claims did not go unnoticed. In October of 1870 the Walker Brothers of Salt Lake City bought a controlling interest in the Prince of Wales mine. Then, recognizing that it and the Antelope covered the same ground, they purchased



Fig. 5. Collapsed Prince of Wales tunnel, located along the lower road below the Prince of Wales boiler site. What appears as a stump or remnants of a tree at lower center is actually cribbing, a retaining wall that held back soil at the portal of the tunnel. The stone wall at the top of the photo supports the flat at the boiler and winch. The discovery incline, halfway up the slope, is no longer visible.

FAINT TRAILS IN THE WASATCH

35. Prince of Wales Mine - Part II

When the Walker Brothers took control of the Antelope and Prince of Wales mines late in 1870, they consolidated them into a single operation to be known, logically, as the Antelope and Prince of Wales lode. While the mine was generally recognized as belonging to the Walker Brothers, it was managed by Joseph Robinson Walker, the second oldest of the four brothers, also known as Rob or J. R., and all activities were under his control. To supervise the work he employed Thomas E. Owen, the man who had made the original Prince of Wales discovery and had been working the claim during the 1870 year. Owen remained in charge at least a year, perhaps a year and a half, during which time the Prince of Wales tunnel was extended and the Antelope shaft, which became the company's main shaft, was driven to join the two. The tunnel became the main access to the mine for several years and was later known as Antelope Tunnel No.1.

Late in 1872 or early 1873 the mine received a new superintendent: Edward J. Hall, a short, red-haired immigrant from Cornwall, England, who had come to Utah after working in iron mines in Pennsylvania and copper mines near Lake Superior. He pushed the Prince of Wales tunnel, following ore bodies well beyond the main shaft, until it broke out on the slopes high above Honeycomb Fork. He also drove the shaft deeper and contracted for a new tunnel to intersect the shaft at greater depth, a tunnel germane to this discussion. He called it the Antelope tunnel, though it later was called Antelope No.2. It is not known if he or his boss assigned the name, but this is another example of the Antelope name being used in a number of places in the mine over the years. Names of other parts of the mine's workings came from J. R. Walker's family, such as the Mary Ann winze named after his wife, the Sharp winze named for his older brother, and the Annie tunnel named after his daughter. Hall's new tunnel was driven from the slopes high above Silver Fork, northwest of the main shaft, a location difficult of access. To this end a road was built running from the boarding house, just north of the Prince of Wales tunnel, running around the end of the ridge on the north side of the Silver Fork east bowl, then traversing the steep slopes on the north side of the ridge. It is shown in Figure 3, labeled A. Part of this road may have built earlier because near the end of the ridge another road, labeled B in the figure, runs down the ridge a short distance, then turns to make a sweeping traverse of the bowl to meet the Richmond & Teresa road, described in a recent Faint Trails article, thence to Rices Flat (Algiers) and on down Silver Fork. This provided a road from the Prince of Wales tunnel all the way down to Big Cottonwood Canyon.

In January 1874, before the Antelope tunnel broke through at the bottom of the main shaft, E. J. Hall was down in the shaft and claimed he could hear the tunnel contractors talking. According to the sound, he estimated they could not have been more than six feet from the shaft. When the tunnel was open to the shaft it gave another way to get ore out of the mine and to the market. The ore produced by the mine had been hoisted to the top of the main shaft or taken out the Prince of Wales tunnel, then packed out by way of the trails to Grizzly Gulch and down Little Cottonwood Canyon. Those trails crossed the steep slopes between the mine and Grizzly Gulch, slopes that in winter were constantly subjected to snow avalanches. About the time the Antelope tunnel was completed a miner was killed in an avalanche as he was going to the Wellington mine, directly below the Prince of Wales. Another avalanche came down over the Prince of Wales mine and swept Hall's brother, William, down the slopes nearly to the bottom of the bowl. He survived, suffering only bruises, but the message was clear. Hall considered it impractical to continue

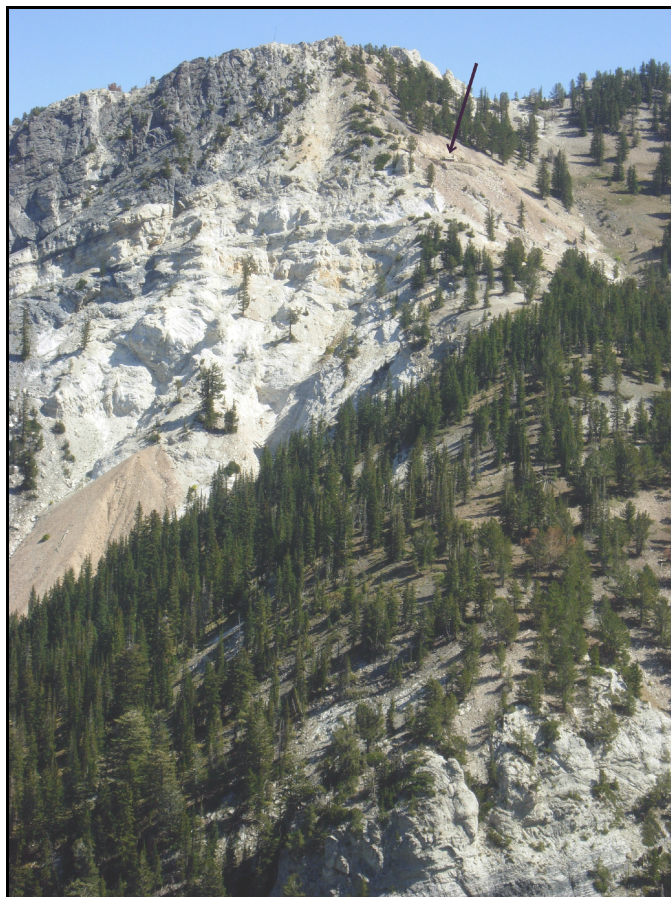


Fig. 1. The Antelope tunnel is at the top of the large dump at the left side of the picture. The arrow points to the boiler at the Prince of Wales shaft near the top of the open slope on the right side of the ridge running up to the top of the Honeycomb Cliffs. (Wm. Nelsen photo)

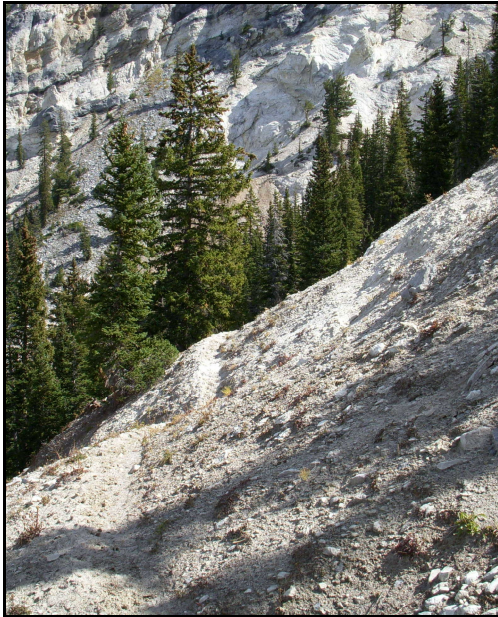


Fig. 2. The Antelope trail traverses the slope in the foreground, heading for the tunnel whose dump can be seen through the trees at the center.

disappears Was this the other end of the road coming down from the Antelope tunnel? Possibly. Twentieth century leasers may have been trying to get a more direct access to Silver Fork and the Alta Tunnel. The rugged terrain between the two existing roads may have discouraged them, or they might have completed their road and Nature has removed it from our sight. Since no documentation has been found to explain the intent or route of this road, it remains one of the unanswered mysteries of the Wasatch.

The map in figure 3 deserves a few more comments. The dark dot at the bottom of the map is the location of the U. S. Mineral Monument No.1 in the pass between Silver Fork and Grizzly Gulch. The trail going off to the left from the pass is the Teresa mine trail, previously described, and the roads going up to the right go to the Prince of Wales shaft and tunnel. The dark dot numbered 7 is the location of the Antelope tunnel. On the map it appears the road does not reach the mine, but it once did cross the drainage and extend up to the portal of the tunnel. The dark dots between numbers 1 and 6 are locations of significant workings on the Prince of Wales fissure. They are, from right to left, the Prince of Wales shaft, Prince of Wales tunnel, Highland Chief shaft, Highland Chief tunnel, Wellington mine, and Boston tunnel. Notice how they fall in a line, tracing the fissure that excited the first miners and prospectors in the Silver Fork bowl. During the winter of 1873-74, at the time the Antelope tunnel was driven and began to be used, the lower four workings, from Highland Chief shaft to the Boston tunnel were not yet part of the Antelope and Prince of Wales group. They are the subject of the next Faint Trails episode. Number 8 on the map is the location of the Alta tunnel in Silver Fork, provided for reference.

shipping ore out the same way. For the rest of the winter it was taken out the new Antelope tunnel and down Silver Fork to Big Cottonwood Canyon, and then to market.

The road that went around the end of the ridge and over to the Antelope tunnel can be followed today, but erosion on the steep slopes has worn it down until it is barely a trail and is almost indistinct at spots. But it was a road in the 1870s, and again in the twentieth century when leasers rebuilt it. In fact, the latter day miners built an additional road that goes down a descending traverse in a northwesterly direction from the Antelope tunnel. This one is labeled C on the map. Before reaching precipitous slopes it switches back toward the northeast and follows another descending traverse until it arrives at the drainage that starts up at the tunnel. It crosses the drainage and heads north through the forest. Today, this road, albeit faint, can be followed without too much difficulty, but as it goes through the forest north of the drainage it grows increasingly faint until it disappears altogether. Nothing has been found to explain the purpose of this road, but it is believed it was to provide an alternate route into Silver Fork. On the old Silver Fork road, now the Silver Fork trail, about 0.18 miles above the Alta tunnel, numbered 8 on the map, a very faint road takes off toward the northeast. It is labeled D on the map. After a tenth of a mile it, too,

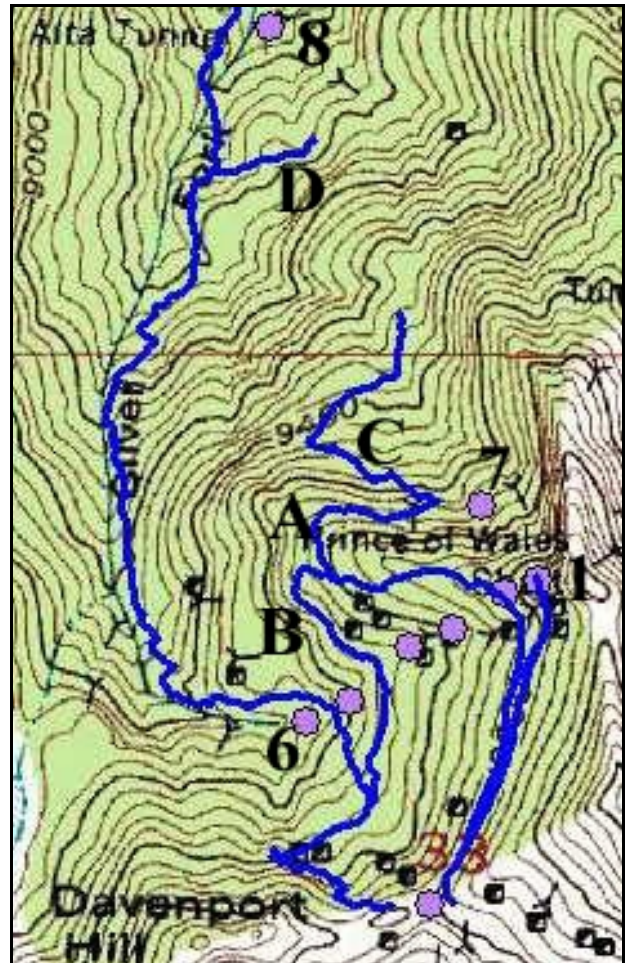


Fig. 3. Roads and trails in Silver Fork supporting the operations of the Antelope and Prince of Wales mine. The legends are explained in the accompanying text.

FAINT TRAILS IN THE WASATCH

36. Prince of Wales Mine - Part III

On the first of April, 1875, the Commissioner of the General Land Office in Washington, D.C., issued his decision to cancel as much of the Highland Chief patent as conflicted with the patents previously issued to the Prince of Wales and the Wandering Boy. While this left the owners of the Highland Chief with possession of a portion of their claim, it was nevertheless a devastating defeat following two years of bitter litigation and paved the way for the compromise that would give the Walker Brothers control of the Highland Chief and Wellington lodes, as well as the Boston Tunnel. It set into motion the expansion plans that must have been made in anticipation of this event and made the 1875 year one of great changes in Silver Fork. It actually started the year before when they built a road from the City Rocks mine in Grizzly Gulch, where the road from Alta ended, up to the pass into Silver Fork, then followed the former pack animal trail to the Prince of Wales mine. This is essentially the road that can be followed today, a vast improvement over previous access via the Davenport trail, a steep pack animal trail that climbed from the west end of Grizzly Flat up to the pass into Silver Fork. The road provided access to haul the heavy equipment and materials for the construction that was to take place.

The flat at the main shaft was likely created during the several previous years; it included the construction of a high stone retaining wall that is still evident today, and excavation into the hillside above. This was the scene of much of the construction activity during the summer of 1875. It was reported 160 to 180 men were employed in the mine and on the surface. By the end of the season a remarkable and extensive mining installation was in place. It included a large structure at the main shaft, twenty feet by fifty feet in size and two stories high, built into the hill and well anchored to prevent damage from snow avalanches. This was an effective precaution; two years later an avalanche came down over the building, causing no damage other than carrying away the smokestack. The upper floor provided sleeping compartments and storage space. The first floor housed the newly acquired boiler and a thirty horsepower steam engine driving the hoist. The headframe over the shaft was completely enclosed, allowing operations to continue throughout the winter. A rail tramway about one-third mile long was built along a contour line between the mine and the pass into Grizzly Gulch. It was completely enclosed in snowsheds, again to allow operations throughout the winter months. Once this installation was in operation, all ore was shipped by way of the tramway to the pass, then by the road down into Alta and the horse railway down Little Cottonwood Canyon.

A boiler is of little use without water, so a spring was developed in upper Grizzly Gulch, a short distance below Twin Lakes Pass. Another boiler and a steam engine driven pump was installed to pump water through a new pipeline running about a mile from the pump to the mine. There must have been a storage tank for the water at the mine, probably inside the new building to keep the water from freezing, but there was no mention of one in the various reports and descriptions of the new installation.

Down in the Silver Fork bowl, below the main shaft, was the Highland Chief mine and below it, the Wellington tunnel, both now a part of the Antelope and Prince of Wales company's operations. The Highland Chief tunnel was at almost the same elevation as the Antelope tunnel that had been driven early in 1874, and



Fig. 1. View looking northeast in the Silver Fork bowl. Points of interest are 1) Prince of Wales main shaft, 2) Prince of Wales tunnel, also variously known as Antelope Tunnel No.1, 3) Highland Chief discovery shaft, 4) Highland Chief tunnel, 5) Wellington tunnel, 6) Boston Tunnel. All except the Highland Chief discovery shaft were used in the Antelope and Prince of Wales operations.



Fig. 2. Boiler and compressor at the Wellington tunnel. The tunnel, in the background behind the boiler, has suffered considerable collapse over the years.

would soon be extended to meet it at the main shaft. Inside the Highland Chief tunnel was a winze that connected it with the Wellington tunnel. This latter tunnel, being about 450 feet lower than the new works at the collar of the main shaft, was seen as an excellent access to the workings at depth, so it was extended to intersect the shaft. Accordingly, another boiler and a 20 horsepower steam engine driving a Bowers air compressor were installed at the tunnel's portal and the water line was extended down to it. The air was used for air-driven drills and ventilation, as well as to drive a 15 horsepower air-driven hoist at a winze well inside the mine. This tunnel was worked and extended until it intersected the main shaft and was continued until it emerged in Honeycomb Fork. By the end of the decade it was used as the mine's main tunnel. It is believed that this tunnel, like the Antelope Tunnel in Silver Fork and several others in Honeycomb Fork, was used primarily to remove waste material, while ore was hoisted up the main shaft

for shipment to the smelters. The amount of waste hauled out through the Wellington Tunnel is suggested by the size of its dump.

The Boston Tunnel, below the Wellington, was over 400 feet long when it fell into the hands of the Antelope and Prince of Wales company. While it had subterranean connections with the Wellington, there is no indication that it became a significant part of the overall operations in Silver Fork. It was worked late in 1875, with its ore being shipped down to Big Cottonwood Canyon.

Early in 1875, after superintending the Prince of Wales operations for several years and making preparations for the extensive construction project about to take place, Edward J. Hall was compelled for health reasons to suspend his work at the mine. His brother William took his place until he was able to return. In the few years that followed Edward held leases in the Richmond and Teresa mine, another Walker Brothers enterprise near the Prince of Wales, and the Alpha mine in Peruvian Gulch in Little Cottonwood Canyon. But he never returned to his former position at the Prince of Wales. On Sunday, 8 October 1881, Edward Hall died of consumption, a disease not uncommon among miners. He was 34 years of age.

William E. Hall remained as superintendent into the 1880 decade and ran the mine with great success, causing its expansion in many directions and levels. One of the things he introduced was what he called the tribute system, where he would assign his best miners to a section of the mine and pay them forty to fifty per cent of the value of the ore they produced. This worked very well for the miners because they could earn considerably more than the fixed daily pay rate. And with that incentive, the company enjoyed greater production. During the latter part of the 1870 decade, when more than a hundred miners were at work at the mine, it was said that at least half of them were working on the tribute system.

It was a small step from the tribute system to a full blown leasing arrangement, a step that was taken during the 1880s. While the Antelope and Prince of Wales was a rich and profitable mine, it was but a small part of the Walker Brothers' overall mining interests. When they became involved in Montana silver mines in the late 1870s, they poured all their efforts into developments there, even to the extent of dismantling their mill in Ophir and moving it north to complement new equipment being installed there. William Hall went north too, becoming superintendent of the Walker's Alice mine near Butte. Thereafter Prince of Wales was worked almost exclusively by leasers. And leasers tended to leave little in the way of documentation that would allow a historian, working after the passage of many years, to use as source material. Hence, little is known about later activities at the mine. However, the Antelope and Prince of Wales company was not much better; it was a closed corporation, owned solely by the Walker family. It gave few press releases and did not appear to welcome visitors. Only on a very few occasions were correspondents invited to visit the mine and tour the surface and subsurface workings. Any documentation created by the company, if it survives, has not come to light.

Leasers may have used the facilities at the main shaft, but that would have ended in 1914 when a snowslide destroyed the surface workings. A miner who was active at Alta during the 1930 decade remembered visiting the Prince of Wales mine where he saw the boiler and hoist buried in the wreckage of the buildings. Leasers continued working the mine dumps and the various tunnels with small shipments of ore reported as late as 1938.

FAINT TRAILS IN THE WASATCH

37. Prince of Wales Mine - Part IV - Honeycomb Fork Operations

Although the Prince of Wales and Antelope claims both extended over the ridge into Honeycomb Fork, no activity took place over there until, probably, early in 1873 when Superintendent Edward J. Hall pushed the Prince of Wales tunnel past the main shaft and, following the ore body, broke out in Honeycomb Fork. Imagine the surprise of the miners when, returning to the face of the tunnel after the smoke from the last round of shots cleared, they found themselves staring out into daylight. But the opening was high on the cliffs, at a place much more accessible through the tunnel than from Honeycomb Fork. Recognizing that future workings would extend in that direction at greater depth, Hall went over to Honeycomb Fork and located a site for a tunnel that could be worked from that side. In April of 1874 he filed a location notice with the recorder of the Big Cottonwood Mining District, something not always done for tunnels, listing both his and J.R. Walker's names. While in the planning stages Hall called it the Antelope Tunnel East, but it was recorded as the Annie Tunnel, named after Walker's thirteen year old daughter. The elevation of the tunnel site, some seven hundred and fifty feet lower than the collar of the Prince of Wales main shaft, indicates that the management had every intention of carrying their operations to great depth. A cabin was built at the portal and a number of miners were hired to drive the tunnel. They worked throughout that year, but in January of 1875 disaster struck when an avalanche came down the slopes and destroyed the cabin, killing the four miners who were inside. Two others working in the tunnel were unhurt; after they dug their way out and discovered what had happened, they made their way down to Silver Springs to report the tragedy. A rescue effort recovered the bodies, which were taken



Fig. 1. The Annie tunnel dump in Honeycomb Fork as seen from the Woodlawn mine. The road to the top of the dump goes up around the right side. The Antelope No. 3 dump is above the Annie, and another dump, from the Number Four tunnel, can be seen through the trees at the far right.



Fig. 2. Remains of a two-room log cabin at the Number Four tunnel. The stone wall in the background is part of the cut leading to the tunnel.

to the city for burial. Undaunted, the company continued working the tunnel, which eventually extended under the company's earlier workings.

The Annie tunnel was not the only Prince of Wales venture in Honeycomb Fork. The slopes and cliffs above are pockmarked with workings, some of them connecting with the main shaft on the other side of the ridge. The accompanying map, figure 3, shows a few of them and some of the interconnecting trails. The Honeycomb Fork road runs from the upper left, where it leaves Silver Fork, to the lower right. When traveling up the fork the road to the Annie tunnel can be seen going off toward the west a short distance below the stream crossing, shortly before the Honeycomb road leaves the forest. The Annie road climbs up the side of the dump to the tunnel level. From this point a good trail, probably once a road, heads into the woods toward the north, then makes an abrupt turn and goes up the slope. As it climbs around the side of another mine dump, numbered 2 on the map, a short spur leads to the top of the dump where the remains of a

two-room log cabin is found. Actually, it probably was originally a single cabin, with a second cabin built next to it at a later date, the two cabins sharing a common wall. On the far side of the cabins a cut, supported by stone walls, leads to the collapsed tunnel, known within the Prince of Wales organization as the Number Four tunnel. The size of the dump suggests that considerable work has taken place in early days, and in more recent years leasers worked the waste rock, as testified to by the remains of concentrating equipment at the base of the dump. All this suggests the mine had a yield of considerable value in its day.

From this point a very faint trail heads southwest across the steep slopes to the Antelope No. 3 tunnel, identified by a twentieth century miner who presumably had access to some of the original Prince of Wales documentation. The tunnel went through to the main shaft and was a significant working in its day as can be seen by the amount of waste rock on the slopes below. It is location number 3 on the map and can be seen near the top of the photograph in figure 1. There are suggestions of a trail continuing in a southerly direction across the steep slopes below the Honeycomb cliffs. They may have provided access to the numerous workings that were found in that direction, but it is unlikely they were ever used to move equipment or ore. All the significant workings were connected with the main shaft. Two of them are shown as numbers 5 and 6 on the map. The upper one, number 6, is the continuation of the Prince of Wales tunnel where it broke out on the cliffs as described above. The lower one, number 5, was identified as the Honeycomb Tunnel by the twentieth century miner mentioned earlier. It, too, ran in to the main shaft and provided a convenient place to dump waste rock, which today is strewn all the way down the slope to the canyon bottom.

Returning to the Number Four tunnel, the first trail continues up the slope and goes all the way to the top of the ridge, passing the remains of a stone cabin on the way. An unimpressive mine working known as the Cooper mine, number 4 on the map, is found up there. It must have had some value lest the trails leading to it would never have been built, but it was not significant enough to leave much in the way of artifacts. It was not a part of the Prince of Wales operations. What is impressive up there is the great view that is offered at the crest of the ridge,

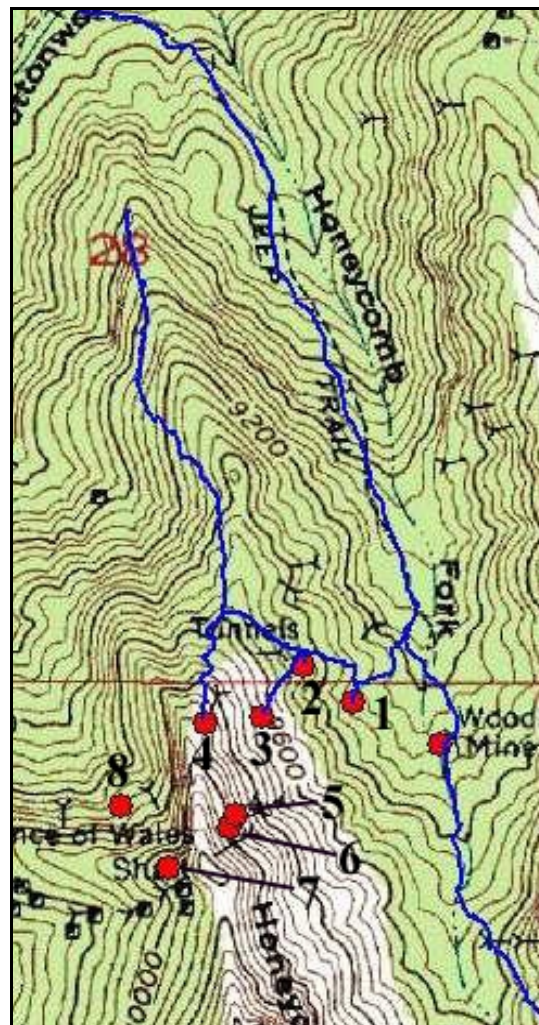


Fig. 3. Trails and a few of the mine workings in Honeycomb Fork. The Honeycomb Fork trail runs diagonally from the lower right to the top of the map. Points of interest are: 1. Annie tunnel, 2. Number Four tunnel, 3. Antelope 3 tunnel, 4. Cooper mine, 5. Honeycomb tunnel, 6. 1873 extension of Prince of Wales tunnel, 7. Prince of Wales main shaft, and 8. Antelope tunnel in Silver Fork, described in Faint Trails article 35, Prince of Wales, Part II.

only a few feet above the end of the trail. Below to the left one can see the Antelope tunnel in Silver Fork, the one that was completed in 1874 under superintendent Edward Hall, indicated as number 8 on the map.

Returning down the trail a junction will be found where the ascending trail mounted the ridge. The other branch continues down along the west side of the ridge. This trail alternates between being very good and very poor, the latter usually due to downfall or trees growing in the trail. But with a little care it can be followed for about five-eighths of a mile, dropping 750 feet, before it fades and disappears at the end of the ridge. Presumably it dropped down to meet the Honeycomb trail at the large flat below.



Fig. 4. Remains of a shaker table used to concentrate ore remnants remaining in the dump below the Number Four tunnel.

FAINT TRAILS IN THE WASATCH

38. U. S. Mineral Monuments

United States Mineral Monuments (USMM) have been mentioned several times in recent Faint Trails articles. Perhaps this is a good time to expand on that subject.

Mineral Monuments were used to fill an urgent need at the time. Before miners could apply for patent on their claim they had to have it surveyed by a representative of the U. S. Surveyor General's office. However, it was necessary to reference the survey to a known point so it could be placed in context with other nearby surveyed claims. Usually this would be a section or quarter section corner. But in the 1870s most claims were in unsurveyed territory, which included all of the Wasatch mountains, so there were no section corners that could be used. Hence the Mineral Monument. When making the first survey in an area, the surveyor would establish a Mineral Monument and locate the claim relative to it. Then all other surveys in that area would use the same Mineral Monument as a reference. In that way they would know how a claim related to the other nearby surveyed claims.

At the time a claim was surveyed it would be assigned a Lot Number. Lot Numbers were unique to a mining district, as were the Mineral Monuments. Hence, the Big Cottonwood Mining District had Lot Numbers and Mineral Monuments with the same numbers as Little Cottonwood Mining District, as well as every other mining district in the state. The number assigned to the first survey in each district was always 37, the first 36 numbers having been used for the sections within a township. What a claim had to do with township sections is open to question, but that is the way it was done. At the beginning of 1893 the numbering system was changed so that all surveys in Utah were numbered sequentially, regardless of where they were located. At that time the sum of all surveys in all mining districts in the state presumably totaled 2939, because the first survey number in the new system was assigned M.S.2940. By this time land surveys had extended to most or all mining districts so the surveys could reference a section corner instead of a Mineral Monument and the monuments fell out of use.

With that background, let's consider the USMMs in the Big Cottonwood Mining District. A total of nine were established, some of them being little used after they were created. The first one was to support the survey of the Prince of Wales claim which was surveyed by Charles L. Stephenson on 19 June 1871. He wrote: *"The Prince of Wales mine being on unsurveyed Mineral Lands I first establish a monument of stones with stake marked U. S. Mineral Monument No.1. This monument is built on one of the most conspicuous places on the divide between Little Cottonwood Cañon and Silver Fork Cañon of Big Cottonwood Cañon. It consists of small boulders erected around a cedar post and is on a bluff of rock ... From this monument a very large number of the mines both in Big Cottonwood and Silver Fork Cañon can be seen and therewith connected by a single bearing. The bluff of rock is one well known and of the most prominent character and is in fact the most prominent natural object in the vicinity."*



Fig. 1. USMM No.1 is this post set in a mound of rock in the pass between Grizzly Gulch and Silver Fork. It served both Big and Little Cottonwood Mining Districts. Mount Baldy is in the center background, directly above the post.

His "bluff of rock" is in the pass between Grizzly Gulch and Silver Fork. The cedar post has long since been replaced by a more permanent mushroom marker marked "MM No.1" and "1938." Due to its location, it served both Big and Little Cottonwood Mining Districts, one of the few monuments to serve more than one district.

Mineral Monument No.2 was established on 4-6 June 1872 by G.V.M. Boutelle before he surveyed the Sailor Jack claim. It was a red pine (Douglas Fir) tree located in or very close to Carbonate Pass, south of Kessler Peak. The tree has not survived, nor can a replacement monument be found.

There were two Mineral Monuments No.3, probably due to a delay in recording the first one. One of them was created on 18 Sept.1873 by James H. Freeman when he was surveying the Sacramento Lode, high in the Days Fork bowl. The monument was a lone fir tree located on the Reed and Benson ridge about 1100 feet north of Flagstaff Mountain. The tree does not survive.

The other Mineral Monument No.3 was on Vina Flat, north of Montreal Hill in Mill D South Fork. It was originally set by Ferdinand Dickert on 20 Sept.1876 when he surveyed the Bright Point claim on the ridge between Mineral Fork and Mill D South Fork. However, the Bright Point was under protest for being a

trespass and relocation of the Venus lode, so the survey was rejected and the surveyor's notes were not filed for record. As a result we have no details as to the creation of this monument. Two months later, on 21-22 Nov.1876, Edward B. Wilder surveyed the Venus lode and in his surveyor's notes described how the monument came into

being. Since that time the original monument has been replaced with a metal mushroom marker inscribed “MM 3” and “1938.”

Mineral Monument No.4 was established on 26-27 Feb.1874 by Julian Bausman when he surveyed the Dolly Varden claim. He wrote, *“Finding it impossible to connect with any established monument in the district I am therefore compelled to establish a monument to fix the location of this claim. I select for that purpose a Pine tree 10 inches in diameter near the town of Argenta as being the most convenient point to connect a large number of mines in the vicinity.”* The town of Argenta was on the south side of Big Cottonwood stream east of Mill A Gulch. This marker cannot be found today. It could not be expected the pine tree survived all these years, but it does seem unusual that the monument was not replaced with a more permanent marker, especially since the nearby Maxfield mine was active well into the twentieth century.

Mineral Monument No.5 was set by Obed A. Palmer on 3-4 Sept.1875 when he surveyed the Hayes claim on the crest of the ridge between Big Cottonwood and Mill Creek Canyons, not far east from the head of Neffs Canyon. He wrote, *“In working this survey I found there was no mineral monument within two miles of the claim. I therefore establish a new mineral monument and select for that purpose a Red Pine tree 18 inches in diameter blazed on the SW side facing the claim and the SE side facing the USMM No.2 on Kesler Peak. On this blaze I put the letters ‘USMM No 5.’”* He also noted that the USMM No.2 was 22,864 feet (4.33 miles) distant and that the two monuments are in plain sight of each other. There is no evidence that this monument was used in any other surveys or that it or its replacement survived.



Fig. 2. Mineral Monument No.3 on Vina Flat, north of Montreal Hill in Mill D South Fork.



Fig. 3. The rock with the inscription “USMM No.6 WP X” barely visible in this photograph even though it has been digitally enhanced. Lake Mary reservoir is visible through the trees, right of center.

Mineral Monument No.6 was established on 21 Oct.1880 by Lewis J. Holmes when he surveyed the Legget claim above Brighton, near Lake Martha. He wrote, *“Finding the [mine] too far from any ... established mineral monument ... I established Mineral Monument No.6 by blazing a White Pine tree 12 inches in diameter and 24 feet high situated on the point of a spur from the mountain ridge dividing Big Cottonwood and Snake Creek mining districts ... and marking same USMM No 6 and to further establish and perpetuate said monument I cut in a black rock on said point a cross + also the letters USMM No 6 WP.”* WP was for Witness Post, usually used when a survey line went over the edge of a cliff and it was impractical to go any farther. A Witness Post would be set and the claim map would indicate the rest of the claim although it had no markers on the ground. In this case the Witness Post was a rock used to locate the monument. It was about 23 feet nearly due east of the monument and can be seen today even though the white pine (Engleman Spruce) tree has not survived. The surveyor scraped the black oxide off the rock before making the inscription, most of which is still clearly visible today.

Mineral Monument No.7 was set on 20 June 1881 by Joseph Garlinski when he surveyed the Augusta claim on Scott Hill. He wrote, *“I selected a conspicuous place on the divide or summit between the Big Cottonwood and Uinta mining districts on the south side of the main road leading from Big Cottonwood to Park City, where I put a pine post 6' long, 6"x6" square in mound of stone and earth, marked ‘USMM No.7 BCMD’.”* His monument was at Scott Pass, but has not survived.

Mineral Monument No.8 was established by Charles P. Brooks on 25-26 Aug.1881 when he surveyed the Carrie lode. He wrote, *“USMM No.1 being a very long distance from this claim, I set a new monument which is a hewed pine post 5" in diameter 6' long set in a mound of stone 4' in diameter at the base and 3' high, marked USMM No.8, on the top of a high ridge dividing Silver Fork of Big Cottonwood and the main cañon.”* It was located on the present Solitude ski area, along the ridge west of the top of the Eagle Express ski lift.

The final monument, No.9, was in Mill Creek Canyon. It was set for the initial survey of the Rattle Snake lode, at the lower end of Rattlesnake Gulch. While it was referenced in an 1895 survey of the lode, it must have been set in an earlier, unrecorded survey. The marker was on the south side of the claim and likely never served any other claim surveys.

While this discourse on Mineral Monuments does not describe any trails, they are nevertheless part of the trail of Wasatch history and can offer challenging searches for the curious hiker who would view them.

FAINT TRAILS IN THE WASATCH

39. Mutual Metal Mines Tunnel

Although the portal of the Mutual Metal Mines Company's tunnel is very close to the Big Cottonwood Canyon highway, it remains unnoticed by all but a very few. It is on the south side of Big Cottonwood creek about 500 feet east of the road into Mineral Fork. What is most noticeable from the highway is a stream of water flowing down the opposite bank into Big Cottonwood creek. This tunnel has a history spanning a little more than twelve years, during which time it had a number of different owners, accomplished very little and ended in disaster. Its story began with the Logger mine about a third of a mile farther up the canyon.



Fig. 1. The stream of water flowing from the Mutual Metal tunnel and down into Big Cottonwood creek is about all that can be seen from the highway.

The original Logger claims were on the south slopes of Big Cottonwood Canyon a short distance down canyon from the Maxfield mine. They were filed by the brothers Richard D. and John A. Maxfield in 1915. Their father and uncle were Richard D. and Robert Q. Maxfield, respectively, who in 1855 contracted with Brigham Young to cut and supply logs for the Big Cottonwood Lumber Company's mills B and C, and later, in 1870, filed the claim for the original Maxfield mine in Mill A North Fork. Hence, the younger Maxfields had a family link to both Big Cottonwood Canyon and mining. They formed the Logger Mining Company, then expanded its holdings by adding at least ten additional claims. The mine was developed and promoted for a number of years, producing small amounts of fairly low grade ore. In 1916 they formed the Bankers Mines Company to hold a large number of additional claims they had filed extending from the Logger properties west into Mineral Fork and across the ridge into Mill B South Fork. They went a short distance down canyon and started driving a tunnel to develop the claims. But by early 1919 they had bigger ideas for the tunnel and it was announced that the Bankers and Logger companies would join forces to extend the tunnel already started to run some five miles, going under the larger mines of the district at great depth.

Immediately the Greater Consolidated Mining Company was formed with a much larger capitalization than its predecessor companies to undertake this task. The Maxfield brothers were the principal organizers of all the companies so far, but they were the only miners in the first two. In this one they were joined by two other prominent Wasatch miners who apparently took considerable interest in the project and pursued it with great vigor. The company purchased a large air compressor, electric motor, transformers and pneumatic drills and began operations, but in spite of this activity it only lasted two years. In 1921 its properties and assets were taken over by the newly formed Mutual Metal Mines Company. This time the Maxfield brothers were not involved, but the secretary of the previous company, Burr D. Field, remained as the chief proponent of the project.

It is always interesting to try to determine why mines were given the names they have. In the case of the Logger mine, it was certainly a tribute to the elder Maxfields who were loggers in the canyon for many years. For the Bankers Mines Company the name would be logical if one or more of the incorporators were bankers, but that was not the case. They included the postmaster and U.S. Marshal in Salt Lake City, a lawyer, several people from the U.S. District Attorney's office and the Supreme Court, as well as a Salt Lake Tribune reporter. Twenty five of the thirty-six claims that went into the company were named Banker, Banker Nos. 1 through 17, and Bank Nos. 1 through 7. But they had been claimed by the Maxfield brothers, who were not involved in banking in any way, so it is anyone's guess where



Fig. 2. The portal of the Mutual Metal tunnel has a steady stream of water flowing from it. The torn metal mesh barrier is barely visible in this photograph.



Fig. 3. Concrete foundations for the air compressor and its electric motor are on the south side of the tunnel's portal.

the name came from. But the company was formed to make a great consolidation of a large number of claims and it was sometimes known as the Great Consolidated Mines Company. So when they added more claims and formed the next company, the logical name, perhaps with tongue in cheek, was the Greater Consolidated Mines Company. As for the Mutual Metal Mines Company, it was formed by a new slate of people, except for B. D. Field, and they or he assigned the name without explanation.

Field, his brother and a few other miners kept working the Mutual tunnel through the years that followed. While they claimed to have found small deposits of ore, their intent was to develop a drain and transportation tunnel, so they kept driving straight ahead. The work was financed through assessments on the company's stock, thirteen assessments totaling 7-1/2 cents a share being made over seven years. During that time the tunnel struck several sources of water, resulting in a considerable flow that drained out through the portal. But with the water also came gases that were either poisonous or without oxygen, making the air lethal in either case. The company put the compressor to good use to pump fresh air to the face of the tunnel, which by the spring of 1928 was over 7,000 feet from the portal. Then, on a Monday morning, 11 June 1928, Field and two miners went into the tunnel

with two donkeys pulling mine cars. About four hours later one of the miners staggered out to report Field and the other miner were overcome by bad air. A rescue party went in and brought the two men out. The miner was dead, but Field's heart was still beating. A doctor worked on him for an hour, but without success. Field had been the driving force for the Mutual Metal tunnel; when he died that Monday in June the project died with him.

Before he became involved in this tunnel project, Burr D. Field had not been a miner. Since he moved to Salt Lake City in the first decade of the twentieth century he had been involved in a number of businesses. He was manager of the Salt Lake Union stockyards during its infancy, a position he resigned when the Mutual Metal Mines Company was formed. But he also had his own business with offices in downtown Salt Lake City where he was a broker in livestock, real estate and stocks as well as a dealer in wool, hides and pelts. It is likely he was providing a sizeable portion of the finances for the tunnel project; when the company was formed he subscribed for half of the stock that was issued and therefore provided a considerable sum through the repeated assessments. Yet, in spite of all his efforts the tunnel had only reached a point under the Silver Mountain mine, about due west of Kessler Peak. It was barely half the distance to the Cardiff, the first big mine in the district that it might have served.

While the project ended, the company did not. Field's brother took over as president and over the years made repeated attempts to gain control of the water for irrigation and generation of electricity, but without success. In the 1940s the courts ruled that the company did not own the water and therefore could not control it.

Today one can find the trail going up to the Logger mine, starting at a ford at the lower end of Burnt Flat. While the trail once came to the edge of the stream, frequent floods over the years have washed out the lower end and trees and bushes have grown over it. But once found, it can be followed through one long switchback to the site of the mine, where nothing remains except a flat area on the dump.

As for the Mutual tunnel, the road to it extends from the Mineral Fork road, going over the waste rock from the excavation. Concrete foundations for the compressor and its motor still stand guard next to the portal, and a considerable amount of water flows out over the dump and down the slope into Big Cottonwood Creek. The portal had been closed with a heavy metal screen, which recently has been breached by foolish adventurers who could unwittingly experience the same fate that befell a miner and the mine manager in 1928.



Fig. 4. Two tracks are shown on this map. The one on the left is the route to the Mutual Metal tunnel, starting from the Mineral Fork road. The one on the right is the trail going from the ford across Big Cottonwood creek up to the site of the Logger mine. The large dots, left to right, are the locations of the tunnel, the ford and the Logger mine.

FAINT TRAILS IN THE WASATCH

40. Scottish Chief Mine

Upon surveying their surroundings, visitors to Brighton usually notice a prominent cluster of mine dumps, light tan against the green and brown slope of Scott Hill. There are three of them: a large one bracketed by two smaller ones, looking much like an icon, a symbol representing an animation character that has amused and delighted children of all ages for many generations. Invariably they, the visitors, will call it the Mickey Mouse mine, then dismiss it from their thoughts until they look that way again. The mine operators who created the icon might well have been offended by hearing their mine described as Mickey Mouse, if in fact they would have understood the connotation in those pre-Mickey Mouse years.

The mine's name was Scottish Chief, but that was the name of the company that created the larger dump; there were no mining claims by that name. Although the company ceased operations a century ago, there are some

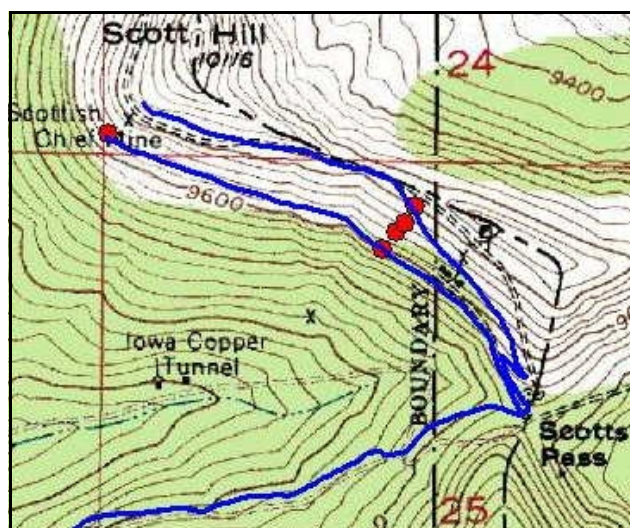


Fig. 1. The tracks on this topo map show the road leading to Scotts Pass from the Guardsman Pass highway, then the road to the top of Scott Hill and also the road to the Scottish Chief mine. The four heavy dots indicate the Copper Apex workings, with the lower one being the site of the ore bins shown in another figure.

Randall & Taylor Lode. Randall was representing Merritt H. Insley, a banker from Leavenworth, Kansas, now retired and living in Denver. He formed the Insley Mining Company to hold the claims, but his company never worked them, putting them out to leasers instead. The leasers ran two tunnels that created the smaller dumps and started an incline shaft between them. Then in 1902 William J. Lawrence, a son of Henry W. Lawrence of the Woodlawn Mining Company in Honeycomb Fork, bought the current lease and formed the Scottish Chief Mining Company to work the mine. There was a bit of irony here because one of the five Insley claims was a relocation of an abandoned 1890 claim that had been filed by Robert Brighton and William Lawrence, the very man who now held the lease on the properties.

Lawrence went to work with a vengeance. He ordered a gasoline hoisting engine and had a large log boarding house built. The 20 foot by 48 foot building included a dining area and a kitchen with storage space large enough to hold supplies for an entire winter.

artifacts remaining, not the least of which is a vintage hoisting engine. Also there is the road to the mine, now seldom used, which can be followed with ease and makes an interesting half day or evening hike. It starts at Scotts Pass, where the original road between Park City and Brighton crossed the divide. It can be seen heading northwest, but below the road that climbs to Scott Hill, the popular mountain biking route. The road of interest here is quite obviously a road for about a third of a mile where it reaches the site of the Copper Apex mine and branches several times. The lower branch goes past the top of two ore bins believed to have been used for Scottish Chief ore even though the mine is still almost a half mile distant. From this point the road looks more like a trail, having been somewhat overgrown, but can be easily followed all the way to the mine.

The origins of this mine are found in the 1895 filing of five claims by R.C. Taylor and J.W. Randall. Taylor was local miner and prospector, probably in the employ of Randall, who was an agent from Denver, Colorado. The names of two of their claims reflected their Colorado lineage: Colorado Boy and Denver Girl. For the final claim the two men honored themselves by calling it the



Fig. 2. A hiker is going down the Scottish Chief road toward Scotts Pass. The building is on the Copper Apex properties.



Fig. 3. Two ore bins are found below the road to the Scottish Chief mine. While they are below the Copper Apex workings, it is believed they were also used to hold Scottish Chief ore.

company and now had nothing to show for it save some worthless stock certificates. The newly formed Silver King Western Mining and Milling company at Park City undertook to exploit the former Insley properties, as well as many others on Scott Hill, but rather than working them from the surface, it proposed to approach them through a long drift from the Spiro Tunnel in Park City. And so the works at the Scottish Chief mine were left to rot and rust until the only visual remnant for the casual observer was the three mine dumps that people call the Mickey Mouse mine. But for those who would visit the site there is a little more. While there is nothing left of the boarding house and only a few logs are left from the shaft house, the hoisting engine that was installed in 1902 still remains. It was one of the very early gasoline engines used at local mines. There was an earlier one at the Cumberland mine in Park City, installed in 1896, at a time when gasoline had few uses other than for heat or light. That early product was so impure that the engine refused to run on it. When the manufacturer's representative visited the site, bringing a better grade of gasoline, the engine worked, in the superintendent's words, as steadily and smoothly as the works in a watch. Another engine was installed at the Sunbeam works that same year. But it was not until the turn of the century that the Fairbanks-Morse company, manufacturer of the hoisting engine at the Scottish Chief, had a resident representative in Salt Lake City. Curiously, though, the engine pictured here was purchased from the Salt Lake Hardware Company, who shipped it to the mine in November 1902. It is a single cylinder engine variously quoted as generating twenty-two or twenty-five horsepower. It had a large displacement, about 1560 cu. in. and ran at very low speeds, between 200 and 300 rpm. Its 'hit and miss' operation gave it quite a distinctive sound in which each individual firing cycle caused a sharp report. Engine speed was regulated by inhibiting power strokes when the speed exceed that regulated by a governor. In that case there were one or more cycles of silence before the exhaust noise began again. This engine gave good service over the years except for a few incidents in 1904 and 1905 when a Salt Lake City mechanic had to travel to the mine to make repairs. Although the engine has been partially disassembled and has suffered damage from vandals and falling timbers from the shaft house, there is enough remaining to be an excellent example of its early 'hit and miss' engine technology. That alone is worth a visit.

After the engine was installed a log shaft house was built to enclose it. Then Lawrence extended the incline shaft that had been started by previous leasers. In the years that followed the underground workings, accessed through the incline, grew to a total length of about 3,000 feet, creating the large center dump that is visible today. Ore from the mine was variously hauled to the Park City sampling mill, or down Big Cottonwood Canyon to Salt Lake Valley smelters.

Around the end of the first decade of the twentieth century work on this mine slowed, and finally ended. The lease expired in 1911 and manager Lawrence started directing his attention to the rejuvenation of the Woodlawn Mining Company's properties. From all indications the Insley Mining Company, if still in existence, was no longer functioning. The properties were sold for back taxes and eventually fell into the hands of the Kearns Corporation, much to the chagrin of many Park City residents who had invested in the former



Fig. 4. The Fairbanks-Morse hoisting engine was installed at the mine in 1902. It is a sadly damaged, rusted and partially dismantled example of the classic 'hit and miss' type of engine popular in the early twentieth century. The large flywheel, an essential component of this type of engine, has been removed and is seen under the debris in the background.