



## Leadville, Colorado: A mining district you can model



# The Mountain Park Extension

An addition to the author's layout based on Leadville

BY ERIC LUNDBERG  
PHOTOS BY THE AUTHOR

MY INTEREST in Leadville prompted me to build the Mountain Park Extension on my Sandric & Lake Superior RR. [Eric's layout was featured in the August 1977 and August 1980 issues of MODEL RAILROADER.—Ed.] Now there wasn't much room to expand the S&LS as it already occupied most of the basement. But delicate negotiations with my wife yielded about 18 square feet of the laundry room. I quickly completed the benchwork to establish the "mining claim."

My idea was to make the Mountain Park Extension a branch line with the feeling of the Leadville area. Because

available railroad space dictated the construction site, it had to be narrow gauge. That meant giving up one aspect of the Leadville area, for it was usually served by some standard gauge line as well.

After selecting 15" radius as the basic curve to attack the mountain, I planned the switchbacks. Turnouts are no. 4s, and some grades approach 5 percent. Tight curves and tough grades were a mark of Leadville's Mining District.

Originally I worked the Mountain Park area with a Shay. It was traded off after I found a narrow gauge 2-8-0 that could negotiate the steep grades with one or two cars.

Besides the mining area, I added a small ore-processing smelter that's reached by 18"-radius track. Incoming ore loads go in one side in hoppers; the load is

"dumped," and the ore is processed and then loaded in boxcars for shipment and further processing. Ore flows to the smelter from the Mountain Park area and other districts on the S&LS, such as Red Mountain and Gold Hill.

The Mountain Park Extension is built on a 1 x 4 pine framework with 2 x 4 legs on the other end. It's attached to the original Mountain Park module benchwork on the inside. Risers are made of 1 x 2 and 1 x 4 pine. The subroadbed is high-quality plywood,  $\frac{3}{8}$ " thick, that's been finished on one side. I used Homasote for the roadbed. Campbell low-profile ties support code 70 nickel-silver rail.

In laying out the line I used a home-made template for the turnouts. This is a piece of paper that's traced over an existing turnout, then cut out. Several would

and lowest tracks on  
be seen in this  
end of the  
a D&RGW  
onto the tip-  
Mining Co.  
D&RGW no.  
the high tre-  
nere's the Lucky  
The rock walls to  
ing decorative bark.

be handy, . . . the only one. However,  
a right-hand . . . out template becomes  
a left-hand o . . . hen you turn it over.

I've never been too excited about using  
a jig for my ties. On the Extension, as  
well as 90 percent of the rest of the lay-  
out, I laid each tie by hand. I guess I've  
never been convinced I should hurry to  
get the railroad done. I glued the ties in  
place with white glue. Later, after the  
glue dried, I stained them with whatever  
came out of the Floquil Thinner bottle.  
It's a smart way to get rid of dirty thin-  
ner, and the ties look pretty good.

Once most of the track was laid I at-  
tached the fascia board on the outside and  
began some of the hardshell base for the  
scenery. There are two good reasons for  
putting scenery on a layout so soon. First,  
scenic elements quickly give a layout a  
semifinished look. More important, they  
prevent derailed equipment from crashing  
to the floor during early track testing.

All turnouts at Mountain Park are  
manually operated. I use walkaround control,  
so it's easy to reach hand-  
thrown switches as I follow my trains.

The Extension switches back on itself  
three times, then swings around in a  
tight curve to reach the top. A key part  
of my Leadville-inspired layout is the  
summit, which incorporates elements of  
Ibex. The line even switches back to get  
to the mine proper, thanks to a long  
trestle that extends over the south end  
of Mountain Park.

#### TRAFFIC FLOW

At Ibex I've scratchbuilt a model of  
the large tipple that's still standing. [An  
article on the Ibex Tipple follows.—Ed.] Open  
hoppers and gondolas transport  
ore from this and other tipples on the  
hill to the smelter at Mountain Park.  
Raw ore is reduced and shipped via box-  
car to the Sandric Mining Co.'s smelters  
at Silver Springs and Sandric and to  
other off-line destinations. Thus the Ext-  
ension becomes a feeder railroad itself,  
despite its rather short main line.

Ores from mines higher in the Rockies  
(basement style) are also shipped to the  
Mountain Park smelter for processing  
and then shipped on. Three other mines,  
including one with a stamp mill, are  
served by the Mountain Park & North-  
ern at Mountain Park. This smelter is  
also the base of heavy mountain grades  
to Gold Hill and Red Mountain, so some  
helper service is stationed here.

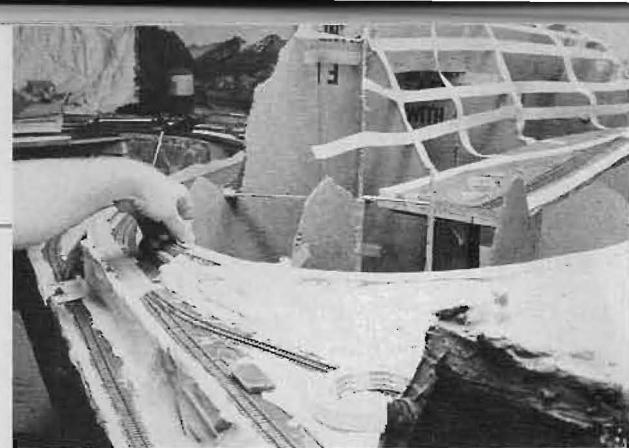
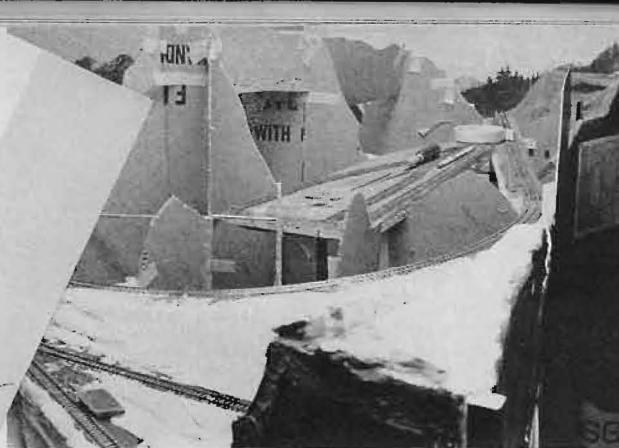
#### STRUCTURES

In building the Extension I've scratch-  
built two mine buildings from field mea-  
surements and photographs taken of ex-  
isting prototypes. Others I've created.  
For example, the Silver Bell Mine is a



3. Above: The same train shown in photo 2 was photographed again a little farther down the line. In addition to the Lucky Strike Mine, we can now see the sand house and a portion of the Mountain Park Station. 4. Below: The Mountain Park Smelter was designed and scratchbuilt by the author.





## Mountain Park scenery building

**Step 1. Above:** Cardboard formers were cut to the approximate shape wanted for High Mountain and then stapled in place. **Step 2. Above right:** The areas between the cardboard former pieces were filled in with a web of masking tape. The track was also covered with tape to protect it from plaster spills.



**Step 3. Above left:** More masking tape was applied to areas that were going to be covered with the hardshell terrain method. **Step 4. Above:** The hardshell terrain method is quick and easy. Simply dip paper towels in Hydrocal plaster and drape them over the masking tape web. When this sets, it forms the basic hardshell terrain. **Step 5. Far left:** Plaster rock castings which had been previously made were fitted and then glued to the hardshell. Cracks between castings were stuffed with paper toweling. Some modelers prefer to fill the rock molds with plaster and slap them onto the hardshell — the wet-casting method. **Step 6. Left:** The cracks between castings were then filled with soupy plaster.

combination of kit and scratchbuilt pieces. The pit headframe is from a Campbell kit, while the hoist house and loading area are of my own design.

**Crown Point Mine.** This structure, my pride and joy, is located on the corner of the Extension. It's a "half" mine rather than a "whole" one. I like to detail the insides of structures, and with the Crown Point I just cut the whole thing in half and modeled that much. The viewer can stand as if he or she were working the pit head or in the shafts. You can view the boiler house with its hoist machinery as well as the shaft house.

The idea for this project came to me on a layout tour years ago. As I was planning the Extension it occurred to me that an open-sided mine would nicely fit an odd corner. I'd already worked in a siding on the switchback, and so the railroad awaited only the discovery of silver ore.

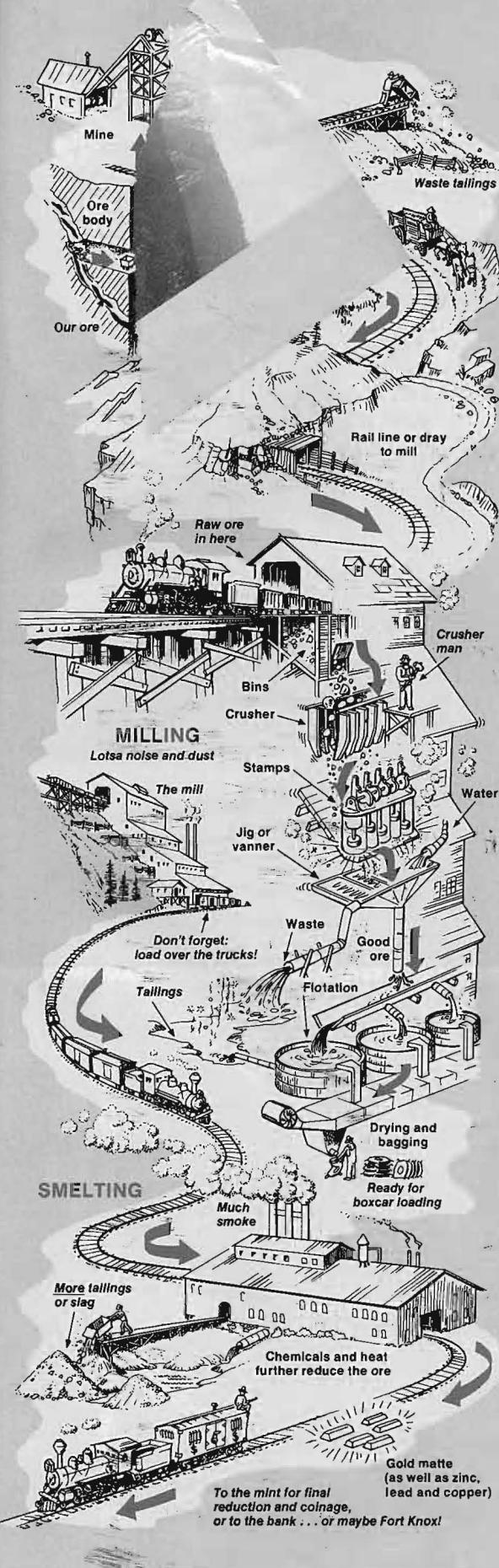
The next decision was how much to cut off, or from the other guy's viewpoint, how much to leave. I decided to cut the mine so that it appeared to contain the entire vertical shaft without the fourth wall. This meant shaving off about one-third of the two major buildings and in the one awkward aspect of the headframe adding a dangling set of legs. The forward leg is not as noticeable because it ends inside the shaft house, but the oblique leg toward the rear is outside and somehow hangs there in the air. So far, however, there have been no smart remarks by visiting mining authorities.

The buildings are of simple construction: metal siding over a framework of scale 9"-square wooden beams. I built the wall frames first, testing for fit as I went along and making minor adjustments where necessary. Most of the framing is balsa, though some is basswood.

After the framing was complete, I applied Campbell's aluminum siding in relatively random fashion, overlapping it both horizontally and vertically. Siding on such structures was rarely a thing of beauty.

**The Mountain Park Smelter.** My research failed to turn up much on smelters, so I designed my own to fit the space. This smelter is large in comparison to other structures on the Extension, measuring 70 x 100 scale feet. A track enters for unloading raw ore, and smelted concentrate is loaded outside. It's a simple building, a rectangle with a sloping roof and lots of windows. Electricity was in use by the time mountain mining towns boomed, but most mines and smelters still relied heavily on sunlight.

The Mountain Park Smelter is made of wood — the material generally used first in a mining area. More permanent



# How ore is processed

**WHAT FOLLOWS** is a generalized and highly simplified description of the processing of precious metal ores in the early 20th century. Gold and silver ore and those ores often found with them went through a three-stage process of concentration, milling, and smelting. This took them from deep underground to the bank vault.

## CONCENTRATION

After a promising vein had been located, ore was extracted from the mine. Rough sorting of ore and obvious waste was done deep in the mine either by sight or by assay. Further upgrading by sorting was done at the surface, and both steps resulted in large quantities of waste that was dumped in piles nearby.

Sorted ore, which was destined for the mill, was generally stored in a hopper of some size at or near the mine until enough was on hand for shipment. Shipments reached the mill in one of three ways. If a railroad had been able to reach the mine site, ore was loaded directly into railcars and sent to the mill. More likely, however, a horse- or ox-drawn dray carried it from there to either the mill or a rail line that moved it.

## MILLING

Mills may be considered custom or integrated. A custom mill drew raw ore from several mines, mines that because of capitalization, size, or worth could not afford to have their own mill. Ore was purchased from each mine on an individual shipment basis, with the price fixed as the result of an assay of each shipment. This assay was done by the mill, not the mine.

An integrated mill was one that processed the ore from one mine or complex of mines under the same ownership as the mill. Naturally some outside "custom" business would be accepted from time to time in slack periods.

Most mills took advantage of a hill or mountainside in construction and used the vertical drop to assist the movement of ore from one process level to the next.

Ore arriving at either type of mill was dumped into another hopper and a sample assayed. When there was enough of a charge to begin the processing, it was moved downward for the first crushing process. A "crusher man" with a sledge often assisted the ore in its initial travel by breaking larger chunks into smaller ones.

The first step for many years in mills was the Blake Jaw Crusher, where the ore was literally chewed by cast-iron jaws to kernel-like consistency. Later improvements included the cone and roll crushers.

Next came the California stamps, which pulverized the kernel-sized ore to a near dust consistency. The noise was deafening as the pistons went up and down in banks of five.

The pulverized ore went on to a jig or vanner. Vibration separated the lesser and lighter portion of the charge, and the careful introduction of streams of water carried it away. The heavier gold and silver and some other metals were left, and these drained into a receiver.

Following this rough concentration, the remaining ore was either subjected to a fine concentration using a Wilfley table or put directly into the flotation process. The complexity of most Colorado ores required that they undergo the Wilfley concentration prior to flotation.

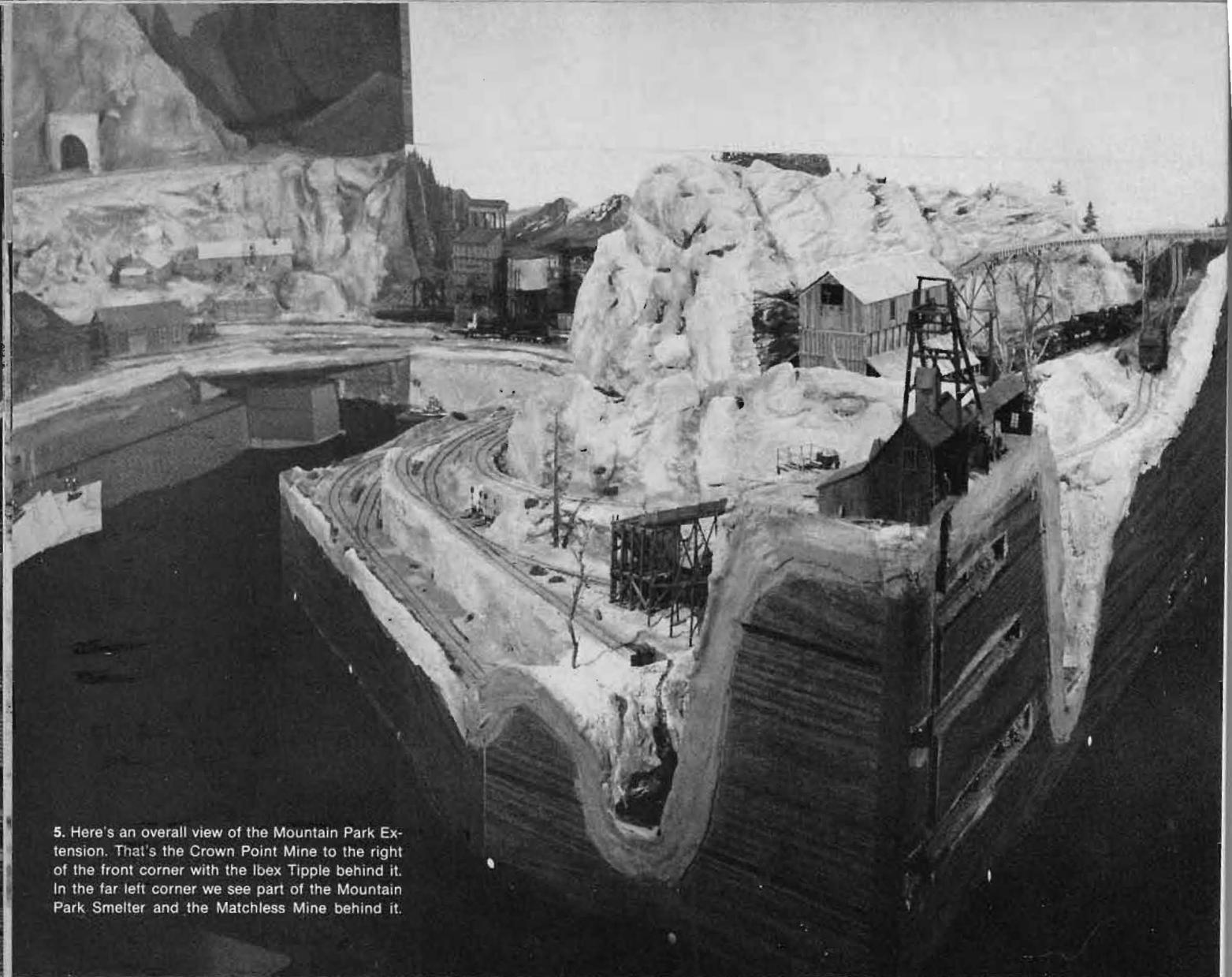
Flotation further separated the good ore by the introduction of light oil, a small amount of acid, and a pinch of sodium cyanide. This caused the ore to froth to the top of the bath, flow over the side, and then be carried to a drying area where it would be readied for shipment to the smelter. From all levels of the concentration process came large amounts of the yellow, tan, and brown tailings that dot mining and mill areas.

## SMELTING

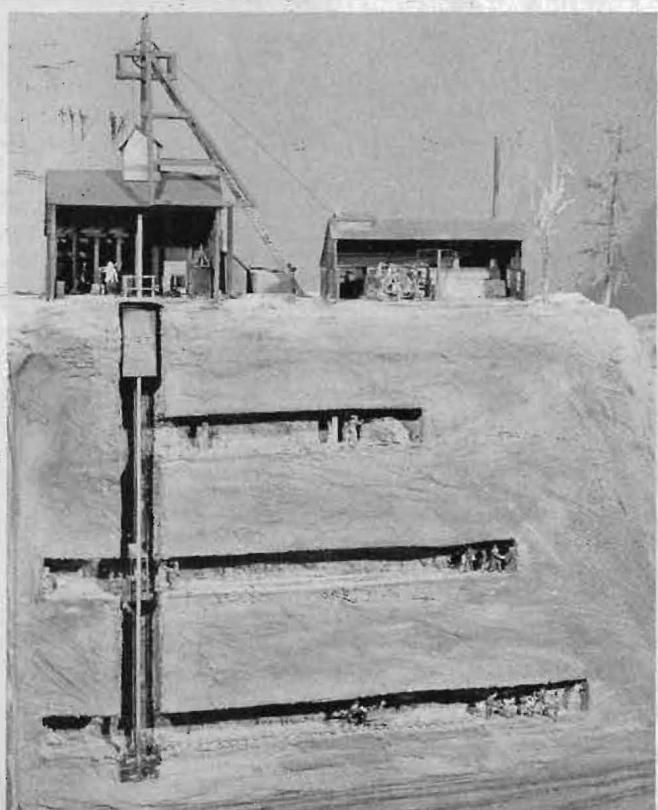
Ore was next moved by rail or another means to the smelter. There a variety of steps reduced it to a matte. Chemicals were used as was heat to reduce the ore still more. Along the way, metals such as copper, zinc, and lead were recovered.

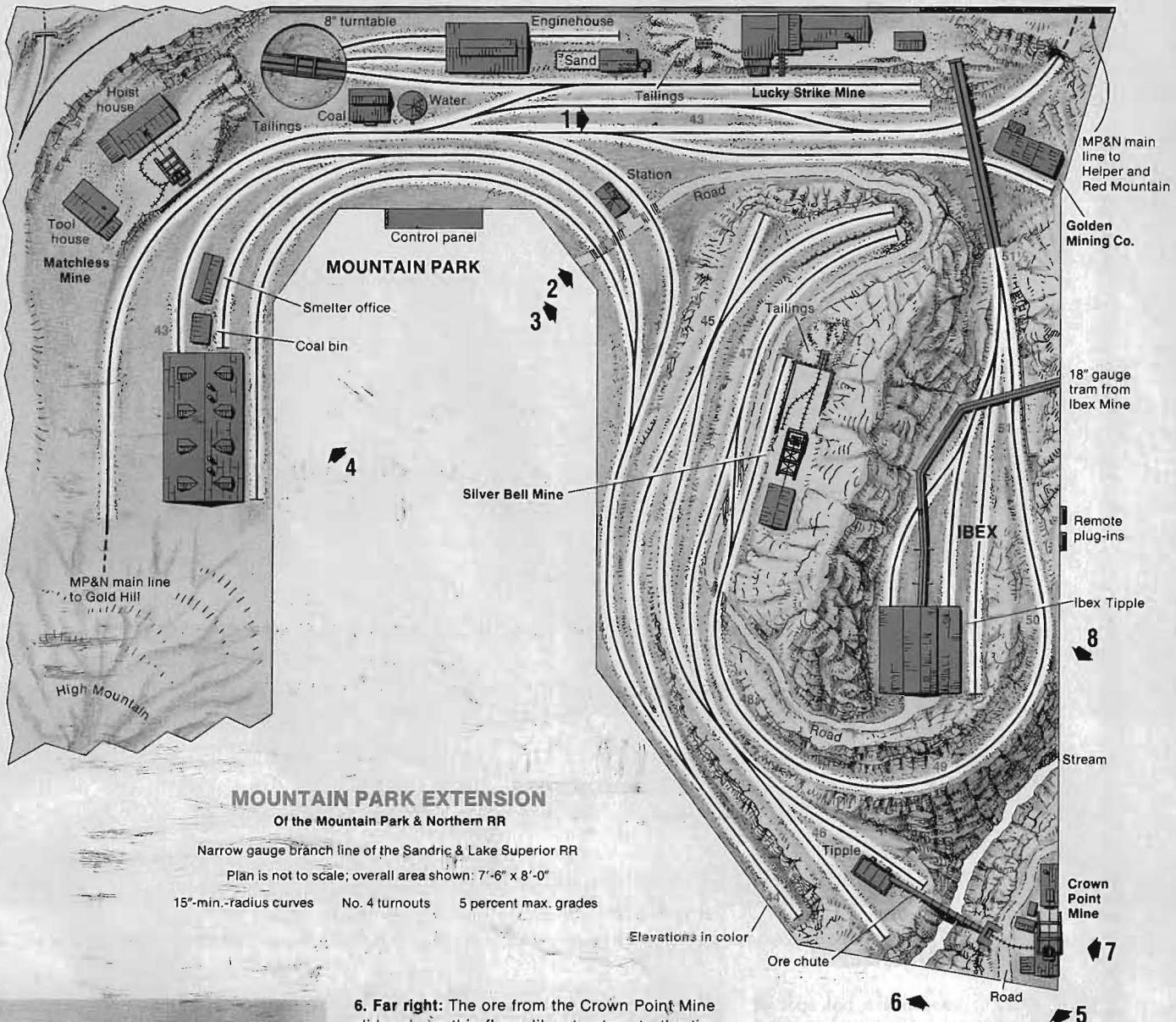
As anyone who's ever seen a smelter knows, large amounts of waste ("slag") resulted and were piled around the facility. Railroads, which transported a good deal of the product in its travels, used some of the slag as ballast and fill.

The final stage of refining was done by the United States Mint. From there the ore, now referred to as bullion, was locked away in vaults or prepared for coinage. ☐



5. Here's an overall view of the Mountain Park Extension. That's the Crown Point Mine to the right of the front corner with the Ibex Tipple behind it. In the far left corner we see part of the Mountain Park Smelter and the Matchless Mine behind it.





### MOUNTAIN PARK EXTENSION

Of the Mountain Park & Northern RR

Narrow gauge branch line of the Sandric & Lake Superior RR

Plan is not to scale; overall area shown: 7'-6" x 8'-0"

15"-min.-radius curves    No. 4 turnouts    5 percent max. grades

Elevations in color

**6. Far right:** The ore from the Crown Point Mine slides down this flume-like structure to the tipple with a siding below. **7. Middle:** This cutaway of the Crown Point Mine is an interesting and educational feature of the Extension. The shaft and stopes were cut into Styrofoam. **8. Left:** A view from the opposite side of the Crown Point Mine nicely shows off the ore slide and tipple.

structures were constructed later if investors felt certain of the mineral content of the area.

**The Ibex Tipple and the Matchless Mine.** Separate short feature articles on these two prototypes and my scratch-built models follow.

#### IT'S NOT OVER YET

The Leadville hills are honeycombed with exploratory holes, some that found glitter, some that did not. I've included several on the Extension addition. I even modeled a couple of prospectors chopping their way into the hillside. The impression I wanted to give visitors is one of a bustling mining community with shafts, holes, and full-blown mechanized operations crowding each other for a chance at

precious metal ores. Not only was all the land "staked out" in the Leadville area, but claims often overlapped and the deep shafts cut across boundaries, above and below and even into competing shafts.

Rust, dirt, tailings, little regard for the environment, a railroad in a place where no railroad should have ever been built, intense activity in cracks and cannies, mines atop mines, and the fever-pitch of a boom mining area — these are the elements I've tried to depict at Mountain Park.

The Extension isn't finished yet simply because I don't think I ever really finish an area. In fact, since I wrote this series of articles I've made a few changes. The original smelter has been "standard gauged" and is now at Leadville, a move dictated by lack of space at the new Mountain Park location. A new Mountain Park Smelter was constructed, and sidings were reworked to serve it. Finally, the Matchless Mine, also a victim of space problems, is farther up the line and a part of the Big Horn mining area in a town named (what else?) Tabor. ☑



Model photos by the author

## Modeling the Ibex Tipple

A turn-of-the-century mining structure that's still standing

BY ERIC LUNDBERG

**I**BEX, COLO., was once a hot spot of mining activity — silver and gold as well as less-precious metals. For a time it also boasted regular daily passenger service from Leadville, which is 2.75 miles away as the crow flies but almost three times that distance as the rail ran.

The hustle and bustle of this town, nearly 1,000 feet higher than Leadville, was keyed by approximately 100 mines in less than a square mile, including the fabulously wealthy Little Jonny Mine. Some of these mines were located close to the Rio Grande's line; others were far enough away that their ore had to be taken to common loading points on drays.

Considering how famous the Little Jonny was, it's surprising that no one is quite sure who the mine is named for. Some historians vouch for James Joseph Brown, husband of the unsinkable Molly of *Titanic* fame. Others side with John Campion, a local mining entrepreneur. In *Leadville: Colorado's Magic City*, Edward Blair notes that Brown worked as a superintendent for Campion. Brown may have contributed to the development of the mine, but his renown is due only to Hollywood and his wife. Campion, according to Blair, was the general



Colorado Historical Society

The information on this turn-of-the-century photo notes, "This is the Little Jonny Mine and depot at Ibex." However, the author believes it is Ibex No. 2 and the Little Jonny was behind the photographer. In the right center is the D&RG's Ibex depot, with standard gauge track curving in front.

manager of the Ibex Mining Co., a position that makes it more likely a mine would be named for him.

With one notable exception, little more than rotting timbers and traces of the

railroad remain today to mark the site. That exception is the Ibex Tipple, a building that stands almost as a tombstone for the town and the frantic era of which it was a part.

## Leadville, Colorado: A mining district you can model

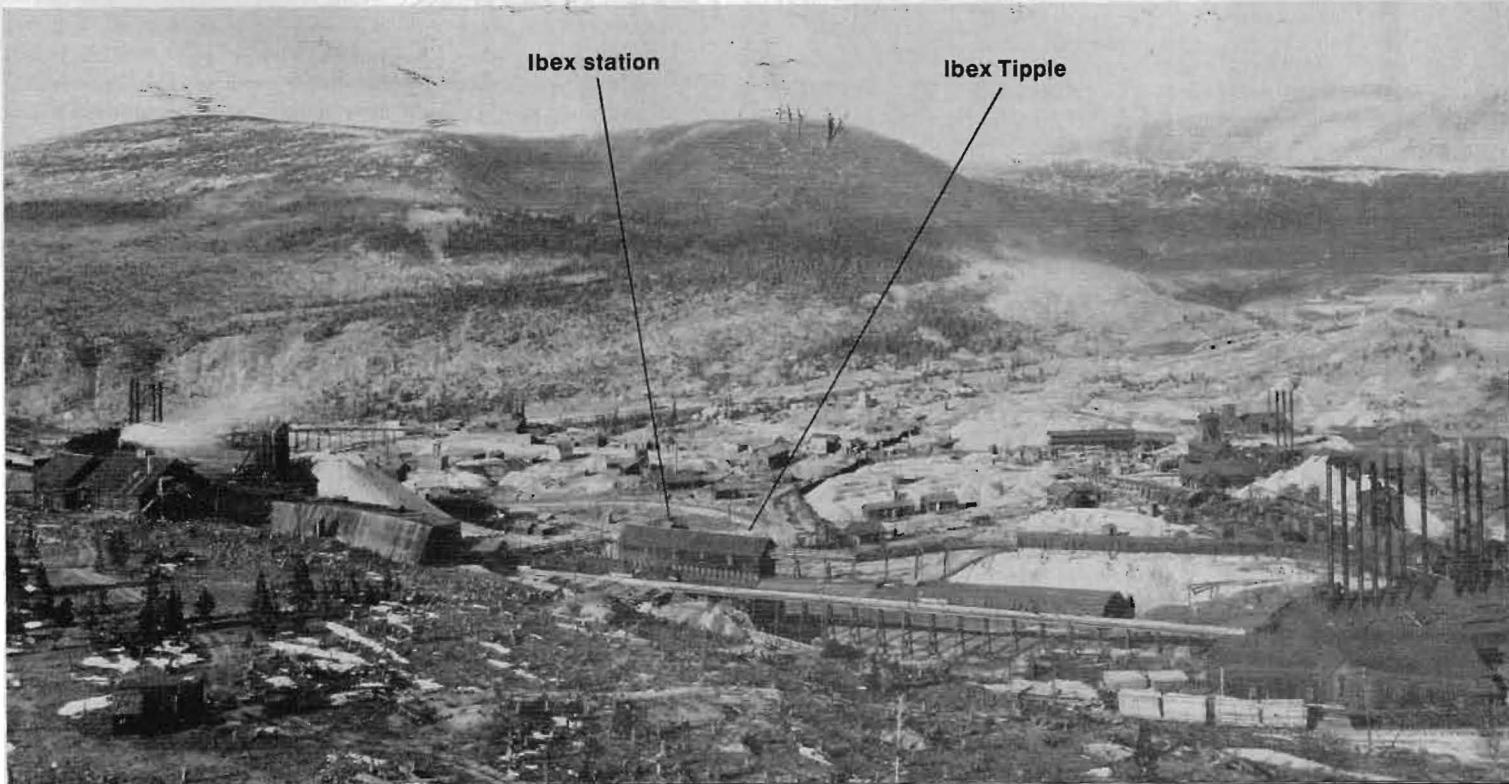
**Left:** The author's shortened version of the Ibex Tipple in place on his Mountain Park Extension. The free-lanced tramway runs to an imaginary mine off the layout. Everything in the scene was scratchbuilt with the exception of the outhouse, a kit from Woodland Scenics.

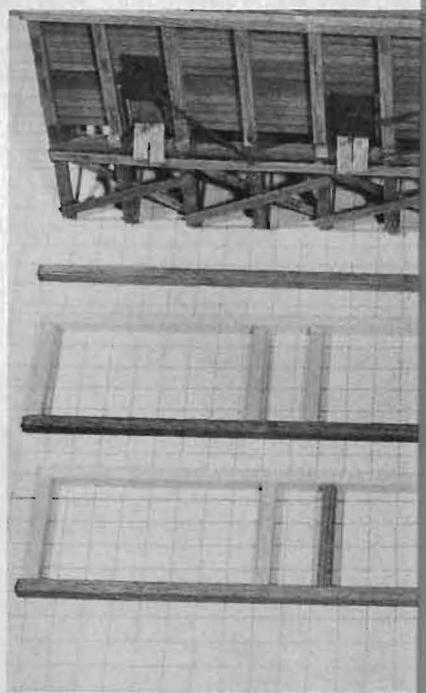


Eric Lundberg

The Ibex Tipple is one of the few structures still standing in an area that once was a thriving mining community. The photo was taken looking northeast.

This photo of Ibex was taken looking northwest shortly after the turn of the century when it was a busy place. The tipple and the station are called out.  
Colorado Historical Society





**Left:** This 1979 photo of the end of the tipple shows that one canopy has completely fallen away and the other is near collapse.  
**Above:** The author did much of his tipple building on waxed paper laid over graph paper to ensure that all of the subassemblies would be square. The frames shown here are the sidewalls of the top section. In the background we can see the partially completed tipple with its hopper doors in place. Because the hopper doors are covered with a canopy, the author simplified the construction by gluing door covers in place for most of them. The one on the left was modeled with the door open, which meant the chute also had to be modeled.

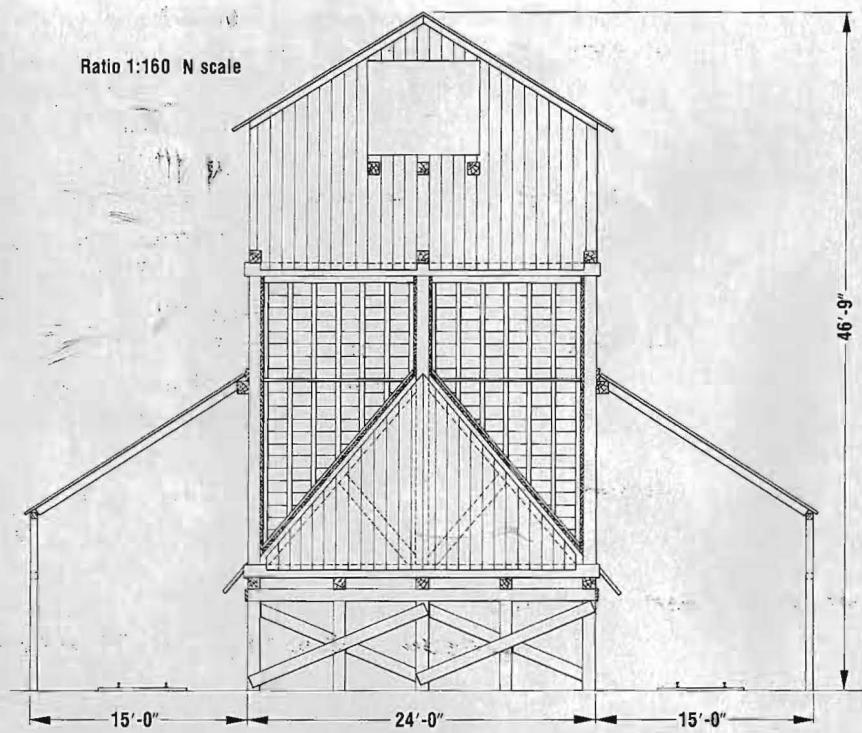
When it served the local mines the tipple was surrounded by the other mine buildings and lesser structures that made up Ibex at the turn of the century. Without paint or care it has managed to survive the years and fierce weather at 11,000 feet while its neighbors have not.

The tipple measures 105 feet long and 35 feet wide. Rich ore was brought to it on elevated tramways. At the tipple the ore was stored in 16 hoppers, 8 on each side, and later loaded into freight cars. The loading areas were protected by overhanging covers, so they resembled a carport.

#### MODELING THE TIPPLE

I designed an area at the top of the switchback mining branch on my narrow gauge Mountain Park & Northern that would hold a scaled down model of the Ibex Tipple. As long as I was moving from standard gauge that served the prototype to narrow gauge, I felt comfortable in condensing elements of the tipple. Specifically, I cut its length from 105 to 50 feet, but didn't change the height or width.

I added an overhead tramway similar to that which brought raw ore to the Ibex Tipple from both ends. The tramway connects my tipple with a nearby



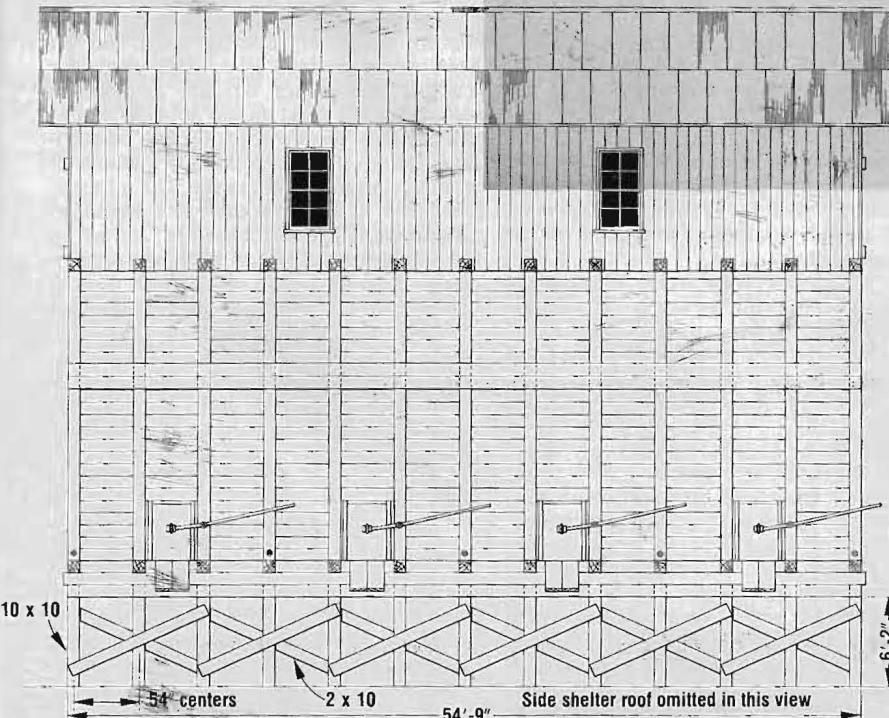
Eric Lundberg

**Right:** Here we see how the tipple looked as it neared completion. The siding for the upper levels was added after the framing was assembled.

Drawn for MODEL RAILROADER MAGAZINE by

**MARC D. LUNDBERG AND  
ALLEN J. BREWSTER**

Magazine purchaser may have photocopies of these drawings made locally as an aid to his personal or commercial modelmaking or tool designing, but purchaser does not have the right to distribute copies of the drawings to others.



and imagined mine, though I didn't actually model one.

Construction divides fairly neatly into four parts: the base, tipple or ore bins, top level where mine cars dumped their loads into the 16 hoppers, and the so-called carports or "patio covers" over the tracks on either side of the tipple. Open "holes" on each end suggest that the facility served mines from both ends. I don't have conclusive proof of this, but photos I've unearthed suggest it was possible.

You may decide to leave off the carports either because space is a problem or you'd rather show off the details of the hopper chutes. Even without the covers, a model of the Ibex Tipple will look good on a layout and grab the attention of just about any visitor to your version of the Mining District. ☐



## Leadville, Colorado: A mining district you can model



The author's Matchless Mine model is in business on the Mountain Park Extension. Because of space restrictions, the building's placement is not exactly the same as the prototype's.

# Modeling the Matchless Mine

A small mine complex with a legendary past

BY ERIC LUNDBERG

PHOTOS BY THE AUTHOR

**I**N 1899 a once-proud man lay dying in Denver. Only a few friends stood at his bedside, where his faithful wife held tightly to his hand. Then he turned to her and in the hushed, darkened room of the downtown hotel uttered feebly, "Hang on to the Matchless. It will make millions."

And with that Horace A. W. Tabor, who in his lifetime had been the most prominent of the so-called "Silver Kings," a millionaire, a U.S. Senator, and a lieutenant governor of Colorado, died. Though he would be forgotten, his dying words to his second wife, Baby Doe (Elizabeth McCourt Tabor), would make the Matchless Mine live on in history.

The beautiful Baby Doe lived out her life in poverty in a shack on the Matchless property, dying there 36 years after her husband. She was found on the cabin floor one winter day, frozen to death.

### HISTORY OF THE MINE

The Matchless Mine was located on Fryer Hill, scene of the early Leadville silver boom. It was not Tabor's first mine, but it was located close to the one that gave him his start. As the story goes, Tabor had been a merchant in Leadville for only a few months when he grubstaked prospectors August Ricsche and George Hook to \$17 in supplies in May of 1878. By agreement and local custom, this "loan" entitled him to one-third of whatever the two found. Tabor later bought some tools for the men, bringing his total investment to slightly more than \$60.

Ricsche and Hook made Tabor a millionaire by finding the Little Pittsburgh on Fryer Hill. Tabor pocketed impressive returns on the mine for a year or so, then sold it to a combine that included David Moffat for \$1 million in cash. He was on his way.

The Matchless became the first property Tabor owned entirely himself when he bought it in late 1879. The mine had been developed, but had not paid out. Tabor invested \$150,000 to clear the property's title and get it into operation. It turned out to be a very good investment by a man who seemingly could do no wrong. The mine produced an average of \$80,000 a month in silver, and estimates put its lifetime output in the neighborhood of \$7 million. It was still a rich mine when the Panic of 1893 rendered silver relatively worthless as a precious metal.

But many Leadville mines were fabulous producers, some richer by far. What put the icing on the mineral cake in the case of the mine named after a leading chewing tobacco of the day were Tabor's dying words to Baby Doe, "Hang on to the Matchless."

The mine today has been preserved by a diligent Leadville group, saved from vandalism, theft, and destruction in the nick of time. It consists of the workhouse last used by Baby Doe as a home, the hoist house, and the uncovered headframe. Photos from the early 1900s show a larger hoist house, and this has been indicated on the drawings.

The headframe is small by comparison to many in Leadville and of A-frame design. It includes a curious bucket-dumping

arrangement. The hoist house had an addition, which appears from old photos to have housed the boiler. It's also possible that some ore sorting was done in the building, and it probably contained a forge. The workhouse used by Baby Doe could have had multiple functions including that of an office, storage shed, and shop.

A spur from the Colorado & Southern Ry. served the Matchless at the north end of the claim. Mine cars from the sorting room, or directly from the pit head, were pushed 50 to 100 yards for loading into either boxcars or hoppers set out on the dual gauge spur. Whether the ore was loaded into narrow or standard gauge cars depended on where it would be smelted. If the ore was going to Leadville, it likely went via a standard gauge car; if it was shipped to Denver by the C&S, it would have been via narrow gauge. The 18" gauge mine track used to get ore to the loading area can be seen in the accompanying photo.

The 1929 photo included with this article shows a rectangular pond with a small building at the end closest to the mine. This is the only reference I have found to this part of the mine, and I assume it was a pump house to clear the lower shafts of water, a continual bane of the hard-rock miner.

Few traces of either the pond or this building can be found today, except a grassy flat area surrounded by mounded tailings. I'd estimate the pump house to have been 12- to 18-feet square. It appears to have been built later to enable 20th-century miners to work the claim after some of its shafts had filled with water.



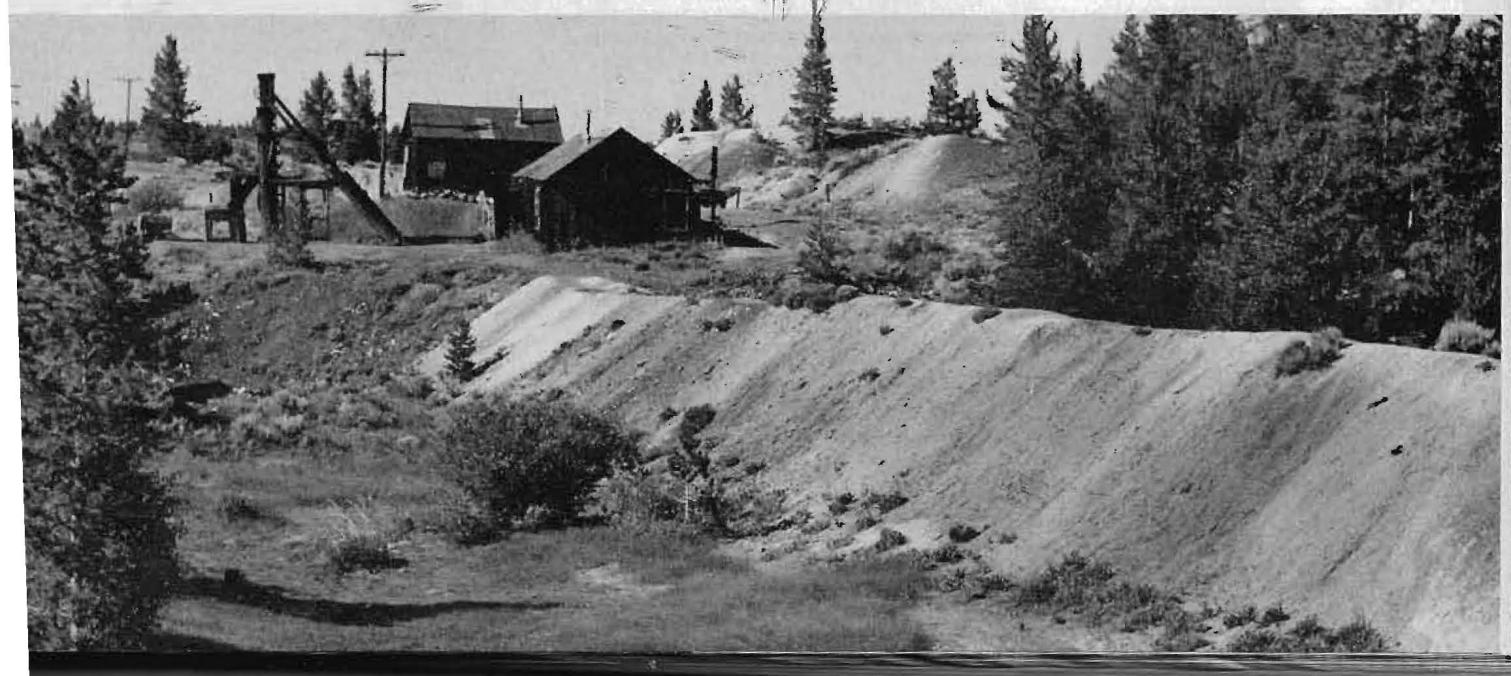
The Matchless Mine as it looks today. This photo was taken looking west from the old Colorado & Southern right-of-way. The mounds are mine tailings.

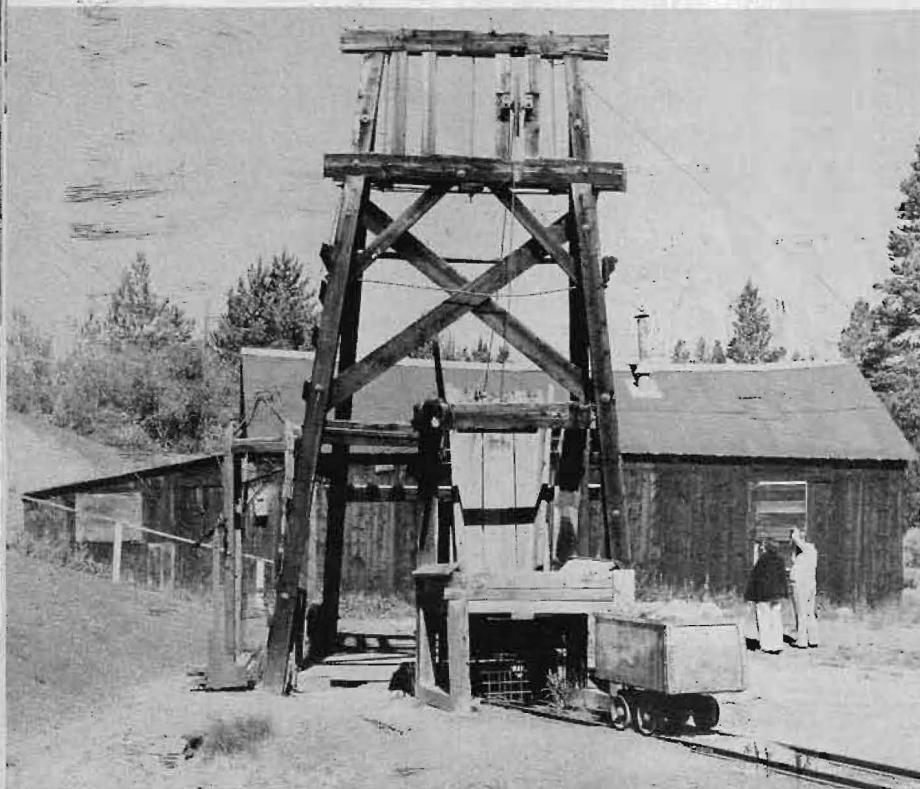
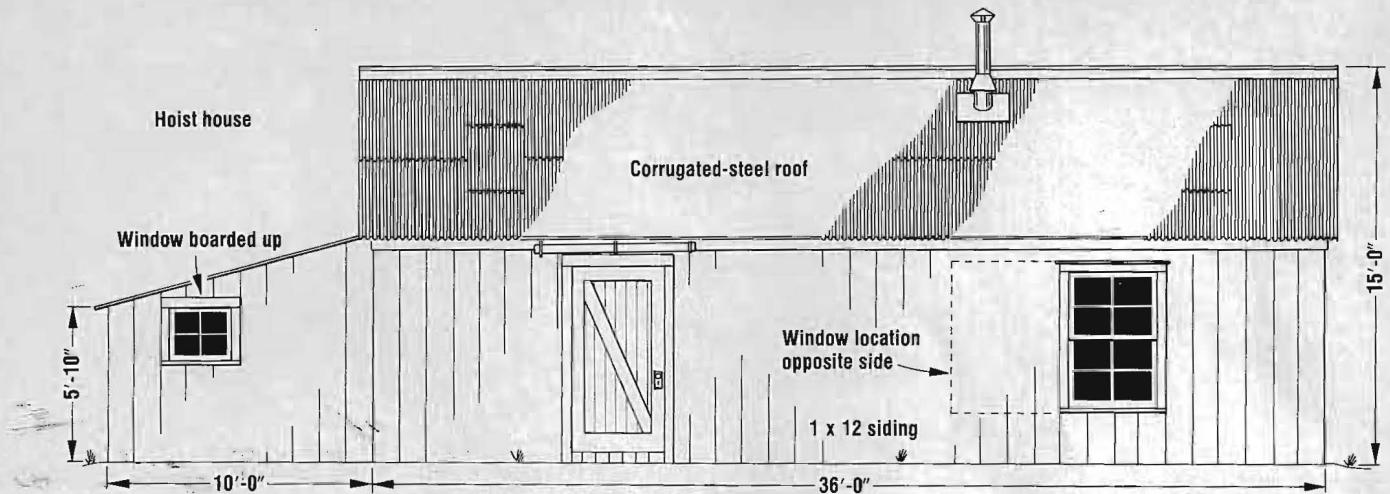


bove: This photo provided by the Colorado Historical Society shows how the Matchless Mine complex looked in 1929. The hoist house had an addition, the headframe was different, and there's a small building near the pond, probably a pump house to clear water out of the mine shaft. On the far side

of the pond is the tram track which leads to the Colorado & Southern's spur.

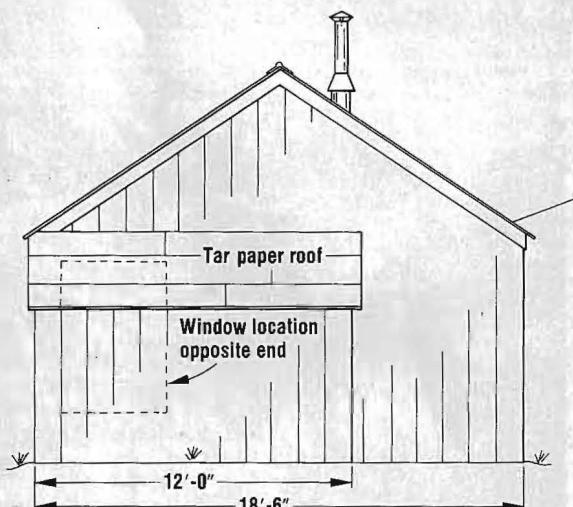
Below: How the Matchless looked 51 years later. This 1980 photo was taken from approximately the same location as the photo above. The hoist house addition has been removed, the pump house is gone, and the pond is dry.





A closeup of the headframe of the Matchless. The bull wheel atop the headframe is probably not the original. Note the cage to the left that was used to transport miners into and out of the mine. The shaft has been covered to prevent anyone from accidentally falling in.

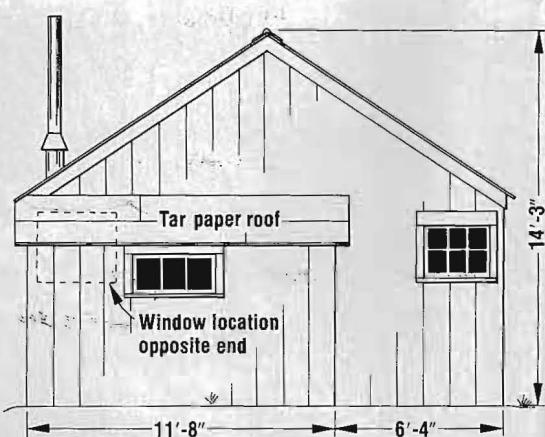
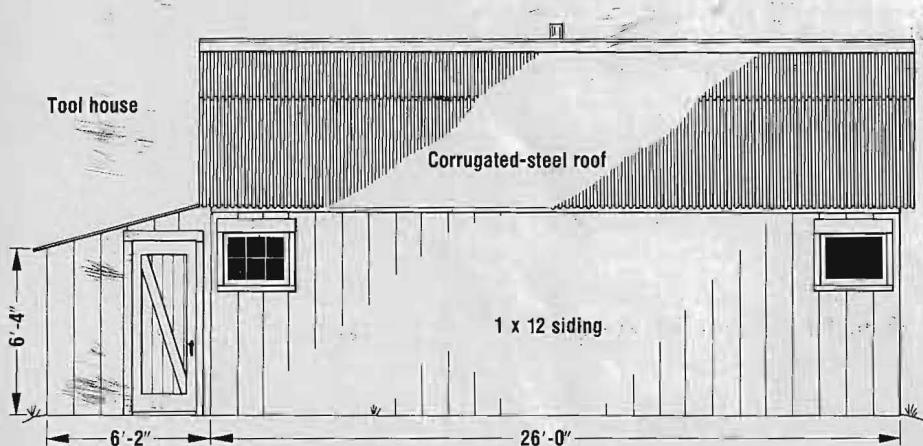
Matchless Mine structures      Ratio 1:87 HO scale



Drawn for MODEL RAILROADER MAGAZINE by

**MARC D. LUNDBERG AND  
HAROLD W. RUSSELL**

Magazine purchaser may have photocopies of these drawings made locally as an aid to his personal or commercial modelmaking or tool designing, but purchaser does not have the right to distribute copies of the drawings to others.



## MODELING THE MATCHLESS

I modeled this famous mine on the Mountain Park & Northern narrow gauge portion of my layout in a corner at Mountain Park. My Matchless loads hoppers directly on the narrow gauge main line, which of course is a deviation from the prototype.

Construction of the Matchless Mine complex is pretty straightforward. The complex consists of three structures: the workhouse where Baby Doe lived and died, the hoist house, and the headframe.

Placement of the three structures is indicated in the accompanying photos. If you are not concerned with matching the prototype, the models can be arranged in almost any fashion. The only rule is that the hoist house must be in line with the headframe because that was where the hoist machinery was located.

The base of the headframe is planked

today, and there is no indication of bottom runners. I built both into my model, however. The bottom runners may have been covered over. Leave an opening 4 to 6 feet square for the shaft directly under the bull wheel.

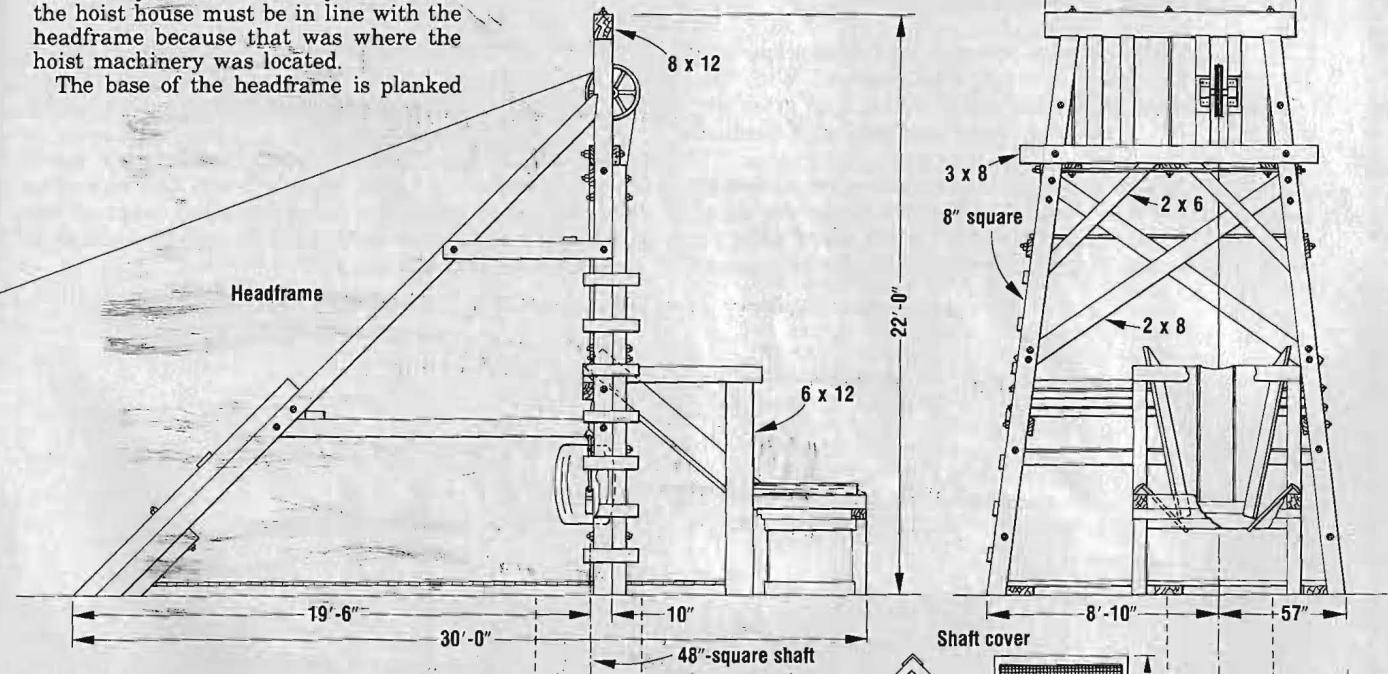
Tram tracks should run in under the loading area, and the hoist house should be set 15 to 25 feet behind the headframe. Run a length of thread from a hole midway over the hoist-house doorway, over the bull wheel, and down the shaft. A nail tied to the end of the string (if your shaft is long enough) will keep the "cable" taut.

Litter the area with odd lengths of wood (aged of course), short lengths of cable, pieces of metal or sheathing, and

any odd junk. The ground is mainly tailings in brown, rust, gray, even red.

There is little vegetation around the mine, even after 50 idle years, just some weeds and a couple of stunted junipers. Near by there are some pine trees that must have grown up since the mining era, otherwise they would have been chopped down to provide supports for the shaft or stopes (the step-like excavations formed as layers of ore are removed).

If you model the Matchless Mine, you can imagine thousands of scale dollars coming up each time an ore bucket is raised. Then you'll know how it must have felt when H. A. W. Tabor uttered his final words. ♦



Prior to installation on the layout, the author arranged the completed model mine structures in the relative positions the prototype buildings occupy on Fryer Hill above Leadville.

