

## *Eisenhower Tunnel a moving target during construction*



*Inside the bore for the Eisenhower tunnel in 1971. Loyd Files Research Library photo*

Part 2

By Kathy Jordan

In March 1973, the Eisenhower tunnel, one of the highest vehicular tunnel in the world with a maximum elevation of 11,158 feet, opened to automotive traffic. It was two years behind schedule and \$56 million over budget.

It was also the first of two bores to be drilled under the Continental Divide between Colorado's western and eastern slopes.

The project started on March 15, 1968, when the Straight Creek Constructors, a company made up of four companies, Al Johnson Construction Co. of Minneapolis, Minn., Gibbons and Reed Co. of Salt Lake City, Utah, Western Paving Construction Co. of Denver and Kemper Construction Co. of Las Angeles, Calif., removed the first rocks and dirt from the tunnel.

At the start the dual tunnels under the Continental Divide were expected to be finished in three years at a cost of \$56 million.

However, even the best made plans of mice and men ran into difficulties that could not have been foreseen when the first pioneer bore was completed in December of 1964.

Before the pioneer bore was started, the Colorado Highway Department had done exhaustive planning and preparation.

Charles Shumate, chief engineer for the CHD, told a Sentinel reporter in 1973 that “We hired the best brains we could get. “

“We knew there was bad rock there,” Shumate said. “We knew the length of it from the pioneer bore. But one thing rock science can’t do is extrapolate the loads from the bore to those in the much bigger tunnel.”

What followed changed the project completely and the progress thereafter would be almost inch by inch.

Upon hitting the fragile rock the contractors discovered it would not support itself and placed tremendous strain on anything under it.

After discussing the situation Straight Creek Constructors made the decision to buy a 450-ton mining shield to dig through the unstable rock and hold the rock up simultaneously.

Problem solved, or so they thought.

The Daily Sentinel reported that “mining shield” quickly became a phrase carrying a connotation similar to “Edsel” (a car design which was a disaster) or “perpetual motion machine.”

While the crumbly soil 90 feet below Loveland Pass was soft it wasn’t soft enough to use the giant shield which bogged down after moving only a few yards.

In November 1970 with the project behind schedule and over budget, Gibbons and Reed became the projects prime contractor and the remaining mining was put on a force account.

Under the new agreement the contractors worked for the state and the state then paid expenses as they were incurred.

The tunnel builders decided that the “Perpetual Motion machine” was not working and that the best way was the hard way. They opted for a method known as multiple drilling.

So began the slow, arduous process of literally lining the main tunnel through the trouble, or “squeeze” area. The trouble areas were toughened with 8-by-10-foot panels of reinforced concrete. This “fix” was eventually successful.

More than 900 miners, heavy equipment operators, welders, electricians, laborers, engineers and supervisors worked around the clock six days a week during the last year to get the job finished.

When the tunnel was finished the trip over the Continental Divide took five minutes. What a difference from the nine mile trip over the Loveland Pass that could take between 45 to 60 minutes.

Hazardous cargo is not allowed in the tunnel, and truckers are required to use Loveland Pass.

In the wintertime Loveland is often closed. When that happens the trucks are queued up in the parking areas at the portal and once an hour the tunnel is shut down and the trucks go through the tunnel escorted by a Colorado State Patrol trooper.

The Straight Creek Tunnel, now the west bound lane, was dedicated on March 8, 1973, at noon, with Gov. John Love officiating. It had been renamed the Eisenhower/Johnson tunnel in 1972 by the Colorado Legislature.

Construction on the eastbound bore, known as the Johnson Tunnel was subsequently begun, and that part of the project was dedicated on Dec. 21, 1979. It was named in honor of former U. Sen. and twice Colorado Gov. Edwin C. "Big Ed" Johnson.