December 16, 1913; Vulcan Mine, New Castle, Colo.; 37 Killed

(From Bureau of Mines report, by A. J. Strane)

The explosion at about 10 a.m. on Tuesday swept practically the entire working section of the mine, heavy falls were produced, much damage was done to the interior of the mine, and the fan on the surface was completely wrecked. All of the 37 men and 1 mule and 1 horse in the main workings were killed, 35 by violence. Two men and a mule in an old entry above were not affected.

The seam pitches at 50° and is reached by rock tunnels from the footwall side. Safety lamps were supposed to be used in the section where the explosion originated, but one driver used an open light and shots were fired with caps and fuse.

It was thought that gas was not involved but that dust was stirred up and ignited by an open shot in a chute or that dust from a fall in a chute was ignited by the open light. There was some suspicion of an intentional explosion because of labor troubles throughout the State, and threats had been made against this mine.

Natural ventilation quickly cleared the mine of gases, and oxygen breathing apparatus was not needed for recovery of the bodies, although it was used by the superintendent on an exploration trip on the east entry. A sketch of the mine is shown as figure 34.

FIGURE 34.—Map of explosion area, Vulcan mine, New Castle, Colo., December 16, 1913.