

M/NM FATAL

1938 0002

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
BY C. W. OWINGS

SUBJECT: Premature explosion of dynamite in the quarry of the Asheville Quarry Company, Asheville, N. C., about 3:45 p.m., August 31, 1938.

An explosion occurred in the quarry of the Asheville Quarry Company about 3:45 p.m., August 31, 1938, resulting in death to five employees. The quarry, had been leased by the City to the Asheville Quarry Company.

In December 1936 Murray Grier, safety director for the Department of Labor, North Carolina, had stopped work on the quarry walls because the company failed to comply with the rule requiring overburden to be removed for at least 10 feet from the edge of the quarry wall in all places. On the day of the explosion, for the first time in a number of months, five men were observed working on a ledge approximately 60 feet above the quarry floor and from eight to ten feet wide. The rock wall above this bench was approximately 70 feet high, was cracked, broken, and in a rough condition throughout its vertical height. There were some loose-appearing rocks near the top of the wall. The rock wall is approximately 130 feet high at this point. Above the bench and rock wall a bank of heavy red clay, lying on a steep slope from 65 to 75 degrees extended for about 60 feet. There was little vegetation to hold this bank in place. Prior to the explosion three holes 1-1/2 inches in diameter and 12 feet deep had been drilled by an air drill. Two men were engaged in loading the first hole, removing the cover from the explosives and putting them loose in the hole, tamping with a wooden bar. One case of 40 percent strength dynamite was on a bench near the hole being charged and nine or ten electric "caps" in a pasteboard box were beside the explosive. Two white men and two colored men were working on this ledge from three to five minutes before the explosion, stated that drilling had been completed; however, four men riding by the quarry at the time of the explosion, eye witnesses to the explosion, stated that the drills were working at the time of the explosion. The superintendent sent his 17-year-old son to the bench to carry an iron bar for rolling a heavy rock from the bench. He had to climb over an unapproved ladder near the top of the bench. At the time of the explosion four eye witnesses observed dirt flowing down from the clay bank at or near the place where the holes were being loaded. An opinion was expressed that the dynamite being charged into the hole had fired and detonated the rest of the dynamite nearby. It was not determined whether or not this hole had been fired. According to Mr. Grier, the most probable cause of the explosion was that a rock or other debris dislodged from the high wall directly over the working bench fell into the electric detonators and a case of dynamite, detonating them, and this in

turn detonated the explosives in the hole. The bar carried by the superintendent's son was burned on the end and bent. There is a possibility that the boy threw the bar up on the ledge and that it landed on the detonators or explosives.

A possibility not mentioned in the report is that the explosives being put into the hole loose (minus the original paper wrappings) may have lodged along the sides and when the tamping bar was used friction caused detonation of the explosive in the hole, which having no stemming on it caused a flame to come from the hole or else caused small particles of rock to hit the detonators or explosives.

An article in "The Evening Star" stated: 50 pounds of dynamite go off Unexpectedly in Quarry. Three theories offered. Asheville, N. C., Sept. 1 - A terrific dynamite explosion that killed five men at a stone quarry here puzzled officials today. The men, William Bizzell and Harley Webb, white, and Will Henry, Wesley Moore and Gus Davis, colored, were perched on a perpendicular 200-foot cliff yesterday when 50 pounds of dynamite exploded and mangled the men beyond recognition.

W. H. Bizzel, father of William and quarry foreman, said that the blast could have been effected in three ways. A spark, he said, could have reached the naked powder, the rock holes into which the powder was poured could have been very hot, or the stone could have contracted to the 40 pounds pressure necessary to set off the powder.

Bizzel said that he just had left the point where the men were pouring dynamite into holes when the blast occurred.

A telegram dated September 2nd stated: Premature explosives accident, Asheville Quarry Company, Asheville, North Carolina, August 31, killed five men. Available information three twenty foot holes drilling half way up three hundred foot face had been sprung. With fifty pounds dynamite and loading the first hole when detonation occurred. Coroners inquest heard such possibilities of spark. Returned verdict no criminal negligence. Further details will follow when obtained. Pittsburgh Advised.