VERDICT RETURNED JUNE 5, 1928, BY CORONER'S JURY IN EXPLOSION AT MATHER MINE, JOHN W. ROSS, CORONER

"We, the Coroner's Jury sitting on the investigation of the cause of an explosion which occurred at the Mine of Mather Collieries, Pickands, Mather and Company, Operators, located at Mather, Greene County, Pa., on Saturday May 19, 1928, on or about the hour of 4:07 P. M., hereby submit the following return: After hearing the testimony of the various witnesses, and a further study and consideration of the thorough report made on this disaster by the State Mine Inspection Commission, we find that this disaster was caused by an explosion of explosive gas and coal dust in the north side of the mine. The primary cause of which explosion is unknown."

## HILLSIDE MINE EXPLOSION

On August 9, 1928, at 1:00 P. M., a gas explosion resulting in the loss of five lives occurred in the Hillside Mine operated by the Tunnel Smokeless Coal Company and situated near Johnstown, Cambria County, in the Twenty-fourth District, Nicholas Evans, Inspector.

The report of the Commission and the verdict of the Coroner's Jury of Cambria County follow:

## REPORT OF COMMISSION OF INSPECTORS

Johnstown, Pa., August 14, 1928.

Hon. Walter H. Glasgow, Secretary of Mines, Harrisburg, Pa.

Dear Sir:

We, the undersigned Mine Inspectors, were directed by you to examine the Hillside mine of the Tunnel Smokeless Coal Company, to ascertain the cause, if possible, of the explosion in said mine on the afternoon of August 9, 1928, at 1 P. M., resulting in the death of five workmen.

This mine is situated in Stoneycreek Township, Cambria County, on the line of the Baltimore and Ohio Railroad, south of the tunnel near Kring Station.

The C-Prime seam of coal is being mined and the coal is delivered to the surface through a rock slope 330 feet long. This mine has been operating for about 10 years, the workings cover an area of about 3,000 by 2,500 feet and no pillars as yet have been extracted.

The ventilation is produced by a Robinson fan, 3 ft. in diameter by 4 ft. wide running 300 RPM with a water gauge of 7/10 inch, producing 31,500 cubic feet of air per minute. The fan is electrically driven, working on the exhaust principle. It was slightly damaged by the force of the explosion.

The mine is electrically equipped by A. C. current for coal-cutting and pumping; the voltage for mining machines and small pumps is 220. The coal is hauled to the bottom of the slope by storage battery motor. The coal-cutting machine is self-propelled, receiving its power from the connection to the power lines at junction boxes placed along the entries. This machine is of the explosion-proof type.

The mine is worked exclusively with electric cap lamps and permissible explosives used for blasting.

The disaster was immediately reported to the inspector of the district. He then called other State Inspectors to go to the mine to assist him in rescue work and some of them were at the mine within thirty minutes thereafter.

Your Commission of Inspectors inspected, on August 13th, that portion of the mine affected by the explosion. We found the main force of the explosion came from the face of No. 4 Left to the Main haulage road. The stoppings in No. 4 Left were blown from the air course to the entry, and the stoppings in No. 5 Left were blown from No. 4 Left towards No. 5 Left. Part of the force went to No. 5 Left through No. 9 room off No. 4 Left. No. 10 room was a blind room (no cross-cuts to other workings in it) and was idle on the day of the explosion and no disturbance was noted in this room. In No. 11 room or the line entry, where the mining machine was cutting coal at the time of the explosion, shows evidence of slight force from the face to the entry, also evidence of fire which resulted in the stringy soot hanging from the roof at the face, also soot on the coal-mining machine and posts. The mining machine was in operation at the time of the explosion and had cut 22 feet across the room which is 30 The controller lever was found in the operating position, feet wide. the machine runner was found 18 feet back from the face slightly burned (2nd degree burn). The machine cable from this mining machine connected to the main power lines at a junction box near to No. 10 room on No. 4 Left.

The explosive force coming from the face of this No. 11 room went towards the face of the Line entry on the left side of No. 4 Left, part going down the entry and part down the air course of No. 4 Left towards the Main entry.

Throughout the mine there was no evidence of any great heat, the force dislodging stoppings and some electric wires on the upper end of this No. 4 Left entry. However, the electric wires leading from the power lines at a cut-through on No. 4 Left between 6 and 7 rooms to a junction box on left side of the air course, were burned off and showed evidence of being very hot, which no doubt was due to the result of a ground caused by the explosion.

The Fire Boss examined this Line entry shortly before the machine runner started to cut the place and reports that he did not detect any explosive gas; also the machine runner had his flame safety lamp with him and evidently failed to detect the gas.

We believe the gas was liberated from the fresh cut during the operation of the mining machine. No gas has been reported in this mine since April, 1928.

After very carefully considering all the evidence as demonstrated by the various forces caused by the explosion, in conjunction with the fact that no shots were fired in that section of the mine where the explosion occurred, and no open lights or locomotives were being used, and only a coal-cutting machine being operated in No. 11 room, No. 4 Left heading, we are of the opinion that the explosion originated in



No. 11 room, No. 4 Left heading, and that the initial point was at or near the coal-cutting machine, and that accumulation of gas which caused the explosion was ignited by an arc from the coal-cutting machine.

A map is herewith attached for the purpose of clarifying this report.

## Recommendations:

Your commission offers the following recommendations:

First—All electric mining machines used in working places and return air should be of an explosion-proof type and should be inspected and maintained in such condition at all times and a record made of said inspections in a book kept at the mine for that purpose.

Second—Rock dust dry and dusty places or use water to keep such in a wet or damp condition.

Respectfully submitted,

THOS. D. WILLIAMS,
Inspector Sixth Bituminous District.
ALEXANDER JACK,
Inspector Tenth Bituminous District.
F. W. CUNNINGHAM,
Inspector Twentieth Bituminous District.
NICHOLAS EVANS,
Inspector Twenty-fourth Bituminous District.

VERDICT RETURNED AUGUST 17, 1928, BY CORONER'S JURY IN MINE EXPLOSION AT HILLSIDE MINE, ANNIE F. SWABB, CORONER.

"We find that the mining machine cut through a feeder of gas and that the latter was probably ignited from a spark originating from the machine which was in a defective condition. This explosion resulted in the death of five employes. We recommend that the Legislature be requested to amend the bituminous mining laws so as to require a record of the inspection of all machines which might possibly cause an explosion in such mines so that more care may be exercised in order to prevent such explosions in the future."

## IRVONA NO. 3 MINE EXPLOSION

On August 15, 1928, at 3:15 P. M., a gas explosion resulting in the loss of thirteen lives occurred in the Irvona No. 3 Mine operated by the Irvona Coal and Coke Company, situated near Coalport, Clearfield County, and located in the Thirteenth District, Thomas A. Mather, Acting Inspector.

The report of the Commission and also a supplemental report of the Commission, with the verdict of the Coroner's Jury of Clearfield County, follow:

