

## FATAL ACCIDENTS

## Explosion of Gas at South Wilkes-Barre No. 5. Colliery

On March 12 an explosion of gas at the South Wilkes-Barre No. 5 Colliery of the Lehigh and Wilkes-Barre Coal Company caused the death of seven men.

The colliery had been idle for three days, but a number of men under the direction of the mine foreman and the fire boss had worked all day until shortly after 4:30 p. m. on plane and plane airway, where the explosion occurred. The fire boss was the last man to leave the place, and upon examination he found both places free of gas. His other duties were to see that no fire or feeders were left burning after the day shift; also to see that all doors affecting the ventilation in this part of the mine were closed. He walked behind the day shift men all the way out to foot of shaft where the fire boss's shanty is located. Here he gave the charge-man of the night shift a safety lamp and reported both places free of gas. The work they were engaged in was moving a compressed air hoisting engine from its old location to a point further up the plane, so as to make it available for hoisting from new levels located above those from which it had been drawing coal.

Parallel to the plane was the plane airway connected with the plane by a heading about ninety feet apart. All but the upper heading had stoppings in them. This upper heading was quite close to the face, and a board brattice extended from it to a point about eight feet from the face. The normal air current through this air course was 13,000 cubic feet per minute, amply sufficient to dilute and carry off all gas evolved there.

The night shift consisted of eight men, all of whom were English speaking men of more than average intelligence. When they reached the fire boss's shanty, the fire boss, although aware that the place made gas, told them that when he left it, the place was safe. But to make absolutely sure, he cautioned them to examine it with safety lamps before attempting to use their naked lights. When they reached the foot of the plane airway, one of the men was sent back for some tools that were required, and the other seven went up.

As the seven men who went up the plane airway, which was the intake from the foot of the shaft, were all killed, there is no evidence as to how the explosion occurred. However, when the bodies were recovered it was found that the safety lamps had not been used, but were in the coat pockets of the men, so that the accident was due to the failure to follow the fire boss's instructions. That it was not a particularly severe explosion was evidenced by the fact that the men were but slightly burned. An examination showed that they had all been killed by after-damp, resultant from the explosion. It is probable that the explosion, which blew out several of the plank stoppings on the headings, was heavy enough to knock them down and stun them, and that before they could regain their senses the deadly after-damp killed them.

As soon as knowledge of the accident reached the officials a rescue corps equipped with Draeger helmets attempted to reach the men, but the knocking out of the stoppings on the headings had short circuited the air current, and, as a result, the heated atmosphere in the upper section of the air course remained and rendered it so hot that the rescue party could not enter. After the air current had been restored to its usual course the hot air was driven off and the bodies recovered. Notwithstanding the fire due to the ignition of the gas and the heat engendered, it is more than probable that all of the men could have escaped if they had not been stunned, because an examination of the bodies showed but comparatively slight burns, and the brattice boards and stoppings showed no signs of scorching. The only way in which the gas could accumulate was by the temporary baffling of the air-current. It is the writer's theory that the few changes in doors and stoppings that were made shortly before the day shift left that day, allowing more leakage in the new stopping, caused diminution of the normal current in this particular split. The result was an accumulation of gas in an explosive condition, just as the men reached the point near where they were to commence work. This would have been detected and the accident prevented, had they heeded the instructions of the fire boss, and used their safety lamps.

## CONDITION OF COLLIERIES

### LEHIGH AND WILKES-BARRE COAL COMPANY

Hollenback No. 2.—Ventilation, roads and drainage good; condition as to safety good.

South Wilkes-Barre No. 5.—Ventilation, roads and drainage good; condition as to safety, good.

Sugar Notch No. 9.—Ventilation, roads and drainage good; condition as to safety good.

Maxwell No. 20.—Ventilation, roads and drainage good; condition as to safety good.

Stanton No. 7.—Idle since October, 1909.

### LEHIGH VALLEY COAL COMPANY

Prospect.—Ventilation and drainage good; roads fair; condition as to safety good.

Dorrance.—Ventilation and drainage good; roads fair; condition as to safety good.

Franklin.—Ventilation and drainage good; roads fair; condition as to safety good.

Warrior Run.—Ventilation, roads and drainage fair. They are robbing pillars. Condition as to safety good.

### DELAWARE AND HUDSON COMPANY

Baltimore No. 5.—Ventilation, roads and drainage good; condition as to safety good.

Baltimore Tunnel.—Ventilation, roads and drainage good; condition as to safety good.

Conyngham.—Ventilation, roads and drainage good; condition as to safety good.