FOSTER'S TUNNEL MINE ACCIDENT

On September 27, 1915, eleven men were entombed in the East Mammoth vein bottom split gangway off Foster's Tunnel, a water level opening of the Lehigh Coal and Navigation Company, situated on the southwest boundary line of Coaldale Borough, Schuylkill County, by a sudden rush of water from the East Mammoth top split gangway, an abandoned working.

The East Mammoth top split gangway was opened off the Old Dry Hollow No. 6 slope and was driven east for a distance of 1,450 feet where it was stopped on account of the vein running into fault. The elevation of the gangway is 1,140 feet and the average dip of the vein 38 degrees, south.

The East Mammoth bottom split gangway was opened off Foster's (water level) Tunnel and has been driven east 1,350 feet where the present face is located. The elevation of the gangway is 997 feet. It was in this gangway the men were entombed, the water and debris having rushed from the East Mammoth top split gangway, 1,140 feet elevation.

It might be well to note that the East Mammoth top split gangway, off Foster's Tunnel, at an elevation of 1,007 feet, has been worked and the breasts broke through into the East Mammoth top split gangway from where the water, which closed the bottom split gangway, came. No trouble was experienced with water in any of these breasts.

In slant chute No. 24 the water broke through at eleven o'clock on the morning of September 27 after a shot had been fired by William Watkins and Gint Hollywood, two competent miners, who were engaged in driving the slant chute. Both men managed to work their way amid the water and debris down the slant chute to a crosscut into and up No. 23 chute where they were entombed for 22 hours.

The volume of water made its course from the old gangway down No. 24 slant chute, gutting it out as it went, breaking down the pillars between Nos. 24 and 20 and violently rushing out No. 20 breast, which was enlarged to practically three times its normal size. Thence it went down No. 20 chute into the gangway and then proceeded to the mouth of the tunnel. In its course the water picked up timber, rocks, coal and fine material sufficient to close compactly the gangway from No. 19 chute to No. 23 chute approximately a distance of 300 feet.

Upon being notified of the accident, General Inside Superintendent W. G. Whildin and Mine Inspector I. M. Davies immediately went into consultation and under their supervision rescue parties and plans for re-opening the gangway were promptly formed and put into operation.

Three parties were formed and definite work assigned to each, one party to open a narrow opening on the top of the gangway, another party to open the airway or monkey gangway, and a third party to follow the first party in re-opening the gangway to its full width. The party which was opening the gangway to its full width started at No. 3 chute and cleaned up such material as was carried by the water in its course towards the tunnel mouth. The party which worked the upper lift of the gangway started at chute No. 19 and opened a hole 3 by 4 feet along the south rib. This work was tedious and slow, due to the extreme difficulties which were encountered along the gang-

way. Between chutes Nos. 20 and 21 the progress was impeded by striking a steel mine car and truck. By means of an acetylene torch enough of the car was cut away to permit the men to follow the north rib and proceed with the work. At the time the men were rescued this party had advanced very close to chute No. 25 where the mules were encountered amid old timber, rock, coal and other debris. The party which advanced along the airway started at chute No. 19 proceeded thence to No. 20 where it was found that the pillars had been washed away leaving No. 20 breast almost three times its normal size. Three sets of timber well planked were used in crossing this breast and the work of advancement was continued along the airway. The pillars between Nos. 23 and 24 chutes were badly damaged and extra precaution was used in opening up this ground. When reaching No. 26 chute, black damp, CO_2, was met and it became necessary to use a supply of compressed air to drive it out in order that the work might continue. Chute No. 26 was the first chute found opened and after driving the black damp out men explored the chute to its mouth and found the gangway filled with water. Two electric pumps were used in lowering this water and when sufficiently lowered, a raft was built and explorations in the gangway began. At chute No. 27 the men were found all alive and good physical condition.

A temporary platform was built along the legs of the gangway timber and each entombed man, after being closed behind a wall of water, timber and loose coal for six days and five hours, was slid along this platform to chute No. 26, up the chute and along the course which was opened by the rescuers to chute No. 20½, then down the chute to the gangway where the company physician gave them hot coffee and, when necessary, a hypodermic injection to stimulate their weakened hearts.

To emphasize the thoroughness with which the rescue work was conducted, it may be stated that each man was carried on a stretcher from No. 20½ chute to the ambulance, at the tunnel mouth. A slip of paper showing what treatment had been given the man was placed in charge of the captain of the stretcher squad who delivered it to the physician of the Panther Valley Hospital, where the men were taken to recuperate.

Helmet men were constantly on the scene and were prepared to push ahead the work no matter what deadly gases were encountered.

The rush of water without doubt came from the East Mammoth top split gangway. Section II and III, made through Nos. 13 and 16 breasts, respectively, show a thickness of 50 and 40 feet of good rock between the top split and bottom split veins, as proved by a rock hole which was driven back from the bottom split to the top split. No connections were made, however, when drilling these holes. The required drill hole length was kept in advance of the men at all times. No water was noticed in either of these rock chutes. In view of this fact the miners who were working No. 24 slant chute were not required to have a drill hole in advance of their working face, as at this point it was assumed that a good thickness of rock separated the worked-out top split vein and the virgin bottom split vein. However, since the accident occurred and the place was examined, it has been determined that the vein ran into fault and both splits of the vein came together and the pressure of the immense body of water aided by the blast caused what little support was there to give way with the above result.

Much credit is due to Mine Inspector David J. Roderick, Hazleton, who responded promptly when asked to assist with the rescue work, also to all the employes of the company without whose noble efforts nothing could have been accomplished.

CONDITION OF COLLIERIES

LEHIGH COAL AND NAVIGATION COMPANY

Nesquehoning Colliery.—Ventilation, drainage, roads and general condition as to safety, good.

Lansford Colliery.—Ventilation, drainage and general condition as to safety, good.

Coaldale Colliery.—General condition as to ventilation, drainage, roads and safety, good.

Greenwood Colliery.—Ventilation, generally good. Roads, drainage and general condition as to safety, good.

Rahn Colliery.—General condition as to safety, good. Ventilation, roads and drainage, generally good.

Tamaqua Colliery.—Ventilation and general condition as to safety, good. Drainage fair.

COXE BROTHERS AND COMPANY, INCORPORATED

Beaver Meadow Colliery.—Ventilation, generally good. Drainage and roads, good. General condition as to safety, good.

ESTATE A. S. VAN WICKLE

Coleraine Colliery.—Ventilation, drainage, roads and general condition as to safety, good.

The Wheelbarrow Wharton slope was abandoned on January 22. The No. 2 Old Wharton and No. 3 Mammoth slopes were also abandoned in the early part of the year.

EVANS COLLIERY COMPANY

Evans Colliery.—Ventilation, generally good. Drainage, roads and general condition as to safety, good.

ELMER NEYER

Black Rock Colliery.—The general conditions were good during operation. The slope was worked out and abandoned July 26.

IMPROVEMENTS

LEHIGH COAL AND NAVIGATION COMPANY

Nesquehoning Colliery.—Extended sub-station ash disposal plant. Installed additional breaker wash-water pump; also 5 additional jigs for steam coal. Built new sub-station near Old Hacklebernie tunnel.