## July 23, 1925; Rockwood Mine, Rockwood, Tenn.; 10 Killed

(From Bureau of Mines report, by F. E. Cash)

The mine, opened in 1876, has a main haulage level branching from the slope 600 feet down. During April a fire occurred from the ignition of gas feeders in a section off the main haulage level more than 2 miles from the slope. A pair of entries 1,300 feet long were sealed and reopened July 18. On July 22 smoldering coals were discovered, and a crew of 11 men under the superintendent and the foreman was gathered at the fire about 1 a.m. July 23.

The section contained accumulations of methane on both sides of the fire; and the entry, in which the men were moving and watering the burned material with buckets, was filled with gas from the roof to within 2 feet of the floor.

The fireboss was sent to make a fireboss run over other sections of the mine at 2 o'clock. At 5:10 a.m., when he was returning to and within 2,000 feet of the fire, an explosion occurred, followed closely by another of greater violence. His safety lamp was extinguished, and he was knocked down. He walked out about 1,200 feet with the aid of a flashlight until he found a mule and a mine car and rode to the slope bottom and was hoisted outside. Help was called, and 2 bodies were found, badly mutilated, 600 to 800 feet outby the fire and 50 feet outby the waterhole, from which the water had been carried to the fire. The other bodies were in the smoke, which was steadily expanding in area.

New seals were put up, enclosing double the original area. The seals were opened by organized apparatus crews under Bureau and State experts from West Virginia and Tennessee on October 22 and 23, 1925; the remaining eight bodies were removed, and the area was ventilated. The gas was ignited either by the fire or by an open lamp carried by one of the victims, all had unlocked flame safety lamps. The explosion was propagated by dust to water pools on the incoming entries.

Explosion hazards found during the investigation included thick layers of dry dust, persistent methane, poor ventilation, open lights, open-type electric equipment, gasoline locomotives, solid shooting, and overcharged holes. The recovery work, accomplished without loss of life or injury, was notable because of the existing hazards.