THIRD DISTRICT.

Office of Inspector of Mines, Third District Anthracite Coal Fields, Wilkes-Barre, Pa., March 17, 1886.

Honorable J. SIMPSON AFRICA,

Secretary of Internal Affairs of Pennsylvania:

Sir: As provided in section seven, article two, of the act of June 30, 1885, providing for the health and safety of persons employed in and about the anthracite coal mines, I have the honor of presenting my report for the year 1885.

The creation of an additional inspection district by this act reduced the number of collieries in this district from sixty-three to forty-two; but, having no inspector appointed for the Second or new district until the end of October, a list of the fatal and non-fatal accidents for the twenty-one collieries formerly in this district is found in my report up to October 31, when Mr. McDonald was appointed inspector for the Second district.

The amount of coal mined in 1885 was 6,177,644 tons, an increase of 442,223 tons over the amount mined in the same portion of the district in 1884.

The number of fatal accidents was 89, leaving 46 widows and 145 orphans.

The number of non-fatal accidents was 285, but only 178 of which were classed as being serious.

The report contains lists of the fatal and non-fatal accidents, tables of useful statistics, and other information thought to be useful.

Three very serious disasters happened in this district during 1885—the first at the West End colliery, August 11, where ten men lost their lives by suffocation; the second at the No. 2 shaft, Plymouth, where sixteen men were seriously burned by an explosion of gas on October 21, six of whom died; and the third was the disaster in the No. 1 slope. Nanticoke, December 18, where twenty-six persons were entombed by an inrush of quicksand. A full account of each will be found in this report, which is respectfully submitted.

G. M. WILLIAMS, Inspector of Mines, Third District. brattice-man, Powell, and his assistant were about going to close the lowest of the two open cross cuts, saw the two Polanders going up the outside breast and drove them back to the gangway, cautioning them to remain there until the fire-boss came in. After closing the cross-cut with boards, Powell and his helper were in the inside breast. The latter took the tools down toward the gangway, while Powell went up with a safety-lamp to see whether the gas was moving away or not. At the same time, the Polanders stole up the other breast, and meeting the gas, fired it from their naked lights. In the explosion which followed, both Powell and they were fatally burned.

Accidents, Nos. 50 to 55 Inclusive.—Frank Lamaraux, John Kerst, and Dennis Titus, Carpenters, Frank Spinnette. Anthony Spinnette, laborers, and Thomas Collins, miner, were fatally burned by an explosion of fire-damp in the No. 2 shaft, Plymouth, October 21, 1885. There were ten other persons severely burned at the same time. The mine had been idle for over nine months, and a few days before this accident occurred, a number of men were set to work repairing the inside barn and repairing the tracks and putting them in order for starting operations in the mine. At seven o'clock this morning, they descended the shaft to their work, as they had done the other mornings. There are two seams mined in the shaft, one at the bottom and another about midway in the shaft. Part of the men got off at the upper seam, called the Tunnel, and the others descended to the lowest one. The passing branch at the Tunnel landing is made in a dirty seam of coal which is not mined, at the terminus of which a rock tunnel (see rock plane on plan) was driven up to the Hillman seam on a grade, so that the coal mined in the latter is lowered by gravity. All the coal hoisted from this landing was mined in the Hillman seam and lowered over this rock gravity-plane to the passing or double branch at the shaft. At right angle to the gangway at the foot of this plane, two parallel openings had been driven about seven years ago to a distance of about six hundred feet and had been abandoned, (see AA, on map.) It appears that these two places were filled with fire damp on this morning to a point not far from the gangway. About eight o'clock John Levitzkie, one of the laborers, not knowing that any danger existed, went up one of these places at X and fired the gas. He was severely burned and he ran out and up the plane, when the men who worked there met him and took him out through the No. 1 shaft. No one else was hurt from this explosion. Dennis Titus and the others who worked with him in the barn ran down to the gangway and saw the flames extending out of the old opening at B and part of the way up the plane. He then sent a young man (his helper) out to tell the boss. This young man ascended the shaft and saw Howard, the acting fire-boss, and three machinists ready to descend. They descended with him and got off at the tunnel landing. The young man stayed on the cage and descended to the bottom seam. He there met the boss and was telling

him of the accident, when another explosion occurred, the concussion of which was very forcible. They ascended the shaft immediately to the tunnel, and found those who were able to walk coming out toward the shaft, (see plan.) Dennis Titus was instantly killed, and his body was found under a car about four hundred feet from the shaft. All the others were severely burned, and five of them died shortly after from their injuries.

The cause of the accumulation of such a large body of gas is not yet definitely explained. The coroner held an inquest, but he selected a jury which proved utterly incompetent. Some of them had been working, more or less, in coal mines, but it was evident that they knew nothing of the principles of mine ventilation, nor of the laws governing gases in mines, consequently their verdict was very unsatisfactory. They attributed the accumulation of gas to the fact that a double door, which was on one track of the double branch, had been allowed to stand open for a short time, yet this place was left without a door for two weeks after the explosion, and some of the jury were invited and went to see the effect, and no gas was found to have accumulated. It was proven conclusively that the neglect of this door was not the cause of the accumulation of gas, and that sufficient air circulated through the abandoned places to keep them safe with. out the door. In view of this fact, some other cause must have existed for the accumulation of the gas. One of the old openings was a continuation of the air-way turning right angle; the other was opened from the gangway at foot of the plane. In the lowest or first cross-cut there was a small man-door (see door to mule barn) placed to enable persons to pass from one place to the other without going around the faces. This had rotted, and fell down during the idle time, leaving a passage for the air-current to cross without going around the faces. This, and the stoppage of the fan for repair, &c., would leave the old openings unventilated, and, consequently, the gas evolved therein would accumulate in a large body; but the fire-boss swore that he examined both places three days prior to the accident, and found them clear of standing gas. If he tells the truth, the presence of a body of gas on the morning of the accident is a mystery which cannot be explained; but if he does not tell the truth, and had not examined the said places since starting to work, the facts stated must have been the cause of the fire-damp accumulating. They had not seen standing gas in these openings before for seven years, and, if they had suspected its presence on this morning, the accident could have very easily been averted.

Fatal Accidents by Falls of Roof and Coal.

There were 38 severely injured and 17 deaths from falls of roof and coal in the Third district during 1885. Accidents of this class occur nearly in the same manner continuously, and at least three fourths are the result of too much haste or too much indifference to the dangers which may