No. 8—Henry Clay.—*R. Langdon & Co., Operators.*

This colliery is situated south of and near Shamokin, in Northumberland county, on the estate of Belle's heirs tract and Philadelphia and Reading Coal and Iron Company. It consists of a main drift opened on the No. 9 vein, or the upper seam of the Mammoth Twin seams, and a double track slope sunk 90 yards deep from the water level of the No. 8 vein, or the lower bench of the Mammoth Twin seams, on an angle of 45°. Mining and all excavations are confined to the west of the slope. The slope gangway is now 1,500 yards long, and mining suspended at this point. 700 yards from this slope a tunnel is driven to No. 9 seam, and that gangway is driven back east 266 yards, ending in a fault, and consequently abandoned. Its west gangway is 900 yards long, and here a second tunnel is driven into the No. 8 vein. Now the west gangway in No. 9 vein is continued 200 yards to its face, giving a total yardage of 1,366 in the No. 9 gangway. 3 inclined planes are in operation in each vein, with 13 breasts working, employing 40 hands.

October 18, 23 hands were employed in the upper No. 9 counter level drift, working 9 breasts, in coal 5 feet thick; the No. 8 seam is 6 feet thick.

Ventilation is produced by the operation of a 20-horse power steam fan, located near the drift opening. The slope is used as an intake air-course, and the current traversing inwards through the No. 8 or slope workings and passing thence into No. 9 workings, and thence out to the outcast at the fan. In No. 9 workings the current traverses through the abandoned water level, thence into the counter level and out at the fan. October 18 I found 6,000 cubic feet of air at No. 8 inlet, and only 4,300 cubic feet at its return into No. 9. There were 40 hands employed.

Outside temperature was 66°, while inside it was 68°, Fahrenheit; outside barometer, index, 29½; while inside it was 29 $\frac{6}{16}$ inches; result favorable.

Engines and Power.—A 40-horse power engine is used for hoisting at the slope, and also to run a 14-inch pole pump. A 40-horse power engine is used at the breaker; also to hoist coal on the inclined plane and the fan engine=3 engines of 100-horse power. 7 steam boilers are used, each 28 feet long by 30 inches. All these engines, boilers and machinery are in good order. 139 hands are employed inside and out; 30 mules and 70 wagons are used. Monthly shipments average 7,000 tons.

ACCIDENT JUNE 10.

In connection with this report I deem it proper to state the cause of the disaster that had taken place on the 10th of June, which resulted in the death of John S. Hays, outside foreman; Michael Mench, Enoch Megenski, Lawrence Rogolskie, Anthony Harris, William Drumheiser, Daniel Paull, Nicholas Paulus, Michael Deia, miners, and Conrad Drumheiser, inside mine boss, who had been killed and burnt by an explosion of fire-damp gas, while the others were suffocated by choke-damp or carbonic oxide, leaving seven widows and 20 orphans, by facts elicited at the inquest held on those bodies on the 11th and 12th inst.

In company with Mr. M'Andrews, clerk of the district of Schuylkill, I assisted Coroner Hezzard in this case. The cause which led to the explosion, and from the testimony of seven competent witnesses, together with examinations made by John Williams, Jabes Payne, and myself, on the night of the 11th, assisted by John Eltringham, inspector for Ashland district, we do agree in our conclusions that the explosion by the imprudent act of Conrad Drumheiser, mine boss, thus: The recent accumulation of

carburetted hydrogen gas in the old workings of the upper abandoned level of the No. 9 vein, the gangway of which had been used as an outlet on the upcast for ventilating the slope workings on both the Nos. 8 and 9 veins, the inlet or down cast being the slope on the No. 8 vein.

It appearing from evidence adduced that the said Drumheiser, some time about the 2d of June, ordered the course of the suction fan to be changed so as to force the air in and down from the upper level into the slope workings into both the Nos. 8 and 9 lower workings, instead of acting as a suction in exhausting the air out of these workings of the slope. It appearing from evidence adduced at the inquest that Conrad Drumheiser decided that during the warm summer weather the natural direction of the air-current would be downward from the fan to the slope workings, and that the operation of the fan would be more effective if worked in the same direction, hence he made the change noted above.

The accumulation of fire-damp in the old level workings may probably be due to the downward action of the air-current in checking it back by its friction in its downward course, as it was known no gas in any quantity existed in that locality a few days before the accident, and we do believe this change facilitated the accumulation of the explosive element there. For while the operation of the suction fan was in the oposite direction, and in its natural draft, the noxious airs and impurities were cast out by its suction movement, the very object for which this fan was constructed and patented by Mr. Louden Beaddle. When the operation of the fan was suspended, as it did for three or four hours out of twenty-four, from one o'clock to five A. M. when no men were at work, the air-current became less constant or fresh at that time in the morning than at any other period of the day; would likely be more sluggish in its action while changing direction. On Saturday, the fan, in the direction of the current, would tend to relieve the old workings of any accumulation of gases, while with the fan forcing the air in an oposite direction, the current would tend to force back the gases thus accumulated into the old workings, and would resist its escape. The operation of the fan was immediately changed after the accident, for the purpose of clearing the slope workings of the after-damp, which had been forced there by the action of the fan, and caused the suffocation of the mine men that encountered its influence in their efforts to escape. Since then the fan is continued as an exhaust, making the slope and slope gangways the inlet air-course, and the upper level on which the fan was located the outcast, with satisfactory results.

The finding of the jury in this case was, that Conrad Drumheiser, did ignorantly and rashly, go into said old workings with a naked lamp, and exploded the fire-damp gas there accumulated, by which he met his own death, and causing the death of the nine men before named by the choak-damp that had been forced into their working places by the reversed operation of the said fan, leaving 7 widows and 20 orphans to mourn their untimely fate.

In review.—It is surprising to see with what persistance some people will cling to delusive opinions, and how stubborn they will resist practical advice and correct views even when their personal interests are at issue. That the case of Mr. Drumheiser should stand as a menace to others in a like position where not only their own lives but the lives of thousands of men may be endangered by such acts. Any reference to this sad case only evokes our sympathy and commisseration for such imprudence in hazzarding the lives of so many very valuable citizens, and precipitating a direful calamity upon so many unfortunate families.