

and chambers 30 feet wide; they leave pillars about 15 feet wide to sustain the roof; they leave cross-entrances from 20 to 30 feet apart for the purpose of ventilation; the roof is good slate and sandstone in the Dunmore upper vein, and bouy coal and slate in the Clark vein; there are no chambers opened in the shaft or Smith's tunnel yet; they have second openings to all the workings; the mines are in a good safe working condition.

*Ventilation* is produced by means of furnaces; the furnace in the shaft is located 900 feet from main opening; Finnerty's tunnel, 850 feet from mouth; Swartz's tunnel, 800 feet from mouth; Smith's tunnel, not working now, and in Sawyer's tunnel 200 feet from mouth; the intakes are located in the shaft and in the opening of all the tunnels; the areas of intakes and upcasts vary from 40 to 60 feet; the amount of pure fresh air at shaft is 3,200, at Finnerty's tunnel is 9,560, at Swartz's tunnel is 6,357, at Smith's tunnel air is not measured, and at Sawyer's tunnel is 6,200 cubic feet per minute; there is no noxious or inflammable gas evolved in the mines; the main doors are hung so that they will close of their own accord; they have attendants at main doors; they have double doors on main travelled roads; the amount of ventilation has been measured and reported: ventilation is good; the air is circulated systematically to the face of the workings; the air currents are good, but not sufficient to keep the mines clear of powder smoke; as the veins are low and the coal hard, it requires a large amount of powder for the miners to complete their day's work.

*Machinery.*—There is no machinery required at any of the tunnels, as they are driven so as to drain the workings; they use 2 engines at the shaft, 30-horse power each; one is used for hoisting, and the other to run the breaker machinery; also a large pumping engine, — horse power; they have a metal speaking tube in the shaft; they have a safety carriage, with all the modern improvements; they have flanges of sufficient strength and dimensions for safety attached to the sides of the hoisting drum; they have an adequate brake on hoisting drum; the ropes, links, chains and connections are in good condition; the boilers have been cleaned and examined and reported in good condition; they have a steam gauge and safety valves for safety and to indicate the pressure of steam; the breaker machinery is boxed and fenced off so that operatives are safe.

*Remarks.*—This colliery is operated by the Pennsylvania coal company. William Bryden is mine superintendent, Jas. M'Millan is mining boss and William Jennings is outside foreman. There is a double breaker attached to the shaft-tower; they mine and prepare about 430 tons of coal per day; they employ in the shaft 10 miners and 6 laborers, and outside 30 slate pickers, 16 head and plate men, 3 drivers, 2 company men, 7 mechanics and 2 bosses; at Finnerty's tunnel 32 miners, 32 laborers, 7 drivers, 3 door-boys and 3 company men in the mines and 2 outside drivers; in Swartz's tunnel 10 miners, 8 laborers, 2 drivers, 1 door-boy and 1 company man, and at Sawyer's tunnel 20 miners, 20 laborers, 4 drivers, 2 door-boys and 2 company men in the mines and 2 drivers outside; in all 227 men and boys; they have furnished a map of mine; they have a house for men to wash and change their clothes in; the mining boss seems to be a practical and competent man; there are no boys working in the mines under 12 years of age; the engineers seem to be experienced, competent and sober men; they do not allow any persons to ride on loaded carriages in the shaft; they do not allow over 10 persons to ride on the safety-carriage at one time; the parties having charge know their duty in case of death or serious accident; the shaft-landing is protected by safety-gates.

#### THE SCREENS IN DUNMORE

are located at the head of plane No. 6, on the loaded track of the Pennsylvania coal company's railroad. They screen and clean the coal here which is shipped from the different mines belonging to the company which have no breaker connected with them; they employ 73 men and boys working about the screens; they cleaned and screened in the year 1872, 146,403 tons of coal; they use 1 engine here of 40-horse power.