

well and is considered an economical method of hauling their very large output. They are producing from 500 to 700 tons per day, and have a capacity for 2,000 tons with their present equipment.

An eight-and-a-half-foot drum at the head of the inclined plane, between the two seams, is operated with double wire ropes to draw up the empty cars, and let down the loaded ones. Each one of the two cables is capable of holding 10 loaded one-ton cars, but only 5 are let down at once. The loads going down heave up the empty cars, and the drum is controlled by a simple lever-brake, so as to stop the loaded cars at will at any point on the incline.

The escapement shaft, recently completed, is 5x10 feet in dimensions, strongly timbered, and provided with stairways, hand-rails and convenient landings from the top to the bottom intersecting both seams. It is doubtless the most complete and costly escapement shaft in the State.

The works are ventilated by a 10-foot fan, which, driven at the rate of 65 revolutions per minute, was found to give 22,656 cubic feet of air; at the rate of 85 revolutions, 23,872 feet, and for 147 revolutions, 37,403 feet per minute. As their working force requires 22,000 feet per minute, the fan is kept at a speed of only 65 revolutions. They can not allow the whole of this current to circulate around the faces, the velocity being too great. About half of it is kept on the roadways, and swinging check-doors turn the air to the working faces at intervals, renewing the freshness of the current.

Mr. Radford, the underground manager, is preparing to split the current, which will further improve the character of the ventilation.

This is a model mine both in its construction, equipment and management, and deserves most favorable mention.

## MENARD COUNTY.

The mines in this county are in very fair condition. One at Tallula has been abandoned this season.

J. C. Cabanas, Petersburg, has a mine which does not show the best of management, though it has more than the legal amount of air. He had no escapement shaft, but by changing the position of the furnace he was enabled to make use of his air-shaft as a place of egress.

T. F. Lanning, Petersburg. This mine has ventilation largely in excess of the legal requirement. At the upcast the volume was 13,000 feet for 56 men. They are introducing the single entry system here, driving with English brattice cloth until a given section is cut out.

### THE PETERSBURG COAL COMPANY.

This company has a well appointed mine, employing over 100 men and six mules. Ventilation abundant. The coal is from six to seven feet thick, but it has a very variable top requiring considerable care and expense for timber. A commendable practice in this mine is the driving of a blind entry between each pair of cross