# HOISTING ENGINE ROOM.

This room is also built of brick, on concrete foundation, eight feet high, with steel ceiling and fire resisting roof; the hoisting engines are first motion 14x18 with a 36-inch drum; the drum is grooved cast iron, each rope feeding behind each other, to reduce the lead. A high speed Kimball engine is also installed with a 60-light dynamo and a switchboard.

#### TOWER.

The tower is built of wood, the loaded cars being weighed on top, on rails, no flat sheets being used; the cars are then dumped on a side dumping tipple, the empty car passing on to a switch back, where it engages an automatic chain, which places the car at the back of the cage. The tower is also equipped with a large double balance shaker screen, driven by a 6x9 Duplex engine; the tower and tipple house are the only parts of this plant on which insurance is carried. Two large pair of scales are placed, one at each end of the switches, the east pair weighing all empty cars passing to the mines, the west pair weighing all loads passing from the tipple. All railroad cars empty and loaded are so graded that the cars run by gravitation and are controlled by brakes.

## SLOPE.

A slope traveling way for men and animals is driven from the surface and connects with the main bottom, seven feet high, timbered and planked throughout at a 33 per cent pitch, and is also provided with a hand rail. This slope is used as an escapement and is lighted by electricity during working hours.

# MULE BARNS.

A single story barn for the mules is located 300 feet from the slope mouth and will accommodate 50 mules; the stable is also equipped with a watering tank and mule washing arrangements and shoeing shop, the building being located inside of a 25-acre pasture, into which the mules are turned during idle time.

#### UNDERGROUND.

The main shaft bottom is driven northwest and southeast with main headings turned off at 90 degrees at each end of the shaft bottom; in front of the shaft are two small diameter turn-tables to turn the car 90 degrees into line with the cage; the empty car, leaving the cage, passes down a grade to a switch back and engages one of two chains northwest or southeast; immediately in front of the chain the cars are automatically oiled, the chain delivering the car at the top of each slope; enough gravitation is then secured to place the car at the extreme end of the shaft bottom, without any labor other than one cager.

The blacksmith shop is installed under an over cast, the fumes from which pass direct to the upcast; at the bottom of the upcast shaft is a large sump with a capacity of 10,000 gallons, built in four tight compartments, which enables cleaning out to be done without stopping. The pump room is made in the solid pillar and is ventilated by a narrow cut to the fresh air course, which keeps the pump room cool and clean.

# METHOD OF WORKING.

The method of working is opon face long-wall, all roads being turned 90 degrees; a car with a frame over the wheels on a 24-inch gauge is used, carrying a load of 3,000 pounds, the weight of the car being 800 pounds; the car is fitted with solid ends with a chain hitching fixed to the car.

# VENTILATION.

The mine is designed for four main splits with three overcasts, all returns and intakes will be on the main roads.

# ABANDONED MINES.

The Gardner-Wilmington Coal Company's mine at Clark City has been abandoned. I inspected this mine February 19, 1904, and found it in an unsafe condition, owing to a dangerous accumulation of black damp, also of gob fires in different parts of the upper seam, which had been abandoned for some time. There is only a thin strata of shale and coal between the upper and lower seams at this place. Many breaks and cavings have occurred at different times and black damp has escaped through these breaks in large quantities, endangering the lives of the men working in the lower seam. Previous to making this inspection, the mine had been idle for over two weeks, and all the mules had been taken out, owing to a fire at the bottom of the escape shaft. I immediately notified the superintendent of the dangerous condition of the mine, also that it must be closed down at once. He ordered the men to take out their tools and the mine was abandoned.

The Pontiac Coal company, Pontiac, Livingston county, has abandoned its

Evans Brothers have abandoned their mine south of Streator, in Livingston county.

John Taylor has abandoned his mine south of Ottawa, LaSalle county.

Alloway & Stevie of Streator, LaSalle county, have abandoned their mine.

## IMPROVEMENTS.

The Oglesby Coal company, Oglesby, LaSaile county, has completed the escape shaft to the middle of its mine; a traveling way has been partitioned off from the air chamber and a good and substantial stairway has been put in, the new stairway in the slope has been completed from the middle to the lower seam, and a new passageway made from the bottom of the slope to the main haulage road; the air course has been cleaned out, which has greatly improved the ventilation of the mine.

The Matthiessen & Hegeler Zine company, LaSalle has retimbered the upper part of the escape shaft and put in stairways in its mine.

## PROSPECTIVE MINES.

The Star Coal company, Kangley, LaSalle county, is sinking a new hoisting shaft at the face of the workings two miles south-west of its No. 2 mine. This will do away with the long rope haulage. A switch has been built to the mine from the Chicago, Burlington & Quincy railway. The company is also sinking a new shaft to No. 2 seam, near its No. 2 mine at Kangley; this mine will be opened on the long-wall system.

The Acme Coal company, Streator, LaSalle county, is sinking a new shaft at the face of the workings as an escapement and air shaft.

William McMillin is sinking a new shaft near Streator, LaSalle county, to supply local trade.

## FATAL ACCIDENTS.

Aug. 3, 1903, Dominic Bertigall, miner, aged 30 years, married, was instanily killed at the face of his working place, by a fall of rock in the Gardner-Wilmington Coal company's mine, located at Clark City, Kankakee county. He leaves a widow.

Sept. 12, 1903, Victor Ferrara, miner, aged 40 years, married, was killed instantly at the face of his working place, by a fall of rock, in Taylor & Cavanaugh's No. 4 mine, located at Carbon Hill, Grundy county. He leaves a widow and one child.