

first motion; all cages are very heavy and entirely of steel excepting the platforms.

The power plant will consist of three 150 H. P. boilers, two of which are now placed; boiler-house is of steel frame construction with steel roof; power-house is of brick with steel roof; machine-shop is corrugated steel with light wood wall frame with steel truss and purlins and roof. In fact the whole plant is of strictly fireproof construction.

The coal will be mined by compressed air puncher machines, air compression machinery and accessories are already purchased and on the ground. Haulage will be by gasoline motor.

The water supply for boiler and mines is furnished by drainage reservoir 1,200 feet away and water is pumped by gas engine to settling basin and standpipe at shaft.

The old air shaft has been concrete lined from surface to solid material and has steel head-frame.

The ventilating fan is 11 feet in diameter and upper half is cased with steel and lower half with concrete; no timber whatever is used in construction of the ventilating system and the fan is driven by gasoline engine.

The shaft and plant will be lighted with a 400 light electric system.

The powder magazine is located 1,200 feet from the shaft with low hill barrier between, and the construction of the magazine is in accordance with latest practice and is strictly fireproof, foundation and roof being of concrete and the walls of brick.

The railroad in connection with the mine has four loading tracks under the tippie, and storage for 40 empties and for from 40 to 50 loads is provided. The capacity of the mine will be 1,000 tons per day.

Provision has been made to install a new coke plant at a later date should the condition of the coke market warrant it, the Equality coal being known to make a fine grade of coke for zinc, lead, and copper smelting.

PROSPECTIVE MINES.

The Middle Fork Mining Company, an Illinois corporation, is opening a new mine two miles east of Benton, Franklin County.

This property will have railroad connections with the I. C. R. R., and C. & E. I. R. R., and later on with the Mo. P., and C., B. & Q. The main shaft is a double compartment shaft of two hoistways, 12 feet x 17 feet 6 inches and will be lined with a 12-inch solid concrete wall reinforced with $\frac{3}{4}$ -inch steel rods every 12 inches for a distance of not less than 50 feet both at the top and bottom.

There will be vertical "H" section "I" beams, imbedded half way in the concrete wall with $\frac{3}{4}$ -inch rods passing through, 12 inches apart, to support the steel "I" beams and buntings and also to support the cage guides. That part of the shaft which is not lined with concrete will be walled with 5-inch x 12-inch long leaf yellow pine timbers and faced with asbestos lining material.

The air and escapement shaft will be 12 x 15 feet and will be lined in practically the same way as the main shaft. The main shaft is of a proper size to accommodate a 4-ton car of coal.

The hoist will be designed to hoist two and one-half cars per minute, 10 tons of coal per minute, 600 tons per hour, or 4,800 tons in 8 hours.

A five year contract has been made with the Central Illinois Public Service Company for electric power. A. C. current at 2,300 volts will be furnished, and will be reduced to 220 volts for use on top of ground and to 275 volts for underground service. A. C. current under-cutting machines will be used, also storage battery locomotives for hauling coal underground. All equipment will be modern and installed in the best way suited to properly operate a mine of the capacity mentioned. The coal screening and preparing plant will be designed to properly size and clean six grades of domestic coal.

The Wasson Coal Company of Harrisburg is constructing a new mine west of Carriers Mills, Saline County, which will be known as Wasson Coal Company's Mine No. 2. The mine will be a slope—the first to be attempted on a large scale in the Eleventh District.