

shaker screens are constructed so as to furnish four grades of coal; each track has an 80-foot scale; these scales are placed in a concrete sealed pit, and were furnished by Moser, of St. Louis. All of the coal is dumped into a hopper and weighed in the tippie by automatic scales, also furnished by Moser. The fan providing ventilation in the mine was furnished by the Danville Foundry & Machine Company. It is 20 feet in diameter and 6 feet wide, is driven by direct connection to an engine, the cylinders of which are 12x18 inches. The buildings are all constructed of fire-proof material, excepting the tippie; the engine rooms are built of brick, the boiler rooms, shop, fan house and oil house are constructed of corrugated sheet iron; the powder house is also built of brick. The machine shop, which is very essential at all large mines, is equipped with all the latest machinery, such as lathes, drill press, and pipe machines, and such other machinery necessary for carrying on successfully the work at a large mine.

The Mt. Olive & Staunton Coal Company's mine No. 2, Staunton, Madison county, is described as follows: The hoisting and escapement shafts are both the same size, each being seventeen feet, two inches by eight feet, two inches; the hoisting arrangement consists of an engine having two cylinders 24x36 inches, which were furnished by the Litchfield Machine & Foundry Company, Litchfield, Ill. The drum is eight feet in diameter; the ropes are one and one-fourth inches in diameter; the cages are self-dumping, made by the Duncan Foundry Company, Alton, Illinois.

The electric equipment consists of a 150-K. W. generator, driven and directly connected to a McEwen engine; there are four boilers of the O'Brien type, each 150-horse power fitted with the necessary pumps and heater. The tippie is constructed of steel, having concrete piers for the foundation, it is 65 feet high from the ground to the top of the sheave wheel; it is equipped with a hopper and shaker screens, the screens making four grades of coal, three Howe scales are so placed that all coal is weighed before leaving the mine. The fan is 22 feet in diameter, made by the Duncan Foundry Company, Alton, Ill. The buildings are all built of brick, engine and boiler rooms, blacksmith, carpenter and machine shops, fan house and office; the company has built fifty dwelling houses and a general store.

The new mine of the St. Louis & O'Fallen Coal Company, East St. Louis, St. Clair county, is a remarkably well equipped mine. The main shaft is 9x17 feet in the clear; the depth to the coal is 197 feet; the air shaft is 7x15 feet; the tippie is built of steel. The hoisting engine is 24x36 inches and was made by the Litchfield Machine & Foundry Company, Litchfield, Ill.; the cable used is one and one-half inches in diameter. Self-dumping cages are installed, and mine cars with a capacity of three and one-half tons are used, all made by the Duncan Foundry Company, Alton, Ill. Two engines are directly connected with the shaker screens, with four tracks, thus enabling the loading of four cars at the same time; there are six boilers built in two batteries, with a capacity of 850-horse power. The company has also installed two stage Sullivan air compressors, each having a capacity to operate thirty mining machines.

The foregoing are the largest mines that have been opened and equipped in this district during the year; each one is built with a capacity to handle 2,000 to 3,000 tons of coal per day. My purpose in giving in detail the description of these plants is to impart a general idea of the equipment necessary for coal mines intended for a like capacity. All of the new mines are reported for the year excepting a new mine which has been sunk by the Consolidated Coal Company, three miles south of Collinsville in St. Clair county, to be known as No. 17. It is the intention of the company to equip this mine to handle a large product, and in addition a large washery will be built.

#### CHANGES IN THE NAMES OF COMPANIES.

A great many changes in the names of companies have taken place during the year:

The Dutch Hollow Coal Company, Belleville, has changed its name to that of the Avery Coal & Mining Company; the O'Fallon Coal & Mining Company, O'Fallon, has been purchased by the Silver Creek Coal Company, a new corporation; the Skellet mine, formerly owned by the Skellet Coal Company,