

and a 12-room boarding house is nearing completion as this report is being written. Work has just been finished on the reservoir and its capacity has been more than doubled, which will insure an adequate supply of water at all times.

The Federal Coal Company added to its equipment: One wash house 30 by 57 feet; one 20-stall fireproof mule barn; one 35-kw. generator and engine; two 110 horsepower Erie tubular boilers.

Madison Coal Corporation at mine No. 8 installed six General Electric storage battery motors. At mine No. 9, four General Electric storage battery motors and 100 new pit cars were added to the equipment. During this year 85 new houses were built.

At the Franco No. 1 mine of the Ernest Coal Co. the following additions and improvements have been completed: Two 6-ton Jeffrey gathering locomotives have been put into operation, being duplicates of the four originally installed, and these six are now capable of putting 2,500 tons per day at shaft bottom with the assistance of the mules, which are used for gathering in the sections of the mine where the grades are advantageous to mule haulage. Six Goodman breast machines have been added to the twelve similar ones in operation and all coal is now mined by machine. Two Goodman shortwall machines have been purchased for work in territories where pillars are being mined, and while pillar pulling with machines has but recently been started, the company is meeting with marked success and it is expected that a high percentage of recovery per acre will be obtained. Permissible powder has replaced black powder for use in the mine and Edison electric cap lamps have been purchased and it is optional with the men what kind of lamp is used, but the use of the electric lamp is being encouraged and is rapidly increasing in popularity among the men. The old fan has been replaced with a 5-foot by 10-foot Jeffrey steel exhaust fan and the system of ventilation changed accordingly, making the down cast at the hoisting shaft. At the time of writing this report one additional 18-foot by 72-inch 150 horsepower RT boiler is being installed, together with a 250-kw. General Electric Company 250-volt generator direct connected to a McEwin engine which will supply the electric power required for the operation of the mine. To provide for the increased power plant an additional reservoir was built which insures an adequate water supply at all times. In the tipple a Link Belt Parrish screen has been installed to make No. 2 nut and 1¼-inch screenings, and the 5-track tipple has been completed and is in operation. Twenty-five 4-room houses have been erected to provide accommodations for the additional employees and the wash house has been increased in size to provide accommodations for 300 men.

The Ernest Coal Company is also opening a new mine which will be designated as Franco No. 3 and it is the plans of the company to make No. 3 a mine equal to any in the district in the way of modern equipment and installation. The shafts are 11 feet by 16 feet in the clear and are of concrete throughout. This field was thoroughly prospected and the coal will average seven feet in thickness with hard black slate roof. The plant when completed will have a capacity to produce and prepare in the most approved manner 4,000 tons per day.

The Ridge Coal Mining Co. erected a new office building 24 by 36 feet; a new blacksmith shop 16 by 36 feet; a carpenter shop 14 by 24 feet; made extension to engine room 14 by 21 feet; built a railroad scale house 6 by 10 feet; addition to fan house 10 by 14 feet, and put in a new set of wagon scales.

The Big Muddy Coal & Iron Co. installed 50 new pit cars; a new concrete powder magazine; built extension to carpenter shop, and put in a new steam pump.

The Pond Creek Coal Co. installed two shortwall machines; two breast machines; 50 new pit cars; one 8-ton electric motor; erected a concrete wash house, and a new office building.