

and which moves the empty and loaded railroad cars. Each end of the $\frac{3}{4}$ -in. rope is attached to two drums respectively, which are driven by one shaft through friction. There are links on the haulage rope every 250 ft. which permit connection with cars by a short rope. The system is reversible; as the rope winds up on one drum it feeds out from the other.

The employees and their families are well taken care of by the Madison Coal Corporation, which believes that they should have homes and not shacks. A new town adjacent to the plant contains 100 houses which were built by the company at a cost of \$1500 each, including a summer kitchen, outbuildings, fences, cistern and

to some city suburbs. When the trees fill out in the yards, the village will be still more attractive.

All are four-room houses of the bungalow style and of the dimension and general arrangement shown in Fig. 6. The inside details are about the same for all four types. In the rear of each house is a 10 x 14-ft. summer kitchen and a cistern 6 ft. in diameter and 8 ft. deep. Each house has a lot 150 ft. deep by 50 ft. in width with a 20-ft. lawn in front. Running water is brought close to each house at the division fence, every other side fence having a hydrant which supplies the house on either side. The house occupied by J. H. Miller, the mine manager, is shown in Fig. 8. It is a

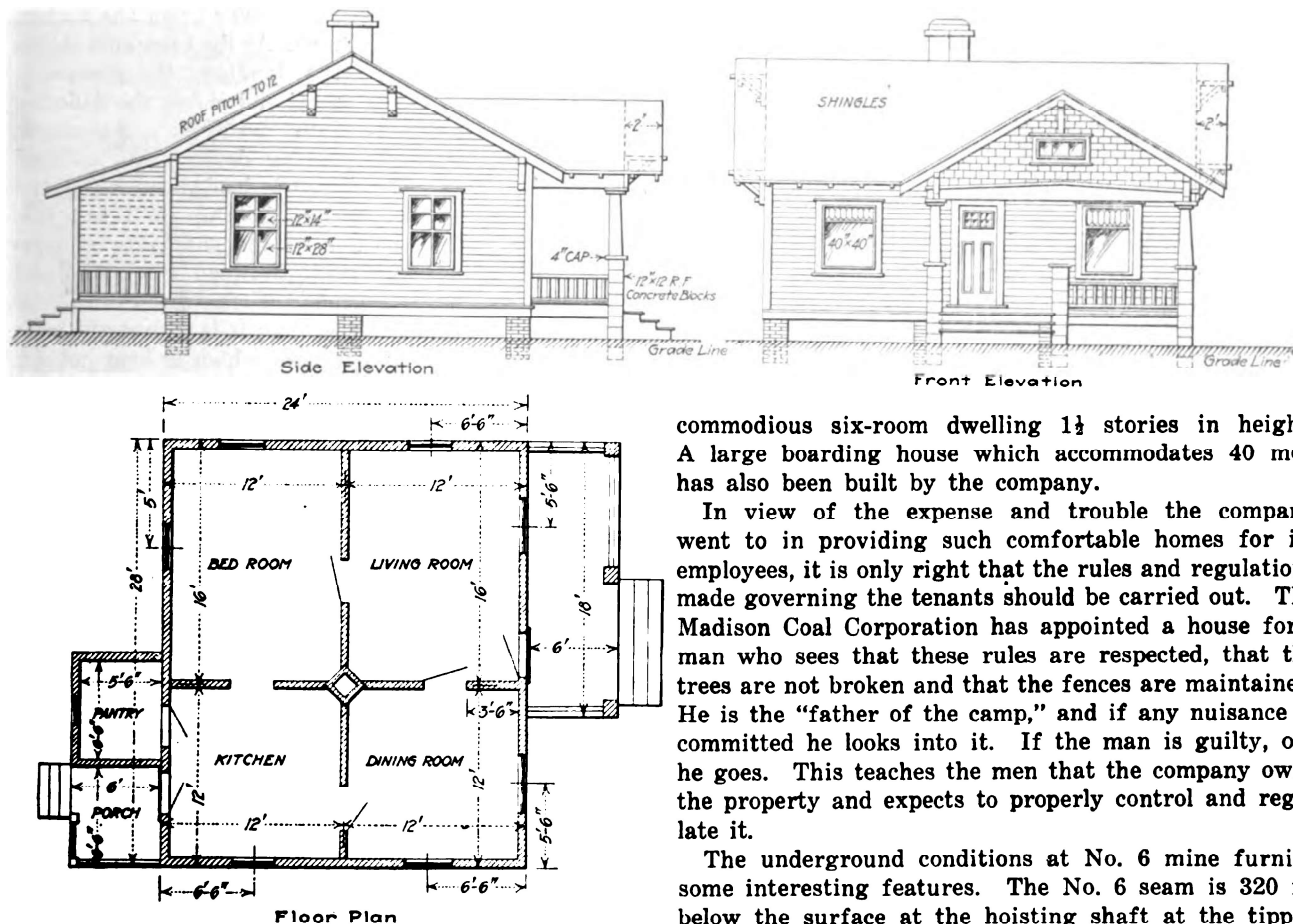


FIG. 6. ELEVATIONS AND PLAN OF ONE TYPE OF EMPLOYEES' HOUSES OF MADISON COAL CORPORATION'S NO. 6 PLANT

other improvements which add to the attractiveness of the town and act as an incentive to the men to keep their places in good shape. The camp at Glen Carbon, another plant of this company, is 30 years old, but the same conditions prevail as to neatness and order. The houses are kept in good repair, attractively painted, and probably are highly appreciated by their occupants.

The mine town at Divernon avoids monotony by having four different types of houses, no two of the same style being adjacent. This feature and the variety in the colors of the paint used on them lend attractiveness to the village. The houses are arranged in four rows, one of which is shown in Fig. 7. Note the neat division fences, the absence of a front fence, the row of shade trees along the street, other trees in the yards and the lawns at each home. Such a scene would do credit

commodious six-room dwelling $1\frac{1}{2}$ stories in height. A large boarding house which accommodates 40 men has also been built by the company.

In view of the expense and trouble the company went to in providing such comfortable homes for its employees, it is only right that the rules and regulations made governing the tenants should be carried out. The Madison Coal Corporation has appointed a house foreman who sees that these rules are respected, that the trees are not broken and that the fences are maintained. He is the "father of the camp," and if any nuisance is committed he looks into it. If the man is guilty, out he goes. This teaches the men that the company owns the property and expects to properly control and regulate it.

The underground conditions at No. 6 mine furnish some interesting features. The No. 6 seam is 320 ft. below the surface at the hoisting shaft at the tippie, and averages 8 ft. in thickness. This is the bed which produces the greatest tonnage and is the one worked all through the central and southern coal-mining portions of Illinois. The method of mining employed here is the room-and-pillar combined with the panel system. The impurities in the seam include a blue band $2\frac{1}{2}$ ft. from the bottom which runs about 1 in. in thickness. Sulphur bands and balls are also found throughout the coal. The top is generally a clod and black slate occurring from nothing to 8 ft. in thickness. It is full of seams. Above the slate is a solid limestone.

The slate weathers badly at certain times of the year and it is the custom here wherever practicable to leave up about 1 ft. of top coal as protection against this spalling of the top. Props are set with a coal top and crossbars are placed where the coal comes down, especially on entries. On haulageways, if the clod is not more than 2 ft. thick, it is taken down to the inside parting and the entry is timbered from here to the face. At