

WEIR *v.* NORTH CHICAGO ROLLING MILL  
Co.

*Circuit Court, N. D. Illinois.*

October, 1880.

PATENTS FOR INVENTIONS—DEVIATION.

In reducing his patent to practical application a patentee is not held to strictly and entirely follow the mere mechanical device shown in his drawings, but he may deviate so long as he does not violate the principle involved in his patent.

In Equity.

*J. H. Raymond*, for complainant.

*George Willard*, for defendant.

BLODGETT, D. J. The complainant's device differs from the Pulver patent by the addition of stationary comb-grates, as he calls them, which operate with the rocker-grates. The Purchase patent shows a series of rocker-grates, each of which is rocked or tilted independently of the others; and the end rocker has grate-bars only on one side of the rocker-shaft, the shaft lying close to the end of the fire-box, and so constructed, with an eccentric upon the side next to the wall of the fire-box, that it can only tilt the grate-bars upward. For all practical purposes the grate-bars in the end shafts are stationary when the shaft is not itself rocked. The bars of the shaft next this end shaft engage and operate with those of the end shaft precisely in the same manner as in the Rounds grate.

I have here a model of the Rounds grate, showing the comb-grates at the ends of the fire-box, and the rocking-grate bars engaging 43 through them. The mode of operation is simply rocking or tilting the rocker-grates.

The model of the Purchase grate shows a series of rocker-grates, each moving independently by itself, and when you rock one of these, leaving the end of the grate stationary, as it is stationary except for an

upward motion caused by an eccentric upon the bar, it is fixed, as far as any downward motion is concerned. By rocking this, precisely the same result is produced as in rocking Bounds' grate. You rock the teeth upon this rocker-bar, mashing them in between the teeth of the fixed grate, precisely as in the operation of the Bounds grate.

It is true, coal or cinders may accumulate upon the shafting which rests against the wall, forming, as it does, a ledge or shelf; but it does not affect the principle involved, which is that of one set of tilting grate-bars matching with a fixed or stationary set. In my opinion it was not invention, but only an act of mere mechanical skill or adaptation, after the steps in the art taken by Purchase, to make a grate with fixed or stationary bars at the ends, between which the rocking-bars could pass or match. It seems to me Purchase would have had the right, in applying his device to practical use, to have dispensed with his end rocking-shaft, and fixed his end grate-bars rigidly to the ends of the fire-box, so there would have been no material deviation from the operation shown in his device.

It seems to me there can be no doubt but what Purchase, after he had obtained this patent, could have said, "The rocking of this grate up and down is of no special practical importance; I will simply make the end bars fixed and rigid in the end of the fire-box, and rock the teeth of the next bar between those;" and it would have been one of those modifications of his device which would have been allowable under the patent, because no patentee is held, in reducing his patent to application, to strictly and entirely follow the mere mechanical device shown in his drawings of the patent. He may deviate, so long as he does not violate the principle involved.

The bill in this case is therefore dismissed, with costs.

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