

T. T. WEIR.
Wagon-Brake.

No. 58,014.

Patented Sept. 11, 1866

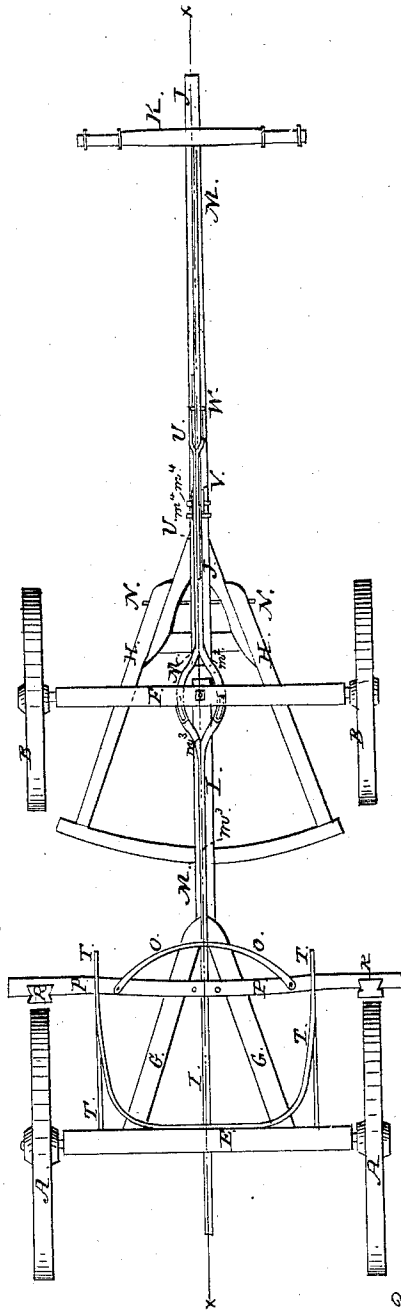


Fig. 1.

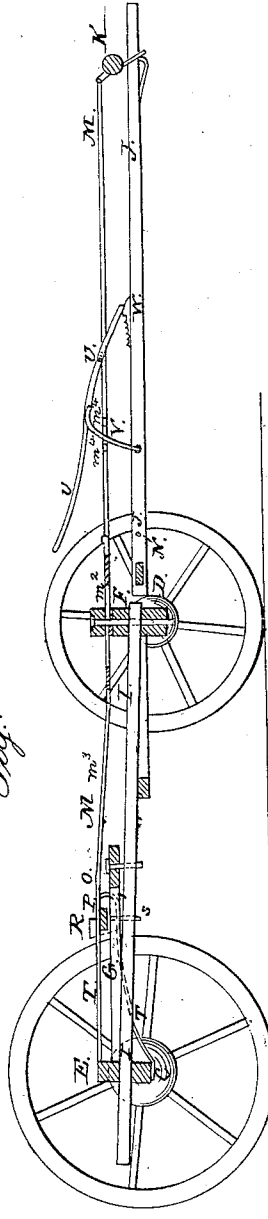


Fig. 2.

Fig. 3.
M.

WITNESSES:

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UNITED STATES PATENT OFFICE.

THOMAS T. WIER, OF GALLATIN, MISSOURI.

IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. 58,014, dated September 11, 1866.

To all whom it may concern:

Be it known that I, THOMAS T. WIER, of Gallatin, Daviess county, State of Missouri, have invented a new and useful Improvement in Wagon-Brakes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top view of the running part of a wagon with my improvement attached. Fig. 2 is a vertical longitudinal section of the same, taken through the line *xx*, Fig. 1. Fig. 3 is a detail view of a portion of the rod showing the joint.

Similar letters of reference indicate like parts.

My invention has for its object to furnish an improved self-acting wagon-brake; and it consists, first, in the combination, with the neck-yoke, tongue, forward bolster, and brake-bar, of a rod jointed in two places to accommodate it to the upward and downward movement of the tongue and to the right and left horizontal movement of the forward wheels in turning; second, in the combination of an iron guide-brace with the brake-bar and with the rear axle and bolster; third, in the combination of a lever and rack with the brake-rod and with the tongue of the wagon, the whole being constructed and arranged as hereinafter more fully described.

A are the rear, and B the forward, wheels of the wagon. C is the rear, and D the forward, axle. E is the rear, and F the forward, bolster. G is the rear, and H the forward, hounds. I is the reach, J the tongue, and K the neck-yoke.

About the construction of all these parts there is nothing new.

To the rear side of the neck-yoke K is attached a staple, L, to which the forward end of the rod M is pivoted. This rod M passes back along the upper side of the tongue J, and just above the pin N, that connects the rear end of the tongue J to the forward hounds, H, there is formed on it a hinge or equivalent, as shown in Fig. 3. By this arrangement the rod is enabled to accommodate itself to the

upward and downward movement of the tongue J, and at the same time maintain a constant pressure upon the brake. Just in front of the forward bolster, F, the rod M is divided into two branches, which pass one on each side of the king-bolt, and the ends of which are slotted, as shown in Fig. 1. Through these slots pass screws or bolts connecting the parts *m*² of the rod M to the part *m*³. By this arrangement the rod M is able to accommodate itself to the position of the running part of the wagon when turning, and at the same time maintain a constant pressure upon the brake. The rear end of the rod M is firmly secured to the central part of the curved brace O, the ends of which are attached to the brake-bar P, as shown in Fig. 1. R are the rubbers, which are attached to the brake-bar P by being secured in dovetailed slots, as shown in Fig. 1, or by being bolted fast to the said bar P. The bar P is secured in place by the keeper or strap S, attached to the said bar, and passing around the reach I so loosely that the bar P may slide freely back and forth. The brake-bar P is still further secured in place by the guide-brace T, the middle part of which is attached to the rear bolster, E, as shown in Fig. 1. It is then curved forward, bent down around the ends of the brake-bar P, and its ends are secured to the rear axle, C, as shown in Fig. 2. This brace T not only supports and guides the ends of the brake-bar P as it moves forward and backward, but it also materially strengthens the rear part of the running-gear of the wagon.

U is a lever pivoted to a support, V, which support is branched, one branch passing down on each side of the rod M, the lower ends of said branches being pivoted to the tongue J, as shown. The forward end of the lever U is also branched, one end of each branch passing down on each side of the rod M, where they are connected by a short bar, which fits into the teeth of the rack W, which is attached to the upper side of the tongue J. *m*⁴ are two short cross-bars attached to the rod M, one on each side of the support V, as shown in Fig. 2. The forward end of the lever U rests upon the rack W, and when the brake is pushed back against the wheels it drops into the teeth of said rack and holds the brake to its place

until the said lever is released, which may be done by drawing down the rear end of the lever U by means of a rope attached to the said upper end of the lever and extending back within reach of the driver. This is the primary object of the lever; but it also enables the brake to be operated by hand, which is the effect produced by drawing back the lever U so as to force the support V against the rear cross-bar, *m*⁴.

I claim as new and desire to secure by Letters Patent—

1. The combination, with the neck-yoke K, tongue J, forward bolster, F, and brake-bar P, of a rod, M, jointed in two places to accommodate it to the movements of the tongue and

forward part of the running-gear of the wagon, substantially as described, and for the purpose set forth.

2. The combination of the iron guide-brace T with the brake-bar P and with the rear axle, C, and bolster E, substantially as described, and for the purpose set forth.

3. The combination of the lever U and rack W with the brake-rod M and with the tongue J, substantially as described, and for the purpose set forth.

THOMAS T. WIER.

Witnesses:

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