L. SEIVERT, J. DIETZEN & C. STOETZEL.

AUTOMATIC WAGON-BRAKE.

No. 193,044. Patented July 10, 1877.

Fig. 1.

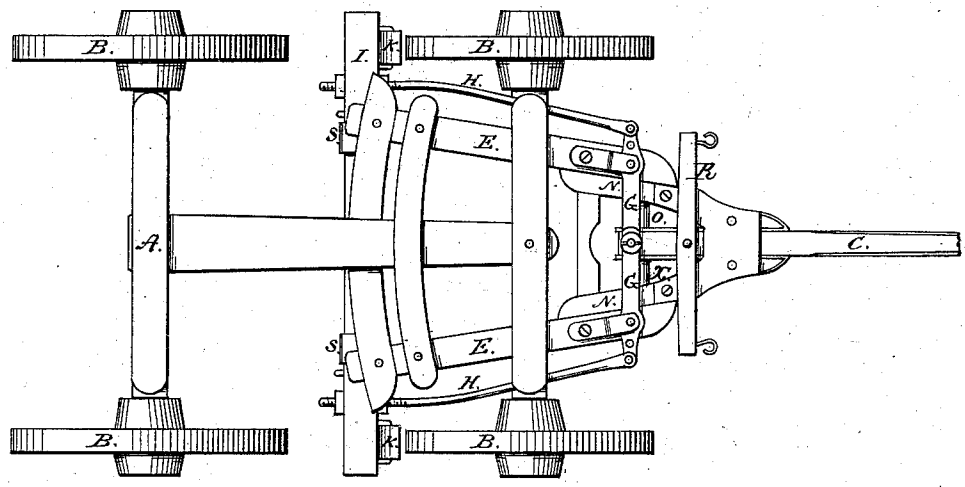


Fig. 2.

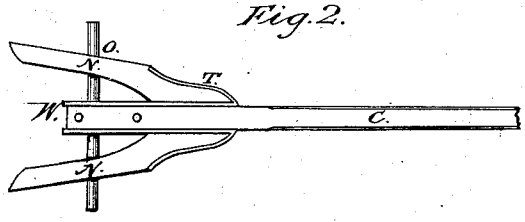


Fig. 3.



Fig. 4.

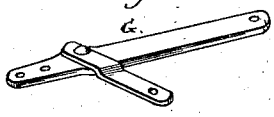


Fig. 5.

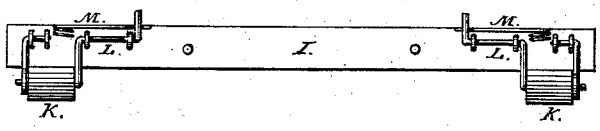
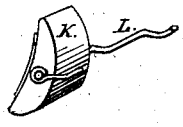


Fig. 6.



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UNITED STATES PATENT OFFICE.

LAWRENCE SEIVERT, JACOB DIETZEN, AND CHARLES STOETZEL, OF BIG RIVER, WISCONSIN.

IMPROVEMENT IN AUTOMATIC WAGON-BRAKES.

Specification forming part of Letters Patent No. **193,044**, dated July 10, 1877; application filed March 20, 1877.

To all whom it may concern:

Be it known that we, LAWRENCE SEIVERT, JACOB DIETZEN, and CHARLES STOETZEL, all of Big River, county of Pierce and State of Wisconsin, have invented certain Improvements in Self-Acting Wagon-Brakes, of which the following is a specification:

The first part of our invention relates to the combination of sliding loop, iron plates, and posts. The iron loop is attached to the after end of a sliding tongue or pole. The iron plates are secured and riveted to the tongue-hounds, through which the tongue slides, and extending back beyond the pull-bolt. On each side of the iron plates there is fixed two hollow shores or posts, through which the pull-bolt passes. One end of each rests against the tongue-hounds; the other two against the iron plates, so as to keep the plates from springing. The pull-bolt passes through the axletree-hounds, thence through the tongue-hounds and iron plates, and loop, forming a slide on the inside of the loop as well as a pull-bolt. On the top side of this loop there is a perpendicular pin, upon which the long arm of two levers are pivoted, having an oblong hole in each to fit the pin, and having a fulcrum-pin in the axletree-hounds with clevis. At the short end of each lever there is an iron rod attached that runs back and is connected to the brake-beam. Thus, when the sliding loop and long arm of the levers are pushed back by the tongue and neck-yoke, the short end of the levers and rod draws the brake-beam and shoes up against the hind part of the forward wheels. With this device, loop-plates, posts, tongue, and hounds can be made to withstand jerking or a sidewise motion of the forward wheels, where all others yet known have proved a failure.

The second part of our invention relates to the combination of shoe-piece fixed in a wedge-like form on each end of the brake-beam, opposite and fitted to each wheel, and pivoted by a spring-clevis. When the brake-beam is hauled forward the shoes press against the wheels and prevent them from turning. When the wagon is backed and the wheels reversed the shoe-piece slips down under the ends of the brake. When the tongue and loop are pulled forward the brake-beam moves back, and the spring-clevis carries the shoe-piece back to place. The friction of the wheels on the shoe-pieces will cause the shoe-pieces to drop below the brake-beam, and thus release the wheels.

The double-tree, to which the horses are hitched, is pivoted to the sliding tongue, and so arranged that when the sliding tongue is pulled out the brake-beam is pushed back and the shoe is carried back to its place by the use of a coil-spring.

Referring to the accompanying drawings, Figure 1 is a diagram of the running-gear of a wagon with the brake attached, embodying our invention. Fig. 2 is the sliding tongue. Fig. 3 is one of the iron slide-plates. Fig. 4 is one of the levers. Fig. 5 is the brake-beam. Fig. 6 is the shoe.

A is the axle of a wagon in common use. B B are the wheels. C is the sliding tongue by which the wagon is pulled by double-trees R.

On the extreme end of the tongue C is placed a pin by which the wagon is held back by the neck-yoke.

T T are the iron plates, bolted to the tongue-hounds, through which the tongue C slides and is held firm in its place. O is the pull-bolt, passing through the axle-tree hounds, thence through the tougue-hounds, thence through iron plate T, and thence through an iron loop, W, on the end of tongue C, and also through two hollow shores or posts, X. G G are the two levers pivoted to and playing on the top side of the tongue C, and hinged by clevices to the axletree-hounds E E. H H are the rods, one end of which is clevised to levers G G and the other end passing through the brake-beam I, and secured by set-nuts, so that the rod may be shortened or lengthened as the case requires. S S are two iron straps, securely bolted to the axle-tree-hounds in which the brake-beam I plays back and forth and is held in place. K K are the shoe-blocks that are pressed against the wheels B B by the brake-beam I, and hinged to the under side of beam I. M M are the coil-springs that press against shank of the clevis, and move the shoe-blocks K K back to place when the tongue C is pulled on and

brake-beam I is pushed back from the wheel B. N N are the tongue-hounds through which the tongue C slides.

We make no claim to the wagon or to the levers G G, rods H H, or brake-beam I; but

We claim as our invention—

1. The sliding loop W and its combination with tongue C, iron plate T, bolt O, and shores X, for the purpose hereinbefore set forth.

2. The spring-clevis L and its combination with the shoe-piece K and brake-beam I, for the purpose hereinbefore set forth.

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