(No Model.)

J. RICH.

AUTOMATIC WAGON BRAKE.

No. 549,533. Patented Nov. 12, 1895.

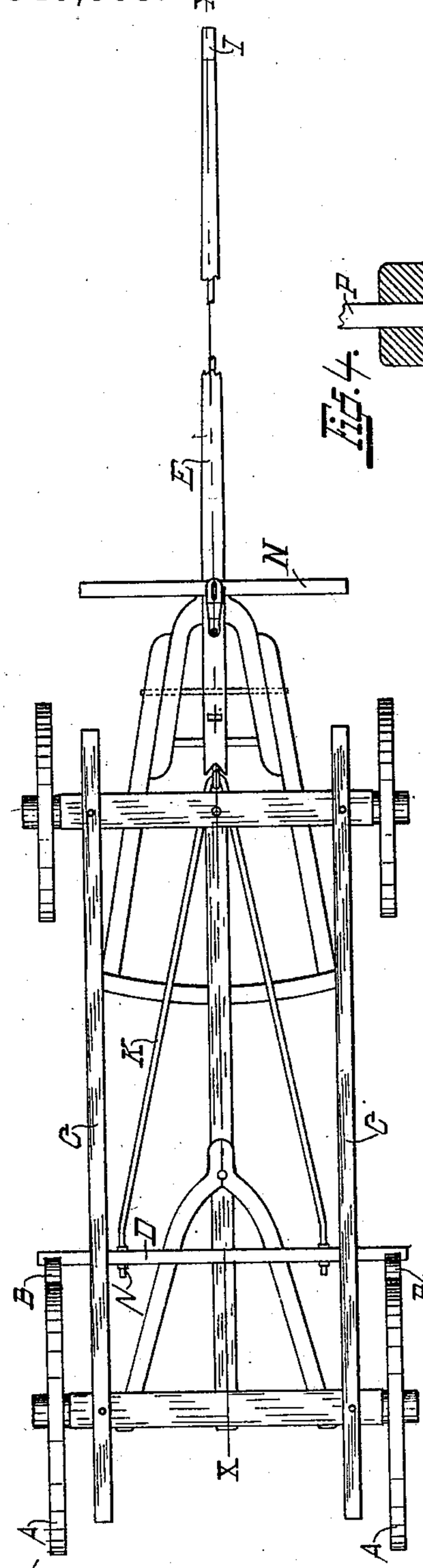

Fig. 1.

Fig. 4.

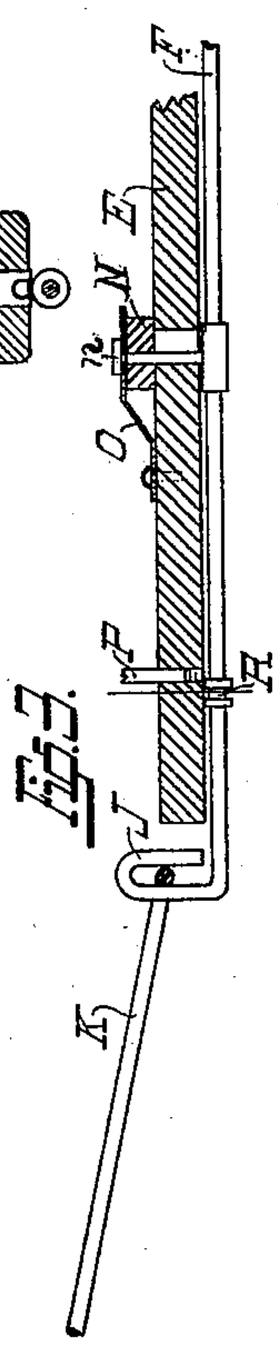

Fig. 3.

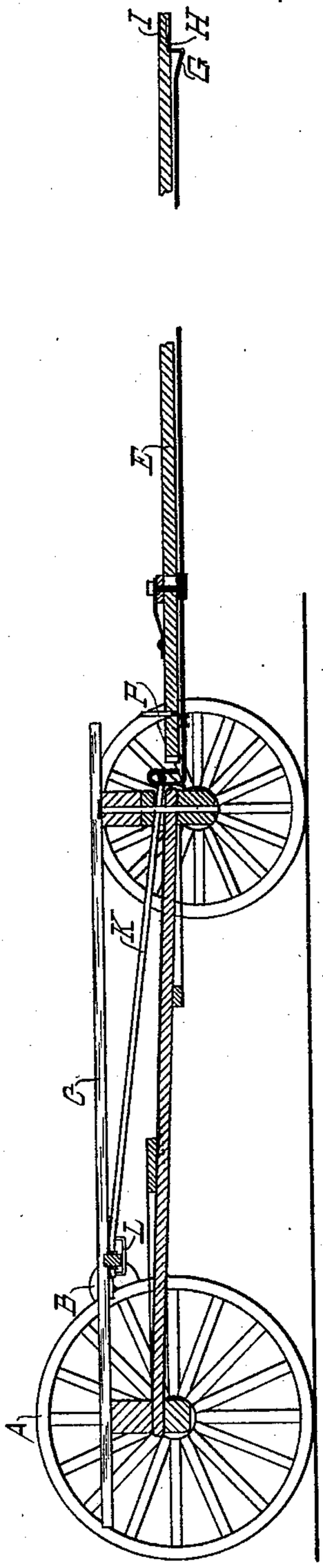

Fig. 2.

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UNITED STATES PATENT OFFICE.

JOEL RICH, OF JUNEAU, WISCONSIN.

AUTOMATIC WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 549,533, dated November 12, 1895.

Application filed April 29, 1895. Serial No. 547,590. (No model.)

To all whom it may concern:

Be it known that I, JOEL RICH, a citizen of the United States, residing at Juneau, in the county of Dodge and State of Wisconsin, have invented new and useful Improvements in Automatic Wagon-Brakes, of which the following is a specification.

My invention relates to improvements in that class of automatic wagon-brakes in which the brake is applied by the backward pull on the neck-yoke.

The object of my invention is to simplify the construction of this form of brake mechanism and to make the same applicable to any wagon without material change in the construction thereof.

In the drawings, Figure I is a top view of a wagon with the box removed, showing my invention in place. Fig. II is a side view drawn on the section-line *x x* of Fig. I. Fig. III is a detail view, enlarged, to show the construction of the connecting hinge-link of the brake-actuating rods and the manner of attaching the evener. Fig. IV is a cross-section of the wagon-tongue drawn through the bifurcated stop and adapted to hold the brake-actuating rods when backing the wagon.

Like parts are identified by the same reference-letters throughout the several views.

A A are the rear wagon-wheels, to which my brake-shoes B B are applied.

C C are truss-bars, adapted to support the wagon-box, and from which my brake-bar D is supported.

E is the wagon-tongue. On the under side of the tongue I have attached the brake-actuating rod F, having the downward-projecting lug G adapted to engage with the neck-yoke ring, and the extreme end H being formed to project into the thimble I, which incloses the end of the tongue. The rear end of the rod F is provided with the link J, and the rod K is looped through it and connected at each end with the brake-bar D.

L are guide-bearings attached to the truss-bars C C, and in which the bar D is slidably supported.

The evener N is connected with the rod F by the bolt *n*, the hammer-strap O and tongue E being slotted to permit a forward or rearward movement of the bolt therein.

The backward pull of the horses upon the neck-yoke communicates motion to the brakes through the rods F and K and brake-bar D to push the brake-shoes B B into engagement with the wheels A A. So, also, the draft upon the whiffletrees is communicated through the evener and evener-bolt to the rod F, to draw the brake-shoes out of engagement with the wheels.

When it is desired to back the wagon, the brake mechanism is locked by the bifurcated locking-pin P, adapted to engage with lugs R on the brake-actuating rod F.

It will be observed that by the use of the link J, I have provided for a hinged connection with a vertical movement adapted to permit of any movement of the tongue without straining the parts, and that the brakes are applied by a direct push upon the brake-rods and are withdrawn by a corresponding pull from the eveners. It will also be noticed that the brake-bar D can be supported directly from the wagon-box, or upon the hounds, if so desired.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

An automatic wagon brake, consisting of the brake actuating rod F, movably supported by the wagon tongue and provided with the neck-yoke engaging lug at its front end, and the rigid vertically disposed link J, at its rear end, the eveners movably supported on the tongue, and connected with said rod, F, together with the brake bar, D, and brakes movably supported from the truss bars of the wagon box, and the rod, K looped through said link, J, and doubled back on each side of the king bolt, with the ends connected with the ends of said brake bar, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

JOEL RICH.

Witnesses:
M. L. LUECK,
JOHN WILDEMANN.