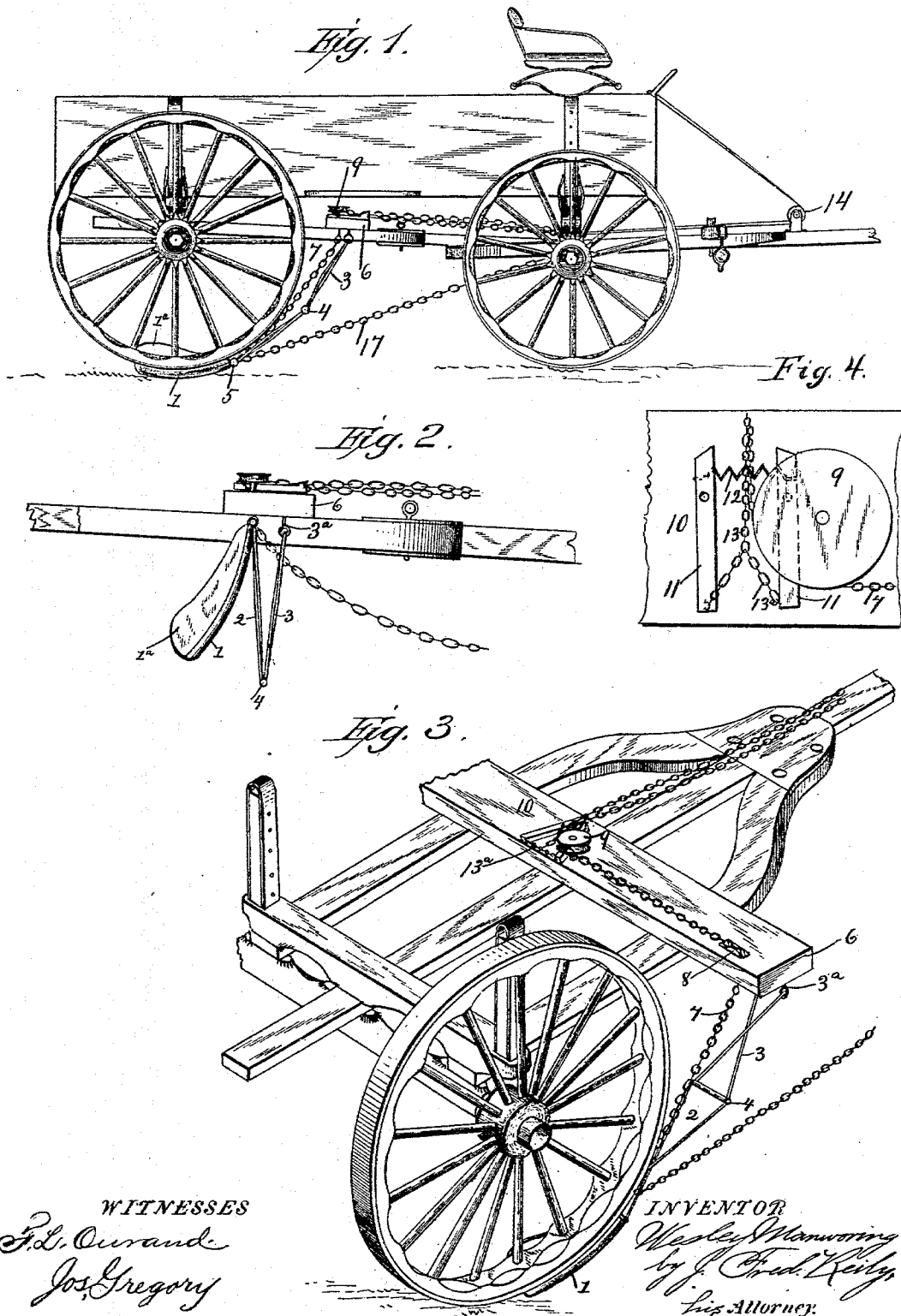


(No Model.)

W. MANWORING.
WAGON BRAKE.

No. 516,101.

Patented Mar. 6, 1894.



UNITED STATES PATENT OFFICE.

WESLEY MANWORING, OF SOUTHPORT, NEW YORK.

WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 516,101, dated March 6, 1894.

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To all whom it may concern:

Be it known that I, WESLEY MANWORING, a citizen of the United States, residing at Southport, in the county of Chemung and State of New York, have invented certain new and useful Improvements in Wagon Lock-Shoes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention consists in a lock shoe which is designed to take the place of, and is far superior to, the usual wagon brake, and which can be applied to the wagon wheel, and removed, therefrom, by the driver without leaving his seat.

My invention will be hereinafter fully described and claimed.

Referring to the accompanying drawings, Figure 1 is a side view of a wagon provided with my invention, showing the lock shoe applied to the wheel. Fig. 2 shows the lock shoe raised when not in use. Fig. 3 is a perspective view. Fig. 4 is a detail top plan view of the spring catch.

Referring to the several parts by their designating numerals, the same numerals indicating corresponding parts in the several figures:—1 indicates the metal lock shoe, which is curved to conform to the curvature of the wheel, and is formed with the side-wings 1^a, to insure its receiving or fitting to the wheel when lowered into its operative position.

2, 3, indicate two wrought iron frames, which are pivoted together at their meeting ends by a transverse pivot-bolt, 4; the lower end of the frame 2 being pivoted to the forward or upper end of the metal lock shoe by a transverse pivot-bolt 5.

6 indicates a block which is secured, bolted, transversely upon the wagon hounds, and is usually about six inches wide, two inches thick, and two and one-half feet in length. The upper end of the iron frame 3 is pivotally secured to bearing-bolts 3^a, which are secured to the end of block 6.

An operating chain, 7, is secured to the up-

per end of the shoe, and passes up and around pulleys 8 and 9 on the block 6.

10 indicates a spring catch which is secured on the upper side of the block 6, and is formed of two arms, 11, 11, which are pivoted near their forward ends upon the central part of block 6. A spring 12 holds the front ends of the pivoted arms 11 pressed tightly together. A short chain, 13^a, is secured at its ends to the rear ends of arms 11, and the releasing chain, 13, is connected to the center of this short chain. The operating chain 7 passes around the pulley 9 and then between the widened and pointed front ends of the arms 11; and cords or ropes run from the operating and releasing chains forward under the bolster of the wagon and under a pulley 14 on the tongue, and then up to the driver's seat.

When not in active use the shoe and its connecting frames are raised and folded up as shown in Fig. 2, the chain 7 being firmly held between the jaws of arms 11. In operation, to apply the shoe to the wheel, the driver pulls upon the cord connected with the releasing chain 13, which opens the spring catch and releases the operating chain 7 to allow the shoe to swing down by its own weight, when the pivoted frames 2 and 3 and the operating chain will cause it to swing down rearwardly under and in contact with the wheel, where it is caught under the wheel and acts with great effectiveness to lock the wheel.

17 indicates a brace-chain which runs from the shoe to the front reach, and takes the strain when the shoe reaches its operative position. To take the shoe off the wheel and hang it up in its first position, it is only necessary for the driver to pull up upon the operating rope, when the chain 7 swings the shoe up into its original position, and the spring-catch holds the chain, the shoe being thus hung up out of the way, ready for instant use when again required.

From the foregoing description, taken in connection with the accompanying drawings, the construction and manner of operation, and the great practical advantages of my invention will be readily seen.

My invention takes the place of a brake, and is far superior to one, as a brake wears the tire and also loosens it, which this inven-

tion does not do. The old way of applying a lock shoe in going down hills was to stop, and climb off, and put the shoe under the wheel; and then get off at the foot of the hill and take it out. All of this trouble and delay is avoided by my invention, by means of which the driver puts on the shoe at will and takes it off without leaving his seat.

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

1. A lock shoe for wagon wheels comprising a shoe connected by a hinged folding frame to a fixed elevated bearing, a spring catch adapted to hold the shoe in its elevated position, an operating chain or rope passing from the shoe around guide pulleys to the driver's seat, and a releasing chain or rope running from the spring catch to the driver's seat and adapted to open said catch when pulled; substantially as set forth.

2. In a wagon lock shoe, the combination of the curved metal shoe, the fixed bearing block, the hinged folding frame pivotally connected to the shoe and to the fixed bearing block, the spring catch secured on said block and adapted to engage and hold the operat-

ing chain of the shoe when the latter is raised, the guide pulleys arranged on said bearing block and the tongue, the operating chain or rope running from the shoe around said pulleys and through the spring catch to the driver's seat, and the releasing chain or cord running from the spring catch to the driver's seat and adapted to open said catch when pulled; substantially as set forth.

3. In a wagon lock shoe, the combination of a shoe connected by a hinged folding frame to a fixed elevated bearing, a spring catch adapted to hold the shoe in its elevated position, a draft chain running from the shoe to the front wagon gear, an operating chain or rope passing from the shoe around guide pulleys to the driver's seat, and a releasing cord or chain running from the spring catch to the driver's seat and adapted to open said catch when pulled; substantially as set forth.

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

WESLEY MANWORING.

Witnesses:

JOHN BUTCHER,
CHARLES W. EVANS.