3 Sheets—Sheet 1.

W. E. NASH.

WAGON-BRAKE.

No. 182,948. Patented Oct. 3, 1876.

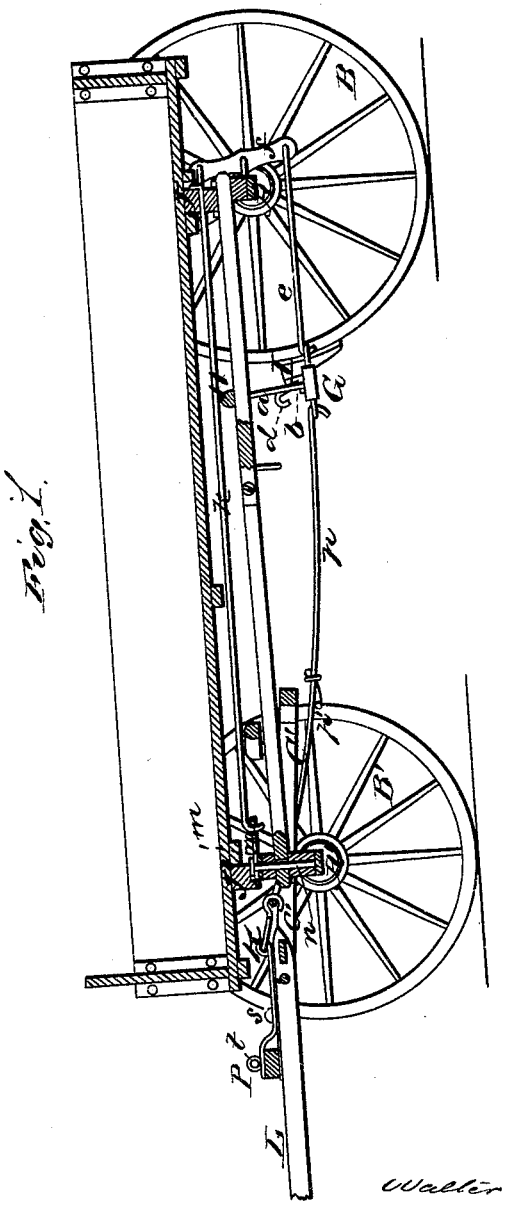

Fig. 1.

WITNESSES

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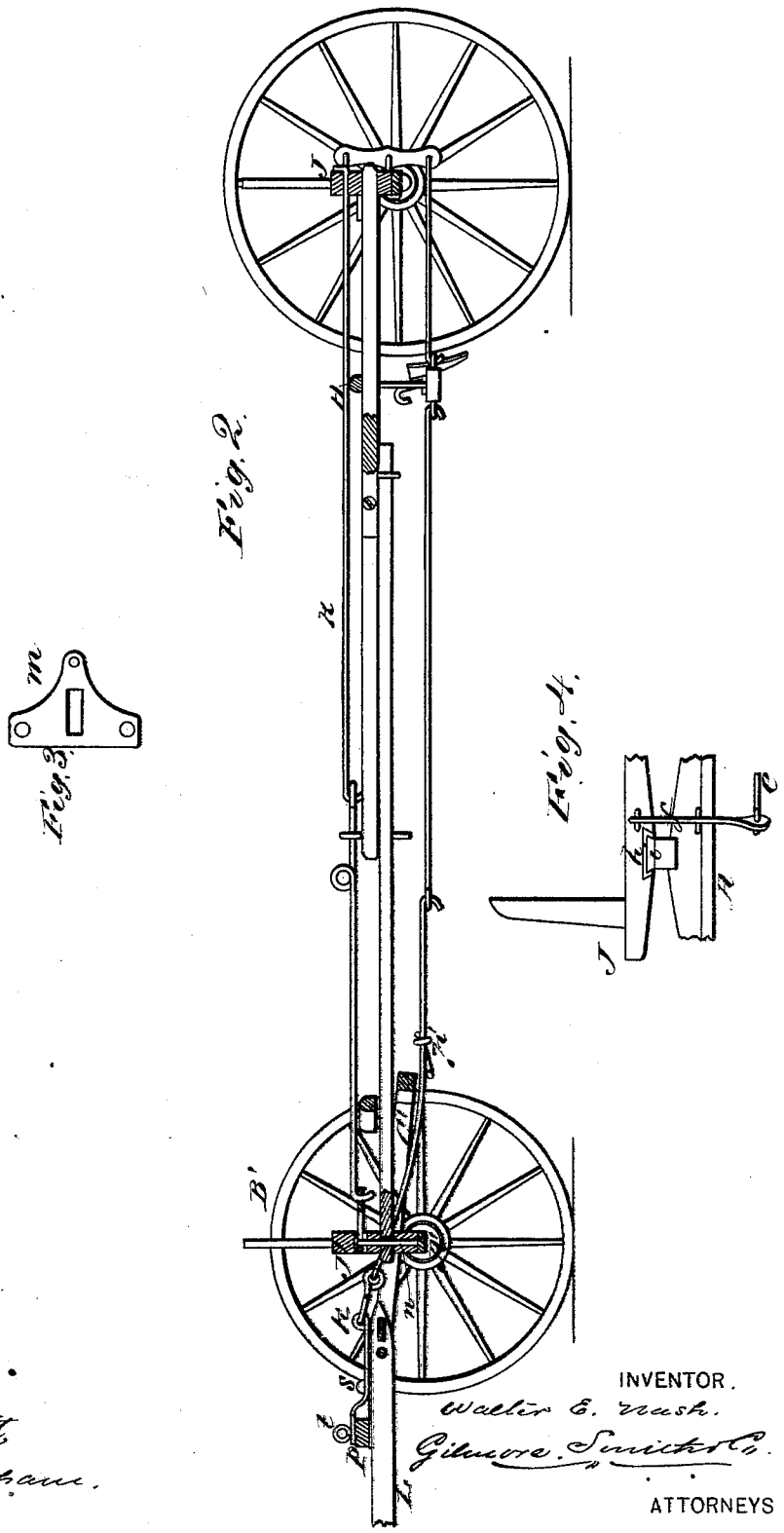

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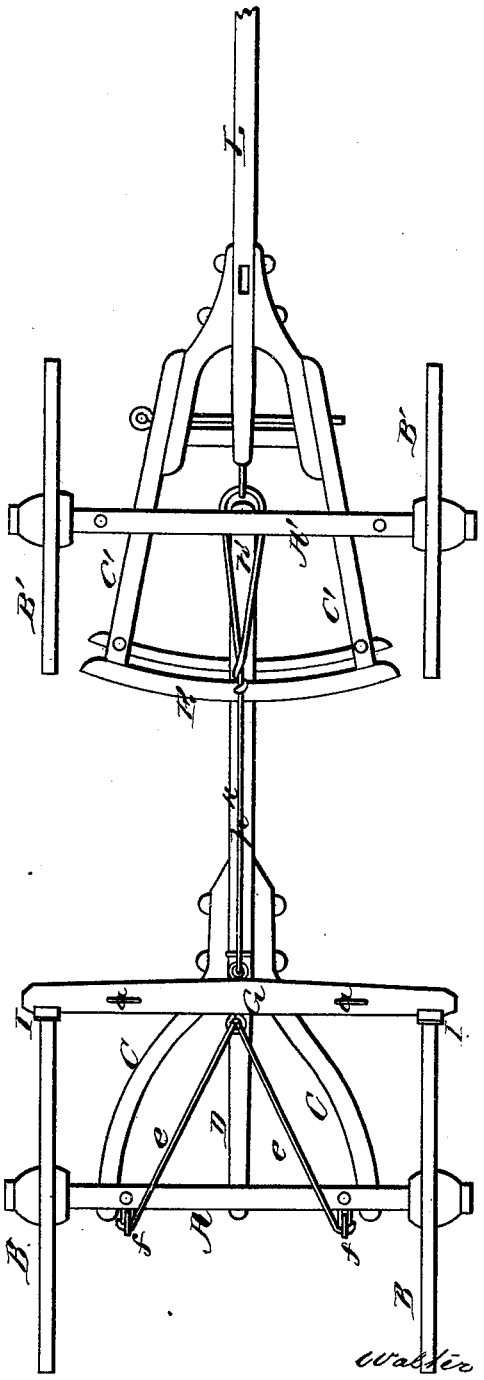

Fig. 5.

WITNESSES

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UNITED STATES PATENT OFFICE.

WALTER E. NASH, OF DARLINGTON, WISCONSIN.

IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. **182,948**, dated October 3, 1876; application filed April 8, 1876.

To all whom it may concern:

Be it known that I, WALTER E. NASH, of Darlington, in the county of La Fayette and State of Wisconsin, have invented a new and valuable Improvement in Wagon-Brakes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figures 1 and 2 of the drawings are representations of longitudinal vertical sections of wagon-brake, and Figs. 3 and 4 are detail views of the same. Fig. 5 is a bottom view of my wagon-brake.

The nature of my invention consists in the construction and arrangement of an automatic wagon-brake, as will be hereinafter more fully set forth.

In the annexed drawings, A represents the rear axle, with wheels B B, hounds C C, and reach D. A′ is the front axle, with wheels B′ B′, hounds C′ C′, and sand-board E, said parts being all constructed in any of the known and usual ways. G represents the brake-bar suspended, by means of rods *a a*, from a cross-bar, H, as shown. I I are the brake-blocks placed in grooves in the rear edges of the brake-bar G. Each shoe, I, is provided with an L-shaped plate or casting, *b*, on the back, the horizontal part of which forms a rest on top of the brake-bar, and is perforated with a rod, *d*, passing through the same into the brake-bar. This construction allows the brake shoes or blocks to ride up when the wagon is backing, and prevent any friction on the wheels. The rods *d* are so formed in their upper ends as to prevent the shoes or blocks from coming off.

The brake-bar G has two rods, *e e*, connected to it in the center at the rear edge, which rods extend backward, and are fastened to the lower ends of two levers, *f f*, pivoted on the back of the rear axle A. The upper ends of these levers are connected to the hind bolster J, which is made loose, and slides upon the hounds C C by means of dovetailed castings *h i* attached to the adjoining surfaces, respectively, of the bolster and hounds. The hind bolster J is, by a central rod, *k*, connected with a plate, *m*, attached on the under side of the front bolster J′. This bolster-plate is slotted, and a short king-bolt, *n*, passes through the same only, obviating the necessity of a hole through this bolster. A rod, *p*, passes forward from the center of the brake-bar G, and has a loop, *p′*, formed at its front end, so as to embrace the front end of the reach. In this loop is connected the rear end of the hammer-strap K, which is attached by a bolt, *s*, to the tongue L, said tongue being pivoted in the usual manner between the front ends of the hounds C′. The bolt *s* passes through a slot in the hammer-strap to allow the same to slide back and forth. The front end of the hammer-strap is double, to pass both on top and bottom of the double-tree P, and the bolt *t*, which connects these parts, passes through a slot in the tongue.

When the team is drawing the load on a level or uphill the rod *p* pulls the brake away from the wheels; but as soon as the wagon is going downhill and the draft slackens, the wagon body and bolsters will slide sufficiently far forward to cause the levers *f* and rod *e* to apply the brakes. It will readily be seen that the steeper the hill or descent the more power is exerted to apply the brakes, thus forming a perfect self-regulating and automatic wagon-brake.

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

The sliding front bolster J′, with slotted plate *m*, in combination with the rod K and sliding hind bolster J, as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WALTER ELLIOTT NASH.

Witnesses:

P. A. ORTON,

H. N. STEPHENS.