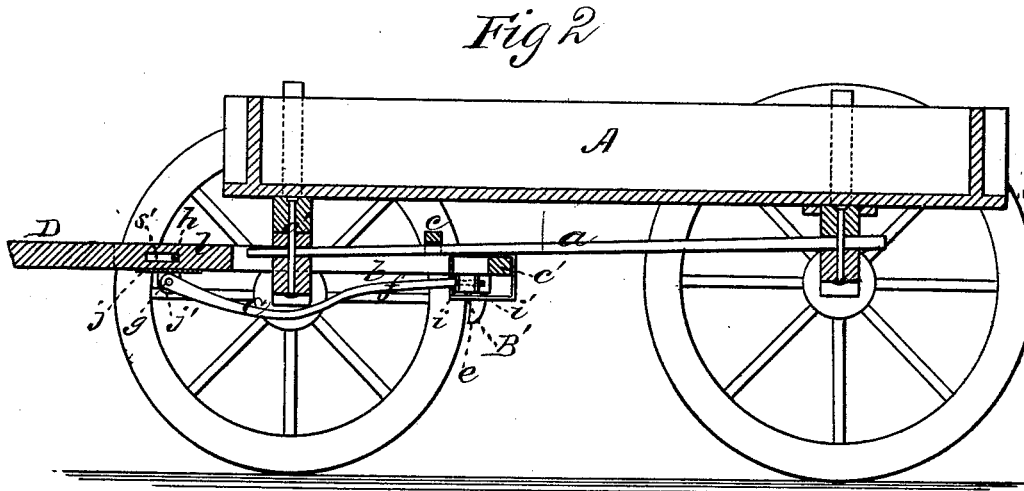
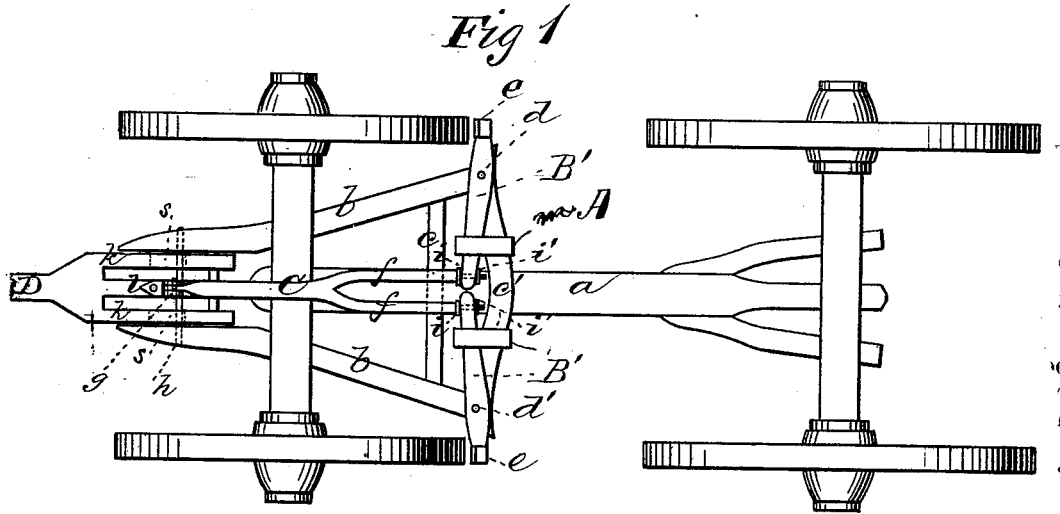


H. HUNT.
Automatic Wagon-Brake.

No. 198,389.

Patented Dec. 18, 1877.



WITNESSES

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HOWARD HUNT, OF TWIN GROVE, WISCONSIN.

IMPROVEMENT IN AUTOMATIC WAGON-BRAKES.

Specification forming part of Letters Patent No. **198,389**, dated December 18, 1877; application filed September 29, 1877.

To all whom it may concern:

Be it known that I, HOWARD HUNT, of Twin Grove, in the county of Green 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.

Figure 1 of the drawings is a representation of a bottom view of a wagon running-gear with my brake applied, and Fig. 2 is a longitudinal vertical section of the same.

This invention has relation to improvements on wagon-brakes.

Its object is to devise a brake mechanism that will apply the shoes automatically in descending a hill, and that is actuated either by the holding back of the team, or by the running of the vehicle upon the team.

The nature of the invention consists in the construction and novel arrangement, in connection with brake-levers fulcrumed upon the rear portion of the hounds, of a longitudinally, movable pole or tongue, and a rod connecting the said lever and tongue, as hereinafter more fully shown and described.

In the annexed drawings, the letter A designates an ordinary four-wheeled vehicle, the axles of which are connected by the usual reach *a* and king-bolt *a'*. The front axle is provided with the usual hounds *b*, extending in front and rear thereof, and braced by the usual stays *c c'*, the former above and the latter below the reach *a*.

B B' represent the brake-levers, fulcrumed, respectively, at *d d'*, in the rear portion of the hounds or ends of the brace *c'*, and provided upon their outer ends with the shoes *e*, the concave faces of which conform to the curvature of the wheel. The shoes are made of rubber, wood, or iron, or any combination thereof, and will be secured to the levers B B' in any suitable manner.

C represents a bifurcated metallic rod, extending from the tongue D to the brake-levers B B' aforesaid. The arms *f* of the rod C extend through the contiguous ends of the brake-levers, and are secured thereto by means of nuts *i i*, applied upon the said arms, one at each side of the same. The front end of the rod C is pivoted at *g* to the under side of the pole, directly beneath the tongue-bolt *h*, a

strong metallic plate, *j*, having a projecting eyebolt, *j'*, being secured thereto for the purpose.

The tongue D is provided with the hounds *k*, adapted to be received between the hounds *b*, having each a longitudinal slot, *s*, in line with a similar slot, *s'*, in the rearward extension *l* of the tongue. The tongue-bolt *h* extends through the hounds *b* of the wagon, and through the slots *s s'* of the tongue-hounds and tongue. The tongue is thus allowed longitudinal play with reference to the wagon-hounds *b*.

When the vehicle is on level ground, the tongue is drawn outward from the hounds *b* until the bolt *h* abuts against the rear ends of the slots *s s'* aforesaid, thus drawing the rod C to the front, and taking off the brakes through the vibration of the levers B B'; but in going downhill the holding back of the team, or the running of the wagon upon the team, causes the tongue to be thrust back between the wagon-hounds, thus thrusting the rod C backward, and, through the vibration of the levers B B', applying the brakes.

It is well known that in many kinds of wagon the rear end of the tongue is received directly between the wagon-hounds *b* aforesaid, the tongue-hounds being dispensed with. In this construction the said tongue has a longitudinal slot, *s'*, for the reception of the tongue-bolt, the remaining attachments being precisely or substantially the same as hereinbefore described.

As shown in Fig. 1, the power-arms of levers B B' extend through metallic loops *m* upon the rear transverse brace of the hounds. These loops limit the throw of the said levers, and prevent them from sagging downward.

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

In a wagon-brake, the combination, with the front hounds and brake-levers pivoted thereto, and a sliding and pivoted tongue, of the forked rod C, connected to said brake-levers in rear, and pivoted in front to said tongue, substantially as specified.

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

HOWARD HUNT.

Witnesses:

JOHN SWAN,
E. B. GOMMERIL.