(No Model.)

C. GARVER.

WAGON BRAKE.

No. 588,640. Patented Aug. 24, 1897.

Fig. 1

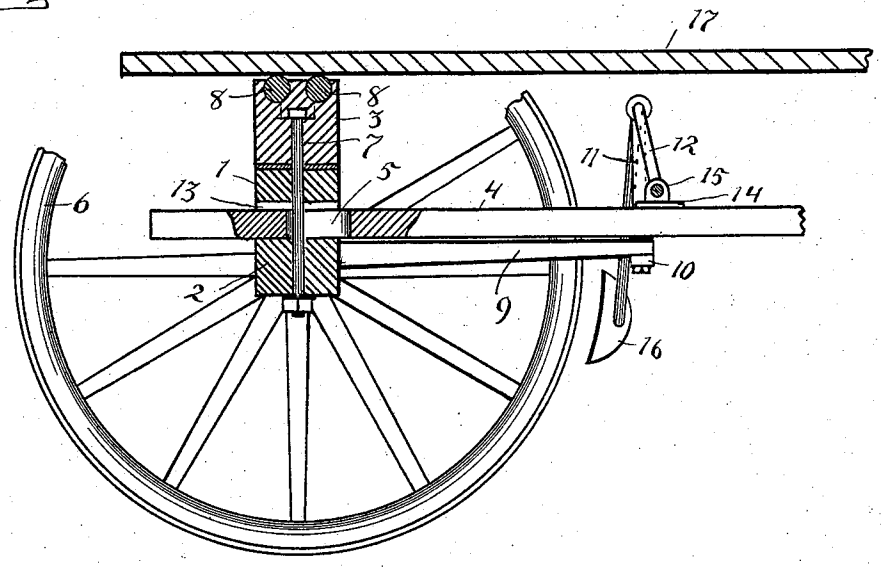
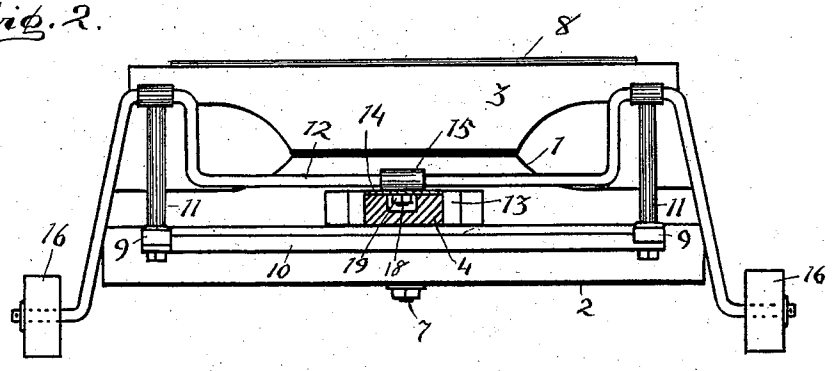


Fig. 2.



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WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 588,640, dated August 24, 1897.

Application filed February 20, 1897. Serial No. 624,421. (No model.)

To all whom it may concern:

Be it known that I, CHARLES GARVER, a citizen of the United States, residing at Fort Wayne, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in Wagon-Brakes; 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 relates to improvements in wagon-brakes in which the brake-beam is actuated by the longitudinal movements of a slidable coupling-pole; and the object of my invention is to afford automatic means for checking the movement of the wagon when descending grades. I accomplish this object by the construction hereinafter described, and illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of the forward end of the wagon, showing the application of my invention; and Fig. 2 is an elevation in a plane at right angles to that of Fig. 1.

Similar numerals of reference refer to corresponding parts throughout both views.

This invention is applicable to wagons of the usual form. The bolster 3 has two parallel rollers 8 8, loosely embedded in its upper face the said rollers projecting sufficiently to afford a bearing for the bed 17. The coupling-pole 4 projects through the opening 13 in the sand-board 1. The king-bolt 7 passes through the bolster 3 and the opening 5 in the coupling-pole 4 and is anchored in the usual manner in the axletree 2. The opening 5 in the coupling-pole being elongated permits said pole to play longitudinally.

The brake-beam 12 is mounted in suitable bearings surmounting the posts 11, and the said posts are erected on the rear extremities of the hounds 9. The central portion of the brake-beam is bent in the form of a depending loop and passes loosely through the swivel-eye 15, which is secured to the upper side of the coupling-pole 4. The outward extremities of said brake-beam are turned downward and terminate with the outturned ends, upon which is mounted the brake-shoes 16.

The swivel-eye 15 is provided with a stud 18, which passes through the plate 14 and is loosely secured thereto by a nut 19, and the said plate is rigidly secured to the upper side of the coupling-pole by means of screws or bolts. (Not shown.) The rear end of the coupling-pole is rigidly secured to the rear axletree in the usual manner, and the rear end of the bed 17 is rigidly fixed to the rear bolster, so that the coupling-pole, the bed 17, and the rear portion of the wagon move in unity.

The operation of the brake is as follows: When motion is transmitted to the forward truck of the wagon by means of the usual draft appliances, which are coupled thereto, the said truck, consisting of the forward bolster 3, sand-board 1, axletree 2, and wheels 6, is moved forward in relation to the coupling-pole and bed 17. The hounds 9, secured to the axletree 2, are carried with it, and the central looped portion of the brake-beam 12 is held from advancing because of its connection with the coupling-pole, and thus the brake-beam is swung rearwardly, which disengages the brake-shoes from the wheels. In descending a grade the resistance upon the front truck will permit said bed and coupling-pole to move forward in relation to the front truck, and the said coupling-pole having a connection with the looped portion of the brake-beam carries it forward, thus swinging the brake-shoes 16 into contact with the wheels 6 with a force corresponding with the incline of the grade and the weight of the load on the wagon. With the use of the rollers 8 the bed of the wagon is caused to slide over the bolster 3 with less resistance, and thus allowing the truck to actuate more freely. Thus it will be seen that the brake will actuate, when occasion requires, independent of any act on the part of the occupant.

Having described my invention and the manner in which it operates, what I claim as new, and desire to secure by Letters Patent, is—

1. A brake for wagons consisting of the beam 12 mounted on the supporting-posts 11, and having depending ends forming mount-

ings for the respective shoes 16, and a depending loop between said posts, the said loop passing through the swivel-eye 15 on the coupling-pole, and being adapted to be actuated by the longitudinal movements of said pole, substantially as shown and described.

2. In a brake for wagons, a swinging brake-beam mounted upon the forward truck of the wagon, and having a connection with the coupling-pole of said wagon and being adapted to be actuated by the longitudinal movement of said coupling-pole, substantially as shown and described.

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

CHARLES GARVER.

Witnesses:
MAUDE RHOADES,
RICHARD H. GARVER.