(No Model.)

J. D. BRATTON & H. H. GOOD.

WAGON BRAKE.

No. 259,468. Patented June 13, 1882.

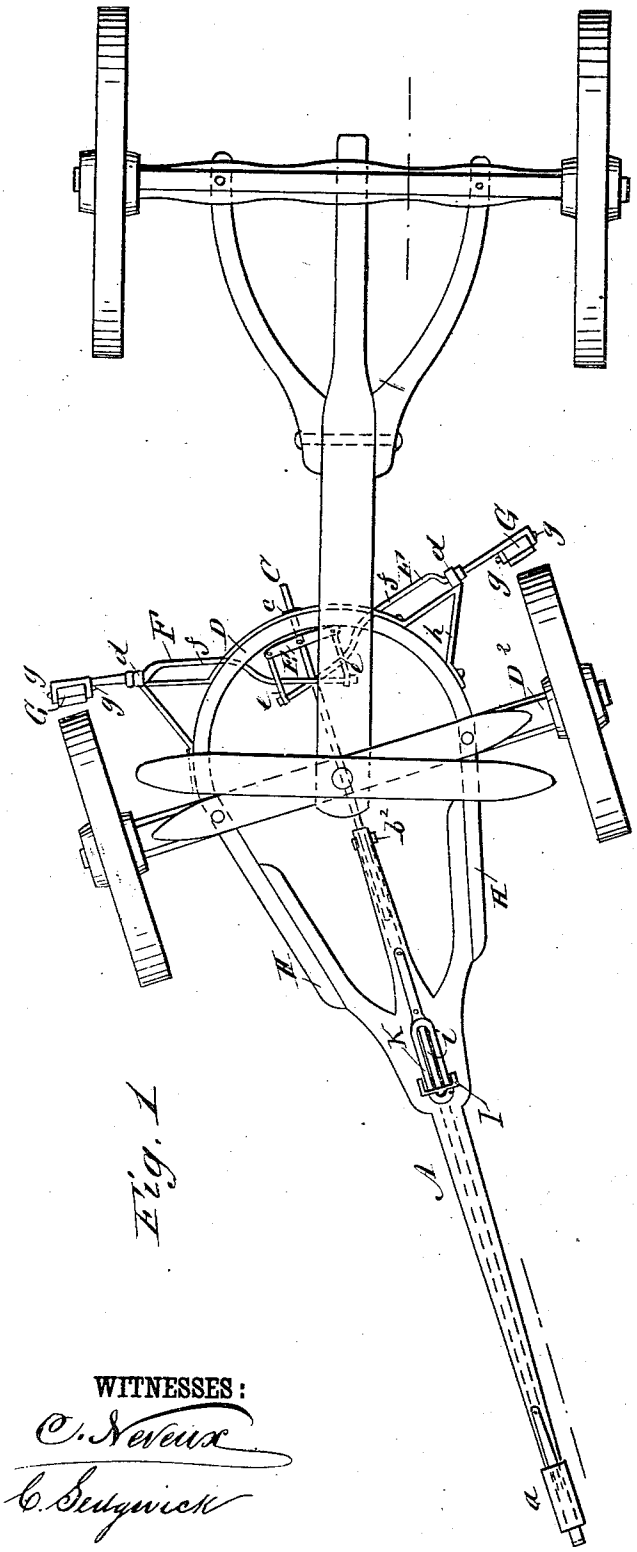


Fig. 1.

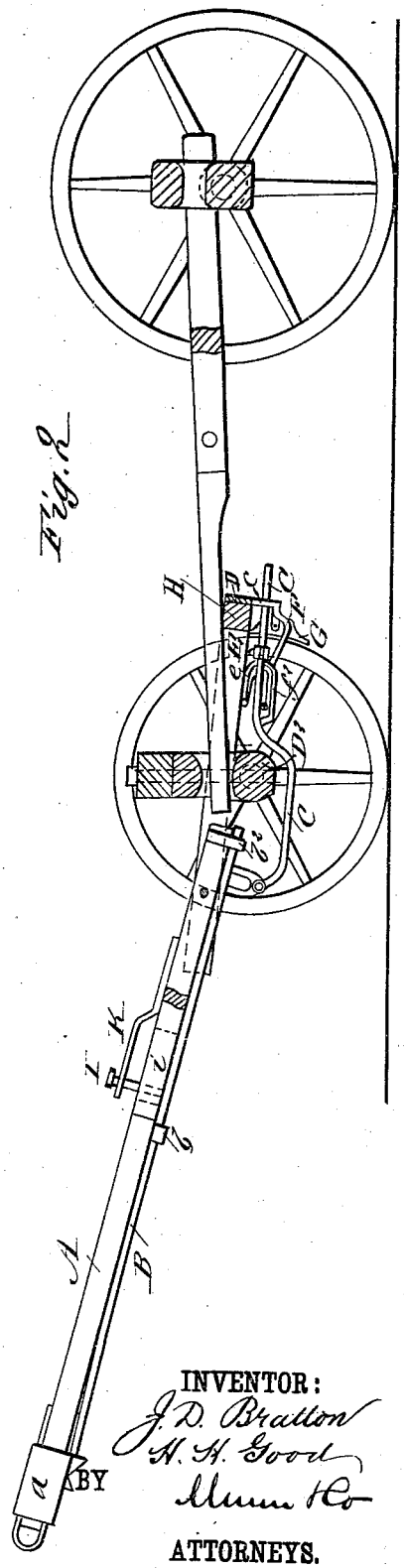


Fig. 2.

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UNITED STATES PATENT OFFICE.

JAMES D. BRATTON AND HENRY H. GOOD, OF WESTMORELAND, KANSAS.

WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 259,468, dated June 13, 1882.

Application filed March 2, 1882. (No model.)

To all whom it may concern:

Be it known that we, JAMES DALLAS BRATTON and HENRY HARRISON GOOD, of Westmoreland, in the county of Pottawatomie and State of Kansas, have invented a new and useful Improvement in Wagon-Brakes, of which the following is a full, clear, and exact description.

Our invention relates to that class of wagon-brakes which are applied to the front wheels of vehicles and operated by the team in stopping or slowing.

The invention consists in a novel construction, arrangement, and combination of levers provided with brake-shoes on their outer ends, and having their inner ends connected by a pressure-equalizing device to a rod secured to a sleeve sliding on the tongue, and other devices hereinafter more particularly described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 represents a top view of a vehicle provided with our improvements. Fig. 2 is a longitudinal vertical sectional view of the same.

A represents the pole or tongue of an ordinary vehicle, which is secured to the hounds in any suitable manner, and is provided on its outer end with a movable sleeve, *a*. Bolted or otherwise secured to the said sleeve *a* is a rod, B, supported at about the middle and inner end by the keepers *b* and b^2. The rod B is also provided with an upright arm, I, projecting through and sliding in a slot, *i*, in the tongue A, for the purpose hereinafter described.

C is a connecting-rod, bent in the manner shown to pass under the axle D^2. The forward end is secured in any suitable manner to the rear end of the rod B. The rear end of the rod C is secured by the keeper *c*, which may be either secured to or made in one piece with the curved bar D, hereinafter more particularly described.

E is a beam or lever, bolted to the rod C near its rear end. To each end of this lever E is secured by means of short rods *e e*, the inner end of a brake-lever controlling the opposite wheel. It serves the double purpose of equalizing the pressure on the wheels when one shoe is worn more than the other, and of affording greater leverage by the greater length of brake-lever which it allows to be used.

F F are the brake-levers, having on their outer ends the brake-shoes G G. Loops or keepers *d d* in the curved bar D serve as fulcrums and support the outer ends of the levers, while between the fulcrums *d d* and the reach of the vehicle the brake-levers F F are formed into cranks *f f*, which by their weight counterbalance the weight of the brake-shoes. The inner ends of the levers F F are connected by short rods *e e* to the lever E, as above described, and are supported, one by passing over the rod C and resting on it and the other by a keeper, f^2, on the lower side of the said rod. The brake-shoes G G are pivoted or hung between the arms *g g* on the ends of their respective levers. The brake-levers F F also fit loosely and turn freely in their supports *d d*. The brake-shoes, however, are so shaped that the lower part is larger than the part where the pivot pierces it. The result is that, if the brakes are applied when the wagon is moving forward, they are made to press closer, while if the wagon is backed the shoes move downward and backward, turning on their pivots, and thus release the wheels.

The curved bar D is bolted or otherwise secured to the hounds H, which it serves to strengthen. It is braced and made stronger by arms *h h*, secured at their ends to the hounds H.

The whiffletree may be attached to the arm or bolt I, above described, so that when a forward pull is given to the traces the brakes are thrown off.

K is a slotted bar attached to the upper side of the pole, having a slot through which the bolt I projects, and serving as a guide and support for the upper portion of the bolt.

The operation is as follows: When the wagon is in forward motion and it is desired to slow or stop, or when a downgrade is reached, the backing of the team slides the sleeve *a* backward on the pole, moving with it the rods B and C, with their appurtenances, and the inner ends of the brake-levers F F, and applying the brake-shoes to the wheels. When the wagon is started again the forward motion given by the team to the whiffletree moves the rods and

levers to their original positions and releases the wheels.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination, with the draft-rod B C and the brake-levers F, of the lever E and the rods *e*, connecting the ends of the said lever with the inner end of the brake-lever controlling the opposite wheel, substantially as and for the purpose set forth.

2. The combination, with the draft-rod B C and the curved bar D, of the brake-levers F, provided with the cranks *f*, the lever E, and the connecting-rods *e*, substantially as and for the purpose set forth.

3. The combination, with the curved bar D and the crank brake-levers F, of the lever E, the connecting-rods *e*, and the draft-rod B C, provided with the arm or bolt I, substantially as and for the purpose set forth.

4. The curved bar D, secured to the hounds and provided with keepers *c* and *d d*, substantially as herein described.

5. The combination, with the wagon-pole A, provided with the slot *i*, the hounds H, and the crank brake-levers F, of the draft-rod B C, provided with arm or bolt I, the curved bar D, the lever E, and the connecting-rods *e*, substantially as and for the purpose set forth.

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