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J. F. HART.

WAGON BRAKE.

(Application filed Sept. 11, 1899.)

(No Model.)

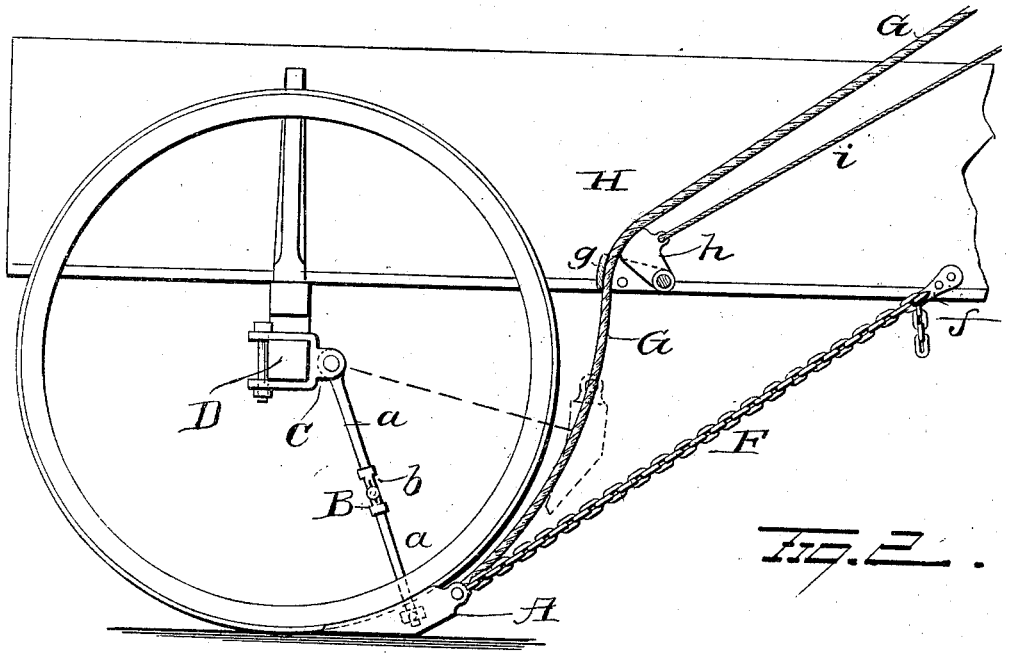

Fig. 2.

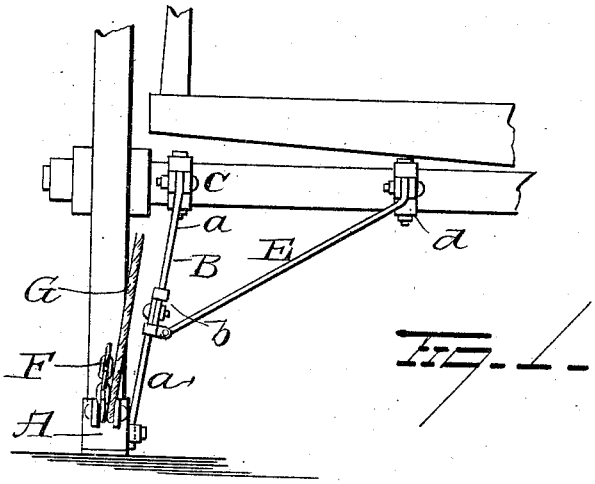

Fig. 1.

WITNESSES

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WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 646,906, dated April 3, 1900.

Application filed September 11, 1899. Serial No. 730,141. (No model.)

To all whom it may concern:

Be it known that I, JAMES FORCE HART, of Athens, in the county of Clarke and State of Georgia, have invented certain new and useful Improvements in Wagon-Brakes; and I do hereby 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.

My invention relates to an improvement in wagon-brakes, and more particularly to that class of brakes or drags which are dropped to a position in front of the wheel and form a temporary runner, which receives the weight of the wheel and by its friction on the ground arrests the speed of the vehicle; and it consists in certain details of construction and combinations of parts, as will be more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in transverse section of a wagon, showing my improvement applied thereto; and Fig. 2 is a view in side elevation thereof.

A represents a shoe, preferably made of metal, wedge-shaped in side elevation and provided with a grooved top adapted to receive a wheel-rim. This shoe may have a removable lower face for the purposes of renewal when worn and is secured to the depending extensible rod B, the upper end of which is journaled to a bearing C, carried by the axle D. The rod B is composed of two parts *a a'*, the meeting ends of which are adjustably secured in clamp *b*, so that the rod may be elongated or shortened to accommodate itself to wheels of varying sizes. The shoe A is pivoted slightly eccentric to the axis of the wheel, so that when the shoe is elevated the inner surface of the shoe is slightly removed from the tire of the wheel; but when lowered to the ground makes contact with the wheel-tire about the time it engages the ground. The clamp *b*, connecting the two ends of the sections *a a'* of the rod B, may be of any construction, and instead of using a clamp adjustably secured to both ends of the rod the clamp may be rigidly secured to one section and provided with a socket to receive the end of the other section and a set-screw for locking same therein.

The rod B is supported against lateral deflection by the brace E, which latter is pivoted to a bracket *d*, carried by the axle, and sustains the rod B in a position to hold the shoe A always in line with the tire of the wheel, so that when the shoe is dropped to the ground it comes in contact with the tire and forms a runner for the wheel, and thus by its frictional contact with the wheel and ground prevents the former from turning.

For the purpose of preventing the shoe A from passing under the wheel I have provided the chain F, one end of which is secured to hook *f*, attached to the wagon-body, while the rear end thereof is attached to the front end of the wedge-shaped shoe A. This chain is of sufficient length to allow ample movement of the shoe, but will not permit the latter to pass the vertical center of the wheel.

Attached to the shoe A is the actuating rope or chain G. This rope or chain passes upwardly alongside the body H of the vehicle between the abutment *g* and the cam *h* and is of sufficient length to extend to any part of the vehicle body or load therein, thus enabling the operator to elevate the shoe from a position on the seat or on the horse or on the top of the load, as the case may be. The cam *h* is a gravity-cam and normally tends to clamp the rope or chain G against the abutment *g*. Hence it will be seen that by simply pulling upon rope or chain G the gravity-clamp *h* engages the rope or chain as the latter is pulled up, and thus prevents any retrograde movement of the chain or rope or the accidental setting of the brake. The brake can be set or dropped by elevating the cam *h*, which is done through the medium of the cord or chain *i*, attached at its lower end to the cam and preferably attached at its opposite end to the free end of the rope or chain G, so that the two ropes or chains, which are essential to the two movements of the brake-shoe, may always be together and within convenient reach of the operator.

To set the brake, it is simply necessary for the driver to pull upon rope or chain *i* and leave rope or chain G free to fall. After the brake has fallen to its proper position the ropes or chains may then be released. To

release the brake, it is simply necessary to pull upon rope or chain G until the shoe has been elevated above the ground.

My invention is simple, is of few parts, and is specially designed for use on wagons where the character of the load would prevent the employment of the ordinary brake-lever.

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

1. The combination with an extensible rod, a brake shoe or runner secured to the lower end of said rod, and a lateral brace, of means for limiting the rearward movement of the shoe and means for elevating and releasing the shoe, substantially as set forth.

2. The combination with a swinging rod, a grooved shoe on the end of said rod, and a brace for preventing lateral movement of the shoe, of a rope or chain for elevating the brake-shoe, a gravity-catch for locking said rope or chain and means for releasing the gravity-catch, substantially as set forth.

3. The combination with an extensible rod, a brake shoe or runner carried thereby and a brace for preventing lateral movement of the shoe, of a rope or chain fixed at its front end and secured at its rear end to said shoe for limiting the rearward movement of the latter, a rope or chain for elevating the shoe, an abutment and cam or clamp between which the lifting rope or chain passes and a rope or chain for releasing the cam or clamp from the lifting rope or chain, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JAMES FORCE HART.

Witnesses:
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HARVEY STOVALL.