

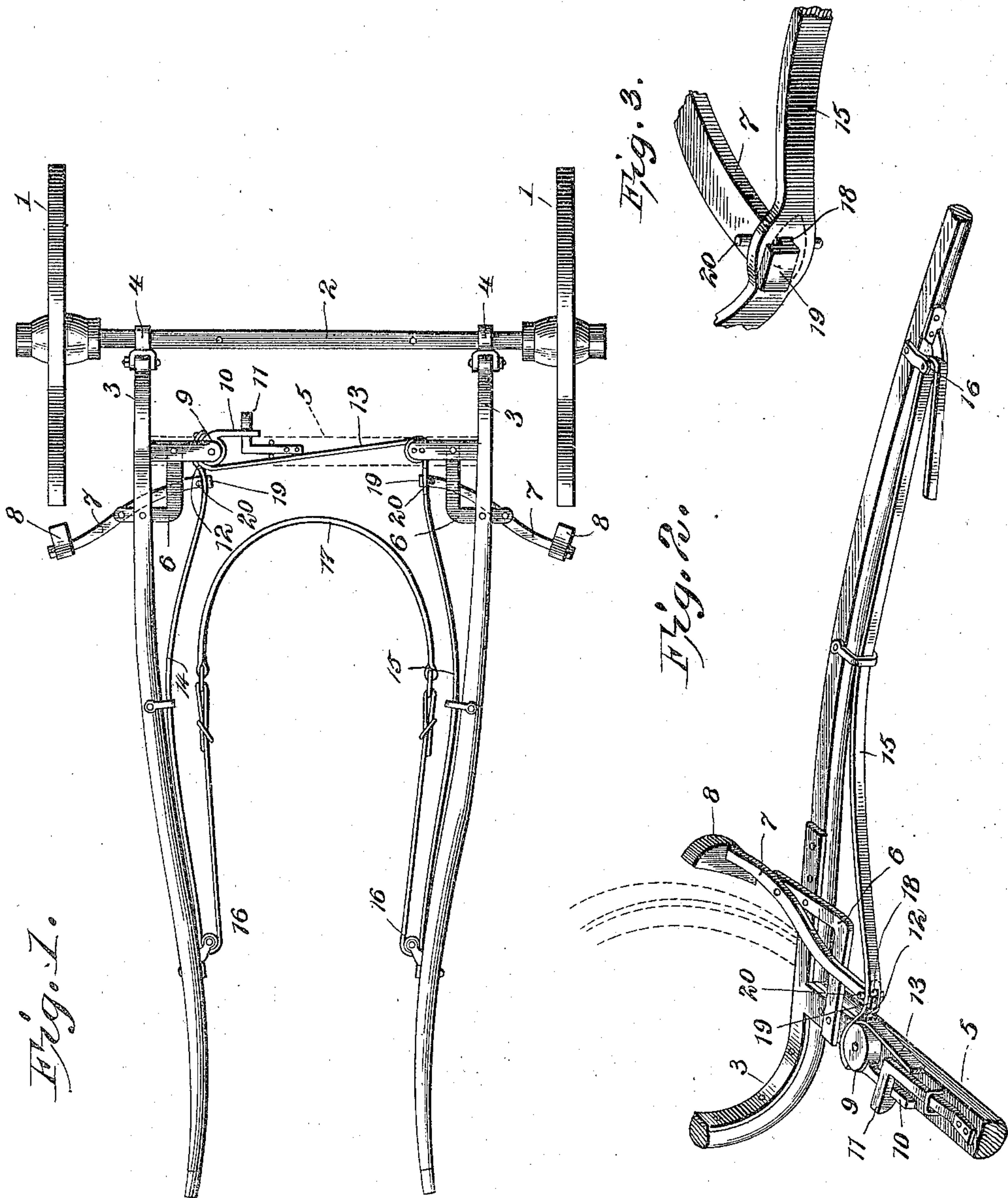
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Patented Jan. 9, 1900.

G. NEWTON.  
WAGON BRAKE.

(Application filed Sept. 22, 1899.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

GEORGE NEWTON, OF ODESSA, NEW YORK.

## WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 640,931, dated January 9, 1900.

Application filed September 22, 1899. Serial No. 731,307. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE NEWTON, a citizen of the United States, residing at Odessa, in the county of Schuyler and State of New York, have invented a new and useful Wagon-Brake, of which the following is a specification.

My present invention relates to a novel automatic brake for vehicles; and its object is to produce a simple attachment which may be readily applied to the thills of a vehicle and which when so applied may be held inactive or may, at the will of the driver, be applied to the vehicle-wheels by the strain exerted upon the holdbacks. In other words, I propose to provide a brake operatively connected with the holdback of a harness and arranged to be released by the driver and to be urged against the wheel-tires by levers connected to and operated by the holdback-straps extending from the breeching.

Referring to the drawings, Figure 1 is a top plan view of the front wheels and thills of a wagon with my device applied thereto, the thill-bar being shown in dotted lines for the sake of clearness; and Fig. 2 is a fragmentary detail perspective view showing, on a somewhat-enlarged scale, the tripping-drum, a brake-strap, and one of the brake-shoes. Fig. 3 is an enlarged detail view of the brake-levers, illustrating the manner of connecting the same with the adjacent side strap.

Referring to the numerals of reference on the drawings, 1 1 indicate the front wheels, and 2 the axle, of the vehicle.

3 indicates the thills, connected to the axle by clips 4, as usual, and provided with a transverse connecting or thill bar 5. Secured to the under side of the thill-bar and thills are two metal brackets 6, preferably of right-angular form, and to the outer ends of which are medially pivoted brake-levers 7, provided with terminal brake-shoes 8, designed to contact with the wheels 1. Adjacent to one of the thills is revolvably mounted upon the under side of the thill-bar 5 what I will term a "trip-drum" 9, provided with a tangential trip-arm 10, engaging a spring-catch 11, likewise carried by the thill-bar and designed when necessary to be depressed to release the trip-arm—as, for instance, by the foot of the driver or by the butt of his whip.

The numerals 12 and 13 indicate a pair of straps connected to the inner ends of the brake-levers and wound slightly around the trip-drum in the same direction, the strap 13 being preferably passed around a pulley, as shown, carried by the thill-bar and designed for the sole purpose of maintaining the direction of the strap.

14 and 15 indicate side or brake straps connected to the inner ends of the brake-levers 7 and passed along the shafts through keepers, around pulleys 16 provided on the shafts or thills, and finally buckled or otherwise connected to the holdback-straps or, as shown in the drawings, to the opposite ends of the breeching 17. The straps 12 and 14 and the straps 13 and 15 may be made of continuous pieces of leather or other suitable material, as illustrated in the accompanying drawings, or they may be made in separate parts or pieces, if desired. The straps 14 and 15, which extend longitudinally of the shafts, are provided with eyes 18 to receive the inner ends of the brake-levers, and they are suitably reinforced around the eyes. The brake-levers are provided at their inner ends with upwardly-projecting lugs 19, and they have pins 20, spaced from the lugs and projecting from the upper and lower faces of the levers. These projections and the lugs form recesses to receive the straps 14 and 15, which are prevented from moving inward on the brake-lever 7. The lugs are adapted to be readily passed through the eyes of the straps 14 and 15, and by this construction the said straps 14 and 15 are detachably connected to the brake-levers.

Ordinarily the trip-drum is turned to the position indicated in Fig. 1, with its trip-arm 10 in engagement with the latch 11. In this position of the parts the inner ends of the brake-levers are retained in a position to hold the brake-shoes out of contact with the wheels and until the straps 12 and 13 are slacked by the rotation of the trip-arm the side or brake straps will perform the function of an ordinary holdback. If now it should be desired to descend a steep grade or if the girth of the harness should break or any other part of the device should become deranged, it would simply be necessary for the driver to depress the catch 11 by means of



his foot or the whip, for instance, thereby releasing the trip-arm 10 and permitting the rotation of the trip-drum, the slacking of the straps 12 and 13, and the exertion of the entire force applied to the holdback or breeching to effectually apply the brake.

What I claim is—

1. The combination with a pair of thills, of brake-levers extending from opposite sides of the thills and having means for engaging the adjacent wheels, a drum connected with the levers and adapted to hold them out of engagement, means for locking the drum in such position, and straps connected with the levers and designed to be connected with the harness, whereby the brake will be applied when the drum is tripped, substantially as described.

2. In an automatic brake, the combination with a suitable support and a plurality of brake-levers, of brake-straps connected to the levers, a strap intermediate of and operatively connected to said levers, and means for adjusting the longitudinal extent of the strap.

3. The combination with a suitable support and a pair of brake-levers, of brake-straps connected to the said levers, connecting-

straps likewise connected to the said levers, a trip-drum designed to exert a pull upon the connecting-straps, and means for controlling the movement of the drum.

4. The combination with a support, of a pair of brake-levers, brake-straps connected to the said levers, a trip-drum provided with a trip-arm, a latch in operative relation to said arm, and connecting-straps connected to the contiguous ends of the brake-levers and passed longitudinally around the trip-drum in the same direction.

5. In an automatic brake, the combination of a brake-lever provided with a rigid projection and having a rigid lug spaced from the projection, a strap having an opening or eye for the reception of the lever and retained thereon by the lug and the projection, and a trip-drum connected with the lever, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEO. NEWTON.

Witnesses:

WM. V. DOLPH,  
A. J. NEWTON.