

(No Model.)

J. W. HUTCHINSON & C. B. RITCHIE.

WAGON BRAKE.

No. 579,710.

Patented Mar. 30, 1897.

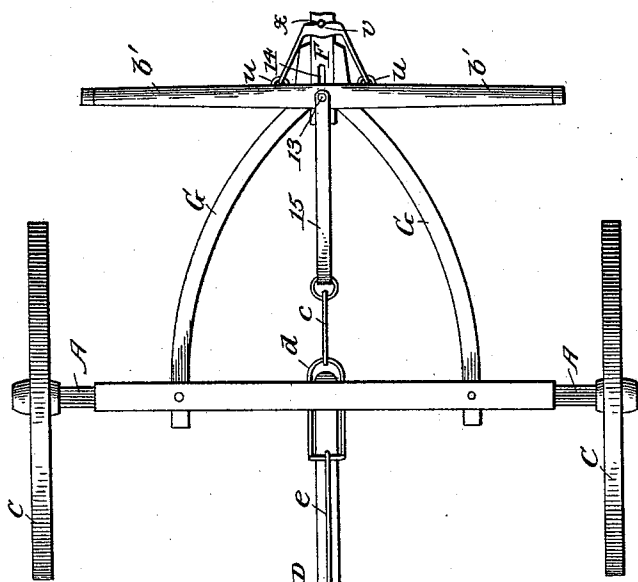
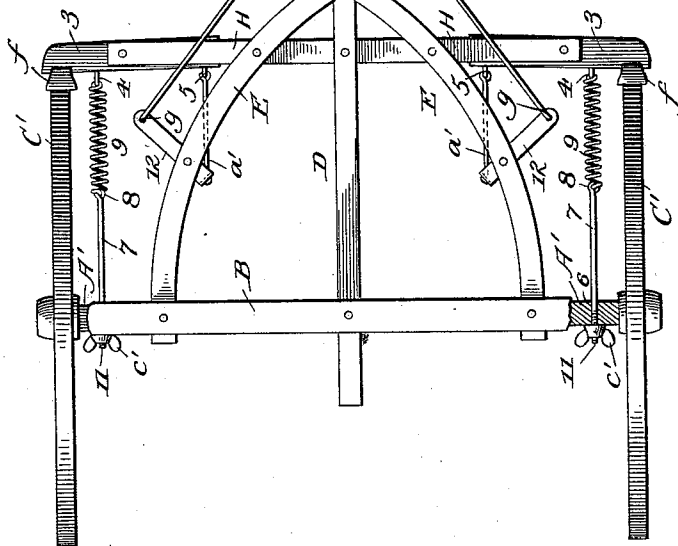


Fig. 1



WITNESSES:

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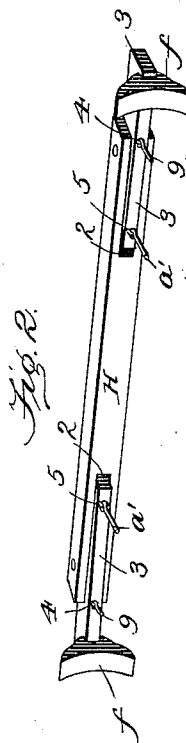


Fig. 3

UNITED STATES PATENT OFFICE.

JAMES W. HUTCHINSON AND CHARLES B. RITCHIE, OF MOAB, VIRGINIA;
SAID RITCHIE ASSIGNOR TO SAID HUTCHINSON.

WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 579,710, dated March 30, 1897.

Application filed June 18, 1896. Serial No. 596,044. (No model.)

To all whom it may concern:

Be it known that we, JAMES W. HUTCHINSON and CHARLES B. RITCHIE, of Moab, in the county of Washington and State of Virginia, have invented an Improved Wagon-Brake, of which the following is a specification.

Our invention relates to automatic brakes for wagons, and relates to that class of brakes which are released when the horses which are attached to the vehicle are put in motion.

With this object in view the invention consists of the details of arrangement and combination which will more fully appear hereinafter.

In the accompanying drawings, which form a part of this application, Figure 1 is a top plan view. Fig. 2 is a detail of the slotted cross-bar.

Like numerals and letters of reference indicate corresponding parts in the views.

Referring to the drawings, A and A' represent the axles, A' the axle supporting the bolster B. C and C' represent the wheels. D represents the coupling-pole secured to the rear axle and braced by the braces E, all of which are of the ordinary or any other suitable construction.

F is the tongue, which is secured to the front axle A by means of the tongue-hound G.

A cross-bar H, having slots 2 at each end, is rigidly attached to the under side of the coupling-pole D and braces E. Pivoted within the said slots 2 are the lever-arms 3, which contain the brake-shoes *f*. Staples 4 and 5 are secured to the lever-arms 3 and will again be referred to. Holes 6 pass through the rear axle I and have the tension-rods 7 passing therethrough, the said tension-rods having the eyes 8, to which are attached the tension-springs 9, said tension-springs being also secured to the staples 4, the said tensions being used to keep the brake-shoes *f* hard up against the wheels. For regulating the said tension winged nuts *c'* are screwed on threaded ends 11 of the said tension-rods. Levers 12 are pivoted to the under side of the braces E. Rods *a'* are secured at one end to the said levers, the other end of the said rod being se-

cured in the staples 5, the purpose of which will be described more fully hereinafter.

A doubletree *b'* is attached to the said wagon-pole by means of the pin 13, which passes down through the said pole and works in the slot 14. The said pin also secures the clevis-shaped link 15. A series of links *c d e*, respectively, of any desired shape connects the clevis-link 15 with the Y-shaped rod 16, the ends *g'* of which are connected to the ends of the levers 12.

It will be readily seen that the forward motion of the horses will take the pressure off the brakes, and when the pressure is removed by stopping the horses the tension-springs 9 draw the said brakes hard down upon the wheels.

A safety-lock *w* is attached to the doubletree *b'* by means of staples *u*, and is substantially U shape and has the notch *v* at its forward end, which catches with the pin *x*, situated on the wagon-pole.

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

In an automatic wagon-brake, the combination with the tongue having a slot therein, a doubletree, a pin passing through the said doubletree and working in said slot, the said pole being connected to the front axle by means of hounds G, the said pin being secured to a clevis-shaped link, a clevis-shaped link, a Y-shaped rod the ends of which are attached to lever-arms and to the clevis-shaped link, lever-arms, pivoted to the braces E, a cross-bar H, slots in the ends of the said cross-bar, lever-arms 3, pivoted in the said slots, brake-shoes secured to the ends of the lever-arms 3, links *a'*, for connecting the levers 12 and the lever-arms 3, and a tension mechanism, substantially as set forth and described.

In testimony whereof we affix our signatures in the presence of two witnesses.

JAMES W. HUTCHINSON.
CHARLES B. RITCHIE.

Witnesses:

D. C. THOMAS,
FRANK T. BARR.