

(Model.)

W. L. WHITMAN & J. D. IGON.
Wagon Brake.

No. 234,637.

Patented Nov. 16, 1880.

Fig: 1.

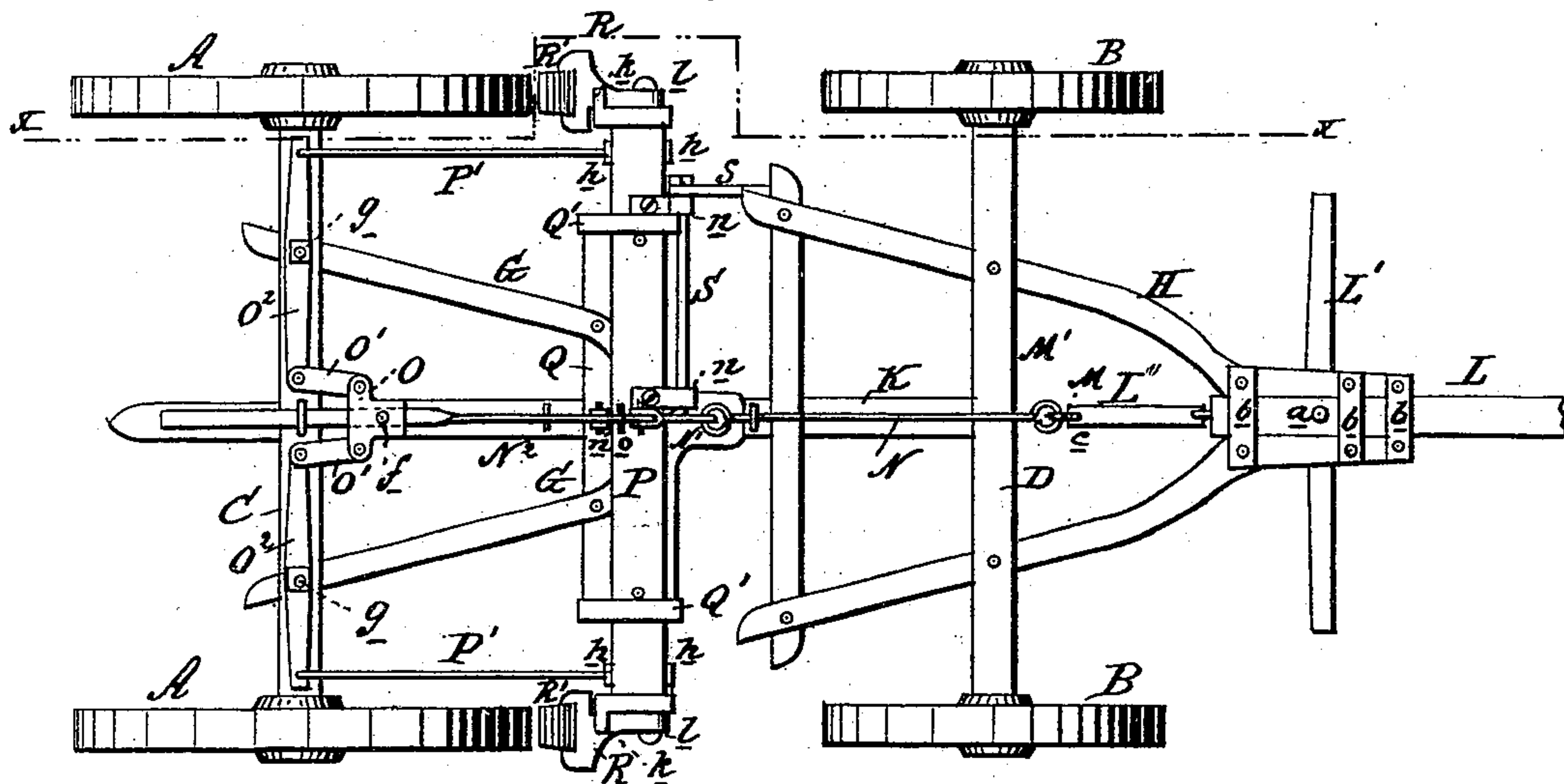


Fig: 2.

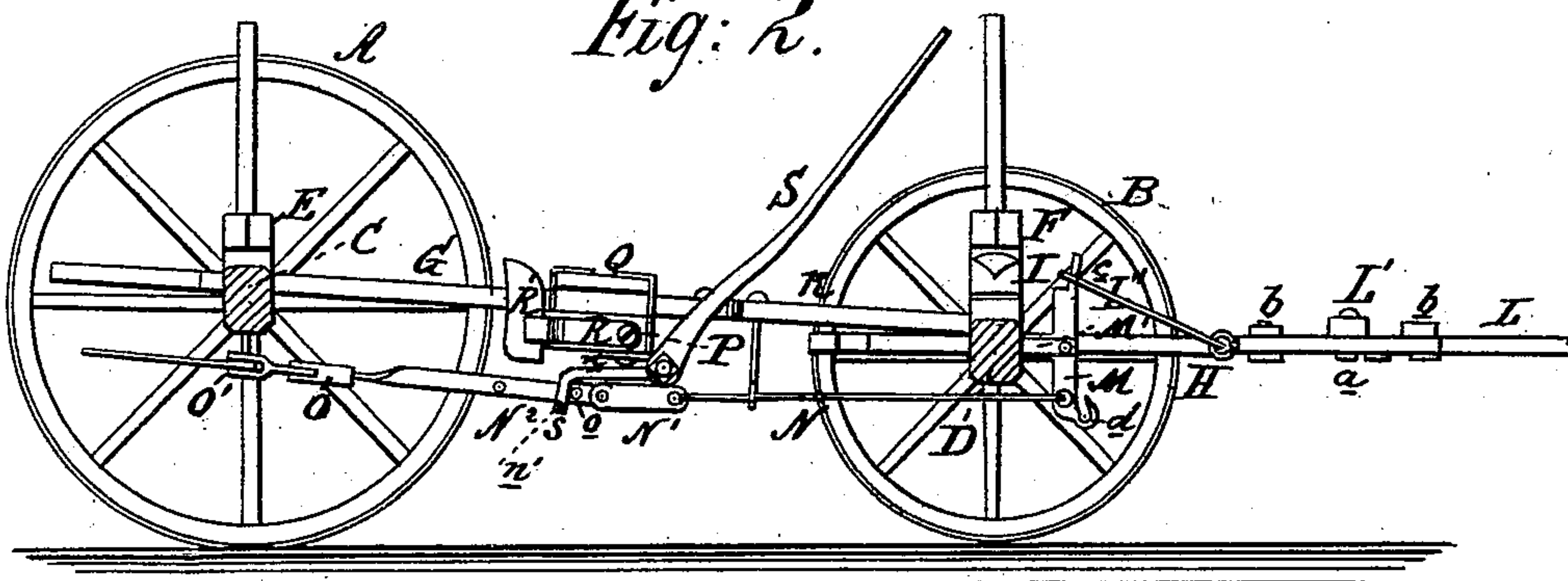
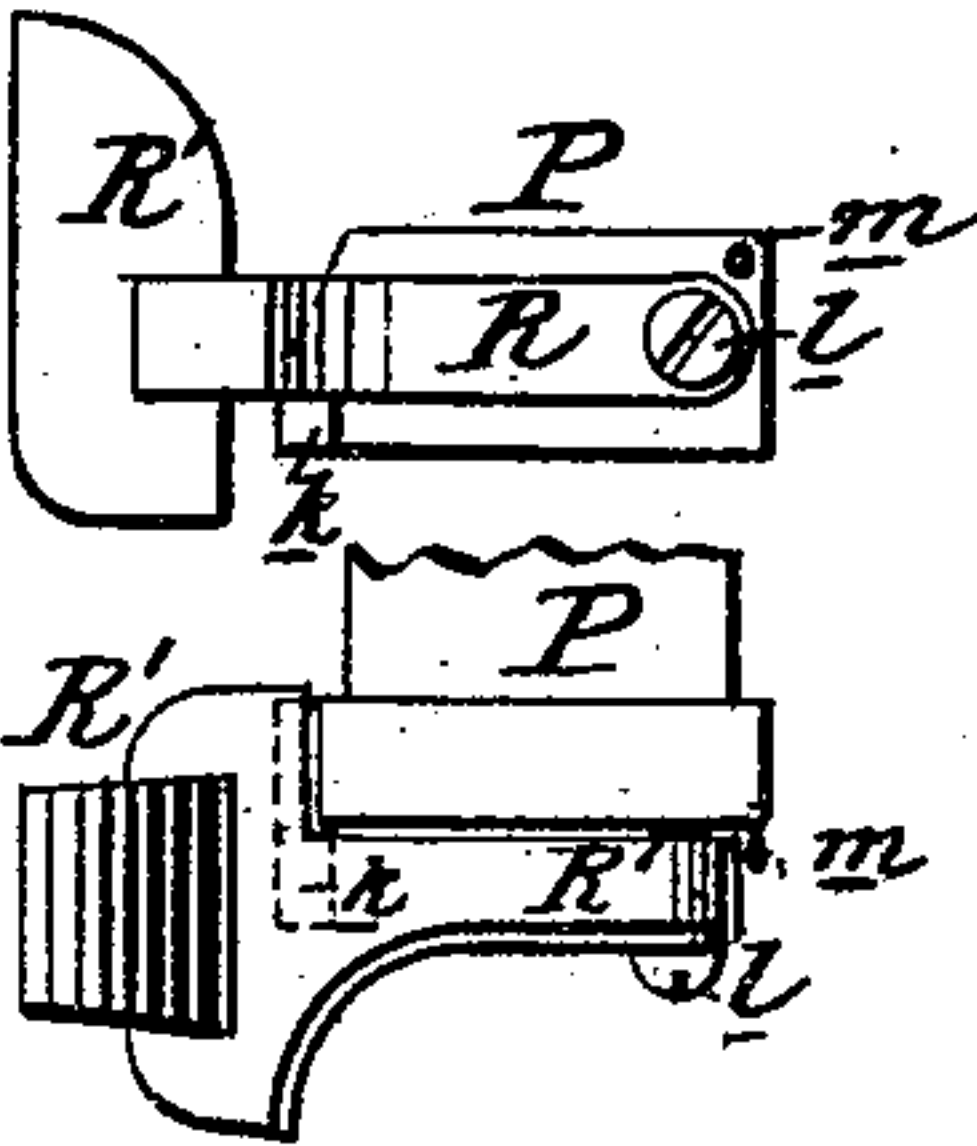


Fig: 3.



WITNESSES:

A. Schehl.
C. Sedgwick

INVENTOR:

W. L. Whitman
J. D. Igon

BY

W. L. Whitman & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM L. WHITMAN, OF RINGGOLD, GEORGIA, AND JACKSON D. IGON, OF JAMES COUNTY, TENNESSEE.

WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 234,637, dated November 16, 1880.

Application filed September 3, 1880. (Model.)

To all whom it may concern:

Be it known that we, WILLIAM L. WHITMAN, of Ringgold, Catoosa county, Georgia, and JACKSON D. IGON, of James county, Tennessee, have invented a new and Improved Wagon-Brake, of which the following is a specification.

This invention is an improvement upon the automatic wagon-brake for which Letters Patent No. 196,406, dated October 23, 1877, were issued to William L. Whitman and Ephraim Manes.

Figure 1 is a bottom view of a wagon-gearing with the improved brake attached. Fig. 2 is a side elevation of the same on line *x x*, Fig. 1, and Fig. 3 represents side and plan views of the improved brake-block in position.

Similar letters of reference indicate corresponding parts.

In the drawings, A A represent the rear wheels; B B, the forward wheels; C D, the rear and forward axles, respectively; E F, the rear and forward bolsters, respectively; G H, the rear and forward hounds, respectively; I, the sway-bar; K, the reach, and L the tongue, all of which are of the ordinary construction, and hence require no description. L' is the double-tree, pivoted to the tongue L by a pin, *a*. The tongue L is held in place in the fork of the forked hounds H by the cross-straps *b b*, and has hooked on its rear end a strap, L'', that is provided with a hole, *c*, in its other end to adapt it to be hooked upon the upper end of the lever M, or upon a hook, *d*, formed on the lower end thereof, which lever M is fulcrumed in a forked lug, M', that projects forward from the front axle, D.

To the lower end of the lever M is hooked the forward end of the rod N, which extends rearward beneath the reach K to about midway of the wagon-gear, and is then hooked into the forward end of a link, N', in whose forked rear end is pivoted the rod N², which extends rearward beneath the rear axle, C, and to the rear portion of the rod N², a little forward of the rear axle, C, is adjustably secured, by a pin, *f*, a cross-head, O, with the ends of which are connected, by short pivoted links, O', the inner ends of the levers O²,

which are placed beneath, and are pivoted, as shown at *g*, to the rear axle, C. To the outer ends of these levers O² are pivoted the rear ends of the screw-rods P', the forward ends of which are passed through the ends of the brake-beam P and adjustably secured by the nuts *h*, so that by turning the said nuts *h* the said brake-beam P can be adjusted nearer or farther from the wheels A A, as required.

Q is a bench fastened across the upper face of the rear hounds, G, and provided at each end with depending stirrups Q' that embrace and support the brake-beam P and hold it steadily, thereby preventing the trembling or vibrating of said beam P while in action that would obtain without these supporting-stirrups Q'.

R R represent the improved brake-blocks pivoted on the ends of the beam P, and prolonged well rearward of the rear face of the beam P, and carrying in their forked ends the brake-shoes R' R', which are extended so far rearward of the brake-beam P that the mud which may be scraped from the wheels A A by the shoes R' R' will not fall on the ends of the brake-beam P and thereby clog and interfere with working of the said block and shoes. The studs *k k*, projecting from the ends of the brake-beam P, support the brake-blocks R in a horizontal position for application to the wheels A A, and being pivoted as shown at *l*, said blocks R will lift, and thus prevent the brake from taking hold of the rear wheels, A A, when the wagon is backing, and the studs *m*, projecting from the ends of the brake-beam P, prevent the said blocks R from being thrown too far upward and forward.

On the under side of the brake-beam P are two forward projecting lugs, *n n*, in which is journaled the horizontal arm of the hand-lever S, whose downward-bent forked end embraces the rod N², just in rear of the link N', and is held thereon by a pin, *n'*, passing transversely through the ends of the fork. The handle or upright arm of this lever S is attached at right angles to the horizontal arm thereof, and extends upward within reach of the driver of the wagon. Transversely through the rod N² is passed a pin, *o*, against which the forked

end of the lever S is pressed for the purpose of applying the brake to the wheels A A. The addition of this hand-lever S, with its connections, permits the brake to be operated independently of the horses, and enables the driver to put on the brake, though the horses may be pulling at the same time, and yet it does not interfere with the free automatic action of the brake being entirely dormant when the brake is thus acting. The hand-lever S is also useful to the driver when the horses are running away with the wagon. It is of use, also, in holding the wagon when going up hill, to rest the horses, and in going down hill with a team not disposed to hold back, and in case of the breaking of any part of the harness while going down hill.

It will be seen, too, that the lever S does not prevent the coupling of the wagon longer or shorter, as may be desired.

With this construction, when the wagon presses forward against the horses in going down hill the forward pressure operates, through the tongue L, strap L'', lever M, rod N, link N', rod N², cross-head O, links O', levers O², and rods P', to push the brake-beam P back

and apply the brake with a force proportionate to the forward pressure of the wagon.

When the horses are to be left standing, and there is no convenience for hitching them, the strap L'', is unhooked from the upper end of the lever M and hooked upon its lower end, so that the least draft-strain will apply the brake and the horses will thus be prevented from moving.

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

The combination, with tongue L, of the strap L'', having end hole, c, the hook-lever M, fulcrumed on a lug, M', of front axle, the hook-rod N, the link N', the pivoted rod N², the cross-head O, having pivoted links O', the levers O², pivoted to rear axle, the rods P', and the brake-beam P, as and for the purpose specified.

WILLIAM L. WHITMAN.
JACKSON D. IGON.

Witnesses:

R. M. MORRIS,
W. H. H. CLARK.