

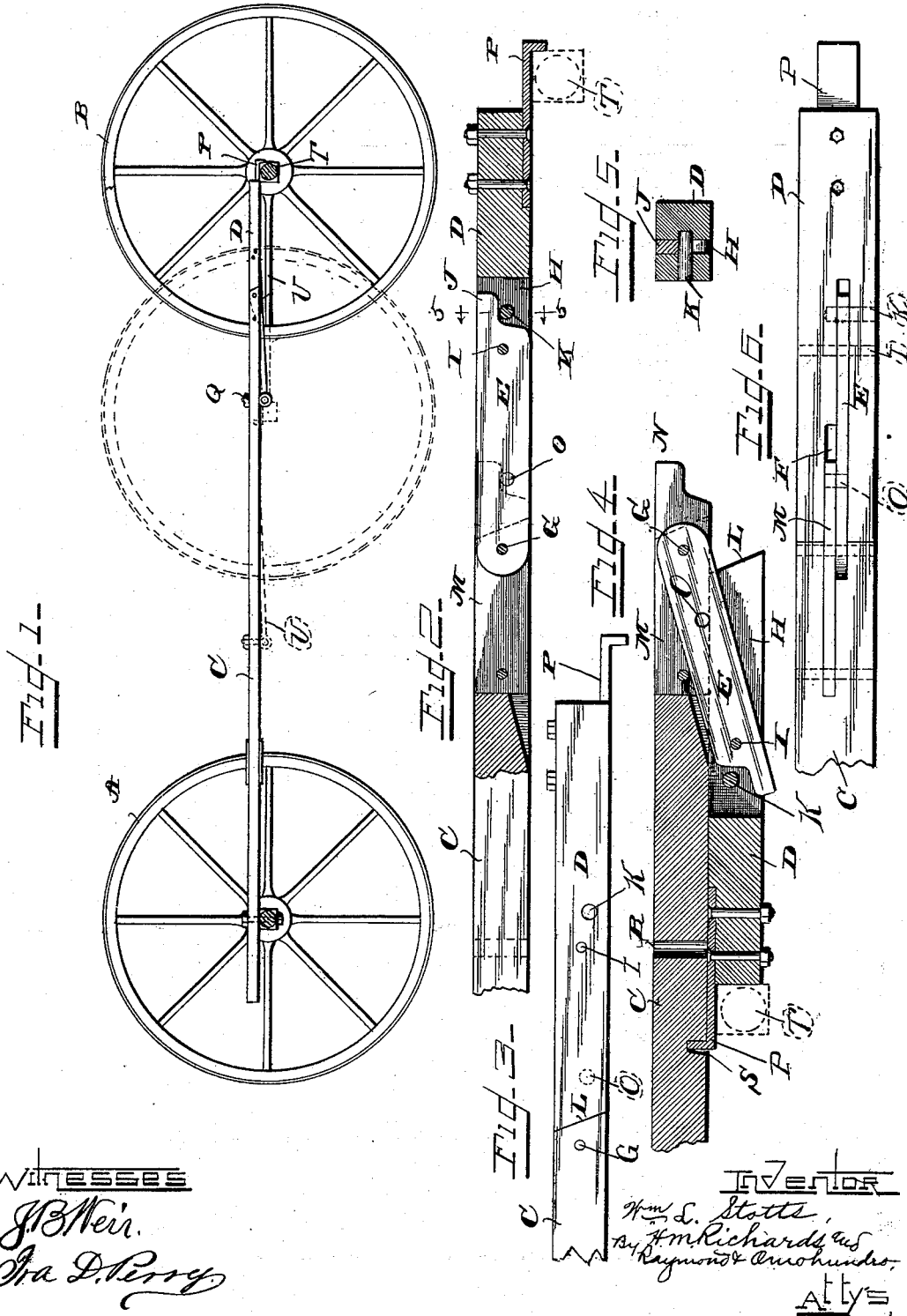
No. 647,768.

Patented Apr. 17, 1900.

W. L. STOTTS.
EXTENSIBLE WAGON REACH.

(Application filed Jan. 25, 1900.)

(No Model.)



WITNESSES
J. B. Weir.
J. D. Perry.

INVENTOR
Wm. L. Stotts.
By F. M. Richards, atty.
Raymond & Birchard.
ATTYS.

UNITED STATES PATENT OFFICE.

WILLIAM L. STOTTS, OF ROZETTA, ILLINOIS, ASSIGNOR OF ONE-HALF TO
ELBERT H. RANKIN, OF STRONGHURST, ILLINOIS.

EXTENSIBLE WAGON-REACH.

SPECIFICATION forming part of Letters Patent No. 647,768, dated April 17, 1900.

Application filed January 25, 1900. Serial No. 2,732. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. STOTTS, a citizen of the United States, residing at Rozetta, in the county of Henderson and State of Illinois, have invented certain new and useful Improvements in Extensible Wagon-Reaches, of which the following is a specification.

My invention relates to certain new and useful improvements in wagon-reaches; and its primary object is to provide a wagon-reach which is capable of being extended to provide for carrying lumber, hay-racks, and for other purposes or shortened to adapt it for the ordinary short wagon-boxes or simply for convenience when no box or load is on the running-gear.

Another object of the invention is to provide a simply-constructed wagon-reach, free from complicated parts, which can be shortened and lengthened quickly and which can be manufactured at a very low cost.

A further object is to provide a wagon-reach made of two parts pivotally connected together and constructed so that one part may be folded up against the other part when it is not in use.

With these and other ends in view the invention consists, primarily, in providing an extension for an ordinary wagon-reach which is pivotally connected with the reach proper in the manner hereinafter specifically described in connection with the accompanying drawings, in which—

Figure 1 is a side elevation of so much of a wagon as is necessary to show the application of my invention. Fig. 2 is a sectional view of the reach, showing the same in its extended position. Fig. 3 is a detailed side view of the end of the reach, showing the extension thereof. Fig. 4 is a sectional view showing the extension folded under the end of the reach proper. Fig. 5 is a sectional view on the line 5 5 of Fig. 2. Fig. 6 is a top plan view showing the connection between the reach proper and its extension.

Referring to the accompanying drawings, in which like letters of reference denote corresponding parts in all the figures, A designates the front wheels, B the rear wheels, and C the ordinary reach proper, of a wagon,

these parts being coupled up in the usual manner commonly employed.

The reach proper is of a length adapted to accommodate an ordinary wagon-box, and it is provided at its rear end with an extension D of any desired length, this extension being pivotally connected to the end of the reach proper by means of a link E. This link E has one end pivoted in a slot F in the rear end of the reach proper by a pin G and its other end arranged in a slot H in the extension D and pivoted therein by pin I, the major portion of the link being located within the slot H of the extension when said extension is arranged in the position shown in Fig. 2 as a prolongation of the reach proper. The forward end of the link is provided with a projection J, which is adapted to bear upon a pin K and cooperate with the beveled edges L in preventing the extension from breaking joint when extended and maintaining the same rigidly in a horizontal position as an elongation of the reach proper. To further insure the maintenance of the extension in its extended position, I secure a plate M in the slot F at the rear end of the reach proper, which plate is provided with a projection N, which engages a lug O on one side of the link. It will therefore be noted that in order to maintain the extension D in proper position as an elongation of the reach proper, C, I preferably provide beveled edges L on the adjacent ends of the reach proper and the extension, the projection J on the link which engages the pin K, and a plate M, provided with the projection N to engage a pin O on the link, which three devices cooperate in maintaining the extension in proper position when extended. On the rear end of the extension I provide a hooked plate P, which is adapted to engage and rest upon the rear axle when a long coupling is desired, in the manner shown in Fig. 1, or rest between the axle and the reach proper when the extension is folded to provide a shorter coupling, as shown in Fig. 4. It will therefore be observed that when a long reach is desired the extension D will be turned up into position to constitute an elongation of the reach proper, C, the hooked plate P resting upon and engaging the rear axle and the hounds-pin Q passing through the hole R

in the reach proper; but when it is desired to shorten up the reach for the purpose of putting on a wagon-box or simply for the purpose of coupling up the running-gear shorter or for any other reason the king-pin is removed, the rear wheels and hounds U moved forward in the reach proper to permit the extension D to be folded up under the reach proper, as shown in Fig. 4, with the hooked end of the plate P fitting in the recess S, after which the rear wheels and hounds are moved backward a short distance until the rear axle is located under the plate P, as shown, and the parts are fastened in the position shown by broken lines in Fig. 1 by arranging the hounds-pin Q in a forward hole in the reach proper. It will thus be observed that by the use of my improved wagon-reach I am able to shorten or lengthen the reach quickly and without manipulation of any complicated parts or mechanism. This improved reach can be manufactured very inexpensively, and it can be adapted to wagons already manufactured, as well as those which may be hereafter manufactured. Furthermore, the invention is so very simple that it can be manipulated by any one without special skill or experience, and the changes can be made expeditiously as occasion requires. It will also be observed that when the reach is extended or elongated by the elevation of the extension D there are no projecting parts beyond the faces of the reach which would interfere in any way with the loading or unloading of the wagon or in any other way present an obstruction on the face of the reach.

As generally constructed running-gears which are adapted for carrying wagon beds or boxes usually have the reach terminate so that it will not extend behind the box, and for this reason the running-gear cannot be lengthened in any way; but by the use of my improved reach the extension can be turned up to form an elongation of the reach proper and the rear wheels moved backward to correspondingly lengthen the coupling of the running-gear.

My invention is particularly useful when it is desired to use the running-gear for carrying an ordinary wagon bed or box, when the coupling would be of the usual length, or for dispensing with the bed or box, so that the coupling may be lengthened to accommodate a long hay-rack, or lumber or iron material may be arranged directly on the running-gear. It is also useful to enable running-gear used for carrying lumber, &c., to be shortened when it has no load to facilitate the movement of the running-gear. It will also be observed that when the extension is folded it is fully protected by the reach proper and is wholly out of the way, so that it will not in any way interfere with loading or unloading the wagon-box, and in this folded position it is securely held in place by reason of the fact that the plate P is held between the axle and the reach proper. The peculiar

manner in which the link is arranged also permits of the extension being folded under the reach proper and forward of its rear end, so that the extension will be entirely out of the way.

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

1. The combination with a wagon-reach proper, of an extension at the rear end thereof and a link connection between said extension and the reach proper, substantially as described.

2. The combination with a wagon-reach proper, of an extension at the rear end thereof and a link pivoted to said reach proper and the extension and connecting the extension to the reach proper, substantially as described.

3. The combination with a wagon-reach proper, of an extension, a link connecting said extension to the reach proper and provided with a projection, and a pin adapted to be engaged by said projection on the link, substantially as described.

4. The combination with a wagon-reach proper, of an extension, a link connecting said extension to the reach proper, and provided with a pin on one side thereof, and a plate on the reach proper provided with a projection adapted to engage the pin on the link, substantially as described.

5. The combination with a wagon-reach proper, of an extension pivotally connected to the end of said reach proper, and adapted to be folded under the same when not in use, substantially as described.

6. The combination with a wagon-reach proper, of an extension pivotally connected to the reach proper and provided with a hooked plate on its outer end, substantially as described.

7. The combination with a wagon-reach proper, of an extension, adapted to form an elongation of the reach proper, and a link device connecting the extension to the reach proper and located wholly within the faces of the reach proper and said extension, substantially as described.

8. The combination with a wagon-reach proper, of an extension adapted to form an elongation of said reach proper, a link pivotally connecting the extension to the reach proper and operating within slots therein, said link being provided with a projection on its forward end to engage a pin in the extension and having a pin projecting from one of its sides, and a plate secured within the slot at the rear end of the reach proper and provided with a projection on its end adapted to engage the pin on the link, substantially as described.

9. The combination with the reach proper, and the rear axle of a running-gear, of a pivoted extension on said reach proper, and a hooked plate on said extension adapted to rest upon and engage said rear axle when the

extension is extended to form an elongation of the reach proper and lie between the reach proper and the rear axle when the extension is folded, substantially as described.

- 5 10. The combination with a wagon-reach and an extension thereof provided with slots in their adjacent ends, of a link having its ends secured in said slots to pivot the exten-

sion to the reach proper, whereby the extension may be folded under the reach proper and back from the end thereof when not in use, substantially as described.

WILLIAM L. STOTTS.

Witnesses:

WILLIAM M. WHITEMAN,
A. P. MCHENRY.