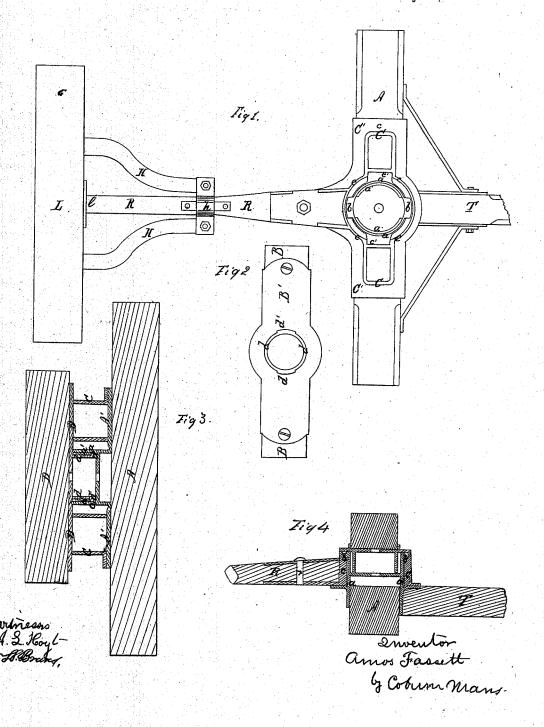
## AMOS FASSETT.

## Improvement in Wagon-Couplings.

No. 115,453.

Patented May 30, 1871.



## UNITED STATES PATENT OFFICE.

AMOS FASSETT, OF STERLING, ILLINOIS.

## IMPROVEMENT IN WAGON-COUPLINGS.

Specification forming part of Letters Patent No. 115,453, dated May 30, 1871.

To all whom it may concern:

Be it known that I, Amos Fassett, of Sterling, in the county of Whitesides and State of Illinois, have invented a new and useful Improved Wagon-Coupling; and I do hereby declare and make known that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and to the letters and figures marked thereon, which form part of this specification.

My said invention relates to an improved device for coupling the front bolster to the front axle of a wagon to be used instead of the ordinary king-bolt; and it consists in a novel arrangement whereby said coupling allows a free movement or rotation of the bolster upon the axle as desired, while at the same time there is no danger of any accidental detach-

To enable those skilled in the art to understand how to construct and use my said invention, I will proceed to describe the same with particularity, making reference in so doing to the aforesaid drawing, in which—

Figure 1 represents a plan or top view of said invention, the bolster being removed; Fig. 2 is a bottom view of the bolster with its attachment; Fig. 3 is a longitudinal section through the bolster and axle; and Fig. 4 is a cross central section through the bolster and

Similar letters of reference in the several figures denote the same parts of my said in-

A represents the front axle, and C the tongue attached thereto in any suitable manner. Upon the axle A is secured, by screws, bolts, or otherwise, a plate of iron or other suitable metal, marked A', as shown. At the middle point of the axle, where the king-bolt is ordinarily passed through, is fixed upon said plate A', or suitably secured to the axle in any other manner, a short vertical tube or cylinder marked a, upon the interior of which, near its upper end, are fixed, in any suitable manner, lugs a' a', projecting inward from the lateral sides of said cylinder, while corresponding lugs b project at right angles from the direction in which the interior lugs aforesaid project, said  $\log b$  projecting externally from said cylinder a, as indicated in the drawing. To the front end of the reach is affixed a plate marked | upon the supports C under its ends.

C', corresponding in size to the aforesaid plate A', upon which it rests, said plate being so connected with the reach as to lie upon said plate, a cylinder, or tube, c, of such a size as to have its interior fit close upon the exterior of the aforesaid cylinder a, upon the axle, being secured in any suitable manner to the under side of said plate C', or to the front end of the reach in any suitable manner. The said cylinder e is provided with recesses c' upon each side corresponding with the lugs b upon the exterior of the cylinder a, hereinbefore mentioned.

By this arrangement it will be seen that, by turning the reach R so that it will lie parallel with the axle, the cylinder e may be fitted down over the outside of the cylinder a upon the axle, the lugs b passing through the slots or recesses e; but when turned back to its natural position, or when turned in any other position than at right angles with the tongue or parallel with the axle A, the lugs b lie above a shoulder upon the interior of the cylinder c, and thus effectually prevent the detachment of the reach from the front axle by any possibility, except when the reach is turned at right angles with the tongue, as aforesaid, which position can never be assumed when the wagon is in practical use or being drawn by the horses attached thereto. The above description explains the mode of connecting or coupling the reach to the front axle of a wagon.

In Fig. 2 is shown the under side of the bolster B, to which is secured a plate, B', at the middle of which is a cylinder or post, d, which fits into the inside of the cylinder a upon the axle, said cylinder or post d being provided with external projections or lugs d, corresponding to the spaces between the interior lugs a' on a, so that when the bolster is turned at right angles with the axle the cylinder or post d will fit into the cylinder a, the lugs d passing down between the lugs  $a_j$  but when said bolster is turned parallel with the axle, or at any other position than at right angles with the axle, the said bolster cannot be detached from the axle. The cylinders ac b are all of the same length; so the distance between the bolster and the axle is measured by the length of said cylinders, and the plate D rests upon the top of the cylinders  $a \bar{c}$  and Thus the reach and the bolster have a free and independent rotary movement upon and in connection with the axle, either of which may be connected in the manner described, or in some other suitable manner; as, by placing a plate over the top of the device seen in Fig. 1, the bolster may be connected by a bolt, or in any other appropriate way, and the bolster may be so attached while the reach is secured to the front axle in the usual manner.

R represents the reach, which, instead of being framed rigidly to the rear axle L and the braces H, passes through a bar or bearing at h and rests in a socket in the axle L, so as to rotate in said bearings and sockets, and thus, when the tipping of one end of the forward axle tends to twist and warp the reach and cause it to break, said reach simply revolves, and thus entirely removes all strain and prevents the reach from breaking. The

tongue or draft-pole T is pivoted at t so as to vibrate up and down, so that the front end of the pole can be raised up as high as may be desired, but can only drop down to the proper position, where it is held by the heel of the pole resting under a shoulder at t', as seen in Fig. 4.

Having described the construction and operation of my invention, I will specify what I claim and desire to secure by Letters Patent—

The combination of the plate A', tube a, with exterior lugs b b and the interior lugs a' a', the tube c, and support C with the recesses c' c', and the plate D, tube d, and exterior flanges d' d', all arranged to operate as herein set forth and shown.

AMOS FASSETT.

Witnesses:

JUNIUS ROGERS, J. M. PATTERSON.