

W. P. BROWN.  
WAGON-GEARING.

No. 191,648.

Patented June 5, 1877.

Fig. 1.

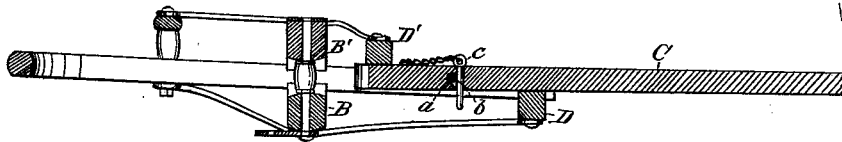


Fig. 3.

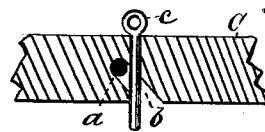
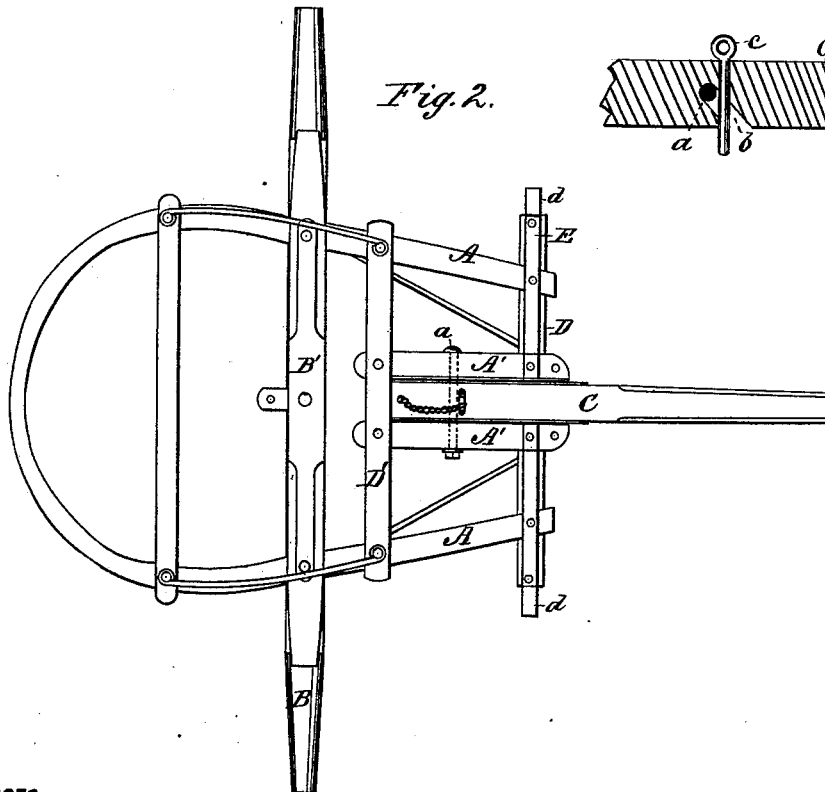


Fig. 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM P. BROWN, OF ZANESVILLE, OHIO.

## IMPROVEMENT IN WAGON-GEARINGS.

Specification forming part of Letters Patent No. 191,648, dated June 5, 1877; application filed April 23, 1877.

*To all whom it may concern:*

Be it known that I, WILLIAM P. BROWN, of Zanesville, in the county of Muskingum and State of Ohio, have invented a new and Improved Wagon-Gearing; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a longitudinal section through the tongue. Fig. 2 is a plan view; Fig. 3, an enlarged detail of the devices for fastening the tongue.

My invention relates to certain improvements in the front gearing of wagons, more particularly of that class which do not employ springs, such as farm and lumber wagons.

The improvement consists, chiefly, in the arrangement of the tongue with respect to the hounds and cross-bars whereby the tongue may be lifted from its horizontal position but cannot drop below the same, and whereby, also, the parts may be all made of straight pieces of lumber, without sawing or bending. The improvement also covers novel means for the attachment and disengagement of the tongue, as hereinafter more fully described.

In the drawing, A A' represent the hounds of the wagon, of which there are two sets—A A, which are located upon the axle B near the wheels, and A' A', which are located immediately adjacent to and parallel with the tongue C, upon opposite sides of the same.

The outer hounds A A, as shown, are formed of a single continuous piece bent around in the rear; but, if desired, they may be made of separate and independent pieces, and connected at the rear by a separate cross-bar. These outer hounds are fastened by bolts between the axle B and the bolster B', and at their front ends are fastened to the cross-bar D.

The inner hounds A' A' are supported upon and fastened at their front ends to the front cross-bar D, while their rear ends are attached to the under side of a second cross-bar, D', mounted upon the outer hounds, just in front of the bolster.

In between these inner hounds, upon a horizontal bolt, a, passing through the same, is

pivoted the tongue C in such a manner that when it is lifted upon its pivot the cross-bars D and D' afford no obstructions to its movement, but when lowered serve to stop and retain the tongue in a horizontal position, the front cross-bar D resting beneath and supporting the tongue in front of its pivot, while at the same time the rear cross-bar D' rests upon and prevents the further motion of the portion of the tongue in the rear of its pivot.

In detachably fastening the tongue in between the inner hounds or jaws, the bolt a is made stationary, while the under side of the tongue is provided with a rearwardly-inclined groove or notch, b, of a sufficient size to receive the bolt a. The tongue is first placed upon the pivot-bolt and the latter allowed to fit closely up into the inclined notch, after which a vertical bolt or pin, c, is dropped through the tongue, and made to cross the inclined opening of the notch, which incloses the pivot-bolt a and thus secures the tongue. This bolt or pin c is, by preference, connected with the tongue by a chain to prevent its loss, and the outer sides of the tongue and the inner sides of the hounds A' are faced with metal to prevent wear. If desired, the tongue may be readily made stiff and rigid by securing it to the inner hounds, or one of the cross-pieces, by a second bolt, which will prevent motion upon its pivot.

E are metallic straps, which secure and help to brace the front ends of the hounds in their attachment, and are bent at their extremities to form loops d d, that are to be used in connection with a chain-draft previously patented by me.

The advantages of my invention as thus described consist in making the hound-pieces and connecting parts of straight pieces of lumber, without cutting across the grain or bending, which arrangement of straight pieces makes a stronger gearing and permits the outer hounds to be located near the wheels, where the strain should preferably come in order to relieve the axles.

I am aware of the fact that it is not new to pivot a wagon-tongue, so that it can be raised above but not lowered below a horizontal position, and I therefore limit my invention to

my particular means for effecting this result, which render the gearing stiffer, stronger, and more easy of construction.

Having thus described my invention, what I claim as new is—

1. The combination of the hounds A A A' A', the cross-bars D D', and the tongue C, substantially as and for the purpose described.

2. The combination, with a wagon-gearing having a permanent pivot-bolt, *a*, of the tongue C, having inclined notch *b* and pin *c*, as and for the purpose described.

WILLIAM P. BROWN.

Witnesses:

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