

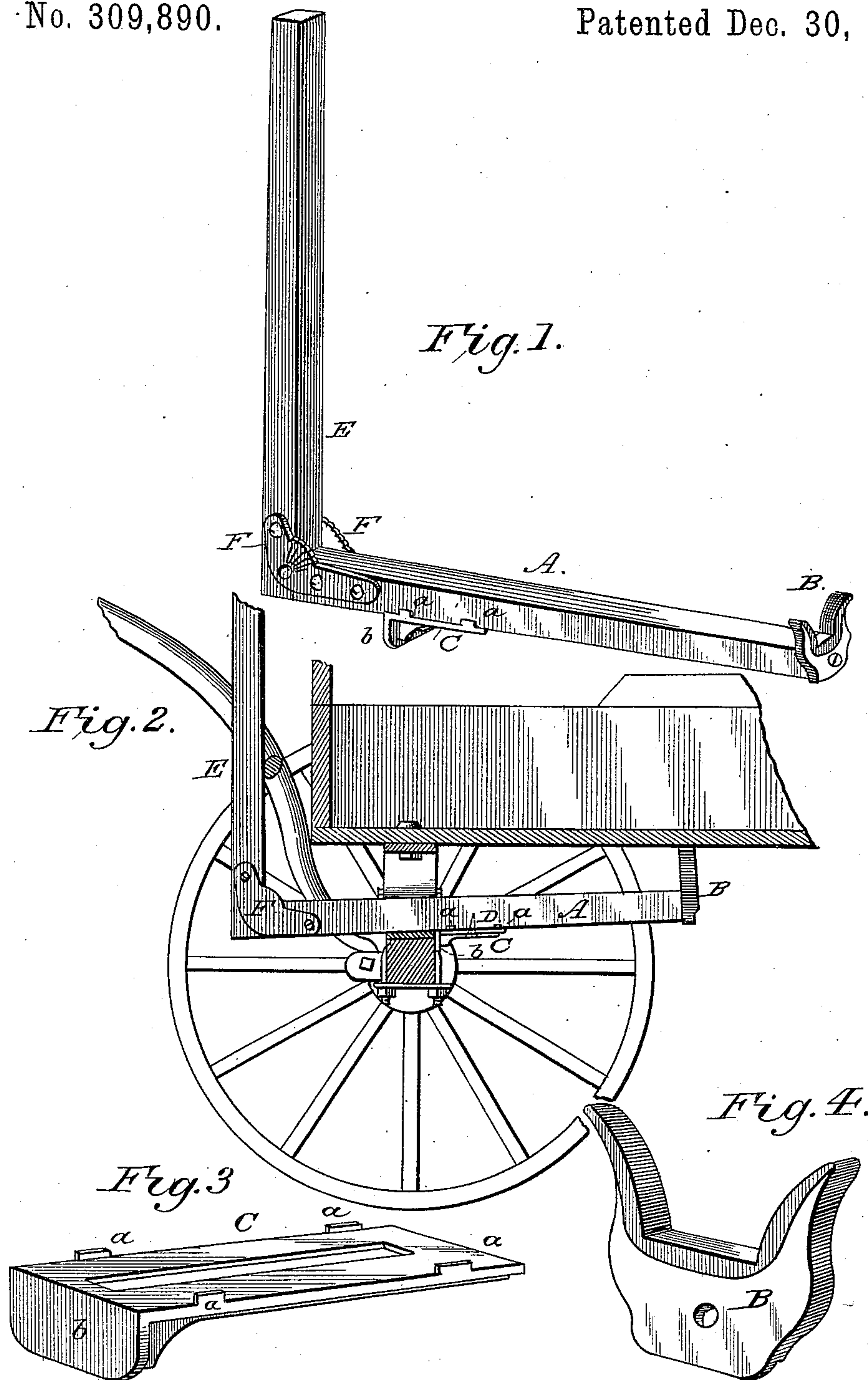
(No Model.)

A. B. SMITH.

THILL SUPPORT.

No. 309,890.

Patented Dec. 30, 1884.



WITNESSES:

*Med. S. Dietrich*  
*Fred E. Parker*

INVENTOR.

*Arthur B. Smith*  
*per J. D. Parker*

ATTORNEY



# UNITED STATES PATENT OFFICE.

ARTHUR B. SMITH, OF MANCHESTER, NEW HAMPSHIRE.

## THILL-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 309,890, dated December 30, 1884.

Application filed September 17, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR B. SMITH, a citizen of the United States, residing at Manchester, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Thill-Supports; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to an improved device for supporting the shafts of wagons and carriages in an erect, or nearly vertical, position, so that the vehicle can be readily moved about in the carriage-house without danger of the shafts falling to the ground.

The invention consists of a bar or base piece that is adapted to be supported in a horizontal position beneath the wagon-body, its forward end resting on the head-block, and carrying a pivoted arm that is braced against the end of said base-bar when unfolded in front of and in contact with the cross-bar that connects the thills, which are thus securely held in a vertical or nearly vertical position, as hereinafter more fully set forth.

In the annexed drawings, illustrating the invention, Figure 1 is a perspective view of my improved thill-support. Fig. 2 represents the support applied to a carriage or wagon; and Figs. 3 and 4 are detail views of the support.

Like letters of reference indicate like parts in the several views.

A is a base-bar, which may be made of metal or wood, and of any suitable length, sufficient to obtain a firm bearing beneath a wagon or carriage body. To the rear end of this bar is attached a bifurcated plate, B, which is designed to bear directly against the under side of the wagon-body, and prevent rocking or lateral movement of the bar, the forward end of which is intended to rest on the head-block of the wagon.

On the under side of the bar A, near its forward end, is adjustably secured a slotted clamping-plate, C, by means of a screw, D. This clamping-plate may be provided on each side with a suitable guide-flange, or with guide-

lugs, *a a*, by which it is prevented from turning on the bar A, and at its forward end it has a broad bearing-surface or head, *b*, for fitting against the rear side of the head-block when properly adjusted. A movable arm, E, is hinged or pivoted to the forward end of the base-bar A in such a manner as to be braced against the end thereof when the device is unfolded for use. This may be accomplished, as shown in the drawings, by attaching flanged plates F F to each side of the base-bar A, at its forward end, and pivoting the arm E therein at a point sufficiently distant from its pivoted end to enable the extremity of that end to bear against the forward end of the base-bar A when the parts are unfolded. The arm E is thus securely braced. It is obvious, however, that instead of hinging the parts A and E in this manner they may be connected in any suitable way that will securely brace the arm E when adjusted for use. The arm E is made of wood or metal, as preferred, and has a length sufficient to enable it to extend up in front of the cross-bar of the thills when the latter are raised.

When the device is required for use, it is unfolded, as shown, and the shafts of the carriage being raised as high as the carriage-body will permit the base-bar A is passed above the head-block and longitudinally beneath the body of the carriage and beneath the thill cross-bar until the pivoted arm E comes in contact with the front of said cross-bar that connects the thills and with the head *b* of the adjustable clamping-plate C bearing against the back of the head-block. The weight of the thills and their connecting cross-bar is then permitted to come against the arm E, thus holding all the parts securely and without liability of displacement.

It will be observed that the forward end of the device is supported on the head-block, and that the weight of the thills, bearing against the arm E, holds the rear end of the bar A and its bifurcated plate B upward against the under side of the wagon-body. This bifurcated plate, as before remarked, prevents rocking of the bar A when the vehicle is moved or jarred. The adjustable clamping-plate C prevents the bar A from slipping forward under the weight of the thills. As the pivoted arm E is securely braced against the forward end

of the base-bar, it will be seen that the shafts are so firmly secured in an upright position that the carriage may be easily moved about without their falling down.

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

10 1. A folding thill-support, consisting of the hinged bars A E, one of which, as A, is provided with an adjustable clamping-plate, substantially as described.

2. In a folding thill-support, the combination, with the base-bar A, of the bifurcated

bearing-plate B and the adjustable clamping-plate C, substantially as described. 15

3. In a thill-support, the combination of the base-bar A, the hinged arm E, adjustable clamp C, and bifurcated bearing-plate B, substantially as described.

In testimony whereof I affix my signature in 20 presence of two witnesses.

ARTHUR B. SMITH.

Witnesses:

EZRA F. P. GOODWIN,

RICHARD J. P. GOODWIN.