



# UNITED STATES PATENT OFFICE.

WILLIAM SMITH, OF CARMI, ILLINOIS.

## IMPROVEMENT IN THILL-SUPPORTERS.

Specification forming part of Letters Patent No. **209,931**, dated November 12, 1878; application filed October 18, 1878.

*To all whom it may concern:*

Be it known that I, WILLIAM SMITH, of Carmi, in the county of White and State of Illinois, have invented a new and useful Improvement in Thill-Supporters; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to that class of thill-supporters designed to hold the thills in an elevated position when the carriage is not in use.

It consists in a supporting-arm provided with a clamp, by which it can be attached to the spring of the vehicle on which it is to be used, and an adjustable bar to secure the thills in a raised position.

In the accompanying drawings, forming part of this specification, Figure 1 represents a side view of a thill-supporter constructed according to my invention, and Fig. 2 shows a similar view on a smaller scale applied to a vehicle as in use.

A represents an arm, which should be of such shape as to suit the carriage to which it is to be applied. It is provided with a clamp, B, having an arm, C, at right angles thereto, threaded for about one-half of its length to receive the nuts D D, by which it is secured in a hole in the arm A.

A bolt, E, having a nut, F, is passed through holes in the lower part of the arm A and clamp B, by means of which and the nuts D D the clamp may be adjusted to securely hold the arm A on the spring I, immediately over the head-block of the carriage on which it is to be used. As a further security, the lower part of the arm A is provided with a hole at a for a screw, which may pass into the head-block J.

At the left side of the arm A is shown a bar, G, secured to said arm by bolts H H'. The bolt H passes through a slot (shown in dotted lines) in the arm A, and through a bolt-hole

at the lower end of the bar G. The bolt H' passes through a slot (also shown in dotted lines) in the bar G, and through a hole at the top of the arm A, by which means the bar may slide up or down on the arm A, for a purpose hereinafter explained, and be held in any desired position by tightening the nut on one of the bolts H H'.

When applied to a carriage the arm and bar should be so proportioned as to allow the cross-bar of the thills to pass easily over the top of the bar G when the thills are raised, as indicated in dotted lines in Fig. 2, so that by sliding the bar G upward it will catch under the cross-bar and hold the thills elevated, as shown.

The weight of the thills will be usually found sufficient to hold the bar G in position; but should it happen to slip down, a turn of the nut on either of the bolts H H' will securely hold it.

If preferred, the bar G may be made longer, and turn on a pivot, instead of sliding, as in the drawing, so that when the bar G is held horizontally the cross-bar of the thill will pass over it, and when turned back in line with the arm A the upper end of the bar G will be under the cross-bar of the thills, and securely hold them in an elevated position.

In some cases I propose to connect a spring to the arm A and bar G, which will hold the latter elevated; or a pawl and ratchet-teeth may be employed for the same purpose.

What I claim as new is—

A thill-supporter consisting of an arm, A, having at its lower end the clamping device B, for attaching it to a carriage-spring, and at its upper end an adjustable bar, G, for securing the thills, substantially as described.

WILLIAM SMITH.

Witnesses:

THOMAS G. PARKER,  
JOHN D. MARTIN.