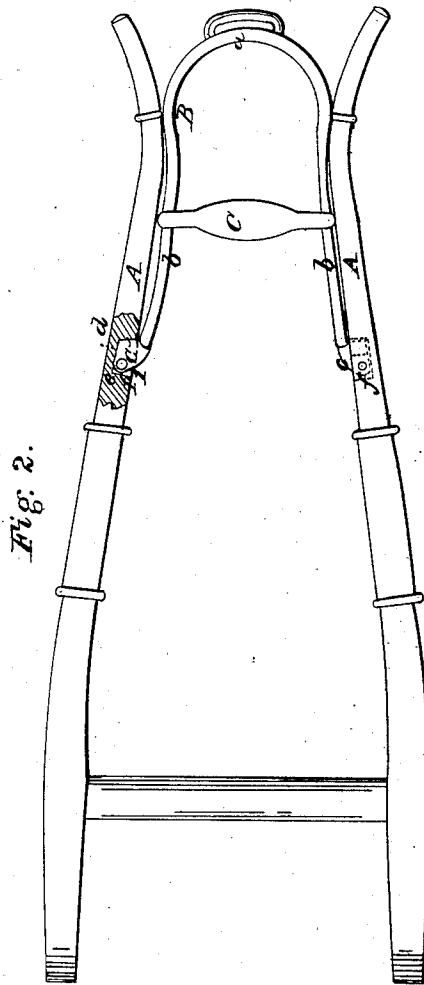
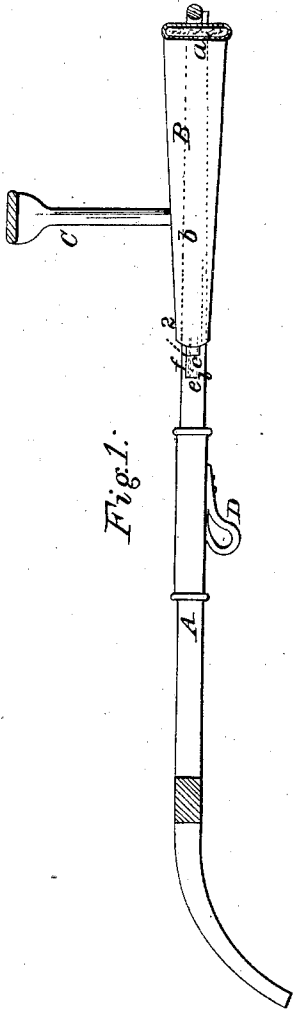


*E. D. Lockwood.*

*Harness Attachments*

*N<sup>o</sup> 23,476.*

*Patented Apr. 5, 1859.*



*Witnesses*  
*W. A. Dwyer*  
*H. S. Huntington*

*Inventor*  
*E. D. Lockwood*

# UNITED STATES PATENT OFFICE.

E. D. LOCKWOOD, OF PENFIELD, NEW YORK.

## MODE OF ATTACHING HORSES TO VEHICLES.

Specification of Letters Patent No. 23,476, dated April 5, 1859.

*To all whom it may concern:*

Be it known that I, E. D. Lockwood, of Penfield, in the county of Monroe and State of New York, have invented a new and Improved Mode of Attaching Horses and other Animals to the Thills of Wheel-Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a longitudinal central section of a pair of thills with my invention applied to them and also bisected centrally. Fig. 2 is a plan or top view of same.

Similar letters of reference indicate corresponding parts in the two figures.

The object of this invention is to attach the animal to the thills by a very simple means, dispensing with the whiffle tree, traces and the loops and tugs hitherto employed and thereby considerably reducing the expense of the ordinary harness.

The invention consists in having a strap pass around the breast of the animal its ends being attached in a novel way to the thills, and having a strap pass around the back of the animal, the ends of the latter strap being attached to the sides of the former ones. The usual breeching and hold back straps being employed and connected to the shafts in the usual way.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, A, represent a pair of thills or shafts constructed and attached to the vehicle in the usual way.

B, is a leather strap the front part of which as shown at *a*, may be padded or stuffed. This stuffed portion *a*, of the strap passes around the breast of the animal and the sides *b, b*, of the strap are attached to the thills A, A, one side *b*, to each thill. The ends of the strap B, are attached to the thills as follows: At each end of the strap a metal plate *c*, is attached. These plates have each a hole *d*, made in them. In the inner side of each thill A, a recess *e*, is made to receive the plates *c*, and in each recess a pin *f*, is secured, the plates being fitted on the pins which thereby connect the ends of the strap with the thills. The recesses *e*, are not of

equal breadth throughout their whole length, the portions or parts 1, in which the pins *f*, are placed is wider than the other parts 2, as shown clearly in Fig. 1, the parts 2, being sufficiently wide only to receive the plates *c*. In order therefore to hook the plates *c*, on the pins *f*, the plates *c*, must be inserted lengthwise in the recesses *e*, in the larger or wider parts 1, and when the plates are inserted on the pins they may be turned around so that the sides of the plates will fit in the narrow parts 2, of the recesses. By this arrangement the ends of the strap are prevented from being casually detached from the thills.

C, is a strap the ends of which are attached to the sides *b, b*, of the strap B. The strap C, passes over the back of the animal. To the under side of each thill A, a loop D, is attached, through which the usual hold back straps pass. It being understood that the ordinary breeching is employed.

From the above description it will be seen that the draft is applied through the medium of the strap B, to the thills, and that the whiffle tree, traces, loops and tugs ordinarily used are dispensed with and the cost of the harness considerably reduced. In order to detach the animal from the thills, the plates *c*, are taken off the pins *f*, by turning them around at right angles with the recesses *e*, so that they will be out of the narrow parts 2, of the recesses and the extreme ends in the wider parts 1. By this adjustment the plates *c*, may be readily slipped off the pins *f*.

I am aware that horse collars have been constructed with a breast strap and back strap arranged similarly to the straps B, C, herein shown, and I do not claim separately and broadly said straps, as a horse collar; but,

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

Attaching the strap B, to the thills A, A, by means of the perforated plates *c*, and the pins *f*, placed in the recesses *e*, of the thills and having wide and narrow parts 1, 2, substantially as described.

E. D. LOCKWOOD.

Witnesses:

N. R. DRYER,  
H. S. HAMBRIGHT.