

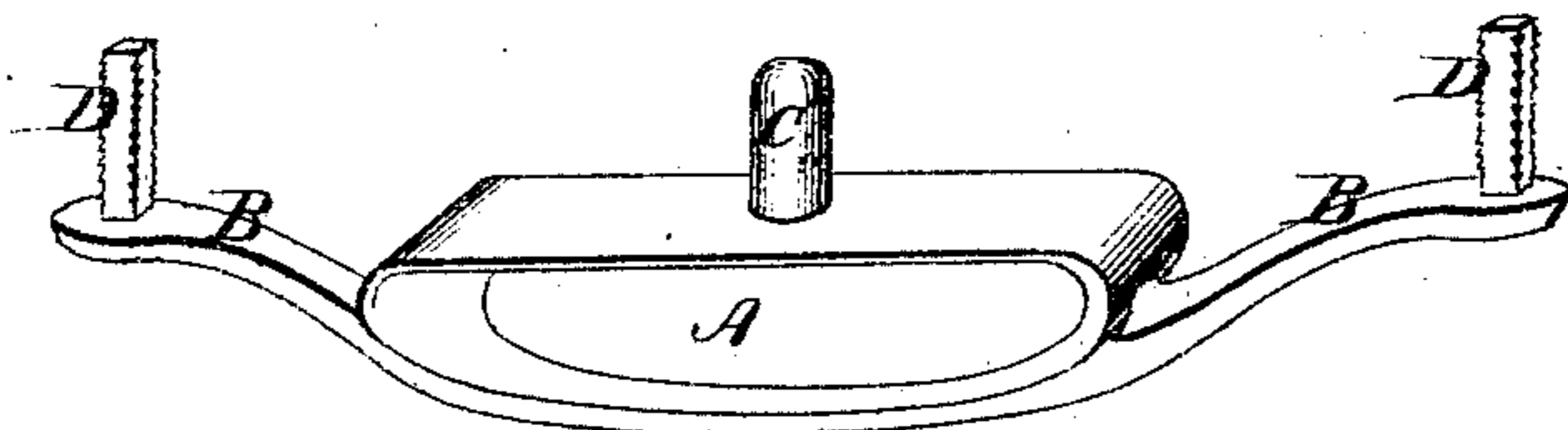
JOHN ARMSTRONG.

Improvement in Holdback for Shafts of Vehicles.

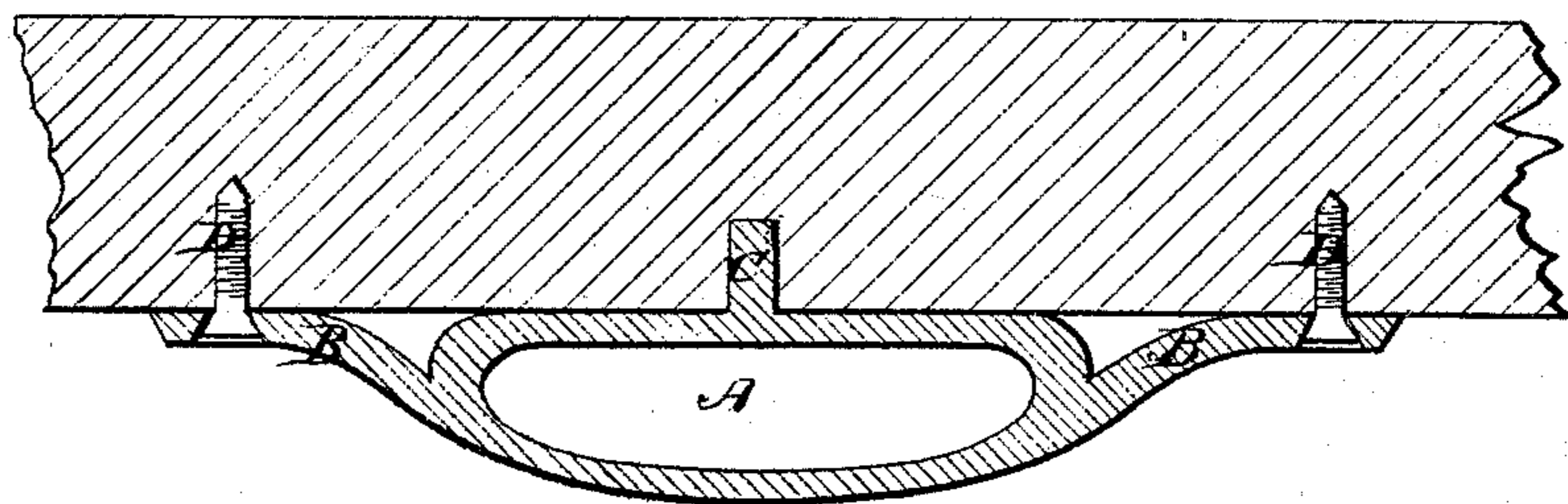
No. 120,477.

Patented Oct. 31, 1871.

*Fig. 1.*



*Fig. 2.*



*Witnesses.*  
*C. F. Brown.*  
*Wm. Ellsworth.*

*Inventor.*  
*John Armstrong*  
*By Wm. Ellsworth*  
*His Atty.*

# UNITED STATES PATENT OFFICE.

JOHN ARMSTRONG, OF NEWARK, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT  
TO MARION G. DECROW.

## IMPROVEMENT IN HOLD-BACKS FOR SHAFTS OF VEHICLES.

Specification forming part of Letters Patent No. 120,477, dated October 31, 1871.

*To all whom it may concern:*

Be it known that I, JOHN ARMSTRONG, of Newark, in the county of Licking and State of Ohio, have invented an Improved Hold-Back for the Shafts of Vehicles; and I do hereby declare the following to be 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 perspective view of my improved hold-back detached from the shaft, and Fig. 2 is a longitudinal section of the same, showing its application to a shaft.

Similar letters of reference in the accompanying drawing indicate the same parts.

The hold-backs generally applied to the shafts or thills of vehicles to receive the quarter-straps of a harness are composed of leather loops nailed to the under side of the shafts, or of metal loops provided with spring-jaws. These forms are particularly objectionable for the following reasons. The leather loops, being pliable, swing from one side to the other of the shafts, and having but one point of connection with the latter are liable to be torn off by any unusual strain. The metal loops with spring-jaws are liable to be clogged with mud, thereby rendering the spring inoperative, or subjecting it to the danger of breaking, in which event the whole jaw drops out of place and the loop is rendered worthless. The frequent use of the spring also subjects the loop to this danger, because of the continual wear. In fact, unless all the parts of a hold-back are made rigid with respect to each other there is always danger of some of the parts becoming displaced. For this reason, therefore, any other construction does not afford the requisite security.

My invention, to overcome these difficulties, consists in constructing each loop in one piece, the bottom next the thill constituting a wide supporting-plate, and the ends forming braces which bear against the thill to resist longitudinal strain. The wide bearing-plate is provided with a stud or spur which is forced into the thill to hold the loop in place, and the braces are either formed

with barbed spurs to be driven into the thill, or are provided with eyes for the passage of screws or nails. By this construction the hold-backs are braced both laterally and longitudinally, and under all circumstances afford a perfectly secure connection for the quarter-straps.

In the accompanying drawing, A is the loop and B are the braces, all made in one piece, preferably of malleable iron. The main body of the loop is formed upon its under side with a broad flat face to bear against the thill, while the braces projecting from the opposite ends of the loop are on a line with this face and also rest against the thill. The broad face is provided with a central spur or pin, C, and the braces are either formed with openings for the passage of screws D, as shown in Fig. 2, or cast with barbed spurs, as shown in Fig. 1.

The hold-back thus constructed is applied to the shaft by forcing the barbed spur C into the thills, entering suitable holes previously prepared therein. Or, in case the central spur only is employed, that is driven into the thill, and the screw D subsequently applied through the braces.

By this construction, when the hold-back is applied its broad face resists lateral strain, while the braces afford ample security against the danger of breaking or displacement by longitudinal strain. The device is simple and economical in construction, easily applied, and when in use is a perfect safeguard against the danger to which other devices of this class are liable.

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

The hold-back, consisting of the wide bearing-loop A, the end braces B, and the center-pin C, all cast in one piece, the ends of the braces being either cast with barbed spurs or provided with holes for the passage of screws or nails, substantially as described, for the purpose specified.

JOHN ARMSTRONG.

Witnesses:

MARION G. DECROW,  
H. S. SACK.

(31)