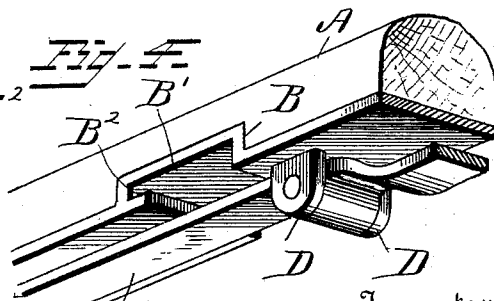
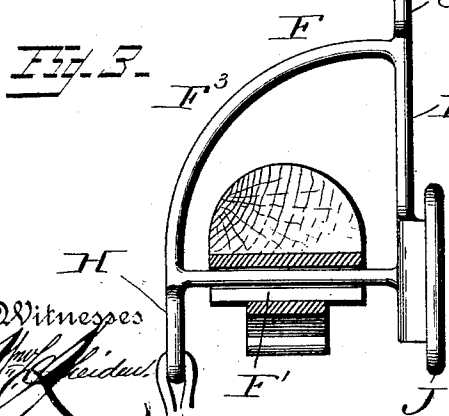
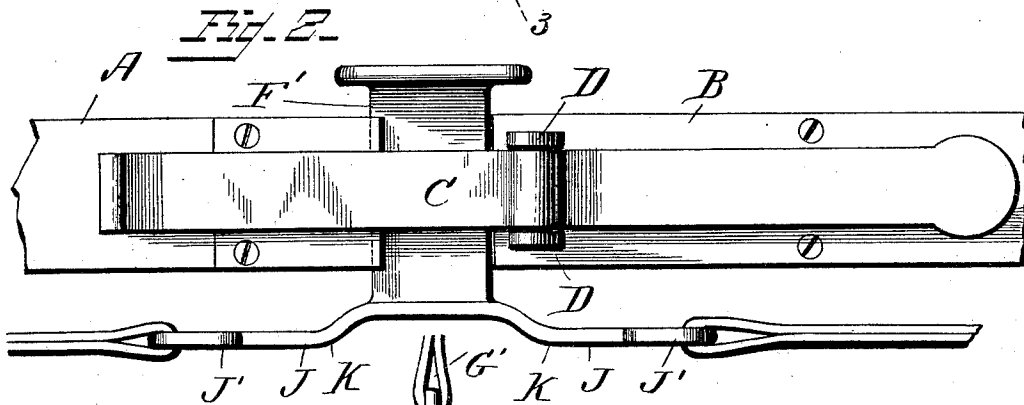
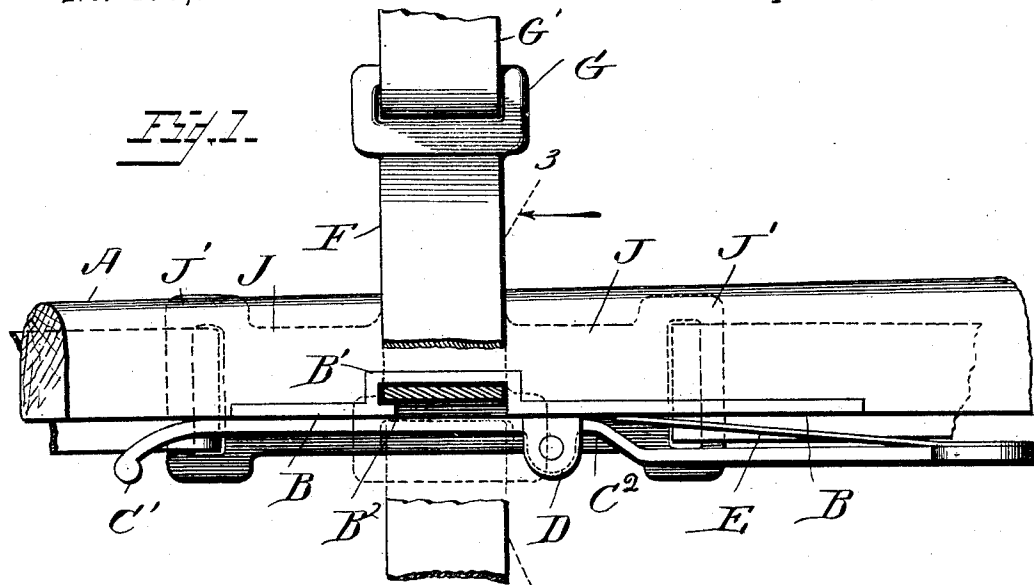


(No Model.)

J. BARR.
THILL RETAINER FOR VEHICLES.

No. 460,174.

Patented Sept. 29, 1891.



Witnesses
Franklin A. Douglass
A. L. Hough

Inventor
John Barr,
 By his Attorney
Franklin A. Douglass

UNITED STATES PATENT OFFICE

JOHN BARR, OF CARROLL, MARYLAND.

THILL-RETAINER FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 460,174, dated September 29, 1891.

Application filed May 12, 1891. Serial No. 392,442. (No model.)

To all whom it may concern:

Be it known that I, JOHN BARR, a citizen of the United States, residing at Carroll, in the county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Thill Retainers and 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 of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in that class of devices which are designed to automatically attach the thills or shafts of a vehicle to the harness and to retain the same in place, dispensing entirely with the use of the long tugs or traces which are commonly used.

The invention has for its object to simplify and cheapen the construction and to render more efficient and serviceable in operation this class of appliances.

To these ends and to such others as the invention may pertain, the same consists in the peculiar construction and in the novel combination, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the accompanying drawings, and then specifically defined in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, like letters of reference indicating like parts throughout the several views, and in which drawings—

Figure 1 is a side elevation of a device constructed in accordance with my invention. Fig. 2 is a bottom plan view of the same. Fig. 3 is a transverse section upon the line 3 3 of Fig. 1, looking in the direction indicated by the arrows. Fig. 4 is a detail perspective view of the under side of the thill, showing portions of the keeper and retaining-latch.

Reference now being had to the details of the drawings by letter, A designates the thill of a vehicle, to the under face of which is secured a metallic plate B, which plate is provided with an offset portion B', which is

set into the under face of the thill. When secured in place, as shown in Fig. 1 of the drawings, the face of the plate B is flush with the under face of the thill, and at the rear end of the offset B' the body of the plate B is extended for a short distance beyond the end wall of the offset, as shown at B², for a purpose which will be presently explained.

The lever C is pivoted at substantially its longitudinal center between the ears D D, which depend from the outer edges of the plate B. From its pivotal point the lever C is straight to a point near its rear end, which end is curved outwardly, as shown at C', and at a point adjacent to the ears D and upon the opposite side of said ears the lever is bent outwardly, as shown at C², and is again extended in a line parallel with the thill.

E is a flat spring having one of its ends bolted or otherwise secured to the upper face of the spring C at its forward end, the opposite end of the said spring bearing against the under face of the plate B, as shown. This bearing of the spring will serve to normally hold the body portion of the spring to the rear of the ears D in close contact with the under face of the thill.

F is a casting, the bottom F' and inner side F² of which are at right angles to each other, while the upper portion F³ is curved, as shown. At its upper end the casting F is provided with an upwardly-extending loop G, to which is secured one end of the strap G', the opposite end of which strap is secured to the harness-saddle, and at its outer lower corner the casting F is provided with a depending loop H, to which is secured one end of the girt H', the opposite end of which is attached to a similar loop upon the casting upon the opposite thill. At its sides horizontal arms J J are provided, which arms are furnished at their outer ends with loops J', within which are secured the ends of straps leading to the collar of the harness and to the breeching, respectively.

It will be observed that the arms J J are each curved slightly outwardly, as shown at K, so as to avoid contact between the straps and the side faces of the thill.

The operation of the device is simple and readily understood. When it is proposed to attach the horse to the vehicle, the thill is

5 passed through the opening in the casting F, and when the said casting reaches the curved end C' of the lever C it will pass beneath the said casting, forcing the body of the lever outward against the tension of the spring E. When the casting F reaches the offset B', the portion F' of the casting will enter the said offset, and the body of the lever will be at once, by the tension of the spring E, forced
 10 into contact with the inner face of the thill, thus securing the casting in place. The projection B² will serve to prevent the casting from accidentally being forced downward, and thus released from the offset when in use.
 15 Having thus described my invention, what I claim to be new, and desire to secure by Letters Patent, is—

1. In a device of the character described, the combination, with the shaft A, having the plate B set into its under face, said plate being provided with an offset portion B', of a lever C, pivoted between ears D, depending

from the plate B, and the spring E, interposed between the shaft and one end of the lever and adapted to normally hold said lever in contact with the lower face of the shaft, substantially as and for the purpose described.

2. The combination, with the shaft, the plate B, having offset portion set into the under face of the shaft, the lever C, pivoted as described, and the spring interposed between the shaft and lever, of the casting F, attached to the harness, as described, and adapted to engage the offset portion of the plate B and be retained therein by the lever C, all arranged and operating substantially as shown and described, and for the purpose specified.

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

JOHN BARR.

Witnesses:

A. L. HOUGH,
MAGGIE E. SMITH.