# ALTHOUSE & REIFSNIDER.

## Thill-Coupling.

No. 59,537. Patented Nov. 13, 1866.

Fig. 1.

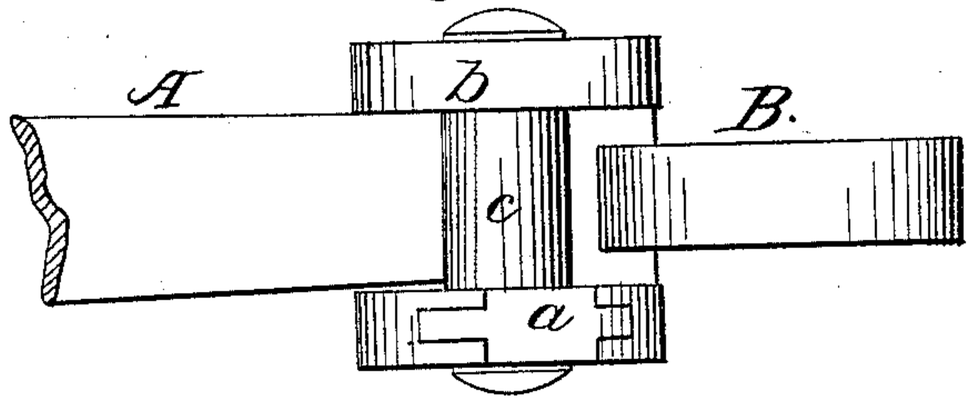



Fig. 2.

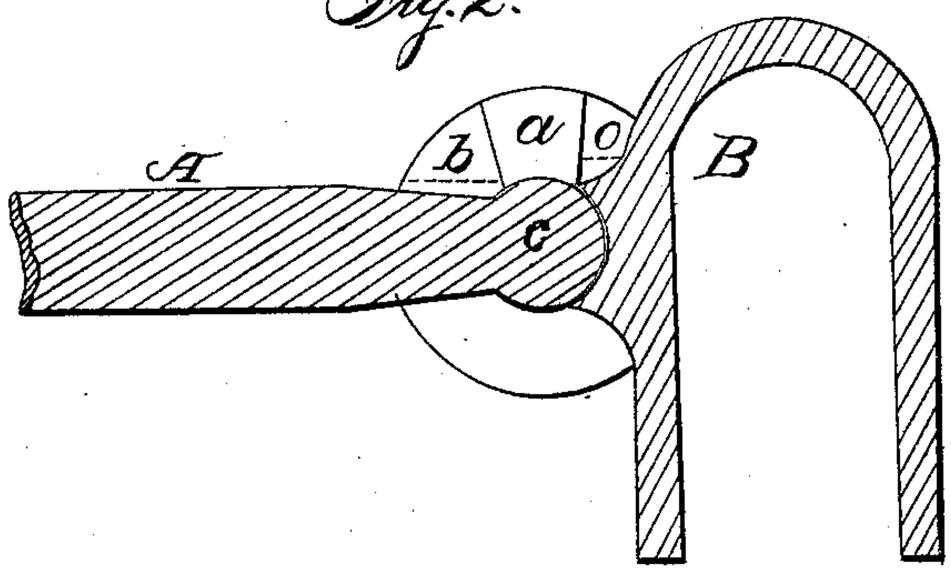
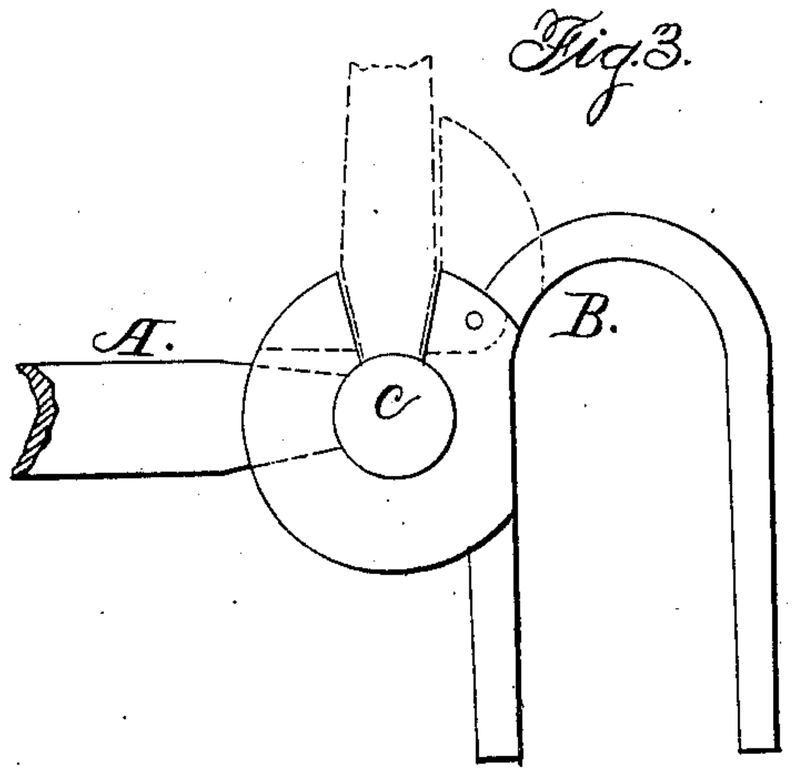



Fig. 3.

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# UNITED STATES PATENT OFFICE.

M. J. ALTHOUSE AND P. REIFSNIDER, OF WAUPUN, WISCONSIN.

## IMPROVEMENT IN DEVICES FOR ATTACHING THILLS TO CARRIAGES.

Specification forming part of Letters Patent No. **59,537,** dated November 13, 1866.

*To all whom it may concern:*

Be it known that we, M. J. ALTHOUSE and P. REIFSNIDER, of Waupun, in the county of Fond du Lac and State of Wisconsin, have invented certain new and useful Improvements in Thill-Clips; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use the invention, we will proceed to describe it.

Figure 1 is a top-plan view; Fig. 2, a longitudinal vertical section; Fig. 3, a side elevation.

Our invention consists in constructing a thill clip or coupling that can be readily attached or detached without the use of any separate bolts, nuts, or wrench.

B represents the clip, the band of which straddles the axle, and is secured by nuts, in the usual manner. From the front of this band two jaws or eyes, *b*, project, as shown in Figs. 1 and 2. These are sufficiently far apart to receive the thill-iron A between them, as shown in Fig. 1; and through the center of the eyes *b* a hole is made to receive the head *c* of the iron A, as shown in Figs. 2 and 3.

The thill-iron A has a T-shaped head, *c*, forged solid on its rear end, the projecting ends of which are made round, like a bolt, and of proper size to fit in the holes in the eyes *b*.

One of the eyes *b* is left whole, with the exception of the hole in its center, while in the upper side of the other a notch is cut, as shown in Fig. 3. This notch is of such a size as to permit the iron A when turned up, as shown in red in Fig. 3, to be shoved sidewise through it, and when thus shoved in until it strikes against the eye on the opposite side it can be turned down between the eyes *b*, with its cross-head *c* resting on each side in the holes in the eyes *b*.

A button or piece, *a*, of proper size to fill the notch in *b*, is provided, and has at each end a central projecting tongue fitting into recesses made to receive them, as shown in Fig. 1, the piece *a* being hinged at its rear end, as shown in Fig. 3, so that it can be raised to open the notch, as there shown. When this piece is shut down it completes the circle of the eye *b*, as shown in Fig. 2.

It will be seen that when thus constructed the parts can be engaged or disengaged at any time by elevating the shafts to the position indicated in red and moving them sidewise through the notch. When united and the piece *a* shut down the parts are held securely in place, and the eyes have the appearance of being solid on each side. It is impossible for the parts to become accidentally detached, thus adding greatly to the safety of persons riding in the vehicle.

Having thus described our invention, what we claim is—

The thill-iron A, provided with the cross-head *c*, in combination with the clip B, provided with the eyes *b*, one of which has the notch and hinged piece *a*, arranged to operate as set forth.

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