No. 612,863. Patented Oct. 25, 1898.

P. W. MOREHEAD.

THILL COUPLING.

(Application filed Jan. 21, 1898.)

(No Model.)

Fig. 1.

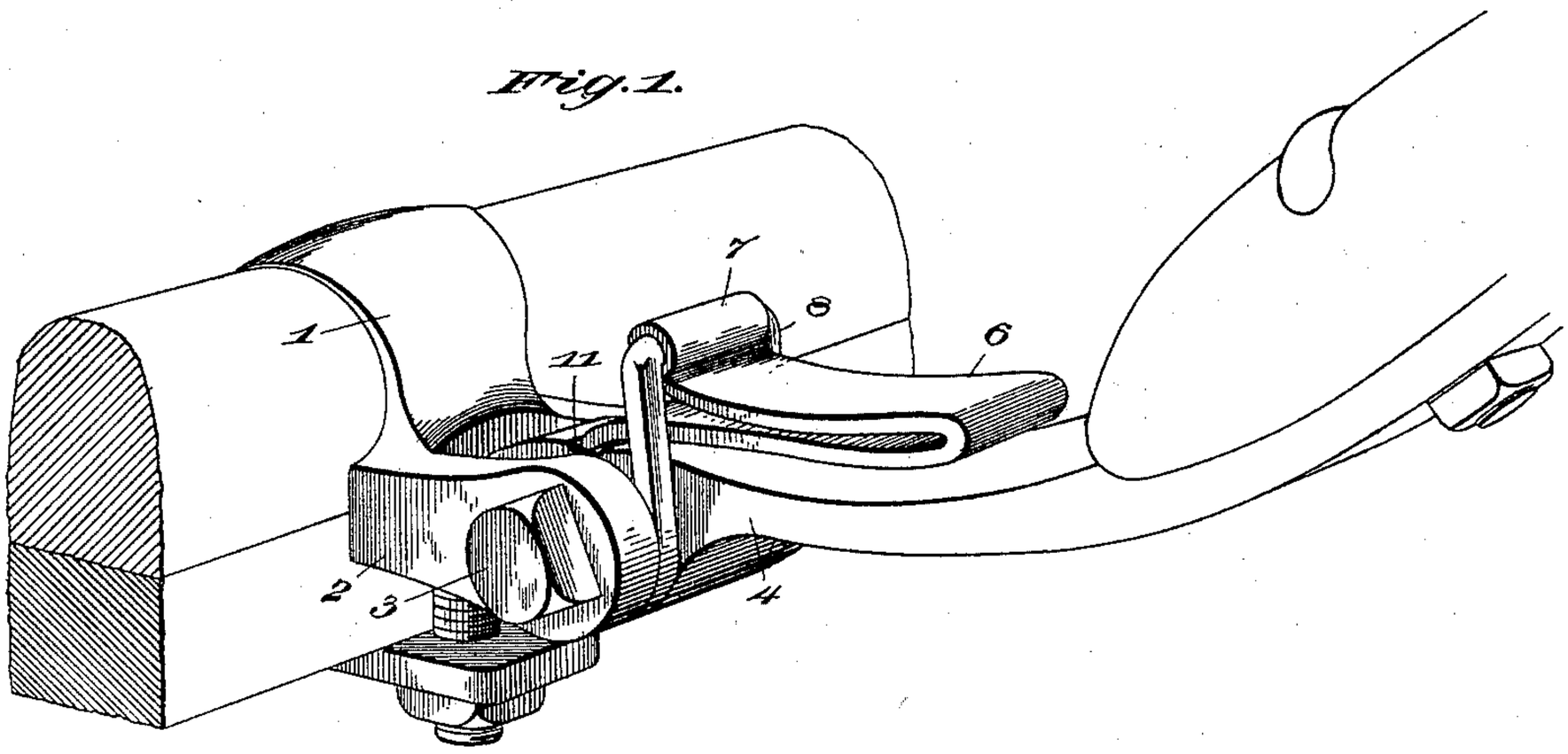


Fig. 2.

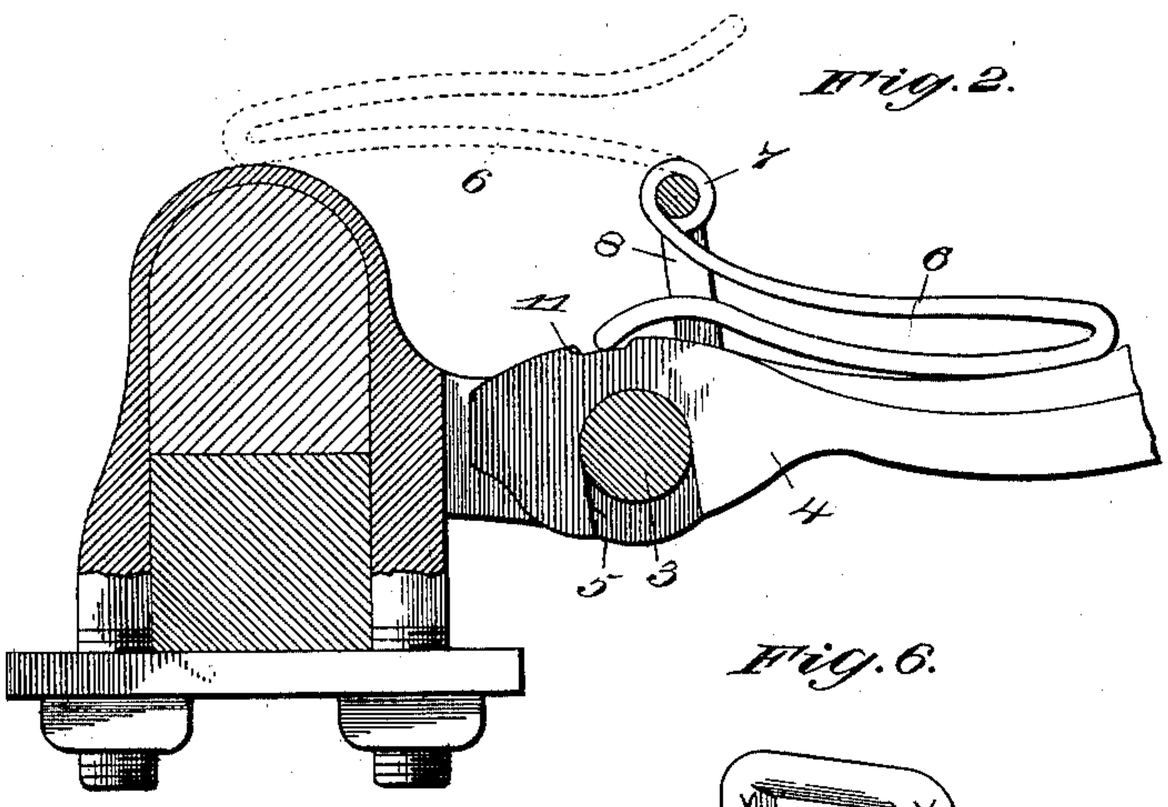


Fig. 3.

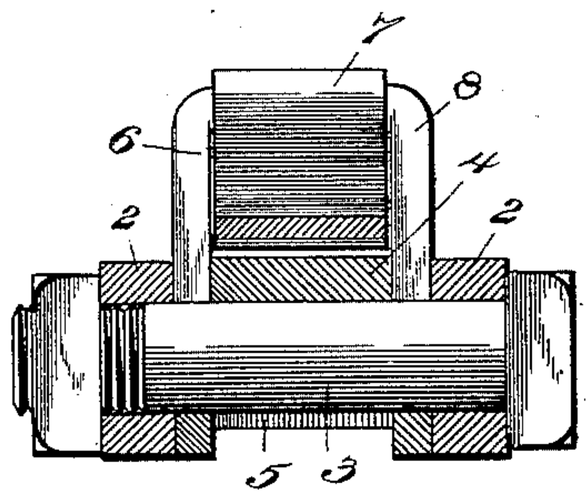


Fig. 6.

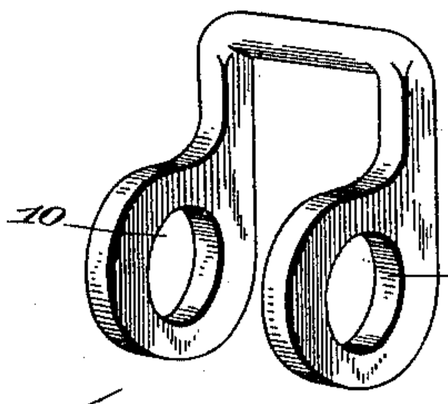


Fig. 4.

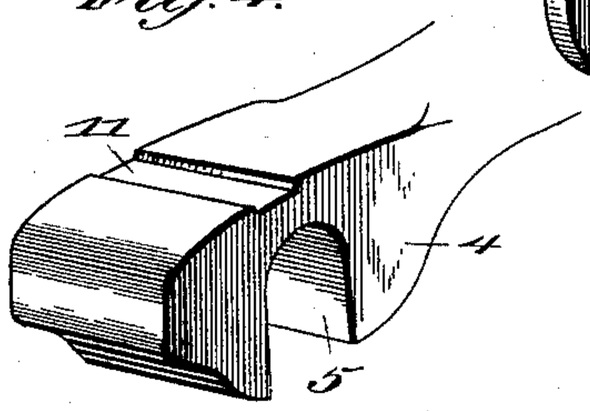
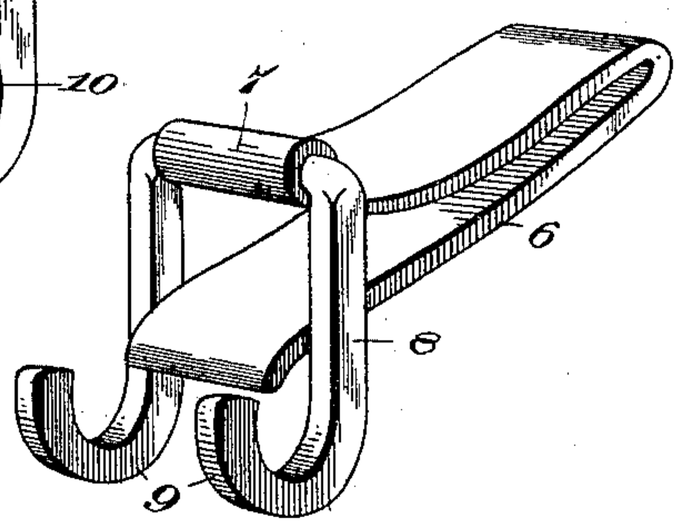


Fig. 5.



Witnesses
Wm. F. Doyle.
J. F. Riley

Presley W. Morehead, Inventor
By his Attorneys,
C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

PRESLEY W. MOREHEAD, OF NEW MARKET, VIRGINIA.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 612,863, dated October 25, 1898.

Application filed January 21, 1898. Serial No. 667,461. (No model.)

To all whom it may concern:

Be it known that I, PRESLEY W. MOREHEAD, a citizen of the United States, residing at New Market, in the county of Shenandoah and State of Virginia, have invented a new and useful Thill-Coupling, of which the following is a specification.

The invention relates to improvements in thill-couplings.

The object of the present invention is to improve the construction of thill-couplings and to provide a simple, inexpensive, and efficient one adapted to prevent rattling and capable of enabling a pair of thills or a pole to be readily connected to or removed from a vehicle.

Another object of the invention is to provide a thill-coupling in which the locking device will be located at the top within easy reach, so that it may be readily manipulated to fasten or unfasten a pair of thills or a pole.

The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a thill-coupling constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same, the spring being swung back in dotted lines. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view of the thill-iron. Fig. 5 is a similar view of the shackle or loop and the locking-spring. Fig. 6 is a detail view illustrating a modification of the loop or shackle.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates an axle-clip provided with forwardly-extending ears 2, receiving a transverse coupling-bolt 3, which pivots a thill-iron 4 to the axle-clip. The thill-iron 4 is provided at its rear end with an open eye or hook 5, the opening being at the bottom and permitting the thill-iron to be readily placed on and removed from the coupling-bolt.

The thill-iron is retained on the coupling-bolt by a substantially V-shaped locking-spring 6, which also acts as an antirattler-spring and prevents any noise. The V-shaped spring when it is in engagement with the thill-iron, as illustrated in Figs. 1 and 2 of the accompanying drawings, conforms to the configuration of the upper face of the same and fits the iron snugly.

The upper side of the spring, which is curved, as shown, is provided at its rear end with an eye 7, formed by rolling the metal on itself or in any other suitable manner, and the eye 7 receives the transverse portion of an inverted substantially U-shaped loop or shackle 8, which straddles the thill-iron and extends above the same. The sides of the loop 8 are interposed between the side faces of the thill-iron and the inner faces of the perforated ears 2 and are connected with the coupling-bolt, being preferably provided with hooks 9, whereby the loop is detachably interlocked with the coupling-bolt. Instead of providing hooks at the ends of the sides of the loop, as illustrated in Fig. 5 of the accompanying drawings, the sides may be provided with eyes 10, as shown in Fig. 6.

The end of the inner or lower side of the spring is curved down, as shown, and engages a recess 11 of the upper face of the thill-iron, and the said spring is adapted to be readily swung backward, as illustrated in dotted lines in Fig. 2.

The invention has the following advantages: The thill-coupling is simple, strong, and durable. It prevents noise and rattling, and it will enable a pole or a pair of thills to be quickly attached to and uncoupled from a vehicle without removing the coupling-bolts. The V-shaped spring, which constitutes a fastening device, is located at the upper face of the thill-iron and is within easy reach. The improvements are adapted to be readily used in connection with the ordinary axle-clip, and when the hooks are employed the loop may be applied to the bolt without removing the same from the perforated ears.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

1. A device of the class described comprising an axle-clip having a transverse pivot, a thill-iron having an open eye or hook detach-

ably receiving the pivot and adapted to be disconnected from the axle-clip without withdrawing the said pivot, a loop connected with the pivot and straddling the thill-iron, and a spring interposed between the transverse portion of the loop and the thill-iron and retaining the latter in engagement with the pivot and located at a point opposite the mouth or entrance of the eye or hook of the thill-iron, substantially as described.

2. A device of the class described comprising an axle-clip having a transverse pivot, a thill-iron having an open eye or hook receiving the pivot, a loop straddling the thill-iron and connected with the pivot, and a spring interposed between the loop and the thill-iron, having one side hinged to the transverse portion of the loop and having its other side engaging the top of the thill-iron whereby the latter is retained in engagement with the pivot, substantially as described.

3. A device of the class described comprising an axle-clip having a transverse pivot, a thill-iron provided with an open eye or hook receiving the pivot, a substantially U-shaped loop straddling the thill-iron and provided with hooks detachably engaging the pivot, and a spring hinged to the loop and engaging the top of the thill-iron whereby the latter is retained in engagement with the pivot, substantially as described.

4. A device of the class described comprising an axle-clip, a pivot, a thill-iron having an open eye or hook to receive the pivot and provided at its upper face with a recess, a loop straddling the thill-iron and connected with the pivot, and a substantially V-shaped spring having one side hinged to the loop and its other side engaging the thill-iron, substantially as described.

5. A device of the class described comprising an axle-clip, a transverse pivot carried by the same, a thill-iron having an open eye or hook detachably receiving the pivot, the mouth or entrance of the eye or hook being at the bottom of the thill-iron, and a hinged spring located at the top of the thill-iron, engaging the same at that point and adapted to be swung out of such engagement, whereby the thill-iron may be uncoupled without removing the pivot, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

PRESLEY W. MOREHEAD.

Witnesses:

GEO. B. TUSSING,

J. W. CLINEDINST.