

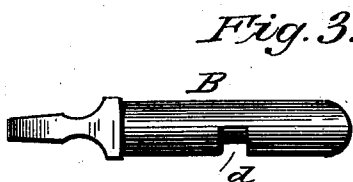
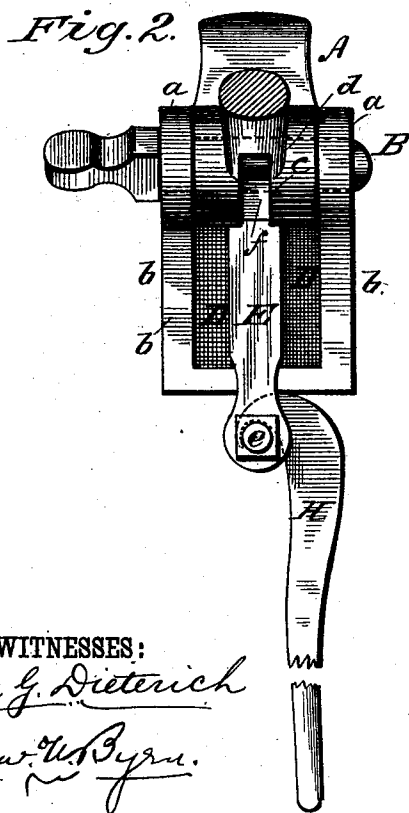
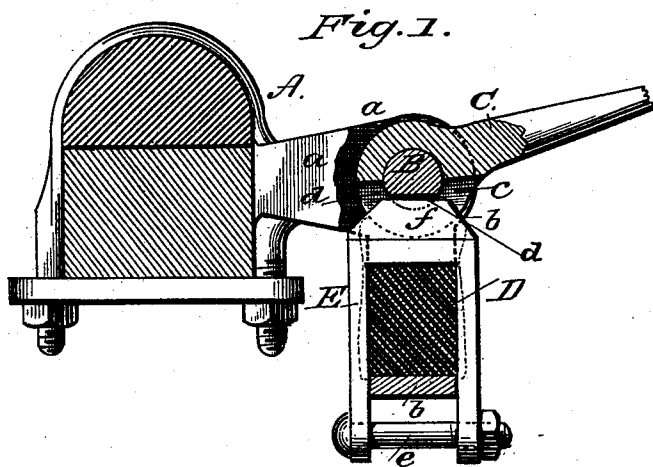
(No Model.)

W. H. TIBBITS.

THILL COUPLING.

No. 368,119.

Patented Aug. 9, 1887.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

WILLIAM HENRY TIBBITS, OF CRAB ORCHARD, NEBRASKA.

## THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 368,119, dated August 9, 1887.

Application filed January 11, 1887. Serial No. 224,068. (No model.)

### *To all whom it may concern:*

Be it known that I, WILLIAM HENRY TIBBITS, of Crab Orchard, in the county of Johnson and State of Nebraska, have invented a new and useful Improvement in Anti-Rattling Thill-Couplings, of which the following is a specification.

My invention is in the nature of an improved thill-coupling which dispenses with the use of a screw-nut on the bolt that secures the thills, and which same construction also prevents the rattling of the coupling; and it consists in the peculiar construction and arrangement of parts which I will now proceed to describe.

Figure 1 is a side view, partly in section. Fig. 2 is a front view, showing the wrench H applied for disconnecting the parts; and Fig. 3 is a side view of the pivot-bolt.

In the drawings, A represents the clip, which is designed to be fastened around the axle in the usual way. This clip is formed in one piece, with ears or lugs *a a*, whose outer ends are connected by a pendent stirrup, *b*, also formed in the same piece with said lugs and clip. The outer ends of the lugs are pierced horizontally with a hole to receive the pivot-bolt B, which latter also passes through the hinge sleeve of the thill-iron C, to which the thills or shafts are attached in the usual way.

The hinge-sleeve of the thill-iron is slotted at *c*, on its under side, transversely in a vertical plane about its middle, and coinciding with this slot there is formed in the pivot-bolt a notch, *d*. In the pendent stirrup *b* from the lugs is seated a soft-rubber block, D, or other suitable form of spring, and embracing the top and sides of said rubber block is arranged a yoke, E, whose lower ends are connected by a bolt, *e*, below the stirrup. The upper part of this yoke is provided with a flange, *f*, whose width is less than that of the slot in the hinge-sleeve and the notch in the pivot-bolt. The elastic pressure of the rubber block, it will be

seen, forces this yoke upwardly and causes its flange to pass through the slot in the hinge-sleeve and enter the notch in the pivot-bolt, thus performing the two important functions of first locking the pivot-bolt, so that it cannot be withdrawn, thus dispensing with a screw-nut, and, secondly, of pressing against both the pivot-bolt and the sleeve and holding the parts tightly, so that they cannot rattle.

For disconnecting the parts of my thill-coupling a cam-hook, H, is fitted between the bolt *e* and the bottom of the stirrup and the yoke, as shown in Fig. 2, and its locking-flange is drawn down by the leverage which this hook exerts, so that the locking-flange *f* is drawn out of the notch in the pivot-bolt, permitting the latter to be withdrawn to disconnect the parts.

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

1. An anti-rattling thill-coupling consisting of a clip having perforated lugs with a pendent stirrup connecting their ends, a notched pivot-bolt passing through said lugs, a slotted hinge-sleeve hung upon the pivot-bolt, a spring seated in the pendent stirrup, and a locking device interposed between the spring and sleeve and pressed by said spring through the slot in the sleeve and into the notch in the pivot-bolt, substantially as and for the purpose described.

2. An anti-rattling thill-coupling consisting of a clip having perforated lugs *a a*, with pendent stirrup *b*, formed in one piece, the notched pivot-bolt B, the thill-iron C, with slotted sleeve, the spring D, and the locking-yoke E, with flange *f* and bolt *e*, substantially as shown and described, and for the purpose set forth.

WILLIAM HENRY TIBBITS.

Witnesses:

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C. W. ROBERTS.