

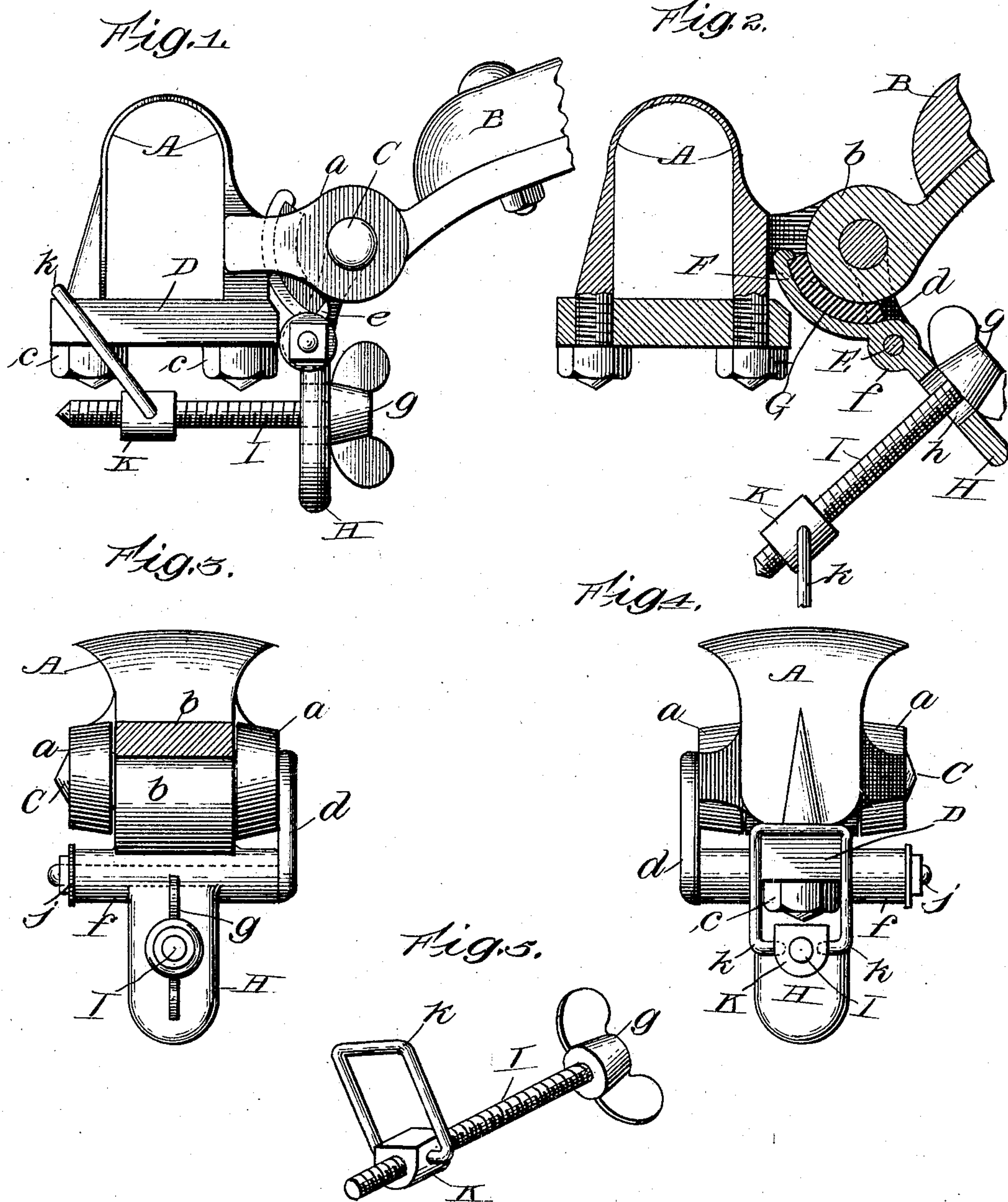
No. 794,283.

PATENTED JULY 11, 1905.

L. J. DILLON.

COMBINED ANTIRATTLER AND THILL PIN LOCK.

APPLICATION FILED JUNE 10, 1904.



Witnesses:
O. M. Vermick
E. K. Lundy.

Inventor:
Lybran J. Dillon.
by Frank D. Thumason
Attorney.

UNITED STATES PATENT OFFICE.

LYBRAN J. DILLON, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-THIRD TO CLAYTON S. DILLON, AND ONE-THIRD TO ALEXANDER B. SHAW, BOTH OF CHICAGO, ILLINOIS.

COMBINED ANTIRATTLER AND THILL-PIN LOCK.

SPECIFICATION forming part of Letters Patent No. 794,283, dated July 11, 1905.

Application filed June 10, 1904. Serial No. 211,895.

To all whom it may concern:

Be it known that I, LYBRAN J. DILLON, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Combined Antirattler and Thill-Pin Lock, of which the following is a full, clear, and exact description.

The object of my invention is to provide a simple attachment for thill-couplings which effectively and in a practical manner prevents the rattling of the same and permits the use of any convenient flat material as a sound-deadening material and at the same time locks the thill-pin in position whether the anti-rattling features thereof become loose or not, yet in such manner that the unlocking of said pin can be easily accomplished when desired. This I accomplish by the means hereinafter fully described, and as particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of a thill-coupling, showing my improvements applied thereto in proper operative position. Fig. 2 is a longitudinal central section thereof, showing my improved attachment in a released position. Fig. 3 is a front elevation of the same. Fig. 4 is a rear elevation. Fig. 5 is a perspective view of the adjusting-bolt.

Referring to the drawings, A represents a thill-clip having the usual lugs *a a* projecting forward from its forward leg, which are provided with the usual thill-pin openings and between which the knuckle *b* of the thills B of the shafts is inserted and coupled thereto by the transverse thill-pin C. D represents the clip-bar, down through which the threaded extremities of said clip pass and are secured thereto by the nuts *c c*.

One end of the thill-pin C has a hanger *d* depending downward therefrom which consists of a short piece of metal of any suitable shape, that extends to a point slightly below the lugs *a a*, and has a pintle-bolt under the knuckle *b* of the thill parallel to the pin C. In short, pin C, pin E, and its connecting-hanger *d* form a U-shaped device one arm of

which (the pin C) is preferably of greater diameter than the other arm, (the pintle-bolt E.)

Journalled on the pintle-bolt E and retained thereon by a suitable nut *j* is a knuckle *f* of a segmental pressure-plate F, which projects upward between the knuckle *b* of the thill and the crotch of the lugs *a a* of the clip A and is of such width as to enable it to come between said lugs *a a*. This plate is of a curvature corresponding to a circle struck from the center of the thill-pin C and is provided at a point adjacent to the knuckle *f* and at its upper edge with transverse beads *e* on its concave side, the opposing edges of which are preferably undercut, so as to assist in retaining a segmental pad G, consisting of a strip of old hose or leather or other suitable sound-deadening fabric, substantially as shown. Projecting from the knuckle *f* in the opposite direction to the pressure-plate F is an extension H, which is of suitable length and is provided with a vertically-elongated slot *h* therein. I pass rearwardly through this slot *h* an adjusting-screw I until its head *g* bears against the front of the extension H, and I provide this screw I with a suitably-shaped nut K, which is provided with a bail *k*, which is preferably of rectangular shape, substantially as shown, and has its end suitably journalled in oppositely-located bearings in said nut.

In operation I couple the thills to the lugs *a a* by inserting the pin C therethrough until the hanger *d* comes in contact with said lug. I then move the hanger *d* forward sufficiently far to enable me to slip the knuckle *f* of the pressure-plate F over the pintle-bolt E without danger of plate F interfering with the lugs *a a* or with the clip-bar and then move the pressure-plate F up between the lugs *a a* of the clip into the position shown in Fig. 1 of the drawings, in which the knuckle *f* will be in contact with the forward end of the clip-bar. When in this position, the screw I will extend horizontally rearward, and the bail *k* of the nut can be swung up over the rearwardly-projecting end of the clip-bar D, substantially as shown. By tightening up the

screw I the pad G, carried by the pressure-plate, is brought to bear against the knuckle *b* of the thills with such pressure as to effectually prevent any rattling of the articulation of the joint formed between the same and lugs *a a* through the medium of pin C. It will be noticed that when in this position the bail *k* will lock the nut *c* on the end of the rear leg of the clip and that of the knuckle *f* will lock the nut on the end of the forward branch of said clip. Should my improvement become loose by reason of bail *k* becoming disengaged from the rear end of the clip-bar and fall into the position shown in Fig. 2, the upper end of the pressure-plate would still remain between the lugs *a a* and prevent the pin C from working laterally out of its bearings in said lugs *a a* and knuckle *b* of the thills.

If desired, the pressure-plate F might be made longer than as shown in the drawings, although this is not essential, as it is practically impossible for the pin C to be withdrawn from the position shown in the drawings except by design.

It will be observed that the thill-pin C and its connections can be used either right or left, according as desired, without at all affecting the principle of its operation.

I do not desire to be confined to the exact construction of the different parts of my invention as hereinbefore described, and as shown in the drawings, because it is obvious they may be changed without affecting their relation or coöperation to effect the objects in view. All such changes I desire to be understood as coming within the spirit of my invention.

What I claim as new is—

1. A thill-coupling comprising a clip having bearing-lugs, a thill, and thill-pin, a pivoted pressure-plate, means suspended from said thill-pin to which said pressure-plate is pivoted at a point below said thill, and a rearwardly-extending bolt passing under said clip for causing said pressure-plate to bear against said thill.

2. A thill-coupling comprising a clip having bearing-lugs, a thill, and thill-pin, a pivoted pressure-plate, means integral with and suspended from said thill-pin to which said pressure-plate is pivoted at a point below said thill, and a rearwardly-extending bolt passing under said clip for causing said pressure-plate to bear against said thill.

3. A thill-coupling comprising a clip having bearing-lugs, a thill, and thill-pin, in combination with a pressure-plate, which is provided with an extension below its pivot, means suspended from said thill-pin to which said pressure-plate is pivoted, and a rearwardly-extending bolt passing under said clip for drawing said extension rearwardly and bringing said pressure-plate to bear against said thill.

4. A thill-coupling comprising a clip having bearing-lugs, a thill, and thill-pin, in combination with a pressure-plate, which is provided with an extension below its pivot, means integral with and suspended from said thill-pin to which said pressure-plate is pivoted, and a rearward-extending bolt passing under said clip for drawing said extension rearwardly and bring said pressure-plate to bear against said thill.

5. A thill-coupling comprising a clip having bearing-lugs, a thill, and thill-pin having a pendent arm which latter has a pintle-bolt projecting therefrom parallel to said thill-pin beneath said thill, in combination with a pressure-plate which is pivoted on said pintle-bolt, and a rearwardly-extending bolt passing under said clip for causing said pressure-plate to bear against said thill.

6. A thill-coupling comprising a clip having bearing-lugs, a thill, and thill-pin having a pendent arm which latter has a pintle-bolt projecting therefrom parallel to said thill-pin beneath said thill, in combination with a pressure-plate which is pivoted on said pintle-bolt, and is provided with an extension below said pivot, and a rearwardly-extending bolt passing under said clip engaging said extension and causing said pressure-plate to bear against said thill.

7. A thill-coupling comprising a clip having bearing-lugs, a thill, and thill-pin having a pendent arm which latter has a pintle-bolt projecting therefrom parallel to said thill-pin beneath said thill, in combination with a pressure-plate which is pivoted on said pintle-bolt and is provided with an extension below its pivot, a bolt operatively connected to said extension extending rearwardly under said clip, and a nut thereon having a bail adapted to engage the rear end of the clip-bar of said clip.

8. A thill-coupling comprising a clip having bearing-lugs, a thill, and thill-pin, a pivoted pressure-plate, means suspended from said thill-pin to which said pressure-plate is pivoted at a point below said thill, a bolt operatively connected to said pressure-plate and extending rearwardly under said clip, and a nut thereon having a bail adapted to engage the rear end of the clip-bar of said clip.

9. A thill-coupling comprising a clip having bearing-lugs, a thill, and thill-pin, a pivoted pressure-plate, means integral with and suspended from said thill-pin to which said pressure-plate is pivoted at a point below said thill, a bolt operatively connected to said pressure-plate and extending rearwardly under said clip, and a nut thereon having a bail adapted to engage the rear end of the clip-bar of said clip.

10. A thill-coupling comprising a clip having bearing-lugs, a thill, and thill-pin, in combination with a pressure-plate, which is provided with an extension below its pivot, means suspended from said thill-pin to which said

pressure-plate is pivoted, a bolt operatively connected to said extension and extending rearwardly under said clip, and a nut thereon having a bail adapted to engage the rear end of the clip-bar of said clip.

11. A thill-coupling comprising a clip having bearing-lugs, a thill, and thill-pin, in combination with a pressure-plate, which is provided with an extension below its pivot, means integral with and suspended from said thill-pin to which said pressure-plate is pivoted, a bolt operatively connected to said extension and extending rearwardly under said clip, and a nut thereon having a bail adapted to engage the rear end of the clip-bar of said clip.

12. A thill-coupling comprising a clip hav-

ing bearing-lugs, a thill, and thill-pin having a pendent arm which latter has a pintle-bolt projecting therefrom parallel to said thill-pin beneath said thill, in combination with a pressure-plate which is pivoted on said pintle-bolt, a bolt operatively connected to said pressure-plate, and a nut thereon having a bail adapted to engage the rear end of the clip-bar of said clip.

In testimony whereof I have hereunto set my hand this 21st day of March, 1904.

LYBRAN J. DILLON.

Witnesses:

FRANK D. THOMASON,
E. K. LUNDY.