

(No Model.)

J. N. BERRY.

ANTI RATTLER FOR THILL COUPLINGS.

No. 293,218.

Patented Feb. 12, 1884.

Fig. 1.

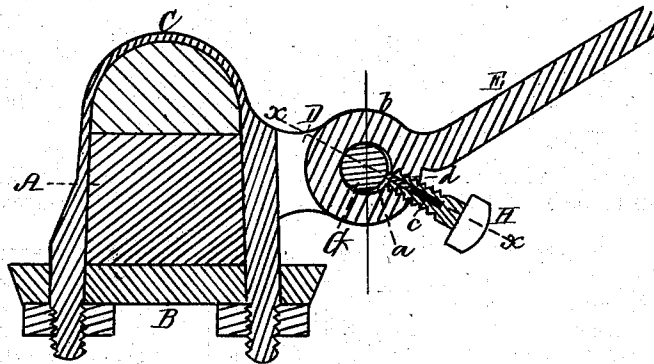


Fig. 2.

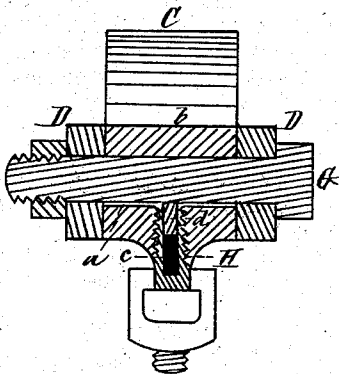


Fig. 3.

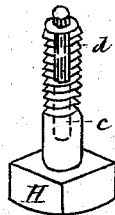


Fig. 4.



Fig. 5.

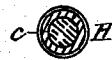


Fig. 6.



Witnesses,
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UNITED STATES PATENT OFFICE.

JOSEPH N. BERRY, OF BOSTON, MASSACHUSETTS.

ANTI-RATTLER FOR THILL-COUPPLINGS.

SPECIFICATION forming part of Letters Patent No. 293,218, dated February 12, 1884.

Application filed December 17, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH N. BERRY, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Anti-Rattler for Thill-Couplings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a longitudinal central section through an ordinary thill-coupling having my anti-rattling device applied thereto. Fig. 2 is a transverse section on the line *xx* of Fig. 1. Fig. 3 is a perspective view of my device detached, (enlarged.) Fig. 4 is a longitudinal section through the center of the same; Fig. 5, a transverse section; Fig. 6, a transverse section, representing a slightly-modified construction.

My invention consists in a hollow screw with a yielding pressure block or substance located therein for keeping the rear surface of the thill-iron eye in contact with the contiguous surface of the connecting-bolt, said hollow screw being turned through the wall of the eye, so as to cause the elastic material within the screw to bear with the required pressure upon the bolt, and thus, while preventing in a great degree the wear of the bearing-surfaces, "take up the play" and preclude the annoying rattling so common to thill-iron and axle-clip connections.

To enable others skilled in the art to understand and apply my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A represents a carriage-axle; B, a plate thereunder; C, the axle-clip, secured to the axle and provided with a pair of ears or lugs, D, having a cylindrical aperture formed through each one. E is the thill-iron, having a cylindrical passage or eye, *a*, formed in its rear, rounded end *b*, for the reception of a connecting-bolt, G, which, when the eye *a* is interposed between and in line with the apertures in the lugs, serves to couple the parts together, the construction of the axle-clip thill-iron, and connecting-bolt thus far described being well known, the distin-

guishing-feature of this invention being a hollow screw, H, with an elastic material located therein, and having its outer end projecting beyond the end of the screw, the screw being turned in a female screw-thread cut through the wall of the rear or socket end *b* of the thill-iron at a point located, preferably, on its underside in advance of a vertical line passing through its center. The interior of the screw H is preferably occupied by a rubber or other spring, *c*, with a block, *d*, of leather or other suitable material, resting thereon, the outer end of the block projecting beyond the end of the screw, so as to abut against the bolt G, and be pressed thereon by turning in the screw H, thus drawing forward and holding the rear portion of the eye *a* of the thill-iron against the contiguous portion of the bolt, whereby all play between these parts is avoided and the rattling incident to many thill-couplings reliably prevented. A spiral spring may be substituted for the rubberspring *c*, if desired, or either spring be dispensed with and a block of leather or other suitable material alone be employed; but I prefer the construction shown and described.

The form of the interior of the screw H may be other than circular in cross-section—as, for instance, square. (See Fig. 6.)

A soft metallic composition may be used instead of the leather block *d*, if desired.

I claim—

1. As an improvement in anti-rattlers for thill-couplings, the hollow screw H, having an elastic substance located therein, in combination with the axle-clip C, thill-iron E, and connecting-bolt G, substantially as set forth.

2. In combination with the hollow screw H, the spring *c*, and pressure-block *d*, located therein, for keeping the rear surface of the thill-eye *a* and contiguous surface of the connecting-bolt G in contact, as and for the purpose described.

Witness my hand this 12th day of December, 1883.

JOSEPH N. BERRY.

In presence of—

N. W. STEARNS,
JAS. W. CHAPMAN.