No. 676,682. Patented June 18, 1901.

M. M. MAXAM.

THILL COUPLING.

(Application filed Mar. 9, 1901.)

(No Model.)

Fig. 1.

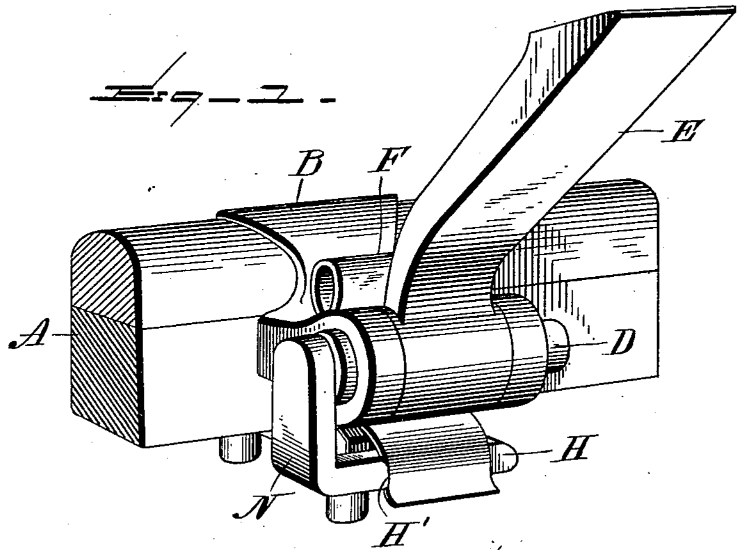


Fig. 2.

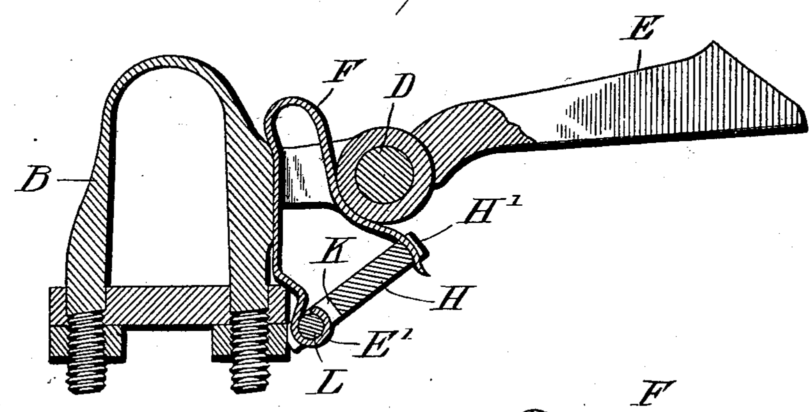
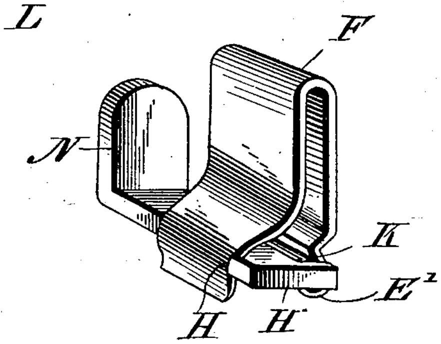


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

MELVIN M. MAXAM, OF TOLEDO, OHIO, ASSIGNOR TO R. E. ABBOTT, OF SAME PLACE, AND GEO. W. HASENCAMP, OF CHATTANOOGA, TENNESSEE.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 676,682, dated June 18, 1901.

Application filed March 9, 1901. Serial No. 50,496. (No model.)

To all whom it may concern:

Be it known that I, MELVIN M. MAXAM, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Thill-Couplings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in thill-supports and antirattlers; and it consists of a key which is hinged to the antirattler-spring, one edge of the key bearing against the spring adjacent to its free end, while an angled portion of the key serves as a means to hold the coupling-pin in place, while the spring and edge of the key bearing frictionally against the spring and the latter against the thill-iron serve to hold the thills in an upright position when not in use.

The invention will be hereinafter more fully described and then specifically defined in the appended claims and is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings—

Figure 1 is a perspective view of my improved thill-support and antirattler. Fig. 2 is a vertical central section through the antirattler, thill-iron, and clip. Fig. 3 is an enlarged detail in perspective of the antirattler-spring and key, which are hinged together.

Reference now being had to the details of the drawings by letter, A designates the axle of a vehicle, and B a clip, of ordinary construction, secured thereto, having the integral lugs with apertured ends to receive the thill coupling-pin D, which passes through the apertured end of the thill-iron E.

The antirattler-spring F has a roll F' formed at one end, in which roll the key H is hinged. This key H has an elongated aperture adjacent to one of its edges, as at K, and the portion of the key intermediate said aperture and the adjacent edge of the key is rounded, forming the hinge-bearing L. One end of the key is bent at a right angle, as at N, and is designed to hold the coupling-pin D in place. The antirattler-spring is bent upon itself, placed between the side of the clip and the thill-iron, as illustrated, and one end of the spring is preferably bent to conform to the end of the clip-retaining cross-bar adjacent to its rolled end. The other end of the spring is slightly curved to conform to the rounded end of the thill-iron, under which it passes and against which it is frictionally held by means of the longitudinal edge of the key. The edge of said key opposite its hinged portion is recessed, as at H', to receive the end of the antirattler-spring and hold same against lateral movement, and the immediate end of the spring is bent slightly, so as to form a hook to hold the edge of the key against the spring.

From the foregoing it will be observed that by the construction of a device in accordance with my specification and as illustrated in the drawings a thill-support is formed by the edge of the key being forced underneath the hooked free end of the spring, thus forcing the spring against the thill-iron with sufficient pressure to hold the thills in upright positions, the coupling-pin is prevented from withdrawing from the lugs of the clip, and all rattling of the parts is prevented.

Having thus described my invention, what I claim to be new, and desire to secure by Letters Patent, is—

1. A thill-support and antirattler, comprising a spring adapted to be inserted between the thill-iron and the clip supporting same, a key having hinged connection with one end of the spring, the opposite edge of the key designed to be engaged by the hooked free end of the spring whereby the spring is held frictionally against the thill-iron, as set forth.

2. A thill-support and antirattler, consisting in combination with the clip and thill-iron pivotally held thereto, a spring having a roll formed at one end a key hinged in said roll, the opposite edge of the key being recessed to receive the curved or hooked end of the spring to hold said spring frictionally against the thill-iron, as set forth.

3. In combination with the clip, the thill-

iron and pin supporting same, the spring and key pivoted thereto, one edge of the key holding the free end of the spring against the thill-iron, and an end of the key bent at an angle and disposed adjacent to the end of the supporting-pin to hold same in place, as set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

MELVIN M. MAXAM.

Witnesses:
LOUIS H. PAINE,
R. E. ABBOTT.