(Model.)

J. M. MACKEY.

THILL COUPLING.

No. 368,843. Patented Aug. 23, 1887.

Fig. 1.

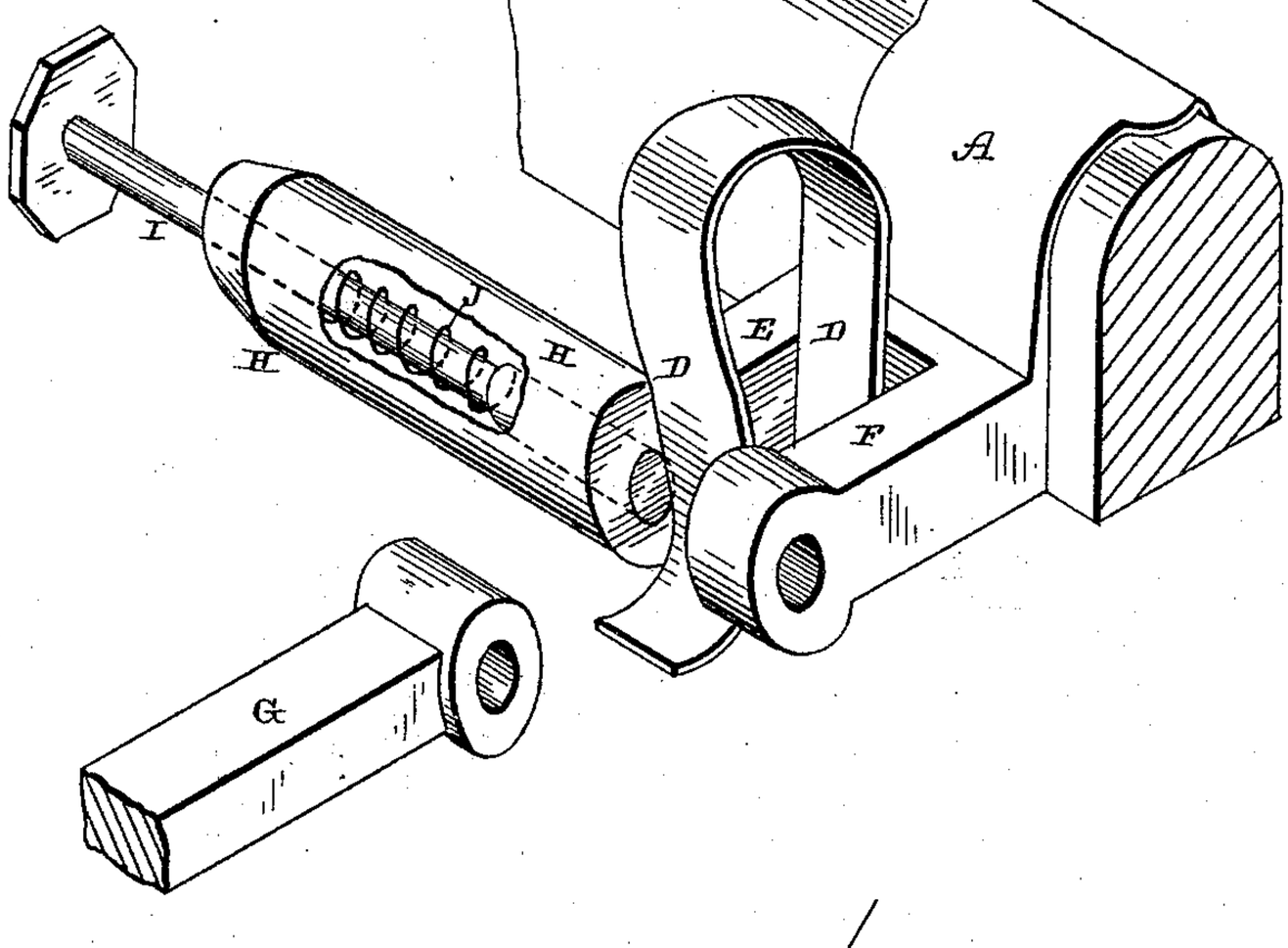
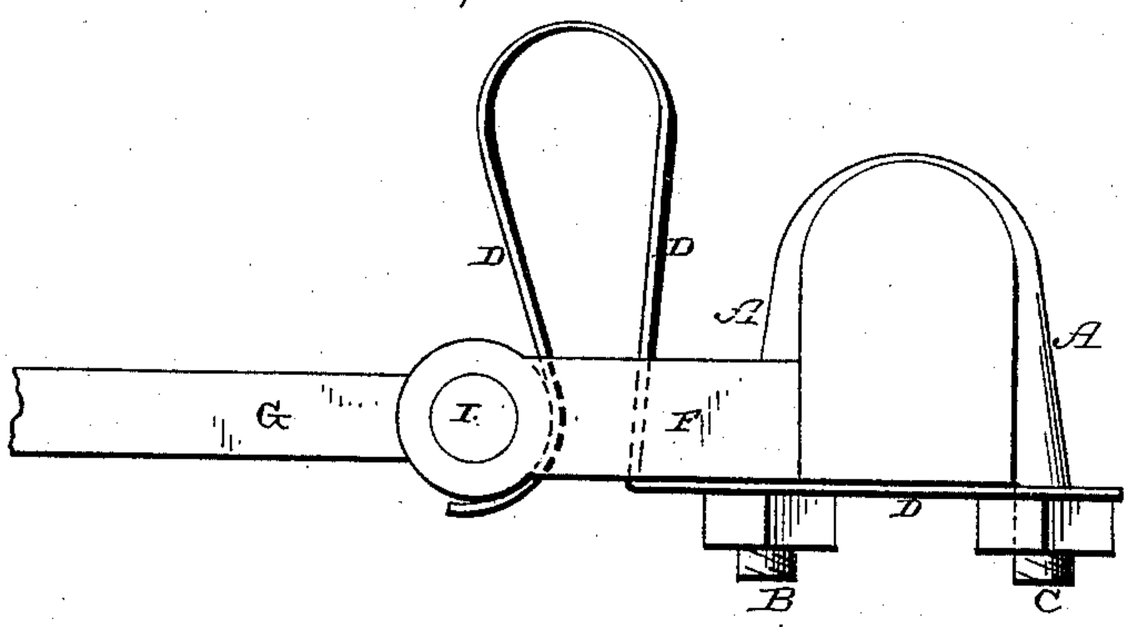


Fig. 2.



Witnesses.
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atty.

UNITED STATES PATENT OFFICE.

JAMES M. MACKEY, OF BELLE VERNON, OHIO.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 368,843, dated August 23, 1887.

Application filed May 31, 1887. Serial No. 239,875. (Model.)

To all whom it may concern:

Be it known that I, JAMES M. MACKEY, of Belle Vernon, in the county of Wyandot and State of Ohio, have invented certain new and useful Improvements in Thill-Couplings; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in thill-couplings; and it consists in the combination of the clip, which is secured to the axle and provided with ears, one of the ears having a barrel or casing formed as a part thereof, a spring-actuated bolt placed in the barrel, the thill iron, and a spring which passes upward between the ears and bears against the thill-iron when in position, and which forms a stop for the bolt when the thill-iron is removed, all of which will be more fully described hereinafter.

The object of my invention is to provide a thill-coupling having a spring-actuated bolt which forms a pivot for the thill-iron, and a spring which serves the double purpose of preventing rattling and to form a stop for the bolt when the thill-iron is removed, so that when the spring is pushed backward by the insertion of the thill-iron it will spring into the hole in the thill-iron and securely hold it in its proper position.

Figure 1 is a perspective with the thill-iron removed. Fig. 2 is a side elevation.

A represents that portion of the clip which is bent over the axle and provided with the bolts B C, which pass through the spring D and are secured by nuts. Formed as an integral part of the clip are the two ears E F, between which the thill-iron G is pivoted. The ear E has formed as a part thereof the casing or barrel H, in which is placed a spring-actuated bolt, I, which is forced by the spring J through the hole in the thill-iron and through the opposite ear F. The spring D passes upward between the two ears, and is doubled back upon itself, and has its free end bent so as to conform to the rounding portion of the thill-iron.

As shown in Fig. 1, when the bolt is withdrawn from the thill-iron and into its casing, the spring D moves forward just far enough to hold the bolt in this position. The advantage of this construction and operation of the bolt and spring is that when the thill-iron is inserted into position and the spring forced backward the bolt will spring through the holes in the thill-iron and the opposite ear as soon as they register. This will enable the insertion of the shafts into position in the clips by one person, where otherwise it would require one to hold the bolts back and another to manage the shafts.

The spring passing backward under the shaft, and having apertures for the bolts B C, it answers the purpose of securing the clip to the axle and does away with the ordinary plate which is used for this purpose.

Having thus described my invention, I claim—

1. In a thill-coupling, the combination of the clip provided with a spring-actuated bolt which forms a pivot for the thill-iron, the thill-iron, and a spring which performs the double function of an anti-rattler and a stop for the bolt when the thill-iron is removed, for the purpose set forth.

2. In a thill-coupling, the combination of the clip having ears, and a barrel or casing formed as a part thereof, the spring D, which has its rear end extended backward under the axle, and having apertures for the bolts B C, and its front end formed into a spring for bearing against the thill-iron, and forming a stop for the spring-actuated bolt I, the spring-actuated bolt, and the nuts for clamping the spring D against the under side of the axle, substantially as described.

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

JAMES M. MACKEY.

Witnesses:
A. E. WALTON,
ELIAS PARKER.