

(No Model.)

M. E. HAMILTON.

THILL COUPLING.

No. 347,238.

Patented Aug. 10, 1886.

Fig. 1.

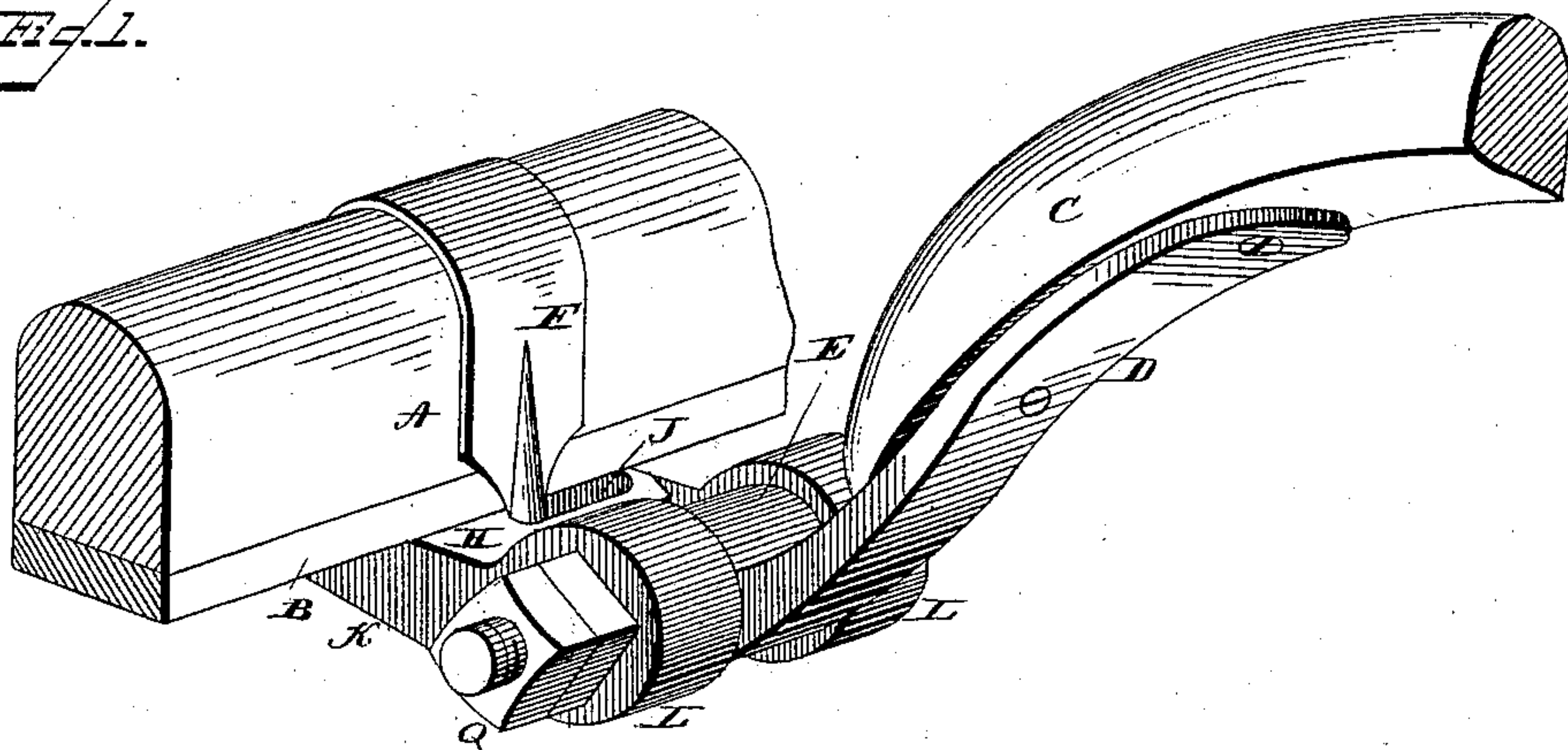


Fig. 2.

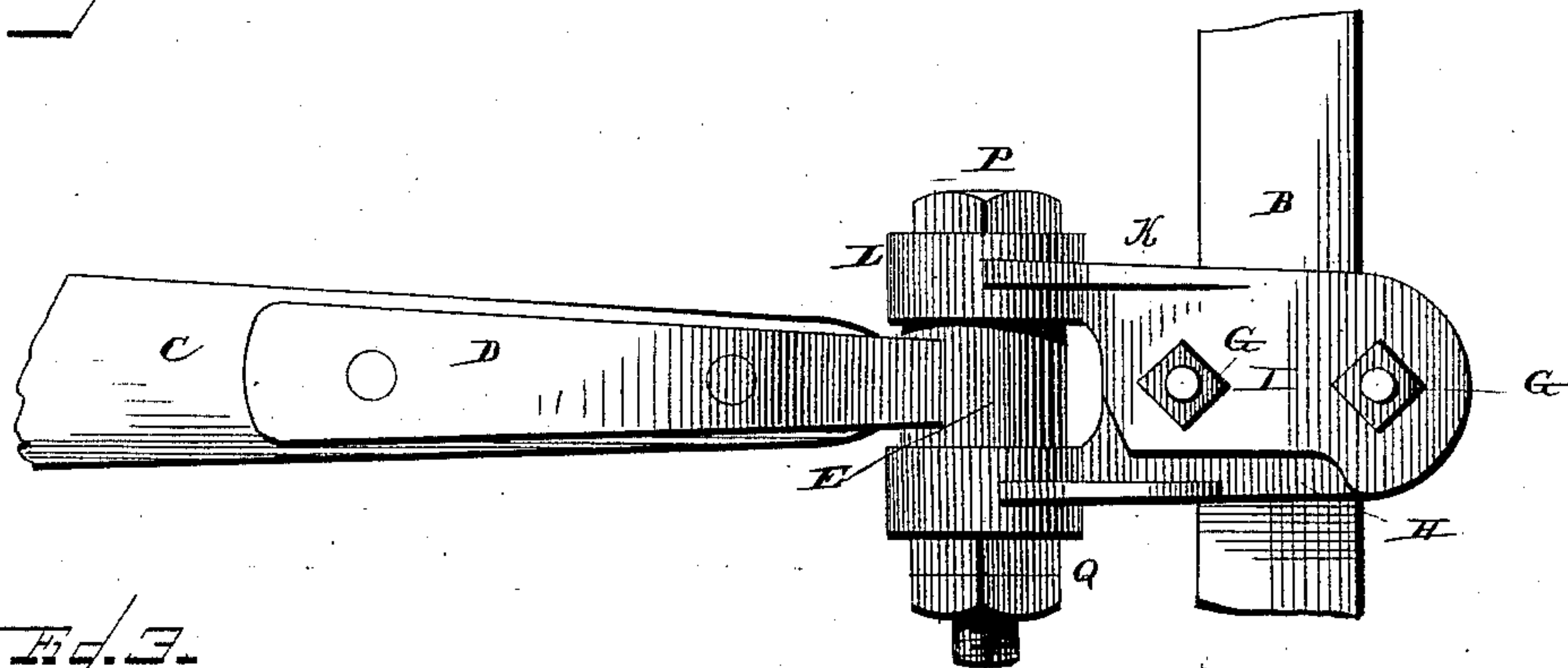
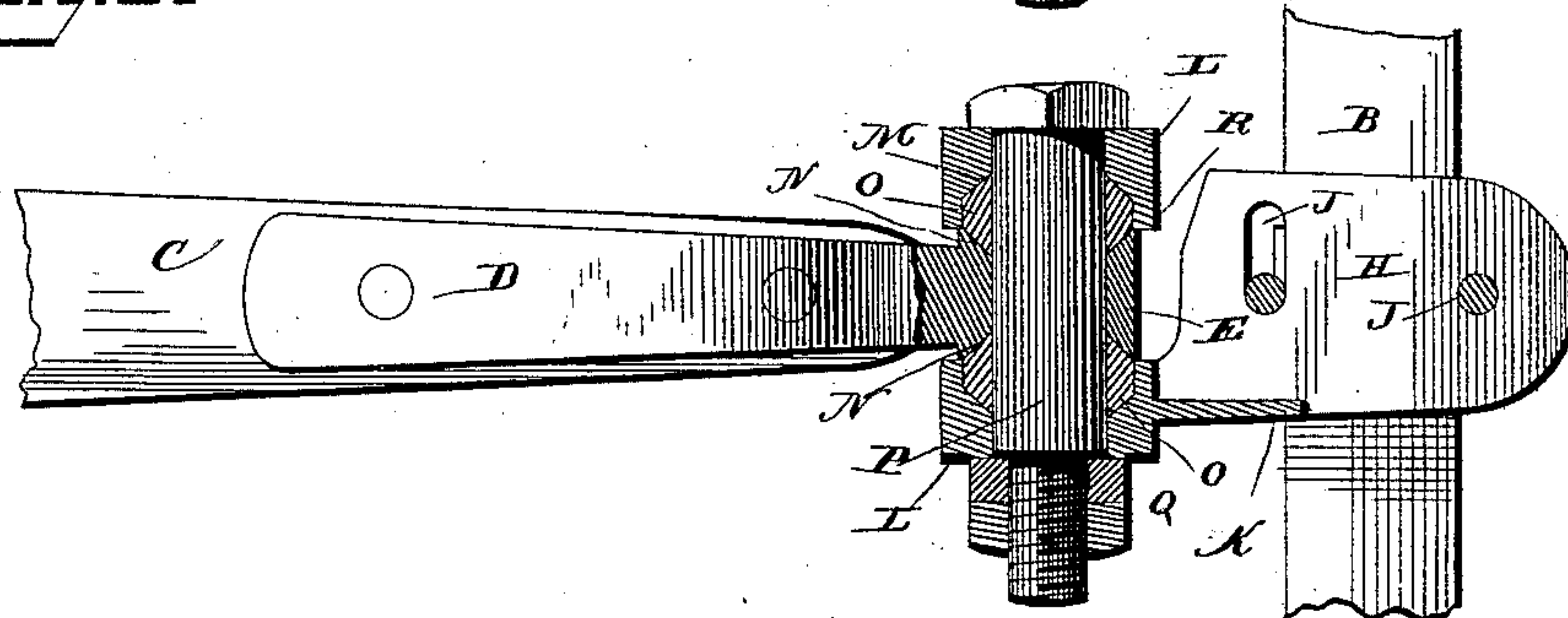


Fig. 3.



WITNESSES
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UNITED STATES PATENT OFFICE.

MILES E. HAMILTON, OF AUBURN, NEW YORK, ASSIGNOR OF ONE-HALF TO
ALVAH B. RADNEY, OF SAME PLACE.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 347,238, dated August 10, 1886.

Application filed June 7, 1886. Serial No. 204,379. (No model.)

To all whom it may concern:

Be it known that I, MILES E. HAMILTON, a citizen of the United States, and a resident of Auburn, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Thill-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved thill-coupling. Fig. 2 is a bottom view of the same, and Fig. 3 is a horizontal sectional view through the coupling-bolt.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to that class of thill-couplings in which the threaded ends of the clip pass through transverse slots in two shackle-plates having perforated ears at their outer ends, forming conical bearings for the conical or tapering joints of the thill-iron; and it consists in the improved construction and combination of parts of such a thill-coupling, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the axle-tree. B is the axle-iron, and C is the rear end of the thill, to which the thill-iron D is secured upon the under side, the thill-iron having the thill-eye E at its inner end.

The clip F, which secures the coupling to the axle, is provided with the usual screw-threaded ends, and with the nuts G, and two shackle-plates, H and I, fit with their perforations J upon the threaded ends of the clip, the forward perforation in the upper shackle-plate being a transverse slot. The side edges of these shackle-plates are provided at the under sides with longitudinal flanges K, which re-enforce the said plates, and the outer ends of the shackle-plates are formed into eyes L, having tapering recesses M in their inner faces. The thill-eye is formed with similar tapering recesses, N, in the ends,

and two collars, O O, having their faces tapering, are placed upon the coupling-bolt P, with their tapering faces fitting in the recesses in the thill-eye and in the shackle-eyes, the said shackle-eyes being drawn together by means of the nuts Q upon the coupling-bolt.

It will be seen that by loosening the nuts upon the threaded ends of the clip, and by loosening and removing the nuts upon the coupling-bolt, the said bolt may be removed, and the shackle-plate having the slot may be slid to one side, turning upon the rear end of the clip, allowing the thill-eye to be removed and the collars to drop out of their recesses.

The wear upon the recesses or the collars may be taken up by tightening the nuts upon the coupling-bolt, the said collars wearing themselves into a seat by their tapering faces fitting in the tapering recesses, and the inner sides of the shackle-eyes are formed with inwardly-projecting flanges R around the recesses, which flanges will cover the joints of the collars and thill-eye, preventing dust or grit from entering the said joints.

The flanges upon the under sides of the shackle-plates at their outer edges serve to re-enforce the said plates and to brace the eyes, preventing the said eyes from becoming twisted by severe strain upon them.

This coupling may be used in place of the usual coupling with very slight changes, it being only necessary to form the tapering recesses in the thill-eye, and to remove the clip and apply the clip and shackle-plates.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a thill-coupling, the combination of a clip having nutted ends, two shackle-plates fitting with their perforations upon the ends of the clip, and having a transverse slot in the upper plate upon the forward arm of the clip, and formed with downwardly-projecting flanges upon their outer edges, and with eyes at the forward ends formed with tapering recesses in the inner faces and with inwardly-projecting flanges, a thill-eye having tapering recesses in its ends, a bolt passing through the

eyes of the shackle-plates and through the
thill-eye and having nuts, and two collars
having tapering faces and fitting upon the
bolt between the recesses in the shackle-eyes
5 and in the ends of the thill-eye, as and for the
purpose shown and set forth.

In testimony that I claim the foregoing as

my own I have hereunto affixed my signature
in presence of two witnesses.

MILES E. HAMILTON.

Witnesses:

S. J. WESTFALL,
CHAS. G. ADAMS.