

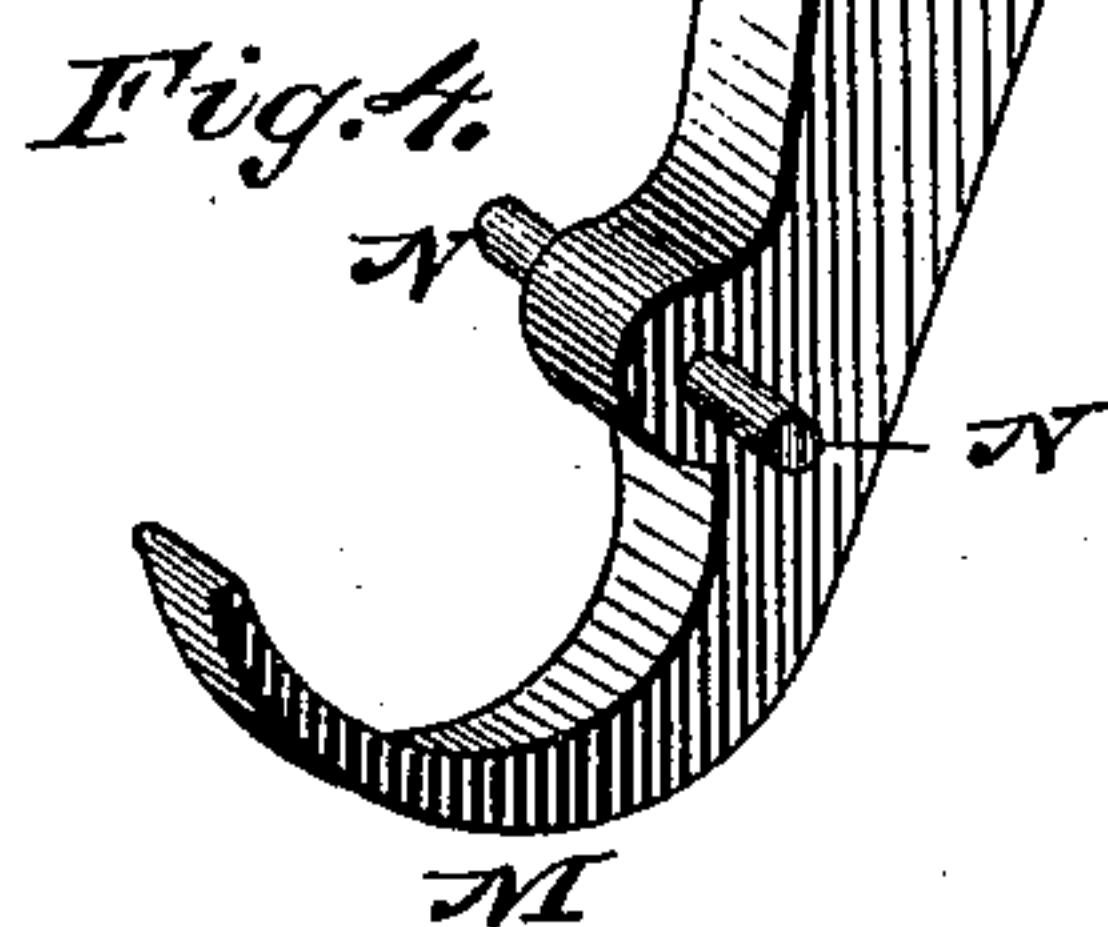
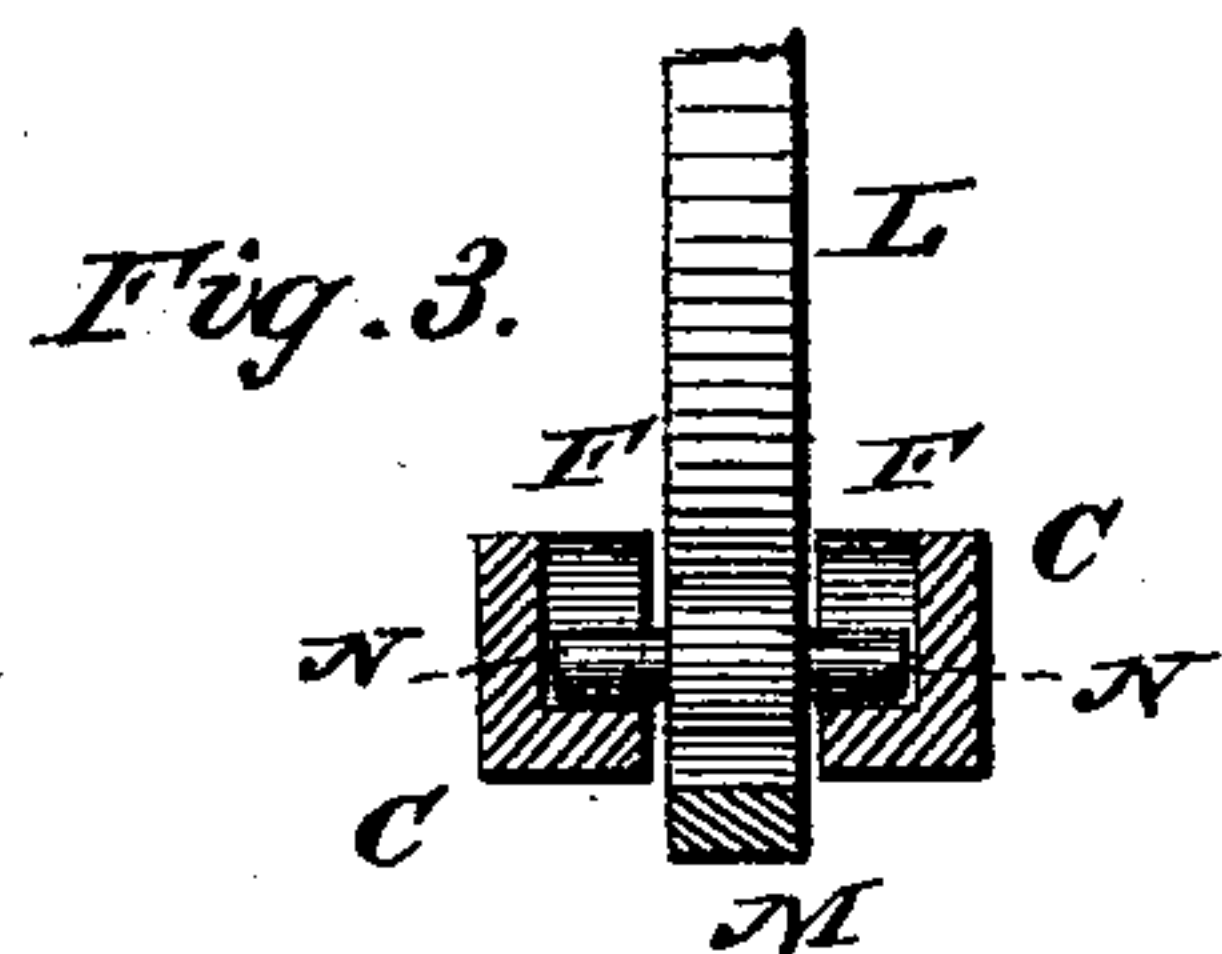
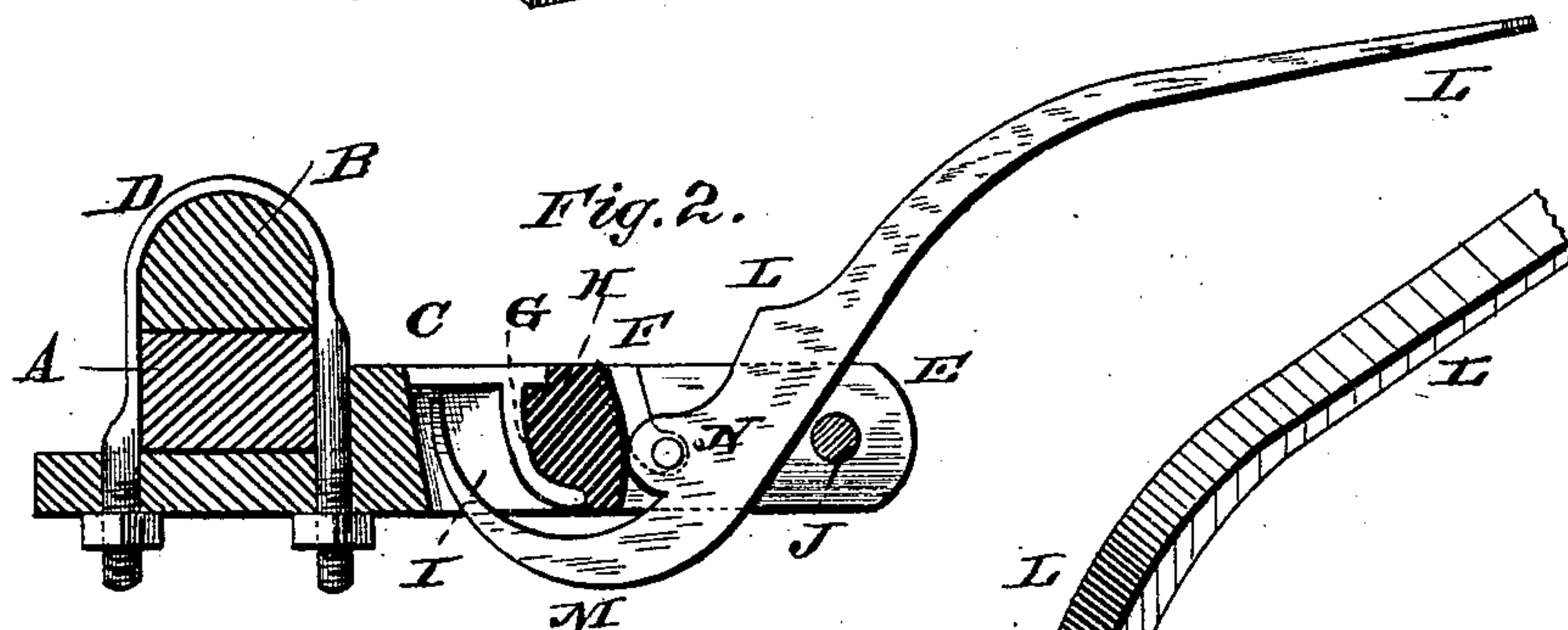
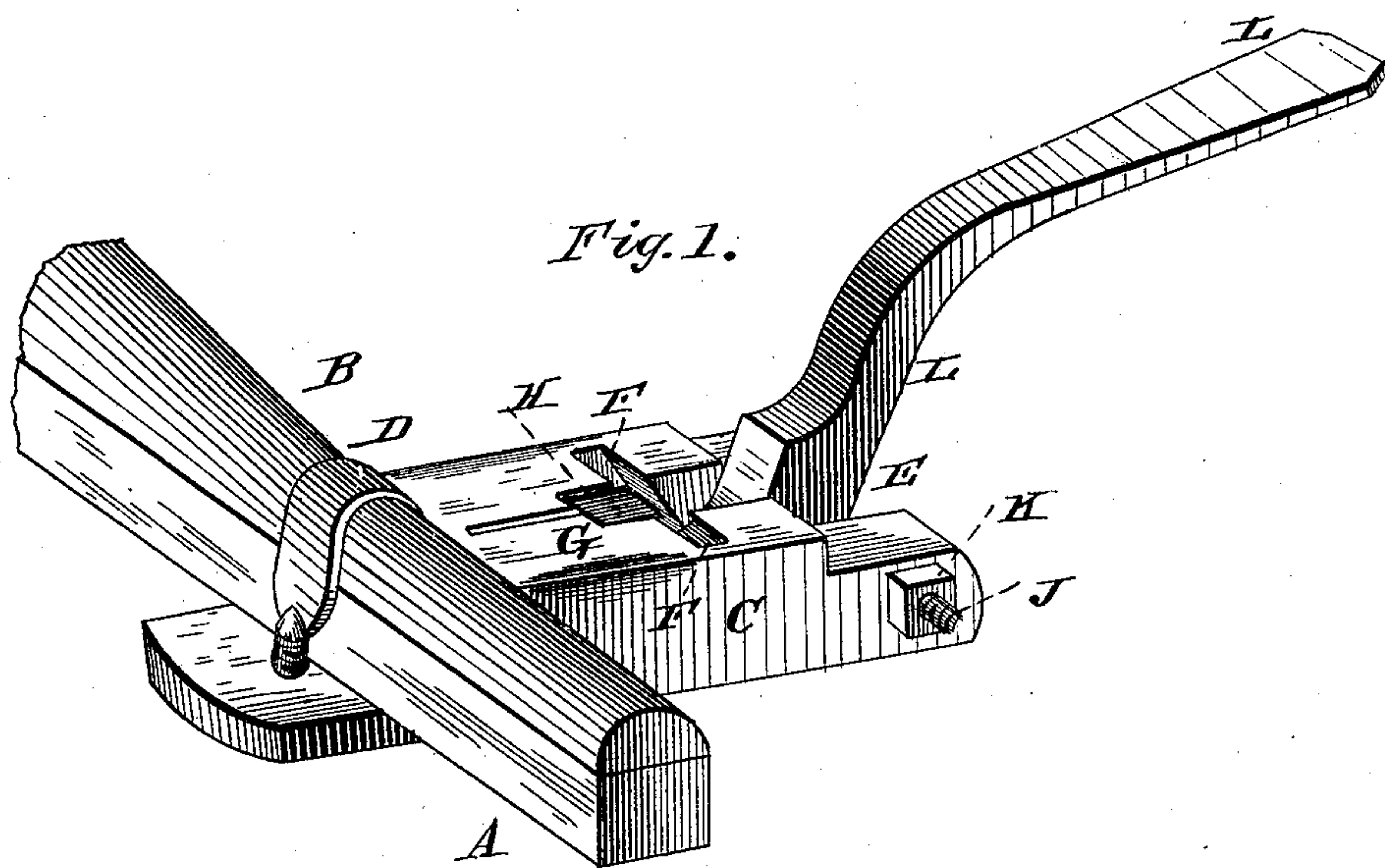
(Model.)

H. T. BIRCHARD.

THILL COUPLING.

No. 251,345.

Patented Dec. 27, 1881.



WITNESSES

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UNITED STATES PATENT OFFICE.

HENRY T. BIRCHARD, OF MONTROSE, PENNSYLVANIA.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 251,345, dated December 27, 1881.

Application filed November 5, 1881. (Model.)

To all whom it may concern:

Be it known that I, HENRY T. BIRCHARD, of Montrose, in the county of Susquehanna and State of Pennsylvania, have invented certain
5 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
10 the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view. Fig. 2 is a longitudinal vertical section. Fig. 3 is a vertical cross-section, and Fig. 4 is a view of the
15 thill-iron detached.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to thill-couplings; and
20 it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A represents the axle; B, the axle-tree, and C the coupling-box, which is secured to the axle in the usual manner by a clip, D. The box C is provided at its front end with a vertical slot, E, the sides of which are provided, near the rear
30 end of said slot, with downward and forward projecting recesses F F, while the rear end is provided with a recess or seat, G, for a block or cushion, H, of rubber or similar packing material, which serves to prevent rattling. In the
35 under side of the coupling-box, in rear of the slot E, is formed a recess, I, for the purpose to be presently described.

J is a bolt, arranged transversely in the forked front end of the coupling-box, and having a nut, K, which may be tightened, so as
40 to force the sides of the box toward each other.

L is the thill-iron, the rear end of which is bent or curved, so as to form an upwardly-pointed hook, M, just in front of which the said
45 thill-iron is provided with a transverse pin, N,

forming laterally-projecting studs, as shown. The iron is to be bolted or otherwise secured to the thill in the usual manner.

The operation of my invention and its advantages will be readily understood from the
50 foregoing description, taken in connection with the drawings hereto annexed. To adjust the thills they are to be raised to a nearly vertical position and the thill-irons inserted into the slots of their respective coupling-boxes,
55 the pins or studs N being fitted in the recesses F. The front ends of the thills are then lowered until the hooks M enter the recesses I, and the front ends of the thills rest upon the transverse bolts J. The nuts K upon said
60 bolts may be tightened, so as to compress the packing and take up any wear upon the ends of the pins or studs M, thus absolutely preventing rattling. To remove the thills the above operation is simply reversed.
65

It will be observed that there are no bolts or other parts to be removed and replaced. Hence the thills may be adjusted or removed in a moment's time.

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

1. The coupling-box C, having vertical slot E and transverse bolt J, serving to tighten said box and to support the thill-iron, which is
75 mounted by separate pivots, substantially as set forth.

2. The coupling-box C, having vertical slot E, recesses F G I, packing-block H, and bolt J, in combination with the thill-iron L, having
80 hook M and transverse pin N, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

HENRY T. BIRCHARD.

Witnesses:

J. H. WILLIAMS,
W. T. HENSTACK.