

(No Model.)

J. E. BEAN & A. G. KOOKER.
Thill Coupling.

No. 230,394.

Patented July 27, 1880.

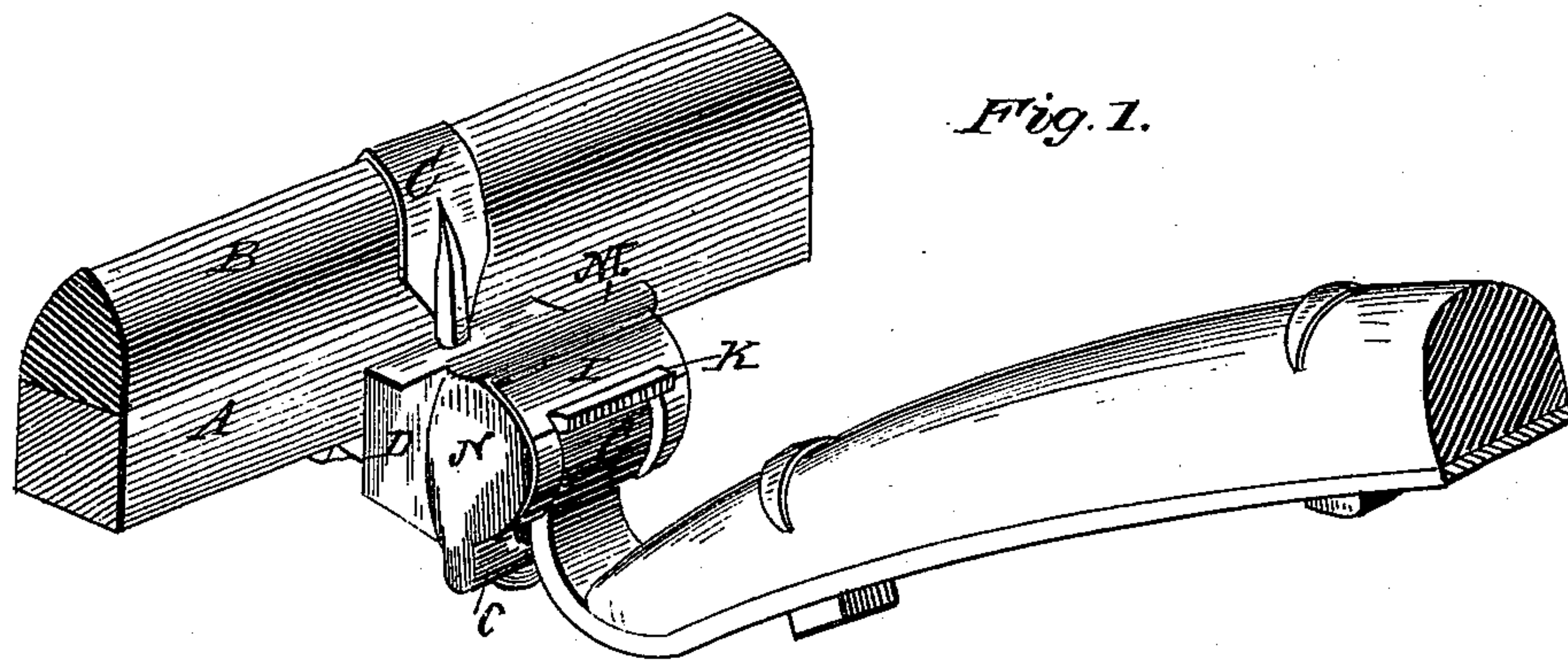


Fig. 1.

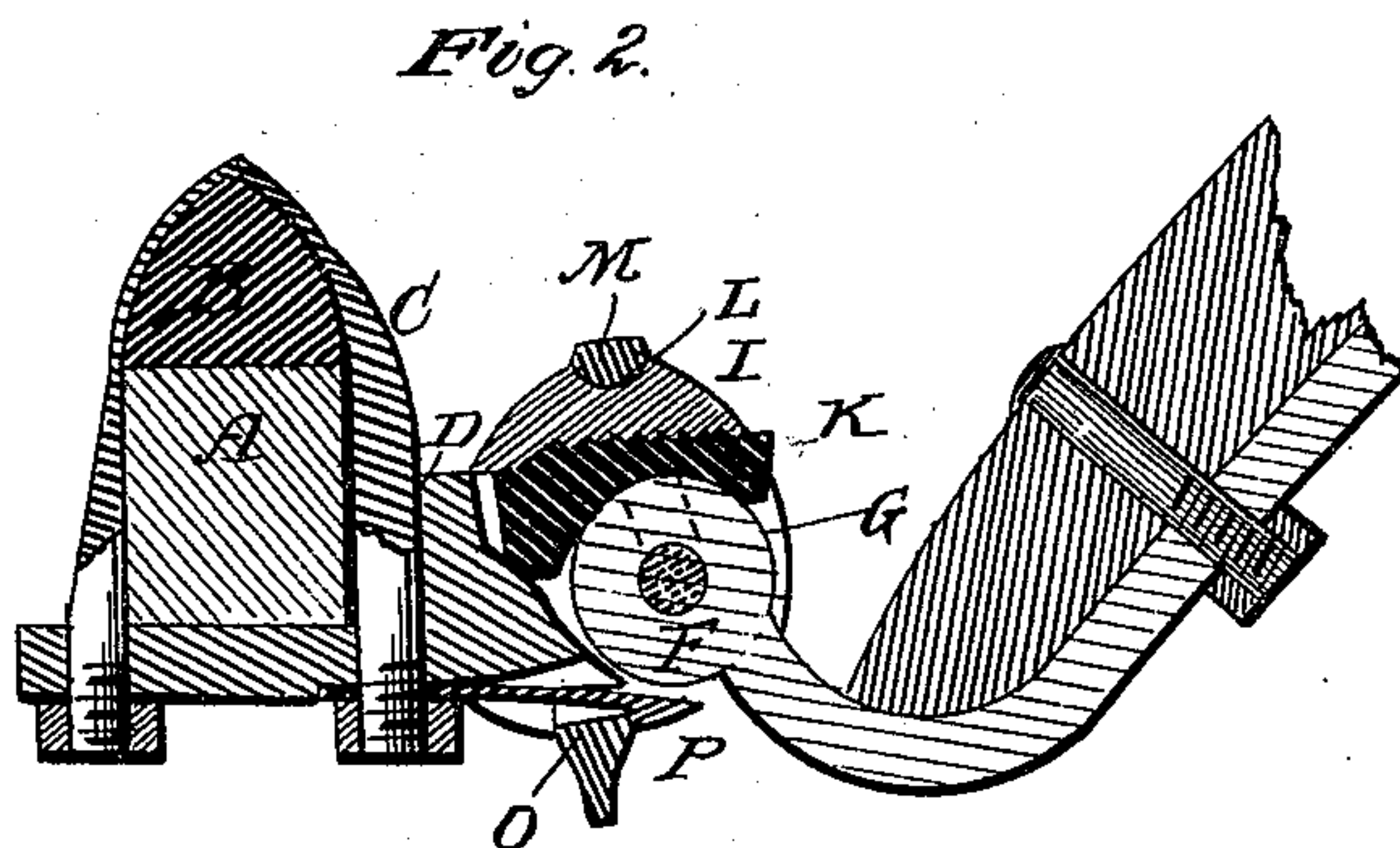


Fig. 2.

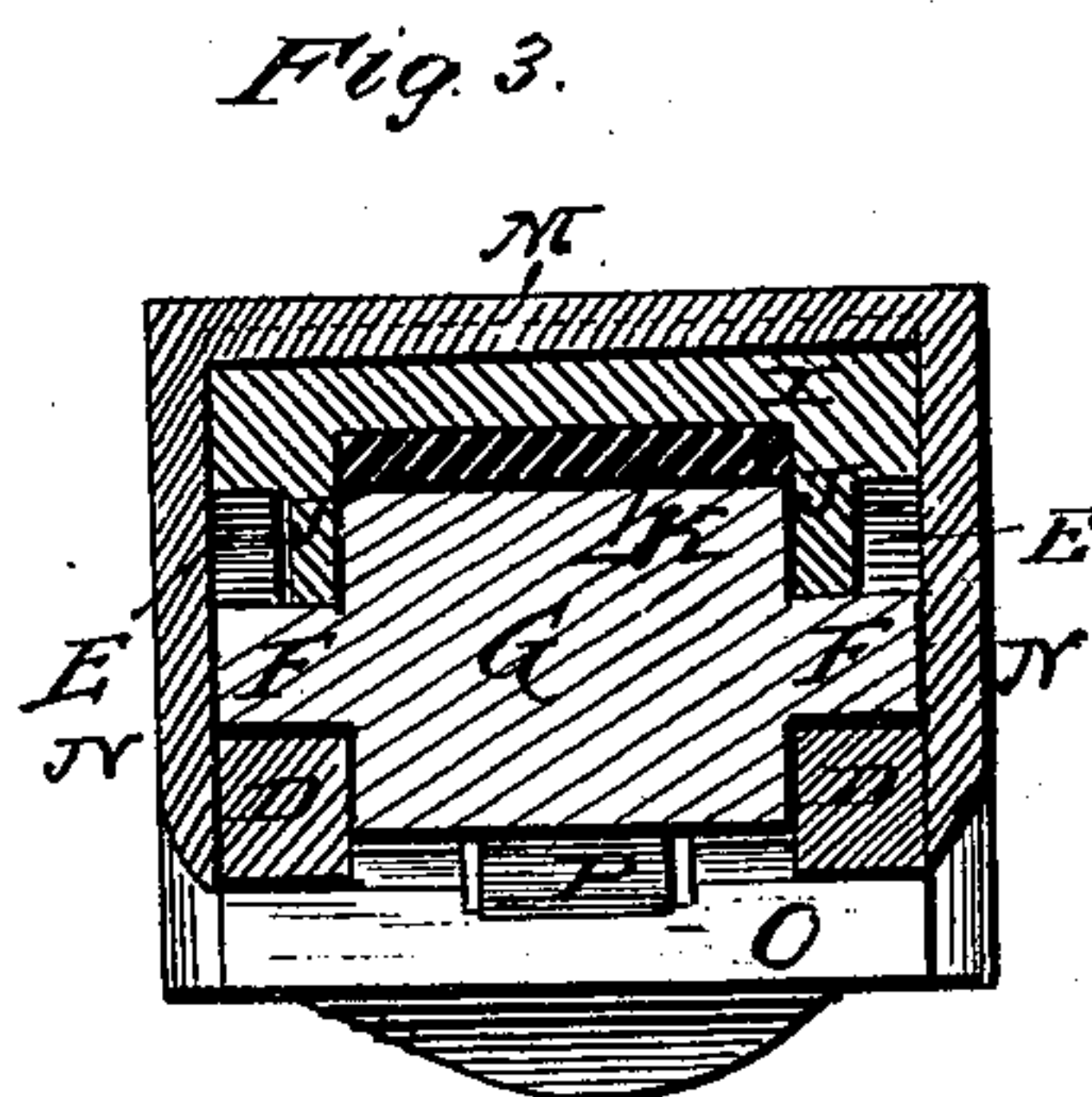


Fig. 3.

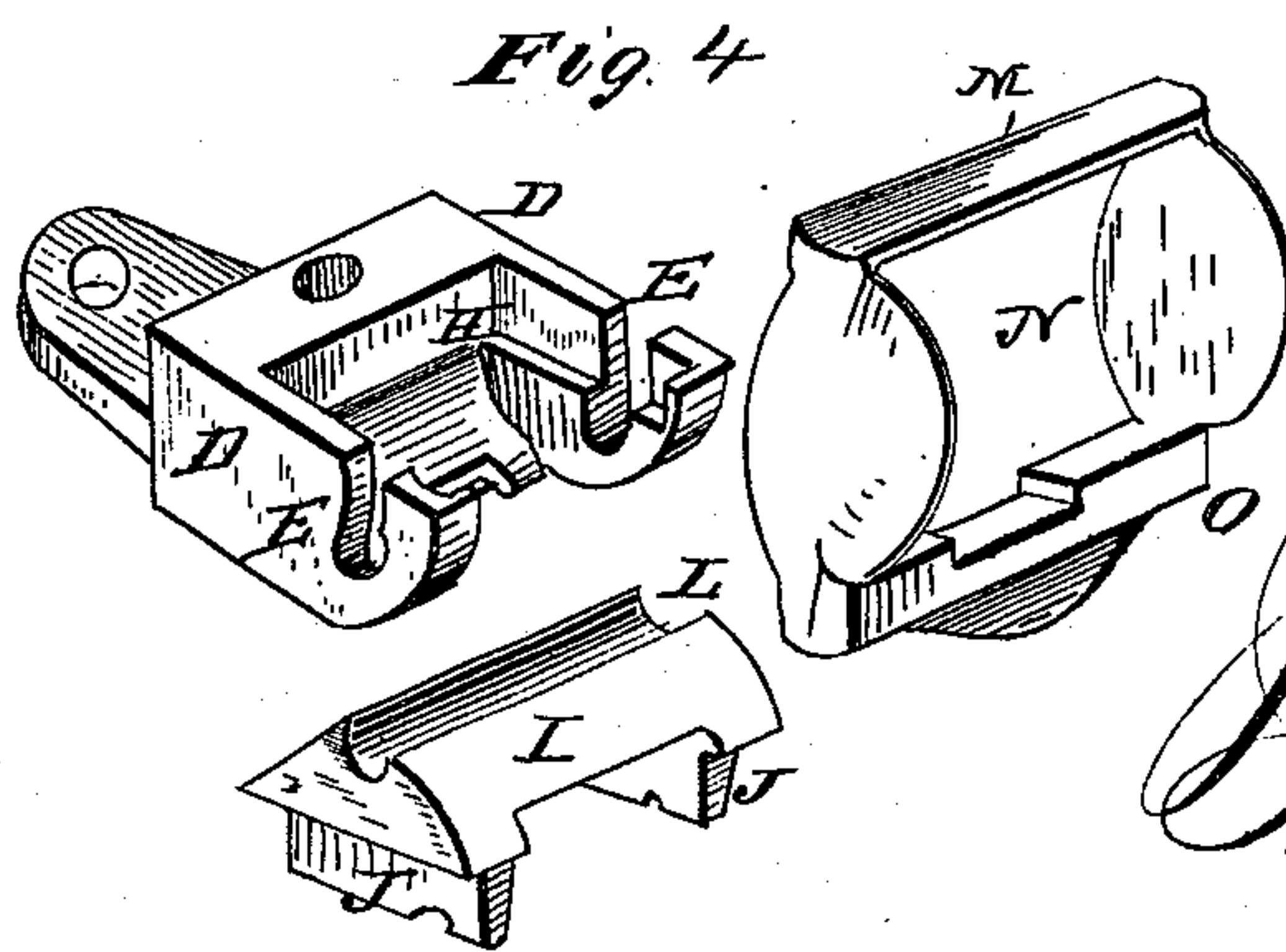


Fig. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN E. BEAN AND ALFRED G. KOOKER, OF PORT KENNEDY, PA.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 230,394, dated July 27, 1880.

Application filed June 19, 1880. (No model.)

To all whom it may concern :

Be it known that we, JOHN EDWARD BEAN and ALFRED G. KOOKER, of Port Kennedy, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in Thill-Couplings; and we 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.

Figure 1 is a perspective view. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a vertical cross-section; and Fig. 4 is a detail view, showing the various parts composing our improved thill-coupling detached from each other.

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

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

In the drawings hereto annexed, A represents the axle, B the axle-tree, and C the shackle-clip, which is provided with forwardly-projecting arms D D, having notches E, which form bearings for the studs F F upon the sides of the head G of the thill-iron. The inner sides of the arms D are provided with recesses H, to receive and accommodate a cap, I, the under side of which is provided with side pieces, J, forming a box, to accommodate a rubber cushion, K, adapted to press against the head of the thill-iron to prevent rattling.

The upper side of cap I is provided with a transverse groove or recess, L, to receive the upper cross-piece, M, of a frame, N, the sides of which fit upon the outer sides of the arms D D of the shackle, while the lower cross-piece, O, is adapted to engage a spring-latch, P, secured upon the under side of the clip.

The spring-latch P, it will be seen, has a tendency to force the frame N, and with it the cap I, in a downward direction, thus causing the rubber cushion to be held down tightly against the head of the thill-iron, rattling of which is thus prevented.

Our improved thill-coupling is simple, durable, easily manipulated, and permits the shafts to be readily and quickly detached or replaced.

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

The herein-described improved thill-coupling consisting of the shackle C, having spring-latch P and arms D D, provided with notches E and recesses H, the cap I, having recess L, rubber cushion K, thill-head G, having studs F F, and the frame N, all combined and operating substantially as and for the purpose herein shown and specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

JOHN EDWARD BEAN.
ALFRED G. KOOKER.

Witnesses:

HORACE WEIKEL,
AARON WEIKEL.