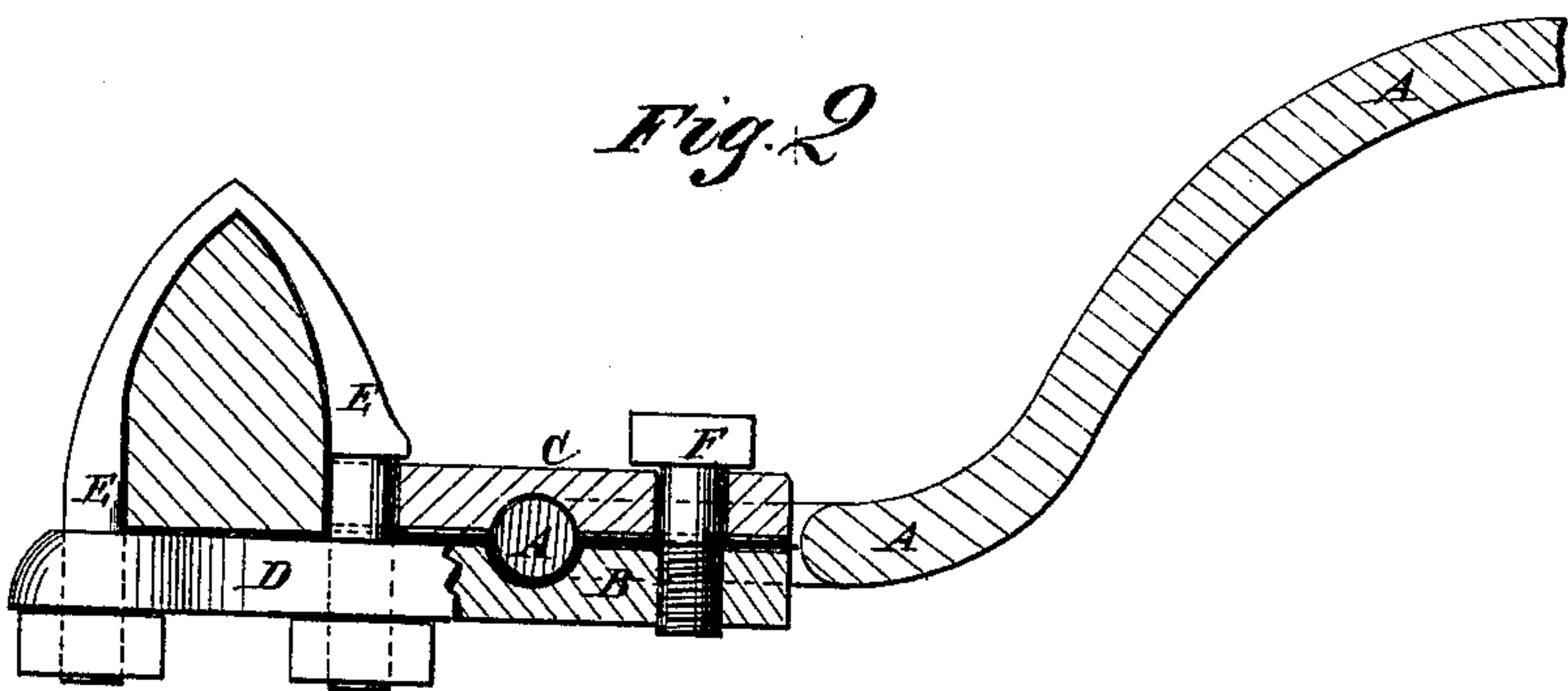
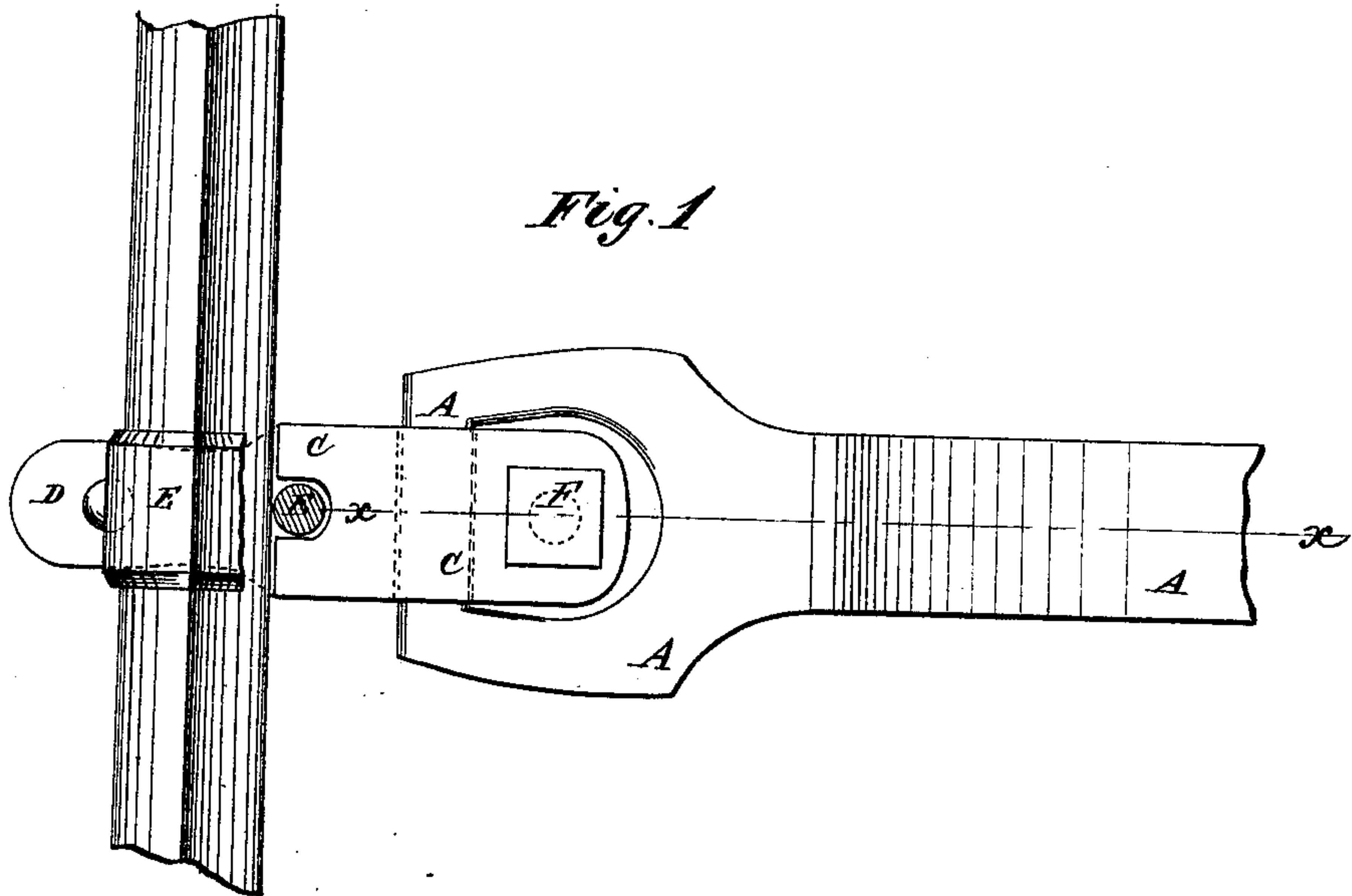


D. R. SILVER.
Thill-Coupling.

No. 196,601

Patented Oct. 30, 1877.



WITNESSES:

A. W. Almgquist
J. H. Scarborough.

INVENTOR:

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BY

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UNITED STATES PATENT OFFICE.

DAVID R. SILVER, OF SIDNEY, OHIO.

IMPROVEMENT IN THILL-COUPPLINGS.

Specification forming part of Letters Patent No. **196,601**, dated October 30, 1877; application filed August 24, 1877.

To all whom it may concern:

Be it known that I, DAVID R. SILVER, of Sidney, in the county of Shelby and State of Ohio, have invented a new and useful Improvement in Thill-Couplings, of which the following is a specification:

Figure 1 is a top view of my improved thill-coupling, part of the clip being broken away to show the construction. Fig. 2 is a side view of the same, partly in section, through the line *x x*, Fig. 1, to show the construction.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved thill-coupling which shall be so constructed as to have the least possible amount of wear, to enable the wear to be readily taken up, and to prevent rattling, which shall be simple in construction and convenient in use, enabling the thills to be readily and quickly attached and detached, and which shall not be liable to become accidentally detached.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

A is the thill-iron, the rear end of which is made wide, and has a semicircular hole or eye formed in it, with the end bar rounded off to form the pivot. The bar or pivot of the thill-iron eye is placed in a hole formed by two half-round cross-grooves made in the adjacent faces of the bars B C. The lower bar B is the forward extension of the yoke D of the axle-clip E. The rear end of the upper bar C is notched to receive the forward arm of the clip

E, and fit beneath a shoulder formed upon said arm.

In the forward end of the bar C is formed a round hole, and in the forward end of the bar B is formed a screw-hole to receive the bolt F, which is made with a square head to enable it to be conveniently turned in and out with a wrench.

The eye of the thill-iron A is made large enough to enable it to receive the ends of the bars B C, and allow the thills to play up and down.

With this construction there will be the least possible amount of friction, and consequent wear, and the wear may be taken up by a washer of leather or other suitable material interposed between the bar of the thill-iron A and one of the bars B C, and kept in place by being clamped between the said bars B C.

With this construction the thills can be detached by simply removing one bolt F from each coupling.

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

The combination, with a grooved bar, C, held at one end by a detachable screw, of the yoke D, extended to form the part B, and the clip E, having a shoulder, under which the free end of part C is rigidly held, as shown and described.

DAVID ROBISON SILVER.

Witnesses:

L. C. BARKDALE,
S. J. HATFIELD.