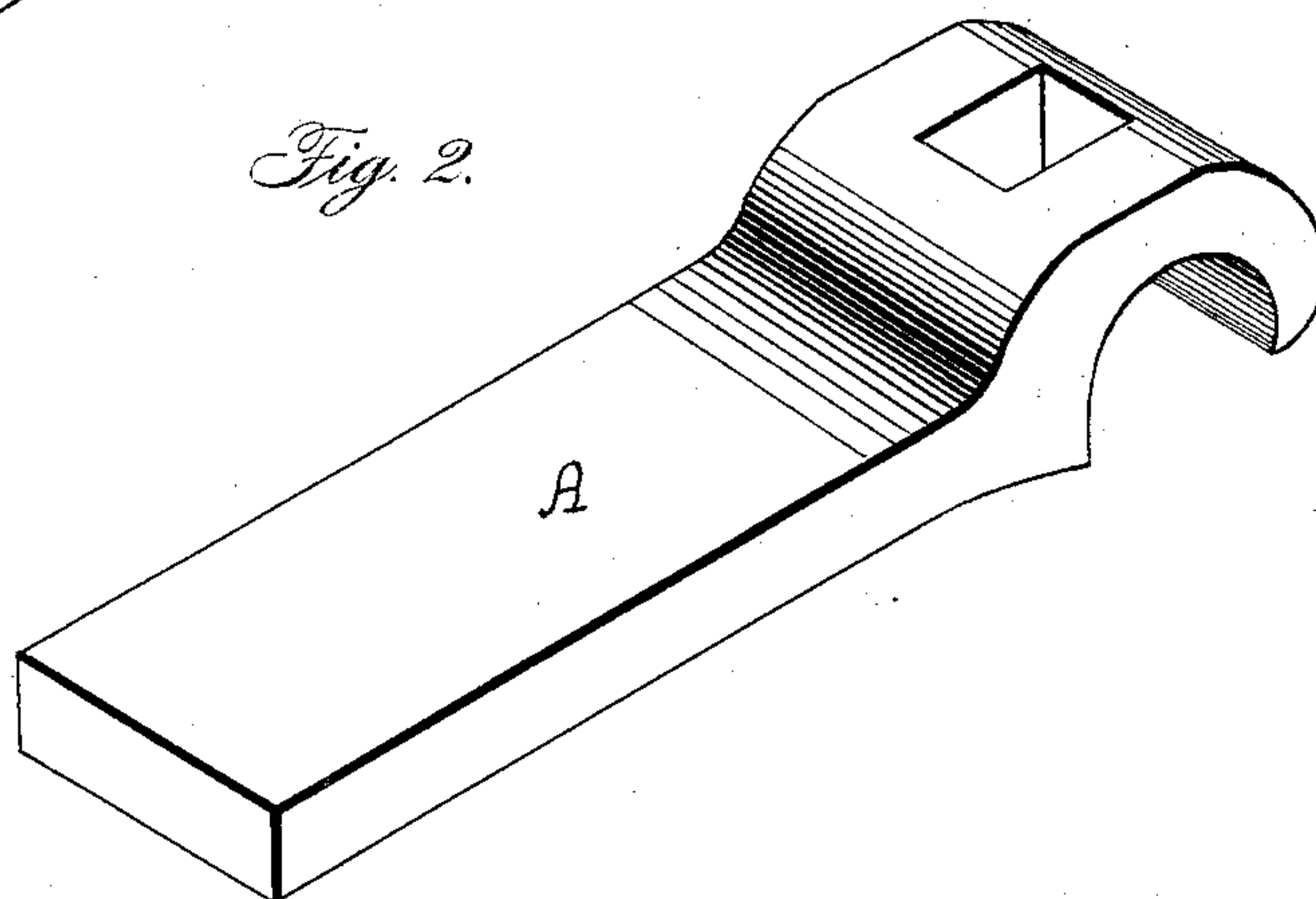
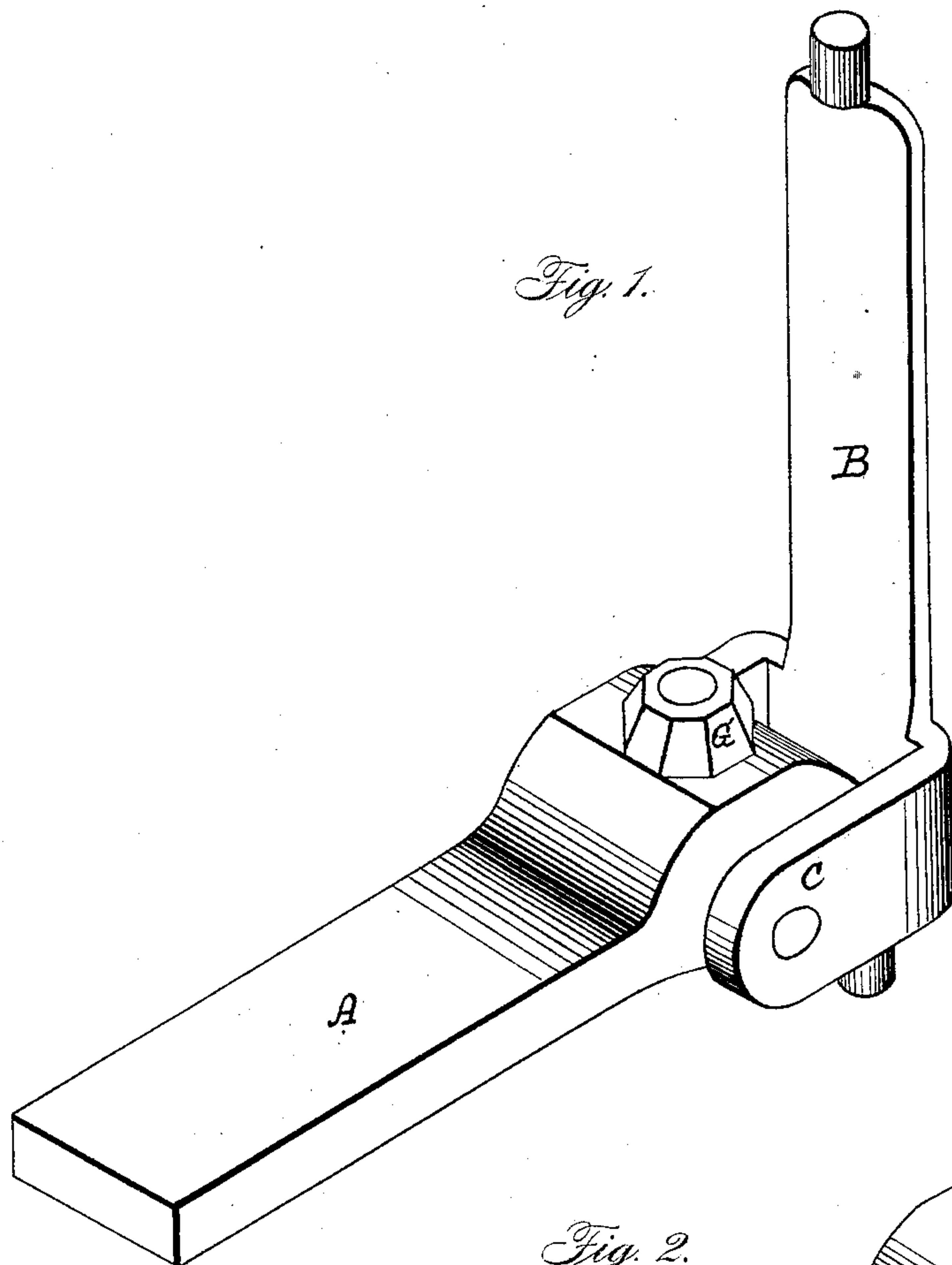


E. HOXIE.

Thill-Coupling.

No. 63,252.

Patented Mar. 26, 1867



Witnesses:

*Jefferson Deary*  
*A. B. Abbott*

Inventor:

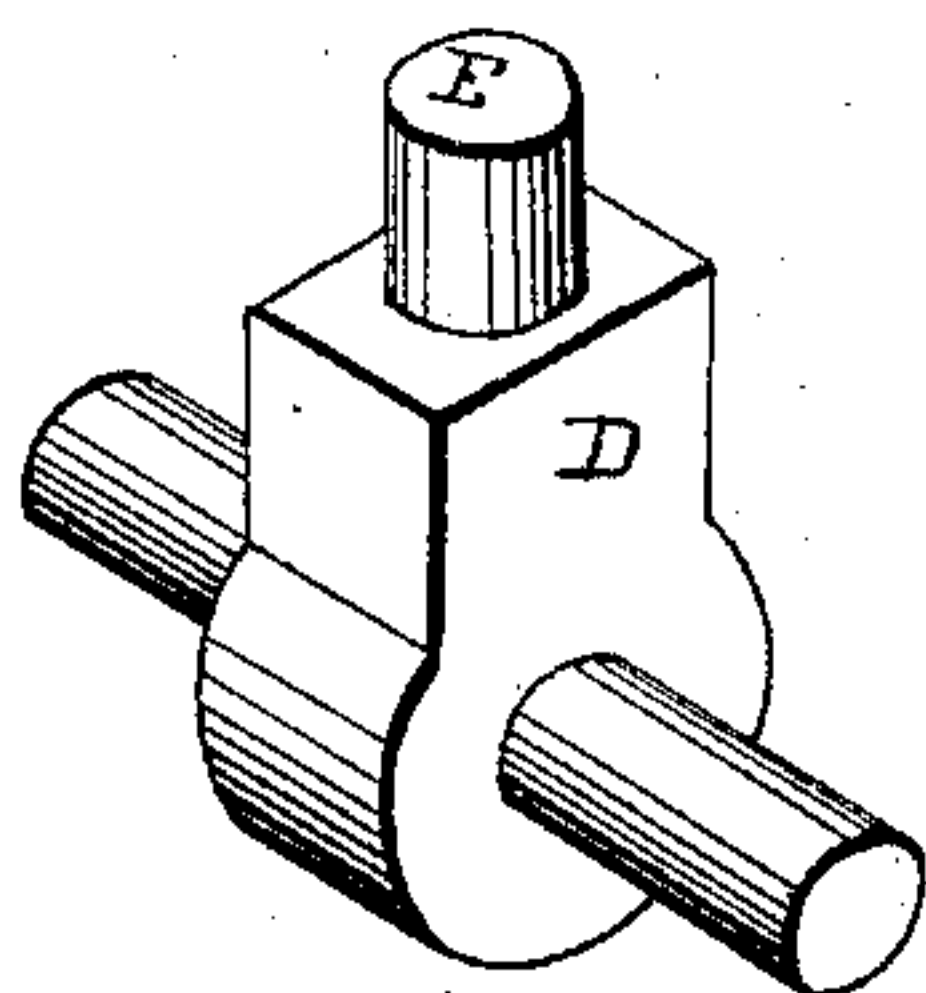
*Elias Hoxie*

E. HOXIE.  
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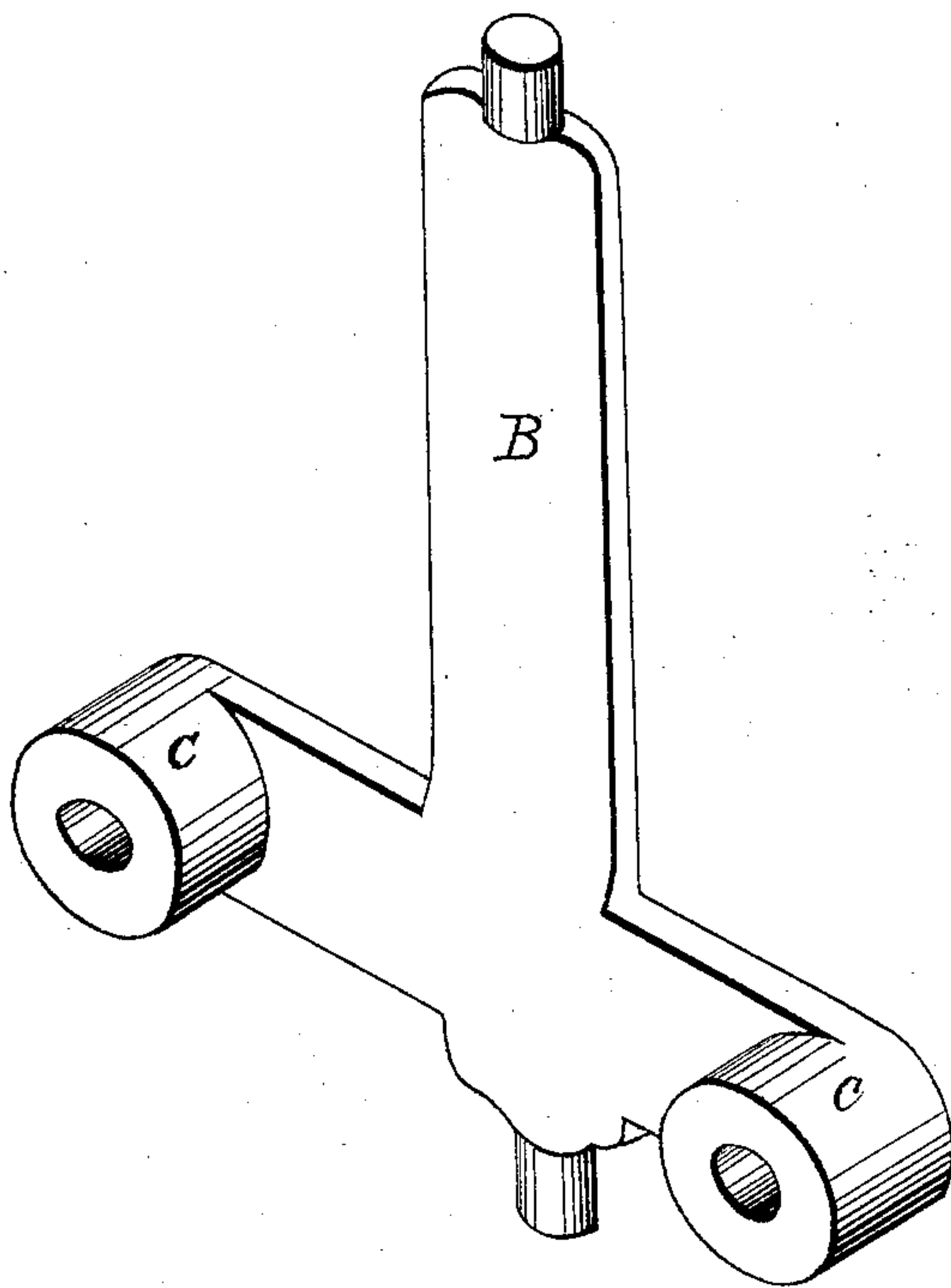
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*Fig. 3.*



*Fig. 4.*



Witnesses:

*Jefferson Dean*  
*A. B. Abbott*

Inventor:

*Elias Hoxie*

# UNITED STATES PATENT OFFICE.

ELIAS HOXIE, OF MONTEZUMA, NEW YORK.

## IMPROVEMENT IN CARRIAGE-CLIP.

Specification forming part of Letters Patent No. 63,252, dated March 26, 1867.

*To whom it may concern:*

Be it known that I, ELIAS HOXIE, of the town of Montezuma, in Cayuga county, New York, have invented a new and Improved Mode of Constructing Wagon and Carriage Clips, or the joint which secures the thills to the axle-tree; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, and to the letters of reference marked thereon.

The object of this invention is to make a cheaper and much more durable article for this purpose than any heretofore in use. Many of the clips or joints now in use are very costly, and withal very liable to get out of order in the using.

Another very important object has been attained in our invention, and that is the ease with which the thill or tongue can be separated from the axle-tree or put in connection therewith, nothing being required to accomplish this object than to unscrew or screw on two small nuts, and the work is done.

Now, in order that others may know how to make and use my invention, I will proceed to describe its construction and mode of operation.

Figure 1 shows the complete joint, in which A is the thill-iron, B is the axle-tree strap, and C the joint.

Fig. 2 shows the thill-iron alone. To this the thill or pole, as the case may be, is to be attached.

Fig. 3 shows the stand D, the rounded portion E, on which is to be cut a screw-thread for a set-nut, and also the pin F, around which the joint moves. These three parts are made of one piece of metal, wrought into the shape represented in the drawings.

Fig. 4 shows the axle-strap B, with the two external portions of the joints C C before they are closed onto the pins F projecting from both sides of the stand D, Fig. 3.

This operation is done while the axle-tree strap and joints are hot. After this the thill-iron A, Fig. 2, is placed onto the upper oblong square portion of the stand D, and the set-nut G screwed onto the round portion thereof, and the joint is complete, as represented in Fig. 1. The several parts being well fitted to each other, the set-nut will hold all firmly in contact, and entirely precludes all noise or rattle therefrom.

Having above described the construction and mode of operating my invention, what I claim as new, and wish to secure by Letters Patent, is—

1. The joint, when formed by bending the two external joint-pieces C C onto the solid stand D, as above set forth.

2. In combination with the above, I claim the thill-iron A, when used as and for the purpose above described.

ELIAS HOXIE.

Witnesses:

A. BABBETT,  
JEFFERSON DEAN.