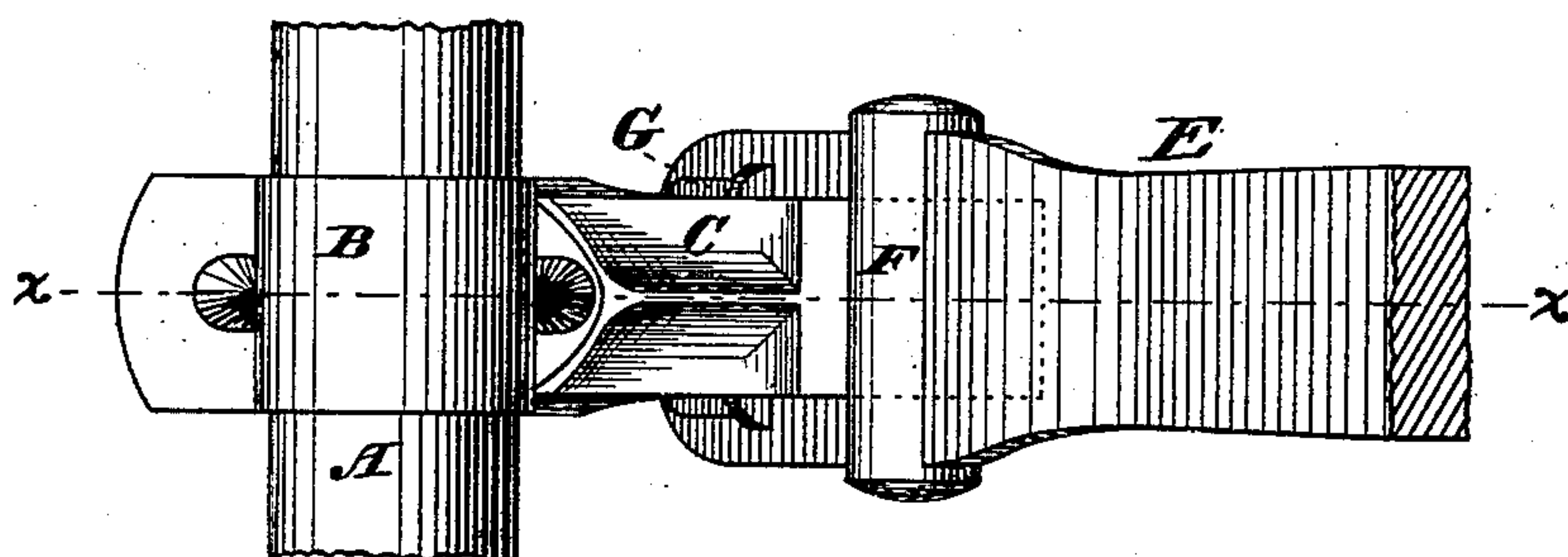


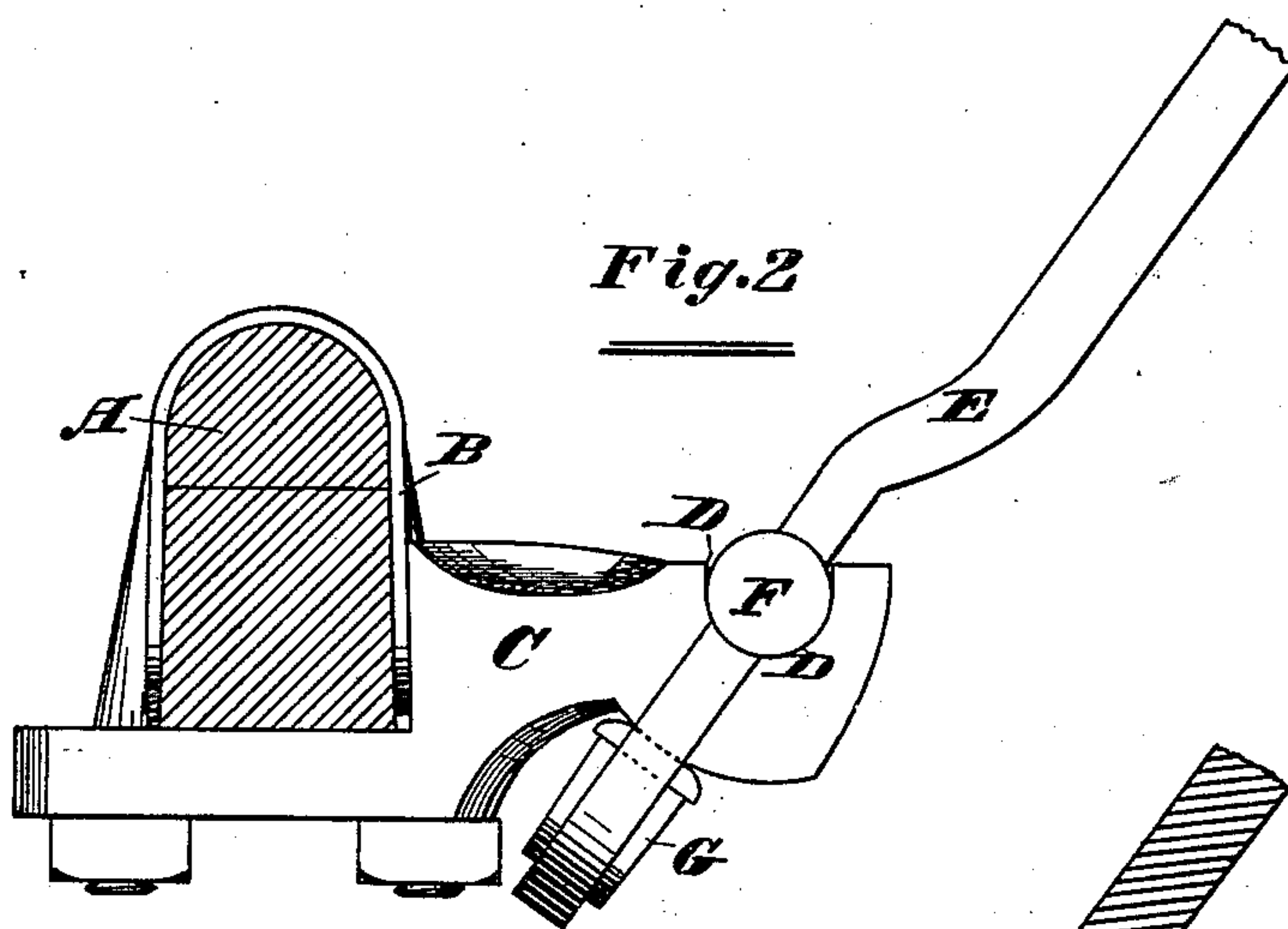
J. T. HARDS.  
Thill-Coupling.

No. 207,415.

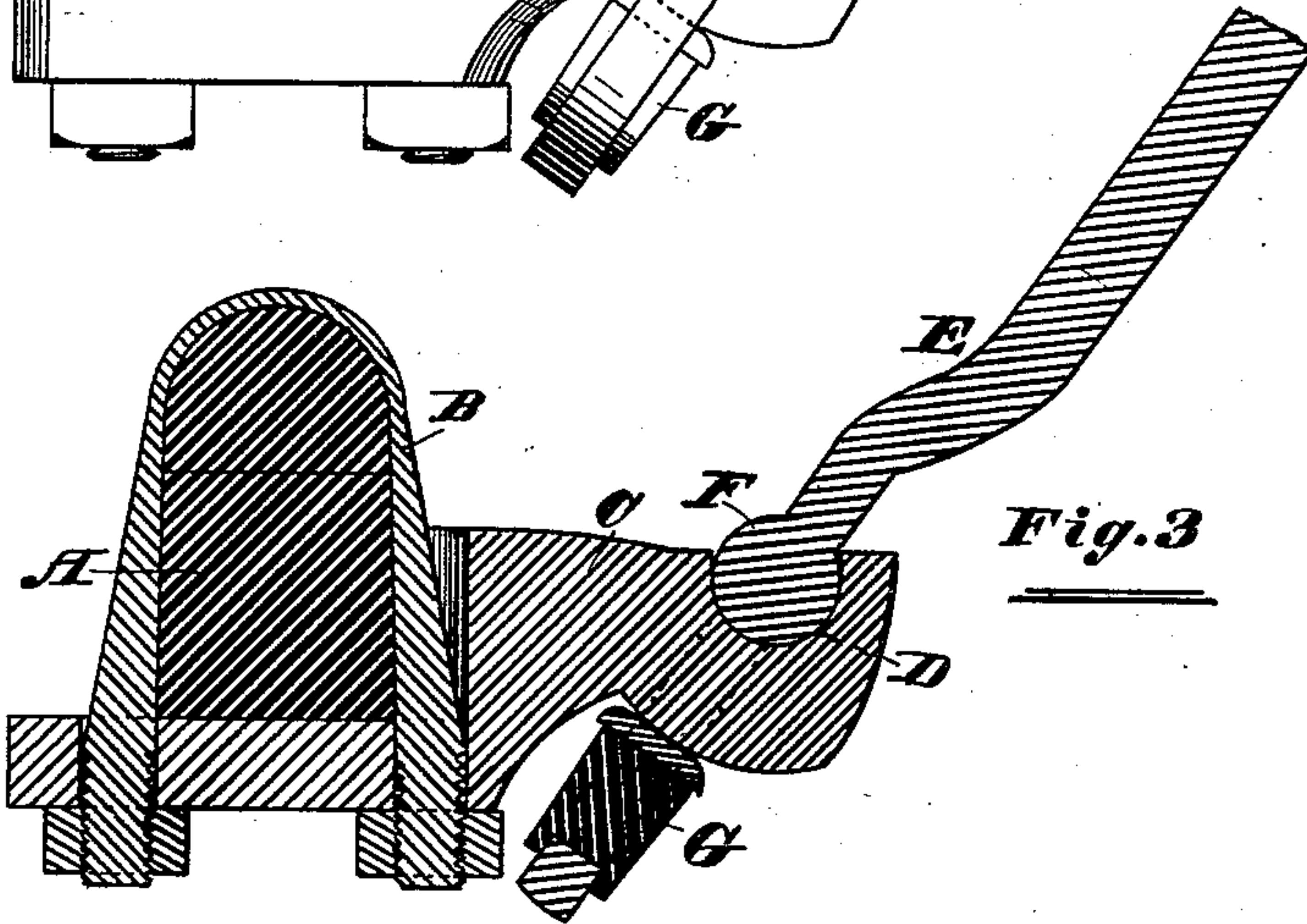
Patented Aug. 27, 1878.



*Fig. 1*



*Fig. 2*



*Fig. 3*

*Attest:*  
*W. J. Baker*  
*S. C. Mergitt*

**INVENTOR:**  
*James T. Hards*  
*By L. B. Crupland & Co*  
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# UNITED STATES PATENT OFFICE.

JAMES T. HARDS, OF GENEVA, ILLINOIS.

## IMPROVEMENT IN THILL-COUPPLINGS.

Specification forming part of Letters Patent No. **207,415**, dated August 27, 1878; application filed March 9, 1878.

*To all whom it may concern:*

Be it known that I, JAMES T. HARDS, of Geneva, in the county of Kane and State of Illinois, have made certain new and useful Improvements in Thill-Couplings, of which I hereby declare the following to be a full, clear, and exact description, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing, in which—

Figure 1 is a top view; Fig. 2, a side elevation, and Fig. 3 a central section.

The object of this invention is an improved device, whereby the thills can be easily and readily coupled or uncoupled from a carriage or other vehicle, and a pole or tongue as easily substituted when the thills are removed. It is very convenient in use and always reliable in operation.

In the drawing, A represents a section of the axle; B, the clip. C represents a lateral projecting jaw, provided with the open semicircular bearing D, the opposite end of said jaw being attached to the clip B and the under side of the axle A by means of the bolts forming a part of said clip.

E represents the thill-iron, having the pin F formed solid thereon, the lower end of the thill-iron having a square opening, and is made

to slip down over the jaw C and bring the pin F into the bearing D. In the lower side of this square opening is placed the rubber cushion G. Between this elastic cushion and the under side of the jaw C is placed a thin piece of metal to prevent the rubber from wearing too rapidly, the object of this rubber block being to keep these parts close to their bearings and prevent rattling.

The shafts can only be uncoupled from the vehicle when they are raised to nearly a vertical position. Thus it will be seen that there is no danger or possibility of the shafts becoming detached while in use.

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

In a thill-coupling, the laterally-projecting jaw C, having the open semicircular bearing D, in combination with the thill-iron E, constructed with pin F integral therewith, and a rectangular opening to encompass the jaw C and to receive and sustain the rubber cushion G under said thill-iron, the whole constructed and operating in the manner set forth, and for the purpose specified.

JAMES T. HARDS.

Witnesses:

R. O. DUNNING,  
V. RATHKNECHT.