

(No Model.)

I. G. BOWER.  
THILL COUPLING.

No. 258,700.

Patented May 30, 1882.

Fig. 1.

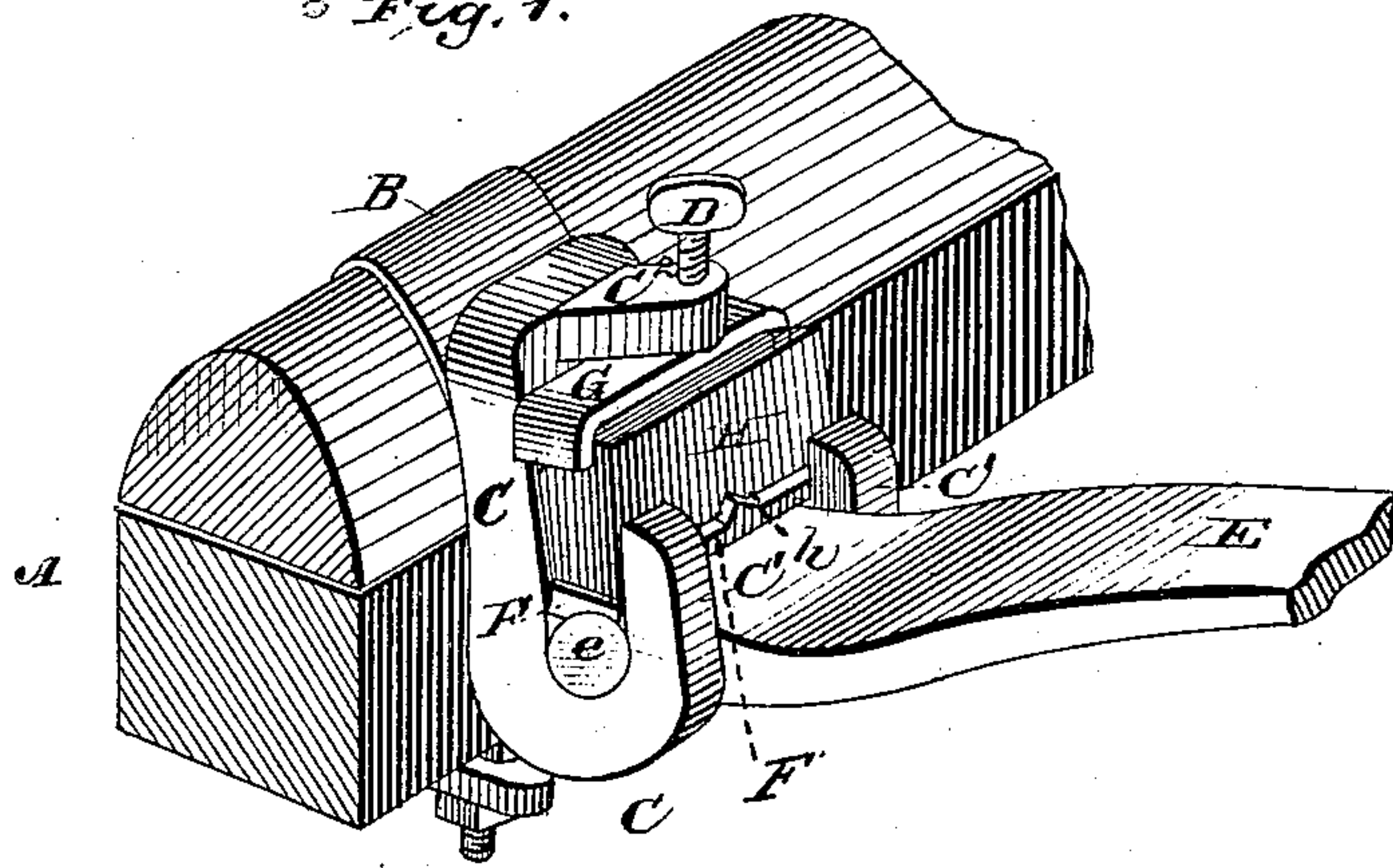


Fig. 2.

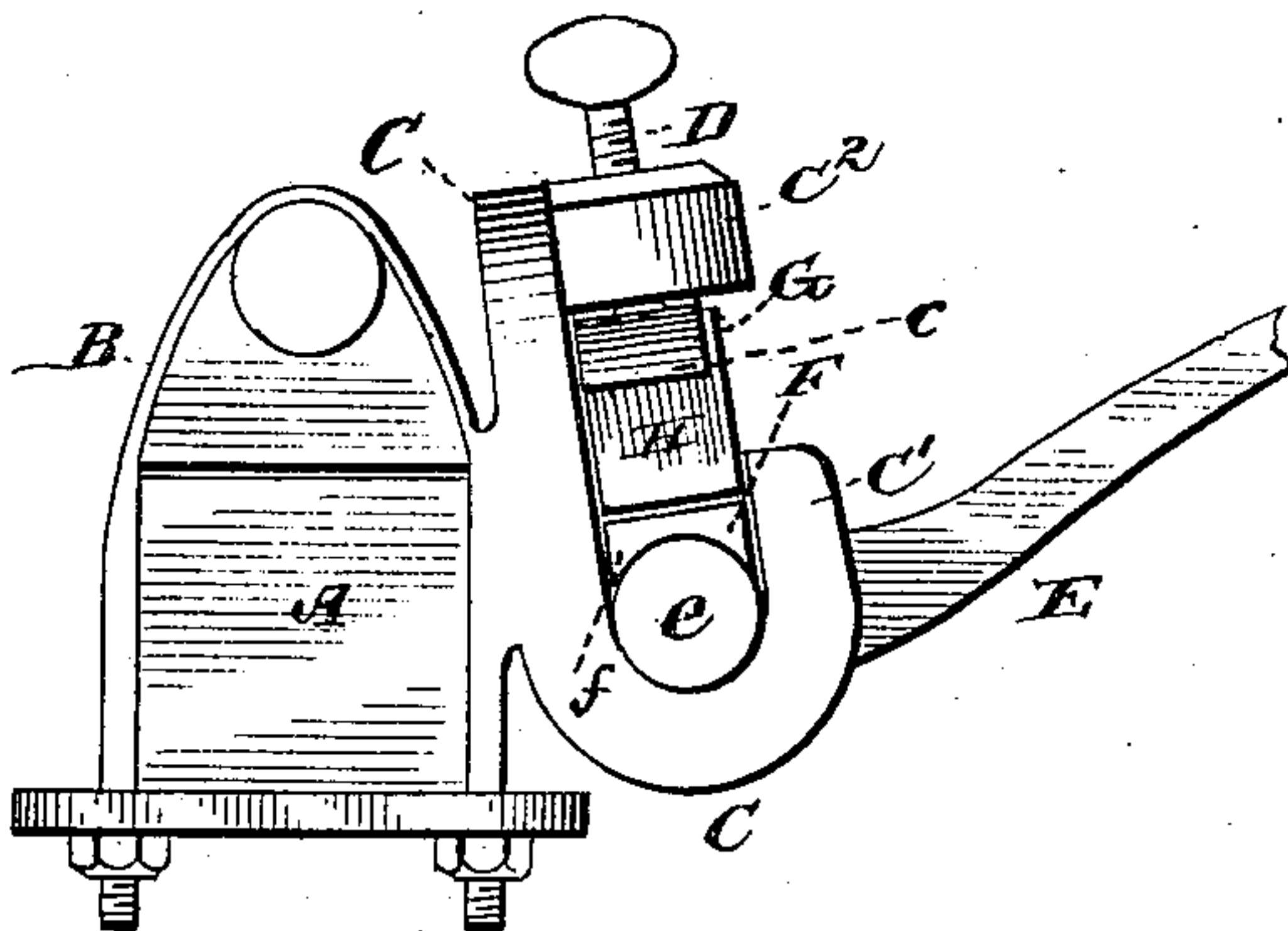


Fig. 3.

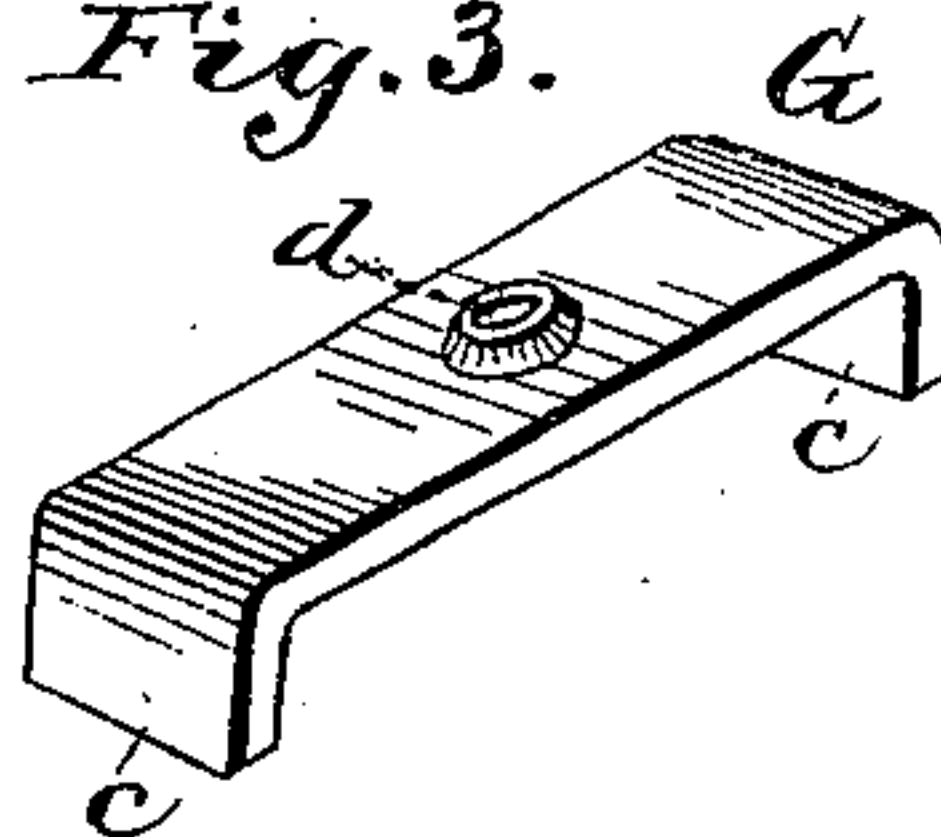


Fig. 4.

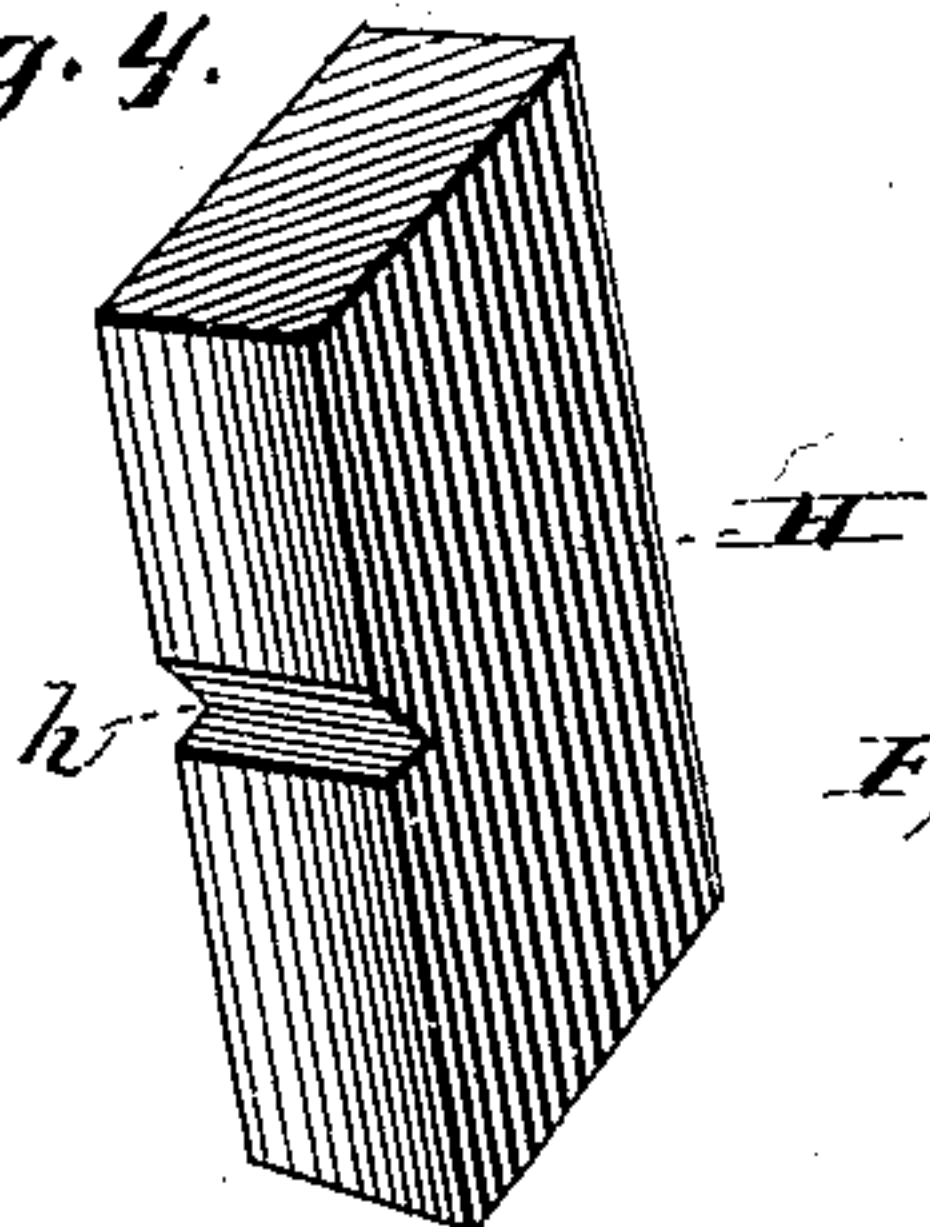


Fig. 5.

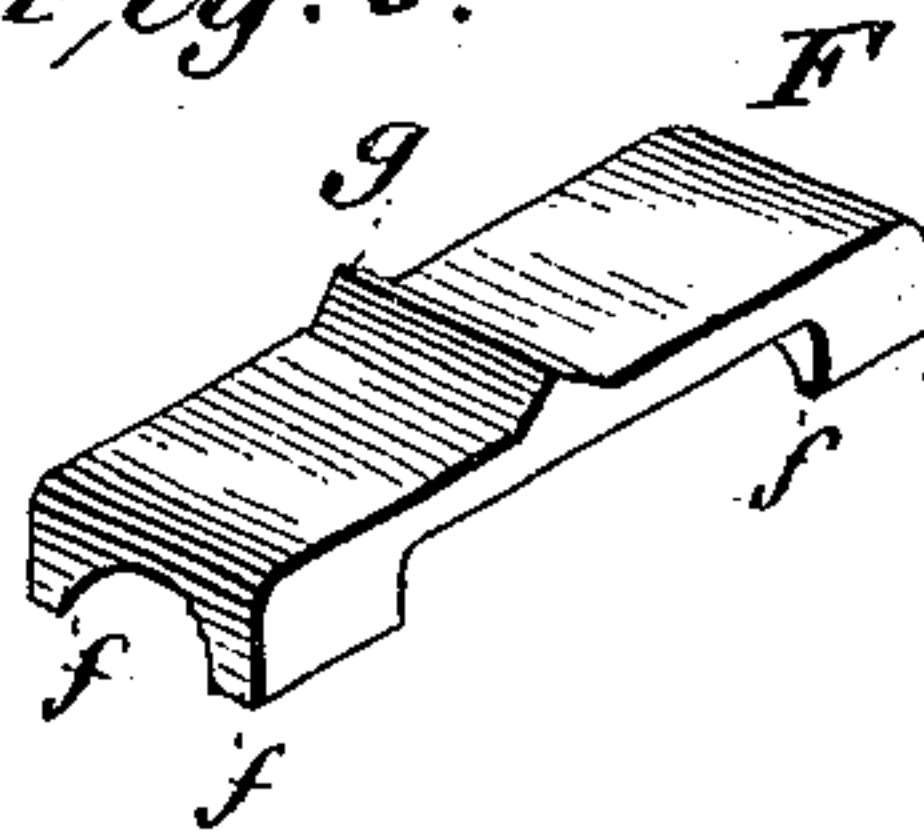
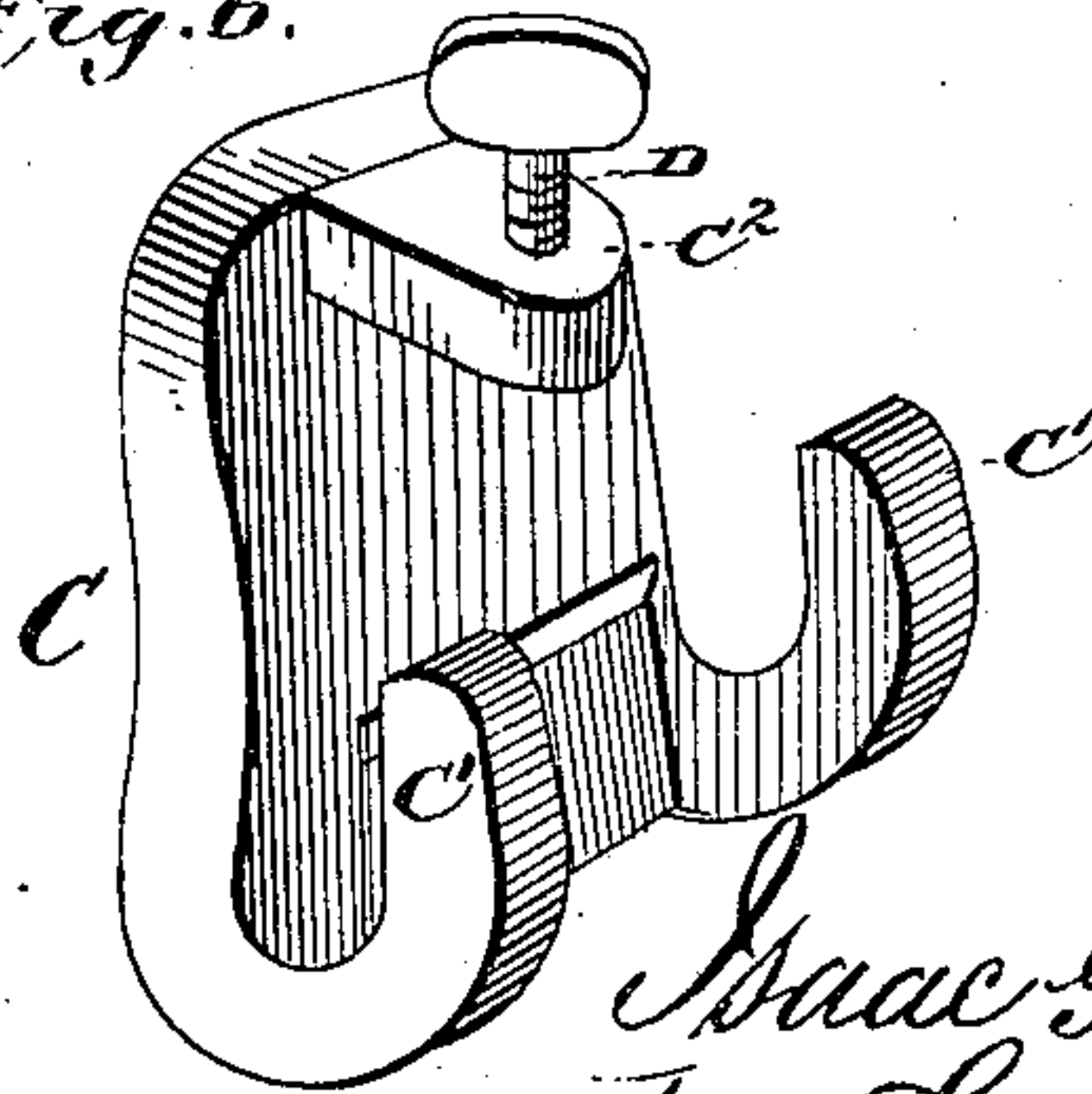


Fig. 6.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

ISAAC G. BOWER, OF FREMONT, OHIO, ASSIGNOR OF ONE-HALF TO BYRON  
R. DUDROW, OF SAME PLACE

## THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 258,700, dated May 30, 1882.

Application filed March 23, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC G. BOWER, of Fremont, in the county of Sandusky and State of Ohio, have invented certain 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 the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved thill-coupling. Fig. 2 is a side elevation of the same. Figs. 3, 4 and 5 are detail views of its component parts detached, and Fig. 6 is a perspective view of the thill-plate or coupling-plate.

Similar letters of reference indicate corresponding parts in all the figures.

My invention contemplates certain improvements in the construction of thill-couplings, as hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings, A denotes the axle, and B the clip, which is made in one piece with the thill-coupling or coupling-iron C. The latter slants outwardly from the clip at its lower end, where it forms two hooks, C' C', while the top part has a projecting nut, C<sup>2</sup>, through which works the thumb-screw D.

E represents the thill-iron, which has a cross-head, e, that rests in the seat formed by the hooked arms C' of plate C. It is held in place by a plate, F, the ends of which have shoulders or projections ff, (see Fig. 5,) that are concaved on the under side to fit the arms of the cylindrical cross-head e. On the top of plate F is a transverse rib, g, which projects up into a recess or groove, h, of corresponding shape, made in the under side of a block, H, of rubber or other elastic material, which is clamped between the bottom plate, F, and a top plate, G. The latter (see Fig. 3) has two end flanges, c c, and a cup-shaped button or projection, d, which forms a seat for the lower end of the thumb-screw, D, the under side of the projecting nut C<sup>2</sup> being recessed to accommodate the button d.

The operation of my improved thill-coupling will readily be understood from the foregoing

description, taken in connection with the drawings. The elastic block H effectually prevents rattling of the thill-iron in its bearings, and is prevented from displacement laterally by the flanges c c of the top plate, G. Lateral displacement or motion of the bottom plate, F, is prevented by the rib g, which, as seen, fits into the transverse groove or recess h in block H. Thus the parts F, G, and H serve to hold one another fixedly in place, and by tightening down the thumb-screw D the elastic block H may be compressed to any desired extent, so as to compensate for wear of the bearing-plate F and cross head e, and also prevent all noise and rattling. If, however, the thumb-screw D should, from any cause, work out of its nut, block H would not become displaced, and the cross-head e of the thill would remain in its seat or bearings without danger of becoming uncoupled or detached.

I am aware that it is not new to provide the base-plate or bearing-plate of a thill-coupling with a projecting nut-piece adapted to receive a screw for tightening up the packing when required; but I am not aware that the several elements which constitute my improved thill-coupling have ever been used before in the combination and arrangement herein described. Hence,

I claim and desire to secure by Letters Patent of the United States—

In a thill-coupling, the combination of the coupling-iron C C' C<sup>2</sup>, constructed as described, and having the thumb-screw D, thill-iron E, having cross-head e, bearing-plate F, having concaved shoulders ff and transverse rib g, elastic block H, having transverse groove or recess h, and top plate, G, having end flanges, c c, and raised seat d, the whole constructed and combined to operate substantially in the manner, and for the purpose herein shown and described.

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

ISAAC G. BOWER.

Witnesses:

GILBERT E. HALL,  
GEORGE D. SHORT.