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J. C. RACINE.

Improvement in Thill Coupling.

No. 122,963.

Patented Jan. 23, 1872.

Fig. 1.

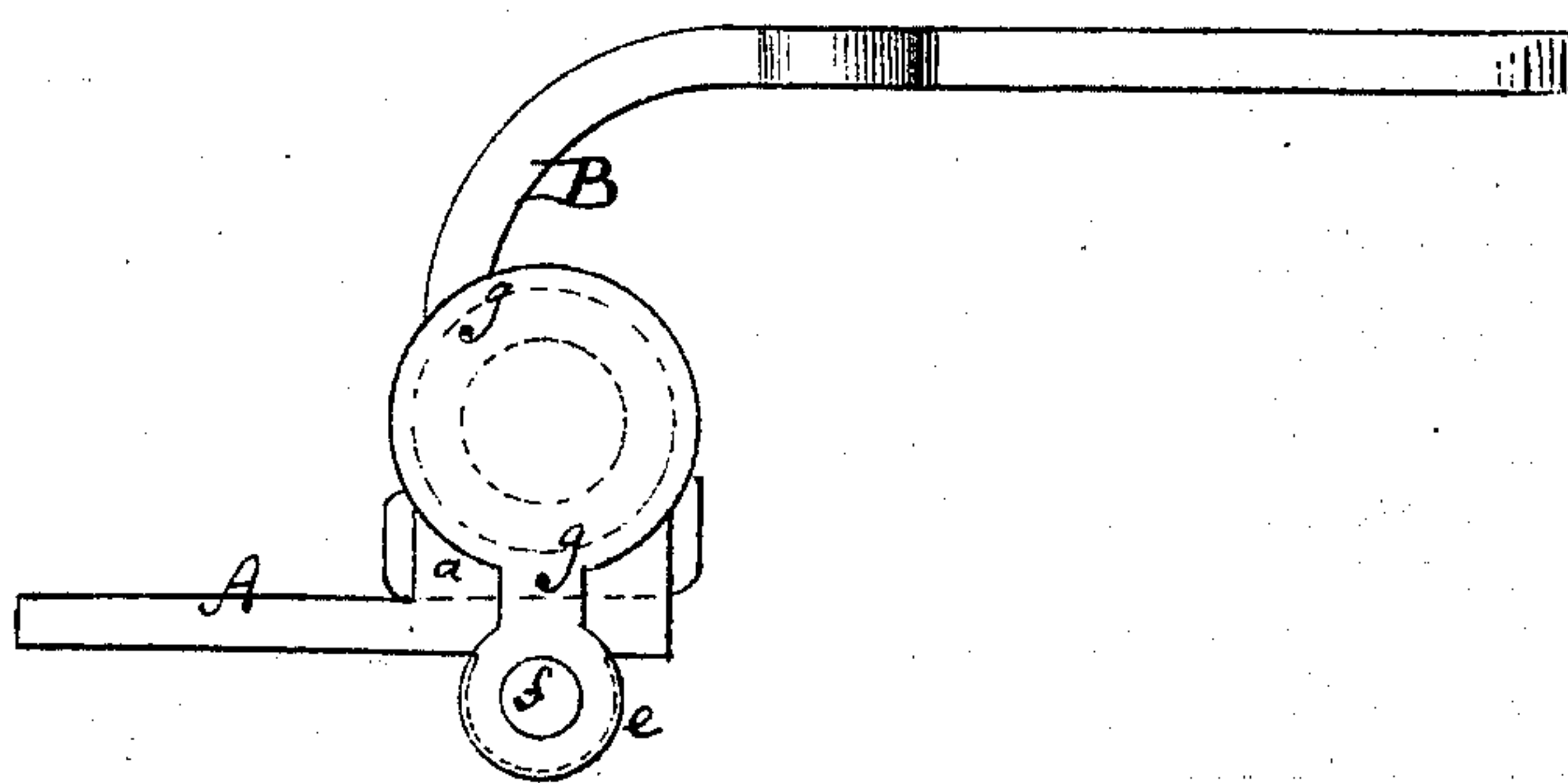


Fig. 2.

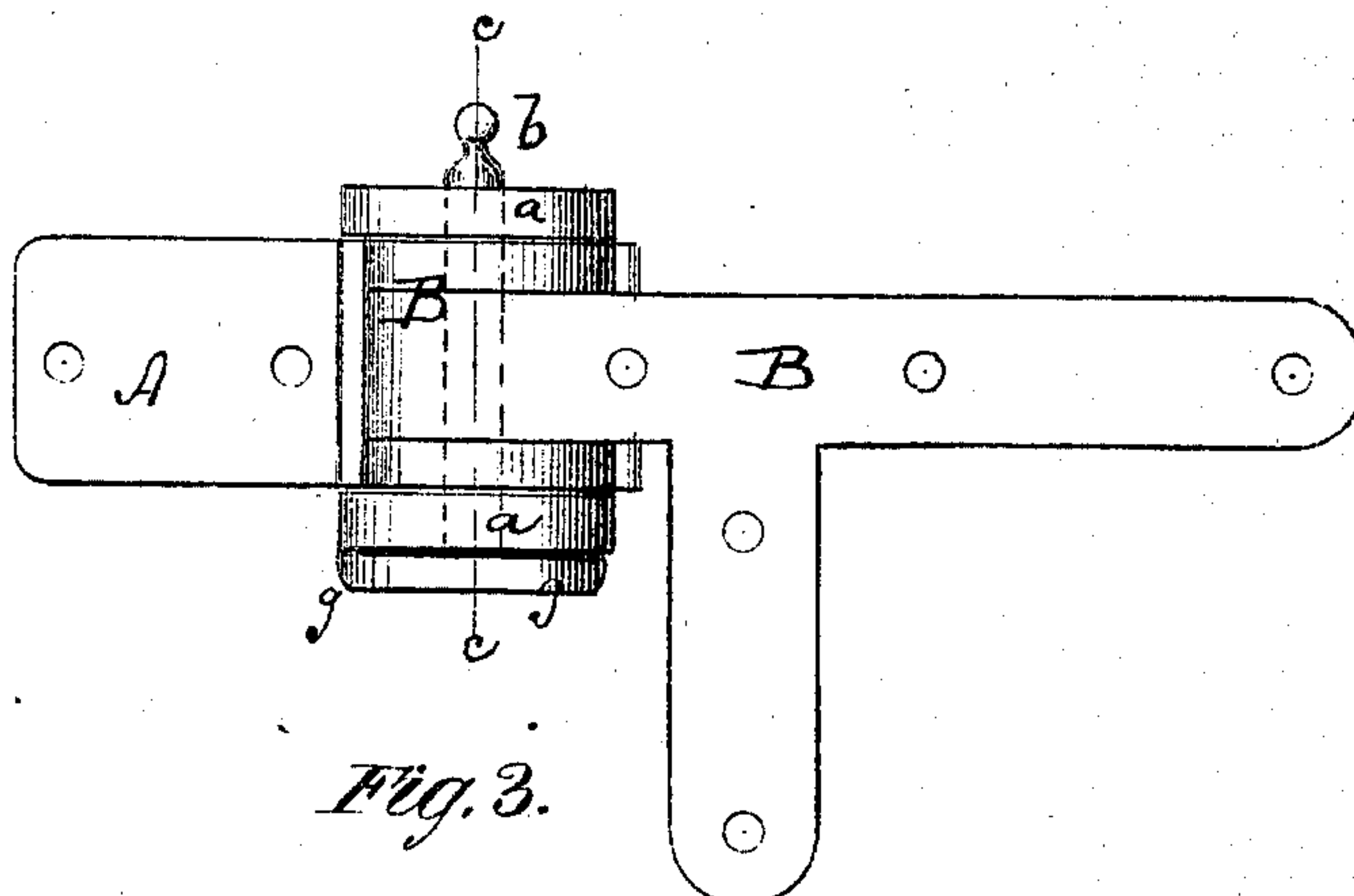
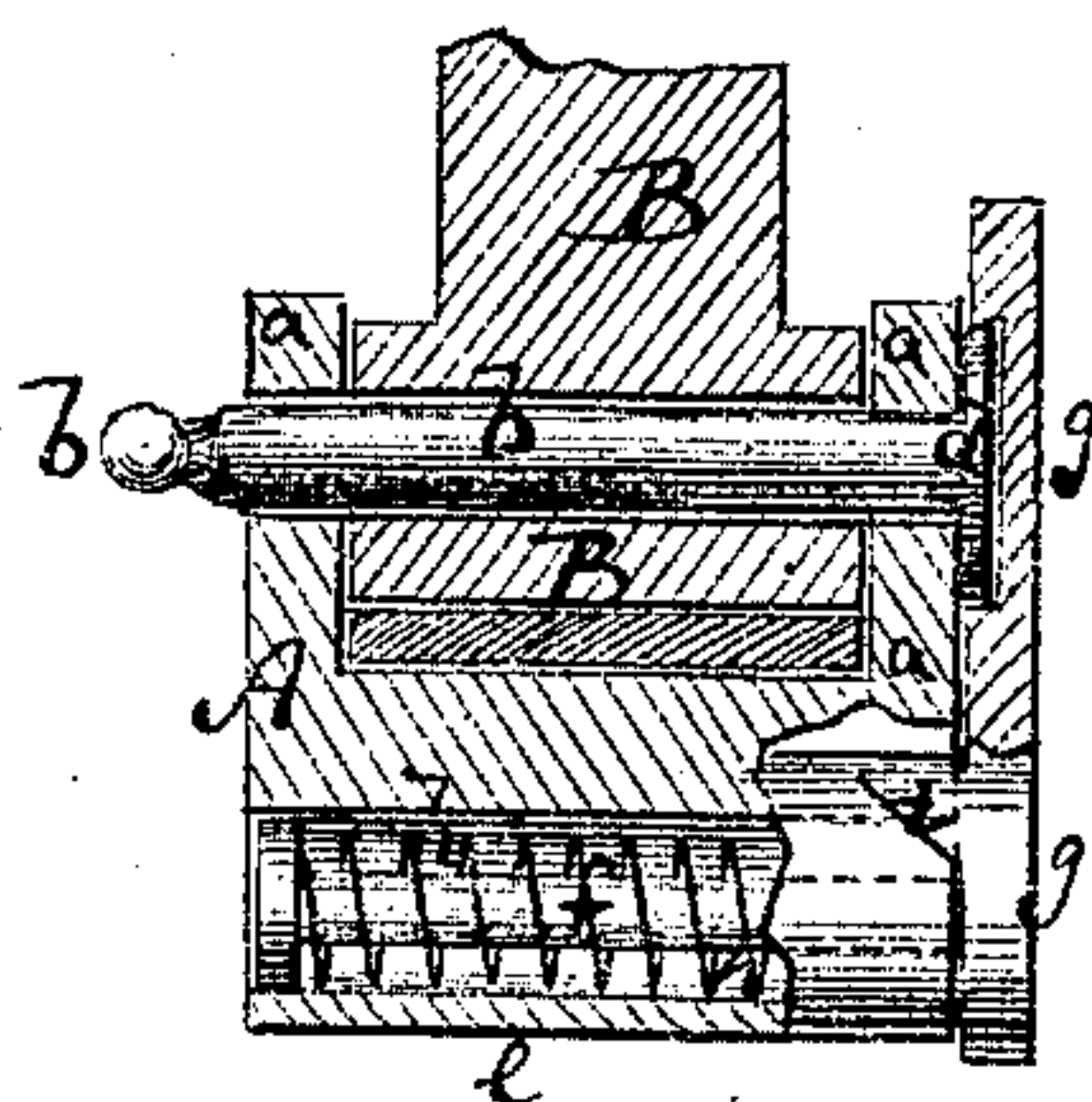


Fig. 3.



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UNITED STATES PATENT OFFICE.

J. CUGNIER RACINE, OF APPLETON, WISCONSIN, ASSIGNOR TO HIMSELF AND
M. H. LYON, OF SAME PLACE.

IMPROVEMENT IN THILL-COUPPLINGS.

Specification forming part of Letters Patent No. 122,963, dated January 23, 1872.

Specification describing a new and Improved Thill and Shaft Coupling, invented by J. CUGNIER RACINE, of Appleton, in the county of Outagamie and State of Wisconsin.

Figure 1 represents a side view of my improved thill-coupling. Fig. 2 is a top view of the same. Fig. 3 is a transverse section of the same on the line *c c*, Fig. 2.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide means for properly securing the bolts with which the shafts, thills, or poles of carriages, wagons, buggies, or other vehicles are held in place. Usually the coupling-bolts are secured by nuts, pieces of leather, or similar devices. My invention consists in holding the bolt by a pivoted plate, which is drawn against the bolt by a spring, and has projecting lugs or spurs at the sides, whereby it is prevented from swinging out of place, as hereinafter more fully described.

A in the drawing is the axle-strap, provided with ears *a a*, between which the thill-strap B is placed, and to which said strap B is pivoted by a bolt or pin, *b*. This latter is put through the ears *a* and the eye of the strap B, and has a head, *d*, whereby it is prevented from dropping through. The lower ends of the ears

a are connected by a barrel, *e*, wherein the pivot *f* of a plate, *g*, is contained. This plate *g* is outside of one ear, *a*, and is by a spring, *h*, drawn firmly against and over the head *d* of the bolt *b*. There are projecting spurs *i i* on the plates *g*, which bear against the edges of the ear *a* and prevent the plate *g* from turning on its pivot *f*. When the bolt *b* is to be removed the plate *g* must first be drawn off to clear the spurs *i* from the ear *a*, and can then be turned aside to liberate the bolt. J is the spring of rubber or metal interposed between the plate A and the eye of the strap to keep the bolt from rattling. In place of rubber I prefer to use a plain or grooved plate of metal riveted to a spring and held against the eye of B, or rubber may be placed upon the plain or grooved face of said plate. The plate can be held in place by projections at its end.

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

The pivoted plate *g*, having the spurs *i*, and combined with the spring *h*, to secure the pivot-bolt *b* of a thill or pole-coupling in place, substantially as herein shown and described.

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