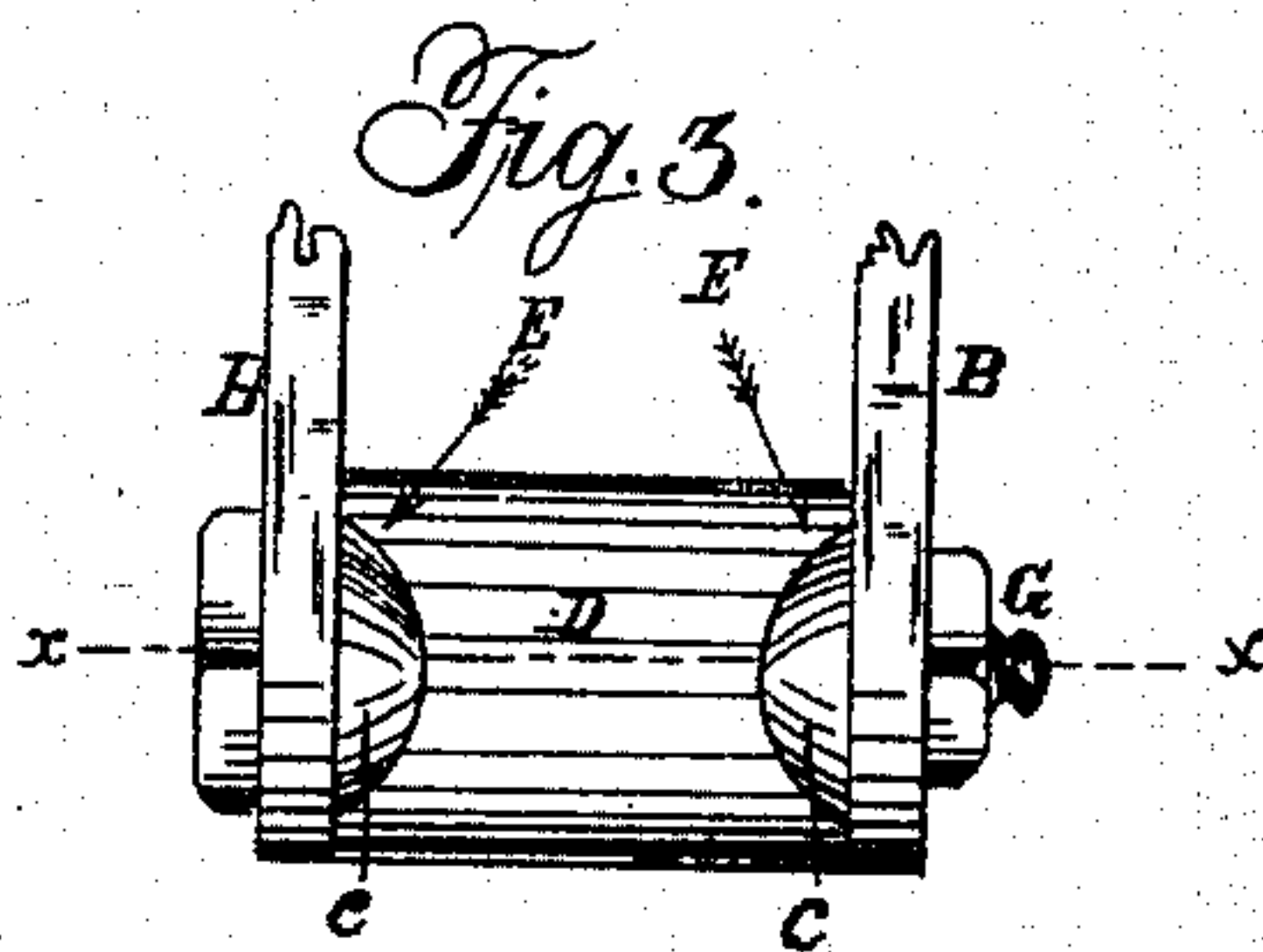
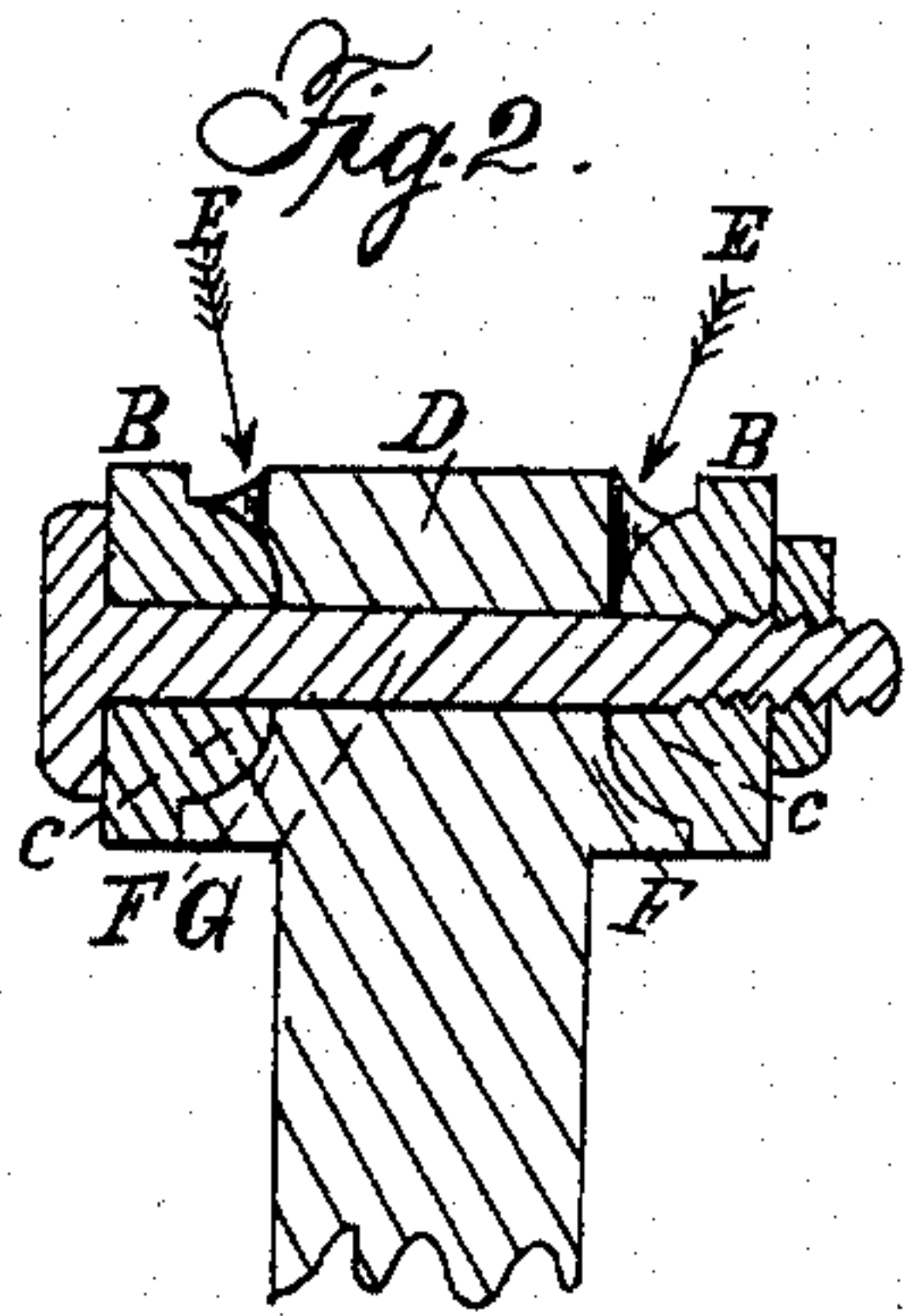
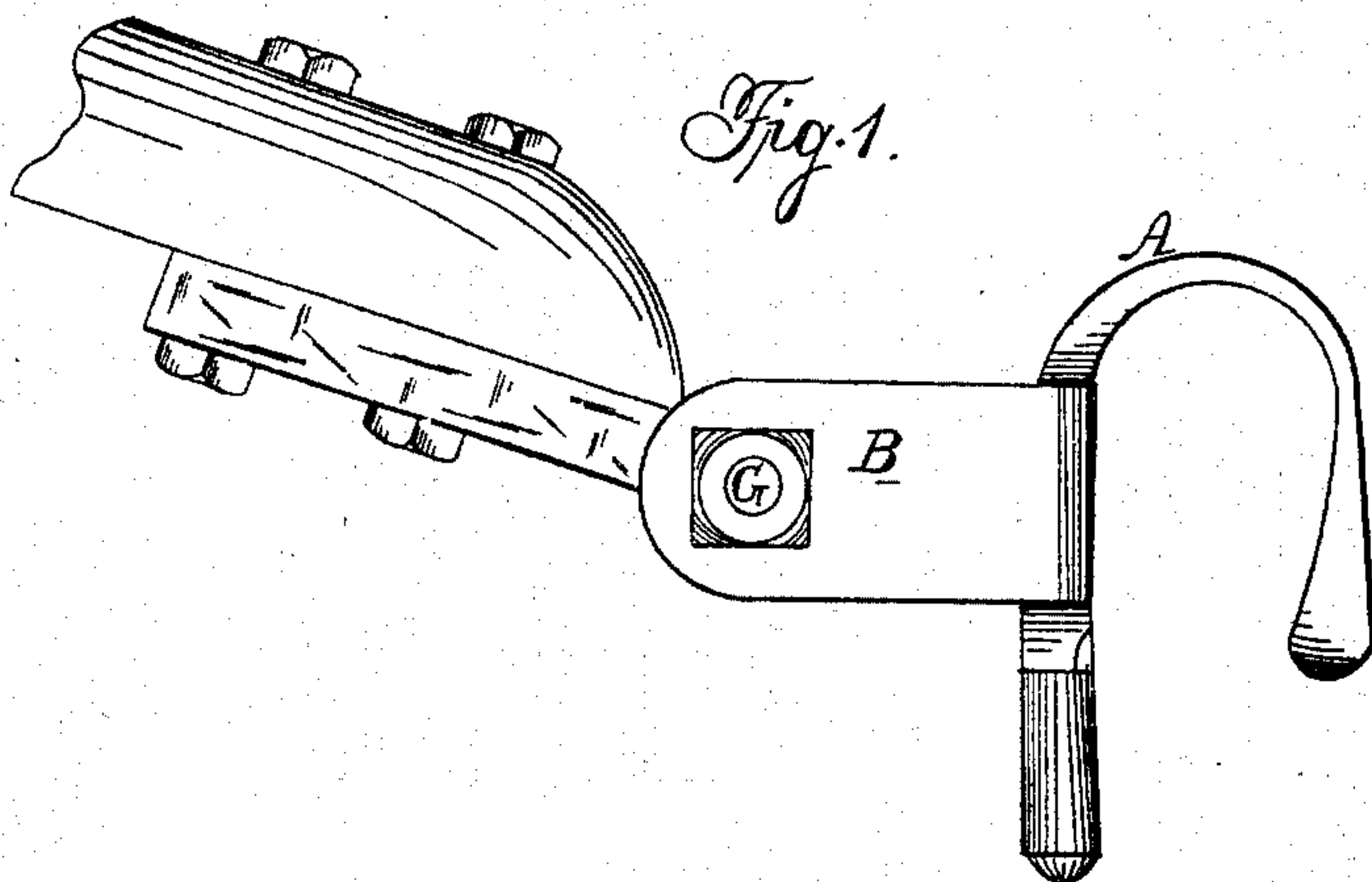


A. ODELL.
Thill-Coupling.

No. 68,895.

Patented Sept. 17, 1867.



Witnesses.
Franklin Barrett
C. L. Barrett

Inventor
Adam Odell
by atty. C. L. Barrett

United States Patent Office.

ADAM ODELL, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND DAVID GRANGER, OF COLLINSVILLE, CONNECTICUT.

Letters Patent No. 68,895, dated September 17, 1867.

IMPROVEMENT IN ATTACHING THILLS TO CARRIAGES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ADAM ODELL, of the city, county, and State of New York, have invented certain new and useful improvements in Devices for Attaching Thills to the Axles of Wagons and other Vehicles; and I do hereby declare that the following is a full description of the same.

The nature of my invention consists in forming an aperture in the sides of the cavity in the eye or end of the shaft-iron for the purpose of inserting it over and upon conical ear-pieces on the insides of the jaws of the jack, and thus supersede the use of movable or hinged jaws to admit of adjusting the shaft-iron into the jack.

But to describe my invention more particularly I will refer to the accompanying drawings, forming a part of this specification, the same letters of reference wherever they occur referring to like parts.

Figure 1 represents a side view of the jack as attached to the thill.

Figure 2 is a cut section of the jack through the line *x x*, fig. 3.

Figure 3 is a front view of the shaft-iron, showing the opening in the edge of it for admission of the shaft-iron over the convex ear-pieces.

Letter A represents the jack as forged previously to its being fitted to an axle-tree, and B B the jaws, having on their inner faces conical ear-pieces *c*. These jaws are made as a part of the jack, and when made of good metal are intended to have a small amount of elasticity, so as to act somewhat as a spring to clamp the sides of the end of the shaft-iron D when inserted between them. For this purpose the edge E of the lower or back portion of the cavity F formed in the ends of the shaft-iron is cut away to near the depth of the cavity. By this means the shaft-iron can be sprung in and over the conical ear-pieces, and when drawn up, by means of the bolt G passing through them, forms not only a perfectly safe thill-fastener, but also an anti-rattling thill-fastener.

I am aware that an anti-rattling thill-fastener has been made previously with conical ear-pieces and movable jaws for the admission of the thill-iron between the jaws, but my invention entirely obviates the use of movable jaws, and as I do not desire to use movable jaws, I therefore disclaim making an anti-rattling thill-fastener having conical ear-pieces and movable jaws for the purposes set forth; but what I do claim, and desire to secure by Letters Patent, is—

The combination of a shaft-iron made, as hereinbefore described, with an aperture, E, in it, with the non movable jaws of a jack, substantially as described, and for the purposes hereinbefore set forth.

Witnesses:

FRANKLIN BARBITT,
C. L. BARBITT.

A. ODELL.