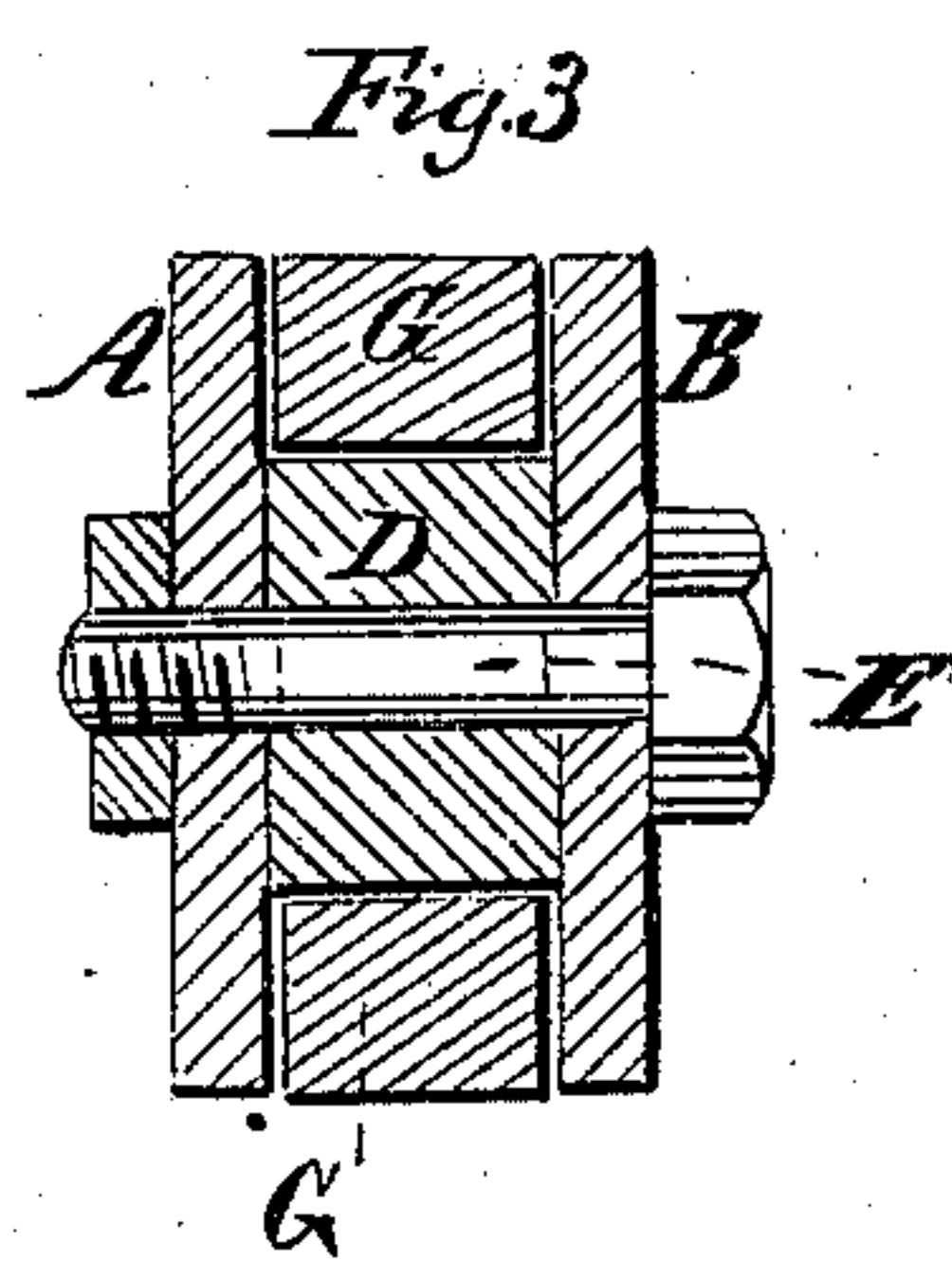
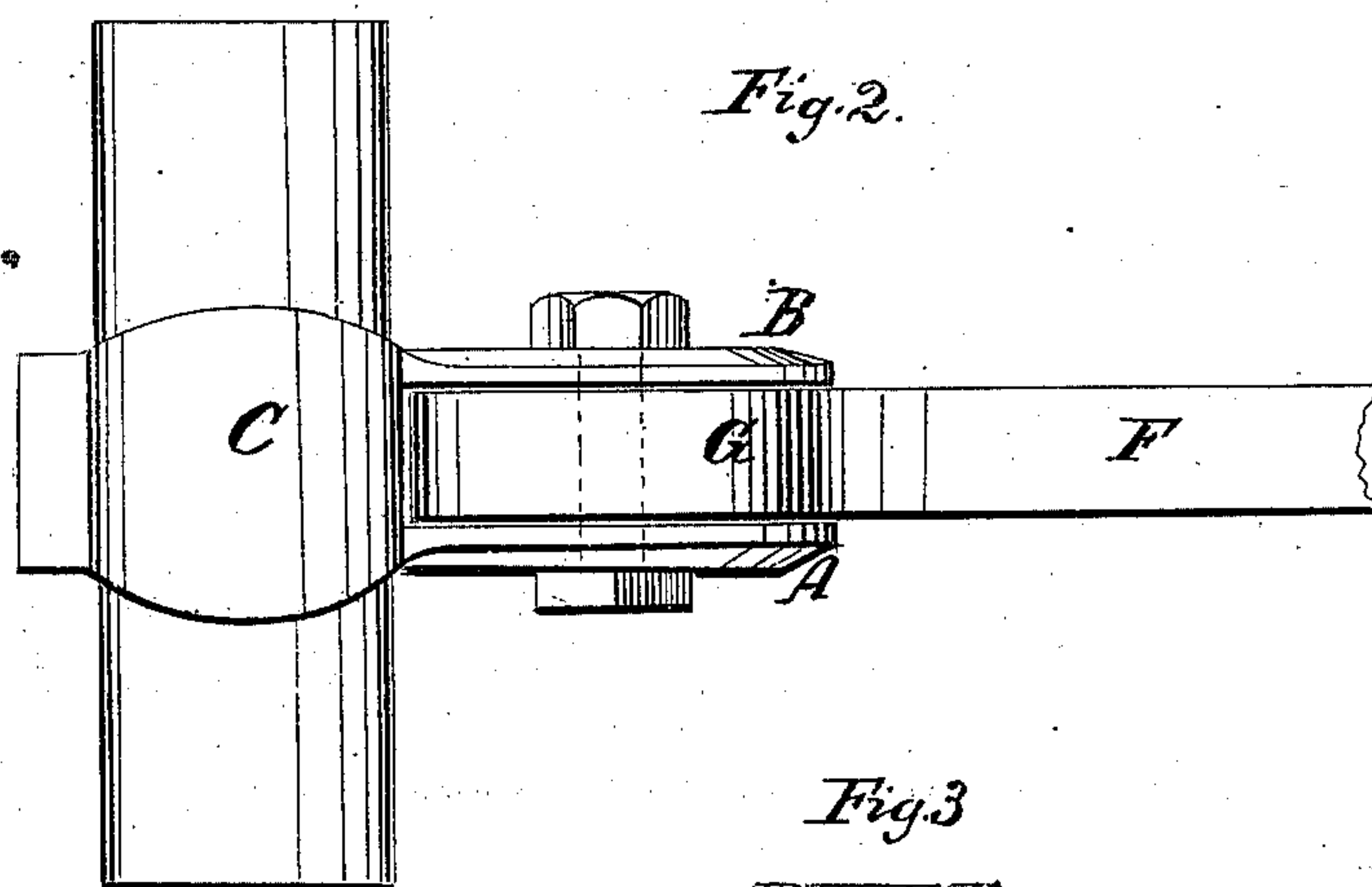
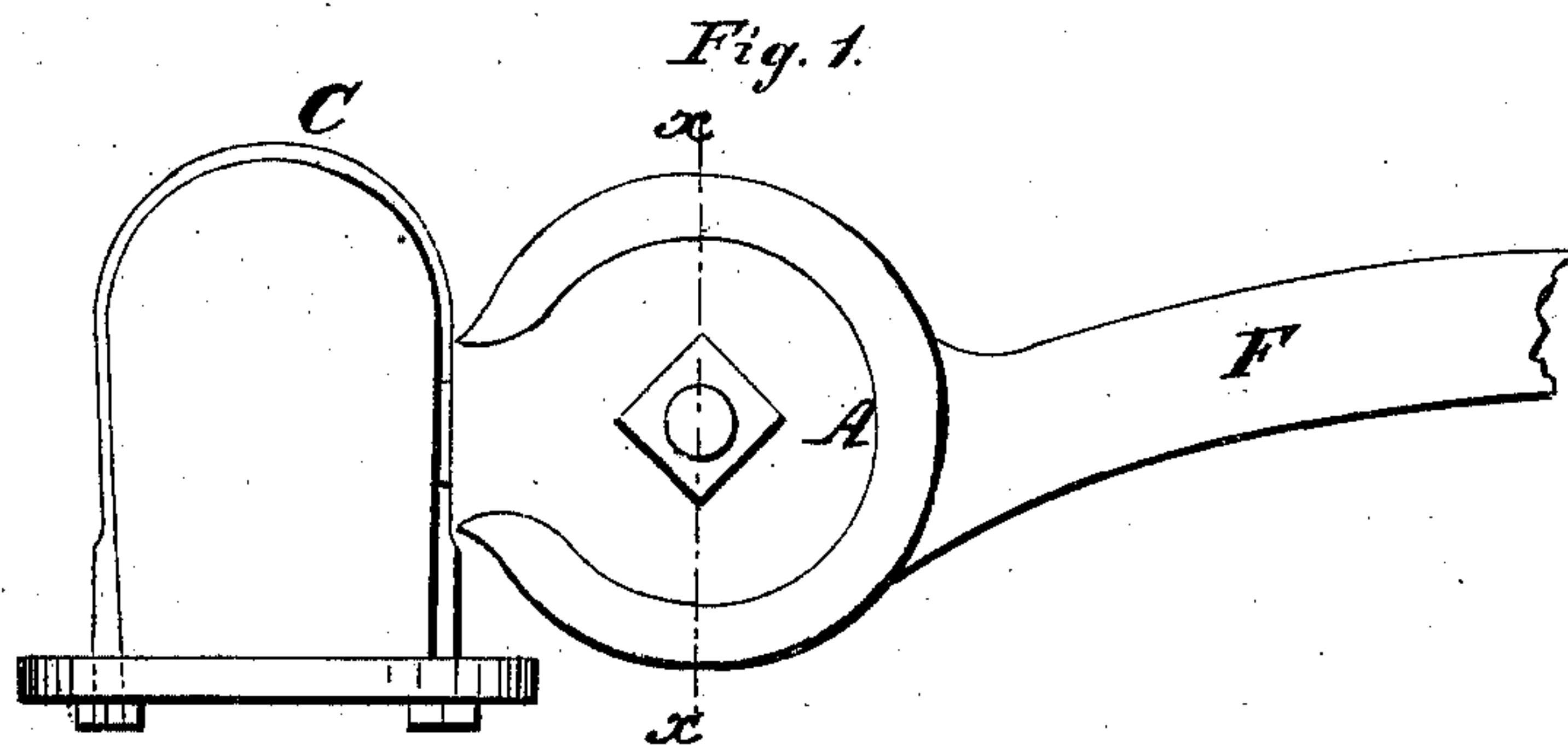


W. F. GILBERT,
Thill Coupling.

No. 81,768.

Patented Sept. 1. 1868.



Witnesses.

A. J. Tibbitts
J. H. Shumway

Inventor.

William F. Gilbert
By his Attorney
John E. Earle

United States Patent Office.

WILLIAM F. GILBERT, OF DERBY, CONNECTICUT.

Letters Patent No. 81,768, dated September 1, 1868.

IMPROVEMENT IN CARRIAGE-SHACKLE.

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, WILLIAM F. GILBERT, of Derby, in the county of New Haven, and State of Connecticut, have invented a new Improvement in Carriage-Shackles; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view,

Figure 2 a top view, and in

Figure 3 a section on line *x x*.

This invention relates to an improvement in shackles used for connecting the shaft or pole to carriage-axles, its object being to afford a strong and secure coupling, which may be easily detached, and at the same time so that the wear will be so little that it will not be liable to rattle from use; and consists in forming the coupling with two large flat cheeks, and a correspondingly large head upon the thill-iron, and the arrangement between the cheeks and through the thill-iron head of a large detachable bearing, which is fixed between the cheeks by a bolt passing therethrough, so that the bearing upon which the thill-iron turns is very much larger than a bolt could be made.

To enable others to construct my improvement, I will proceed to describe the same, as illustrated in the accompanying drawings.

A is one cheek, and B the other, formed upon the clip C, and attached in the usual manner for common carriage-shackles; the said cheeks I make larger in diameter than is usual in common shackles, and between the two cheeks I fit a sleeve, D, of less diameter than the cheeks, but so as to closely fit between the two cheeks, and so that when a bolt is passed therethrough, as in fig. 3, the cheeks will securely hold the sleeve D as a part of themselves.

F is the thill-iron, of the usual form, and constructed with a head, G, of the same diameter, or nearly so, of the cheeks, the centre of which is bored out to correspond, and so as to nicely fit the sleeve D, and slightly thinner than the sleeve D. Then the sleeve D being taken out between the cheeks by the removal of the bolt E, the said sleeve is placed in the head G, and the head G and sleeve set in between the cheeks, as in fig. 3, and the bolt inserted and drawn up. The sleeve D is held fast, while the head G, being slightly thinner, will turn freely upon the said sleeve as its bearing. Thus it will be seen that the increased size of the bearing over what it usually is, by the insertion of the bolt through the shackle, is less liable to wear, and a broader surface and a stronger bearing, and therefore the whole less liable to rattle than shackles of common construction.

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

The combination of the sleeve or bearing D, arranged between the cheek A and B, and secured by the bolt E with the head G of the thill-iron, the whole constructed so as to be united substantially as herein set forth.

W. F. GILBERT.

Witnesses:

A. J. TIBBITS,

J. H. SHUMWAY.