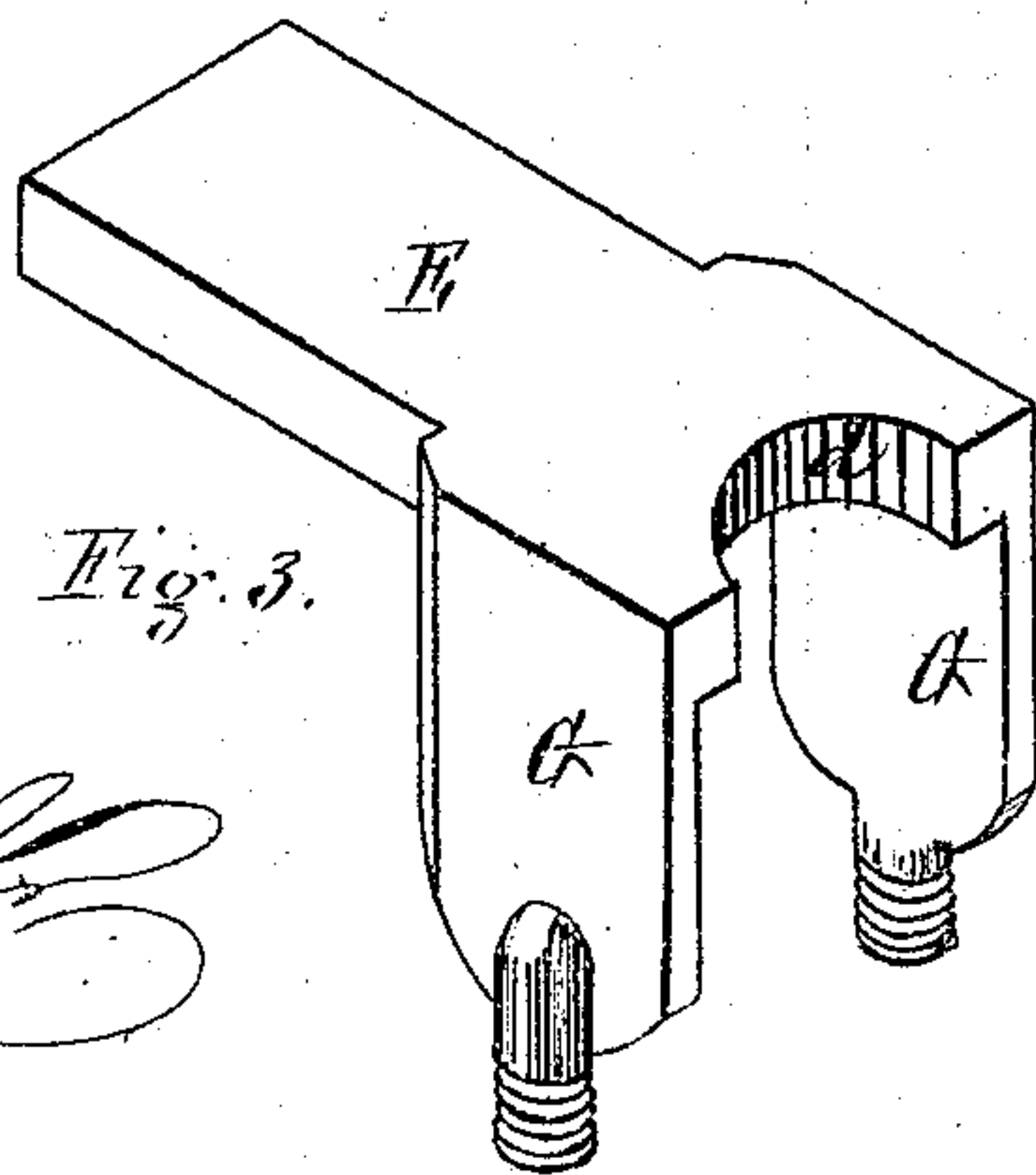
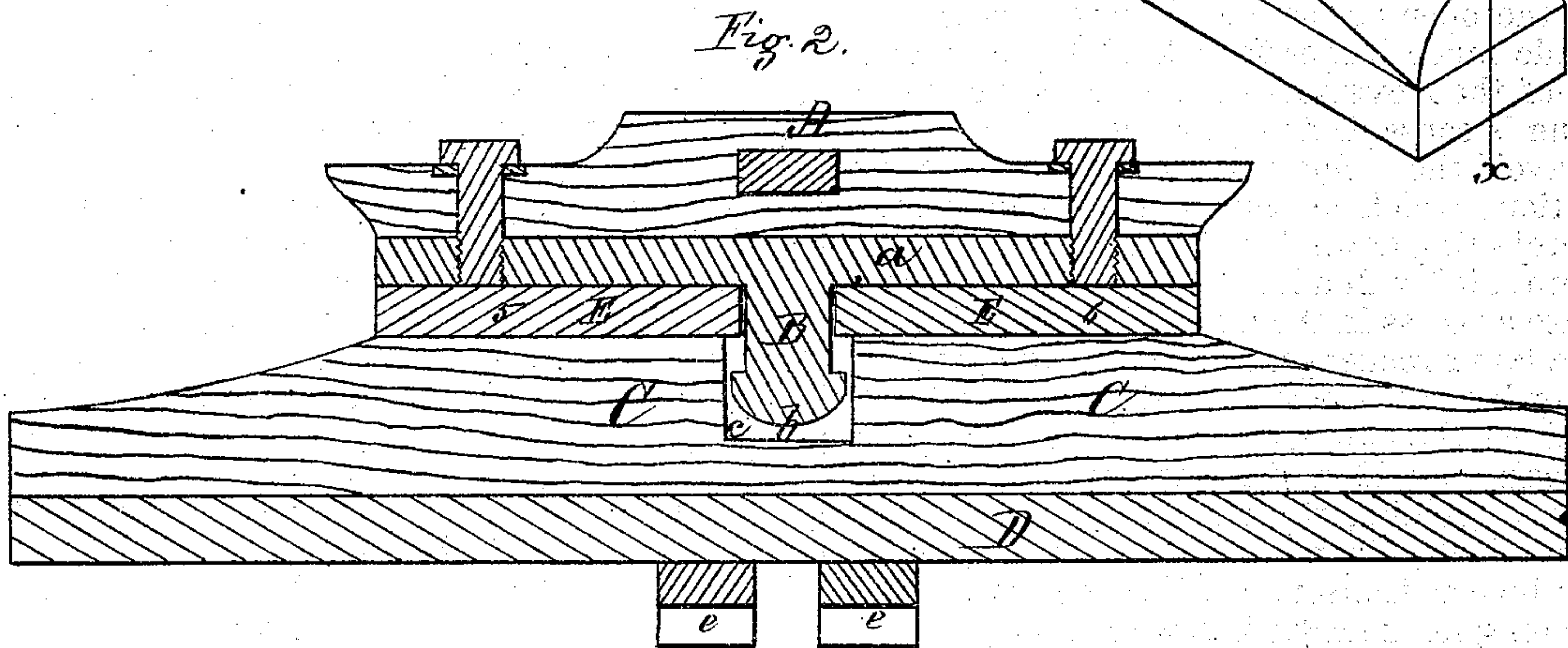
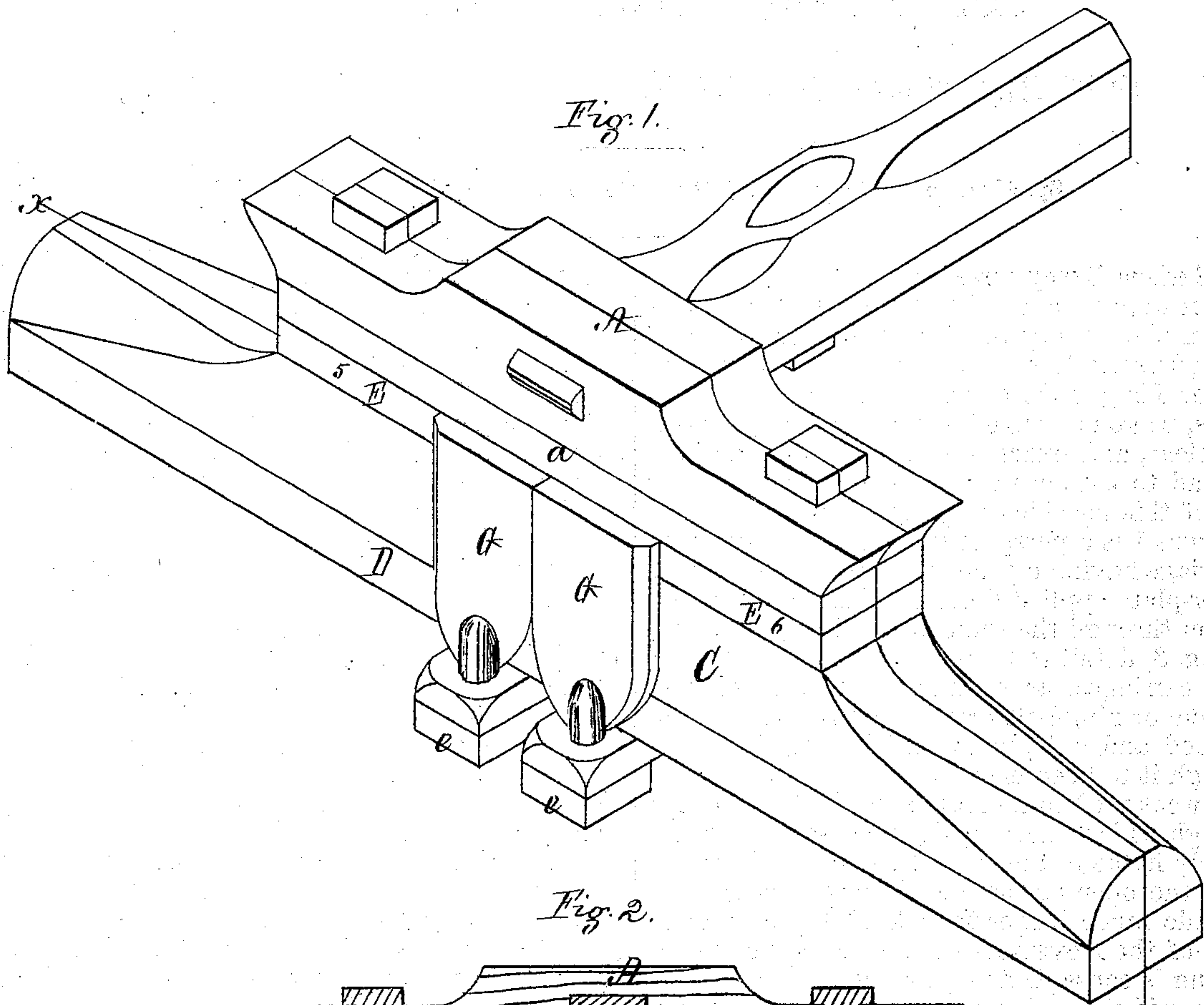


# James A. Judd's Transom Bolt and Rocker-Plate for Carriages:

[22.]

No. 119,463.

Patented Oct. 3, 1871.



Witnesses,  
J. O. Wethermacher  
W. J. Cambridge

Inventor,  
James A. Judd



# UNITED STATES PATENT OFFICE.

JAMES A. JUDD, OF NEWTON, MASSACHUSETTS.

## IMPROVEMENT IN TRANSOM OR KING-BOLTS AND ROCKER-PLATES FOR CARRIAGES.

Specification forming part of Letters Patent No. 119,463, dated October 3, 1871.

*To all whom it may concern:*

Be it known that I, JAMES A. JUDD, of Newton, in the county of Middlesex and State of Massachusetts, have invented an Improved Transom or King-Bolt and Rocker-Plate for Carriages, wagons, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a perspective view of a portion of a carriage having my improved transom-bolt and rocker-plate applied thereto. Fig. 2 is a vertical section through the same on the line *x x* of Fig. 1; Fig. 3, detail to be referred to.

In carriages, as ordinarily constructed, the transom or king-bolt projects down through the axle-bed and axle, below which a key is passed through it to keep it in place. The axle is, however, weakened to a great extent by the opening through which the king-bolt passes, and is extremely liable to break at this point. Furthermore, the opening for the king-bolt requires to be made much larger than the bolt, in order to allow of the movement of the shafts, and much rattling is consequently produced.

To avoid these objections is the purpose of my invention; which consists in a transom or king-bolt projecting down from the upper rocker-plate and provided with a head or enlargement which fits into a recess in the axle-bed, in combination with a lower rocker-plate made in two parts, so as to embrace the bolt above the head and hold it in place, the two portions of the lower rocker-plate being provided with suitable clamps or fastenings for holding them in place upon the axle-bed, by which construction I avoid the necessity of passing the transom-bolt through the axle and weakening it, as heretofore, while the rattling is lessened to a great extent.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawing, A represents the head-block, to the under side of which is secured the upper rocker-plate *a*, from which projects the transom or king-bolt B, provided at its lower end with a head or enlargement, *b*, which fits into a

recess, *c*, in the axle-bed C to which the axle D is secured. E is the lower rocker-plate, which is made in two portions, 5 and 6, the inner end of each of which is provided with a semicircular notch, *d*, Fig. 3, so that when the two portions of the plate are placed together they will embrace the king-bolt B above the head, the diameter of the circular opening formed by the two notches *d*, when placed together, being somewhat larger than that of the shank of the bolt, but not of sufficient size to allow of the withdrawal of the head *b*, which is thus held securely in place within the recess *c*. The head *b* is, however, allowed to have considerable lateral and vertical play within its recess, so as to allow of the free movements of the shafts of the carriage, as required. The two portions of the lower rocker-plate E are provided with clamps or clips G, having screw-nuts *e* by which they are securely held to the axle-bed C. When it is desired to detach the forward portion of the running-gear from the body of the carriage it is merely necessary to loosen the nuts *e* of the clamps G, when the portions 5 6 can be slid away from each other, thus allowing of the withdrawal of the head *b* of the bolt B.

By means of my improvement I am enabled to hold the transom-bolt securely in place without the necessity of perforating the axle to allow of its passage, and consequently weakening it at this point, as has heretofore been the case, while, when the plate *a* is pressed down upon the plate E by the weight of the load, very little rattling is produced.

What I claim as my invention, and desire to secure by Letters Patent, is—

The transom or king-bolt B, with its head or enlargement *b*, in combination with the plate E made in two pieces and secured to the axle-bed C, operating substantially in the manner and for the purpose set forth.

Witness my hand this 12th day of May, A. D. 1871.

JAMES A. JUDD.

Witnesses:

P. E. TESCHEMACHER,  
W. J. CAMBRIDGE.