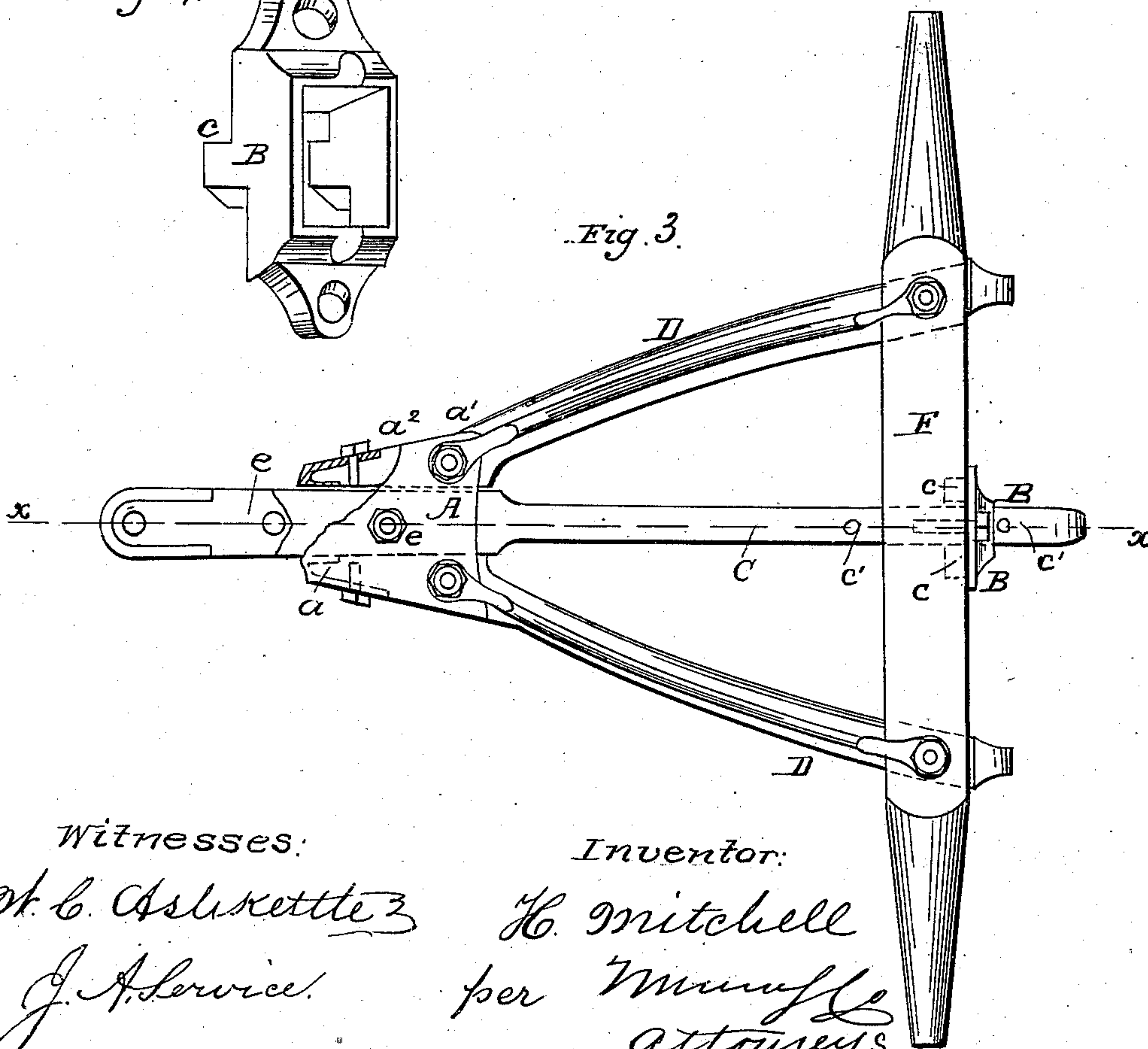
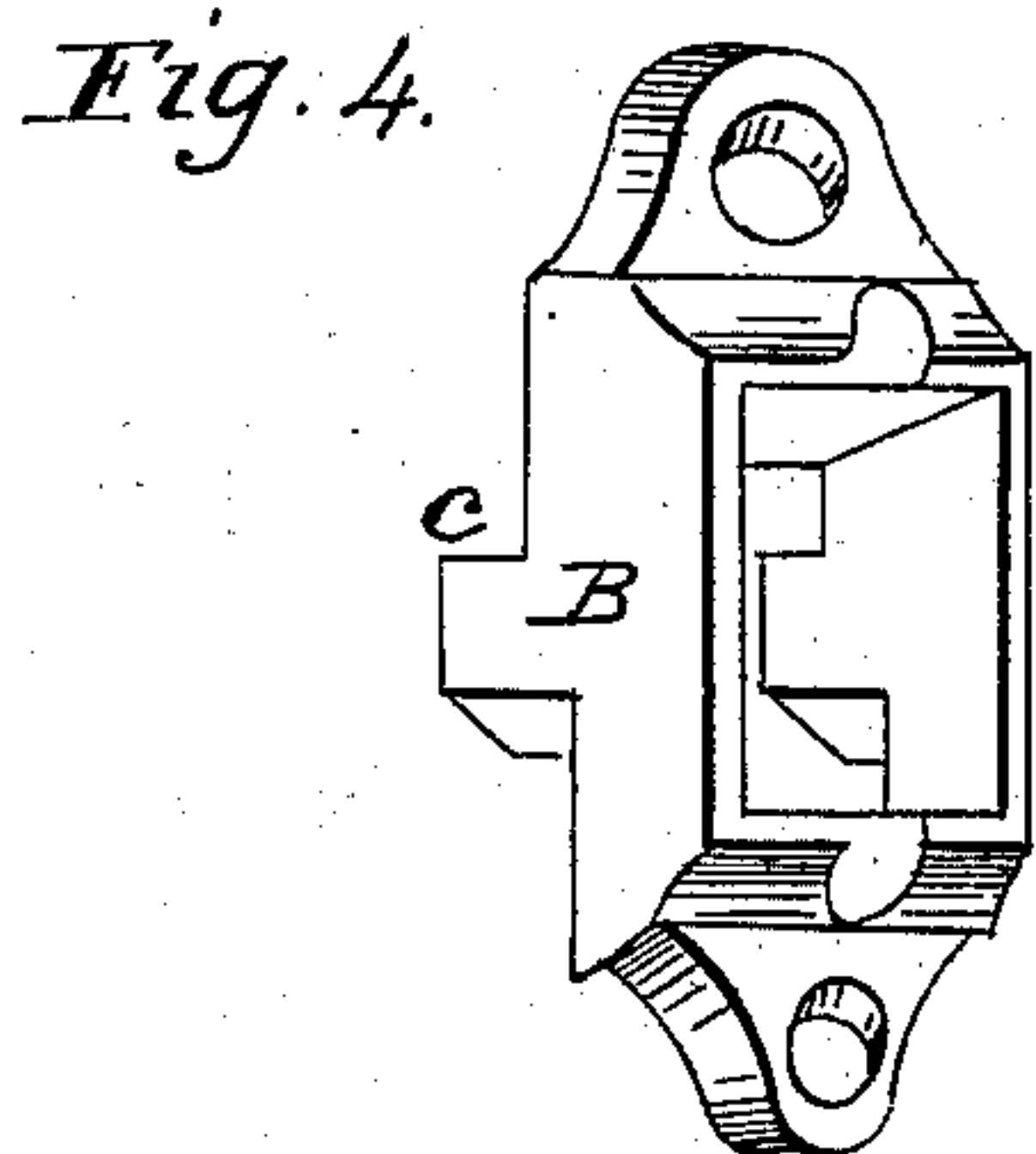
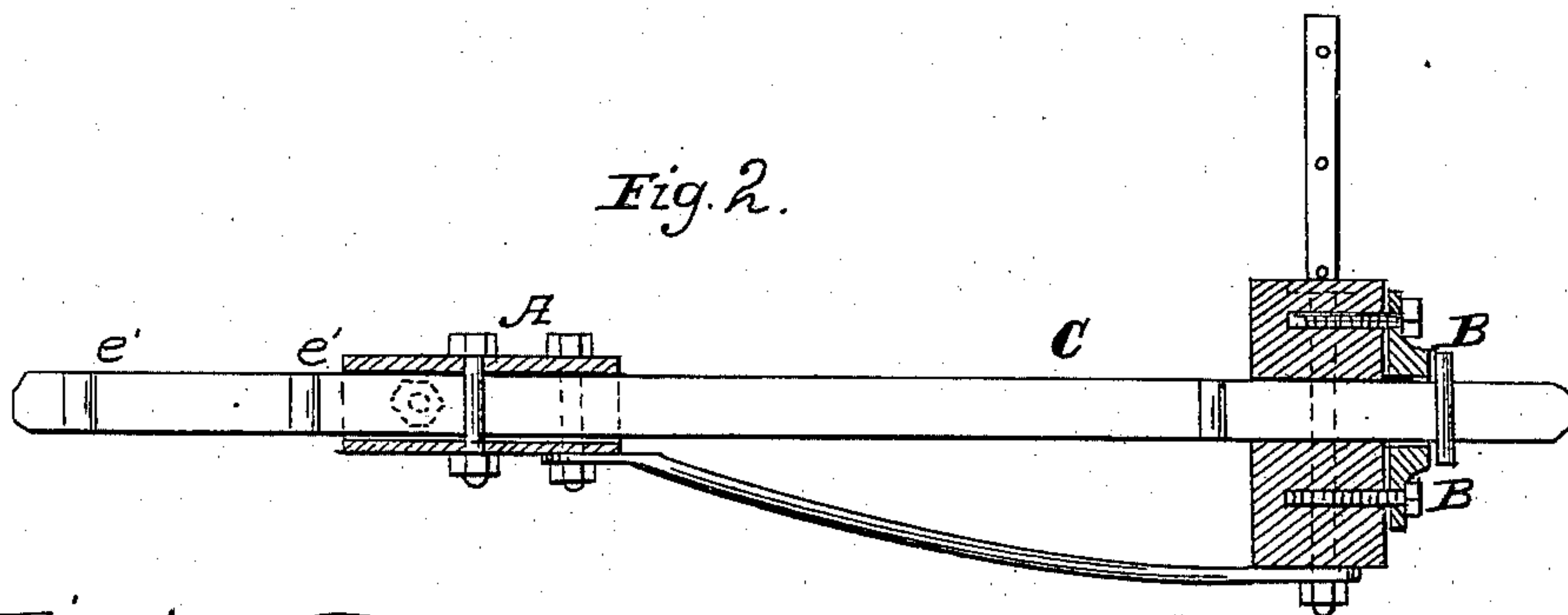
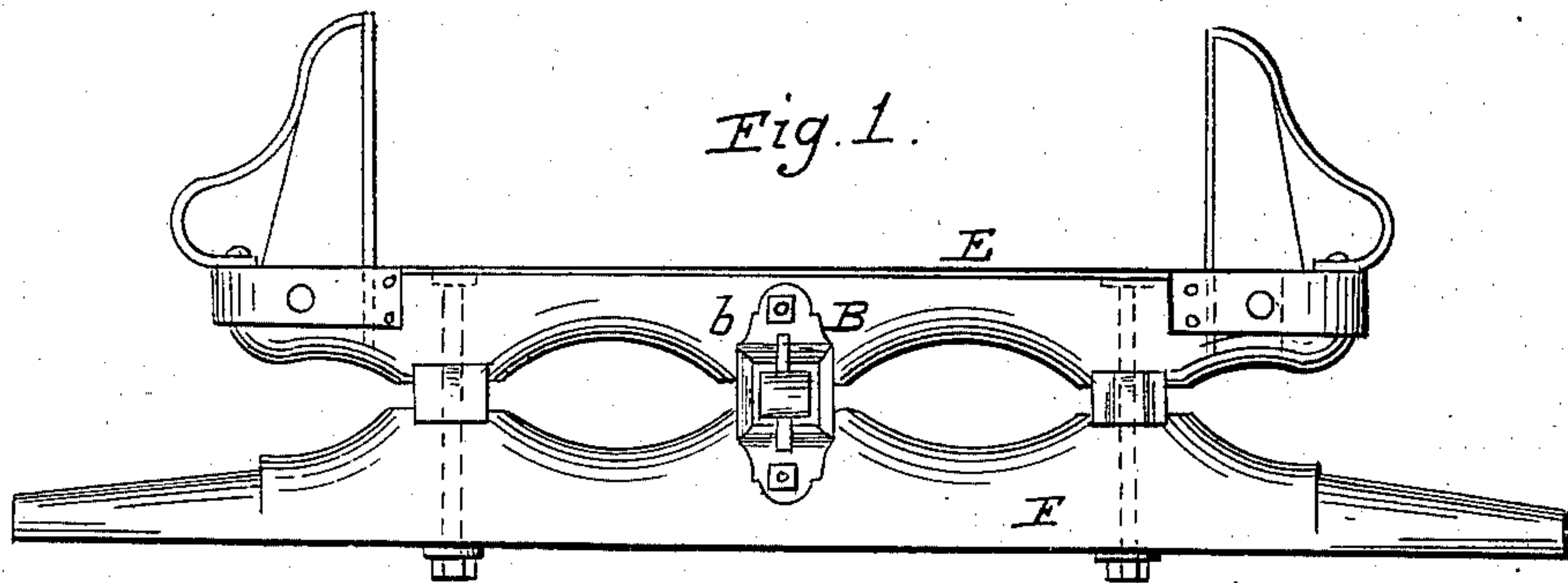


H. MITCHELL.
Wagon Coupling.

No. 74,843.

Patented Feb. 25, 1868.



Witnesses:
W. C. Ashkett
J. A. Service.

Inventor:
H. Mitchell
per Munnell
attorneys

United States Patent Office.

HENRY MITCHELL, OF RACINE, WISCONSIN.

Letters Patent No. 74,843, dated February 25, 1868.

IMPROVEMENT IN WAGON-COUPPLINGS.

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, H. MITCHELL, of Racine, in the county of Racine, and State of Wisconsin, have invented a new and improved Wagon-Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved device for connecting the reach to the running parts of a wagon or other wheeled vehicle, whereby the same are connected in a more durable manner, and are more easily adjusted to loads of different lengths. In the accompanying plate of drawings—

Figure 1 is a rear view of a portion of the running part of a wagon with a portion of my invention in position thereon.

Figure 2 represents a central vertical longitudinal section of a portion of the running part of a wagon, with my invention in section in position thereon, taken in the line *x x*, fig. 3.

Figure 3 is an underneath view of the same, as fig. 2.

Figure 4 is a perspective view of the rear coupling-box.

Similar letters of reference indicate corresponding parts.

The present invention consists essentially in the construction of the forward coupling-box A and the rear coupling-box B, and in the combination of the same with the reach C and the hounds B and bolster E and axle F. The forward coupling-box A is made of cast iron, or brass, or other suitable composition, in the general form shown in the drawing, and is furnished with a cavity on the inside to receive the reach C and the hounds D. The coupling-box A may be described as being formed of two V-shaped plates secured to each other by sides extending partially along the edges of the same, from the front or forward end of the same, which said sides may be part of said plates, said plates being sufficiently removed from each other to leave the necessary space between them for the reach C and hounds D. The sides of the coupling-box A are bent inward toward each other at the front of the box, so as to form the sockets *a*, as shown in the drawing, fig. 3, to receive the ends of the hounds D, which are properly formed at the end to enter and fit in said sockets *a*. The coupling-box A is firmly secured to the hounds D by the bolts *a*¹ and the screws *a*², as shown. The forward ends of the hounds D are entirely within the coupling-box A, and are thus prevented from splitting. By tightening the screws *a*² the hounds D will be firmly held in the coupling-box A, should the same become loose at any time from shrinking. The reach C may move freely through the box A, or the same may be held by a draw-bolt, *e*, passing through the box A, and through any one of several holes *e*¹ with which said reach C may be furnished, whereby the length of the said reach C may be adjusted to the length of the load to be carried. The rear coupling-box B may be made of cast iron or other suitable material, in something the form as shown at fig. 4, and has a rectangular hole through the same to receive the rear end of the reach C. The box B is furnished with two horizontal flanges *e*, on the front side of the same, which, resting upon the axle F, sustain the bolster E, so as to allow the reach C to move freely through the box B. The coupling-box B is secured by common wood-screws to the axle F and to the bolster E, as shown in the drawing, fig. 1. Through the reach C, near the rear end of the same, are several holes, *c*¹, to receive the pin *b* through the same, back of the box B, said box B being furnished with notches in the upper and lower part to hold the pin *b* more firmly in a vertical position. The holes *c*¹ in the rear end of the reach C, when at the same distance apart as the holes *e*¹ in the forward end of the same, serve, in connection with the pin *b* and the draw-bolt *e*¹, as two points of attachment of the reach C to the axle of the vehicle, whether the said reach C is adjusted to a longer or shorter load; or the axles of the vehicle may be held together by the pin *b* alone.

I claim as new, and desire to secure by Letters Patent—

1. The method of coupling the reach C to the other running parts of a wagon or other wheeled vehicle by means of the front coupling A and the rear coupling B, constructed and attached substantially as shown and described.

2. The construction of the coupling-box A, having the sides thereof bent inward, so as to form the sockets *a*, substantially as shown and described and for the purposes set forth.

3. The flanges *c* upon the rear coupling-box B, in combination with the bolster E and the axle F, substantially as shown and described, and for the purposes set forth.

4. The manner of adjusting the length of the reach C to the length of the load, substantially as shown and described.

5. The forward coupling-box A, with the reach C, and the hounds D, in combination with each other and with the rear coupling-box B and the axle F and bolster E, substantially as shown and described, and for the purposes set forth.

HENRY MITCHELL.

Witnesses:

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D. McDONALD.