

(No Model.)

I. BRAGG.
WHIFFLETREE COUPLING.

No. 391,876.

Patented Oct. 30, 1888.

Fig. 1.

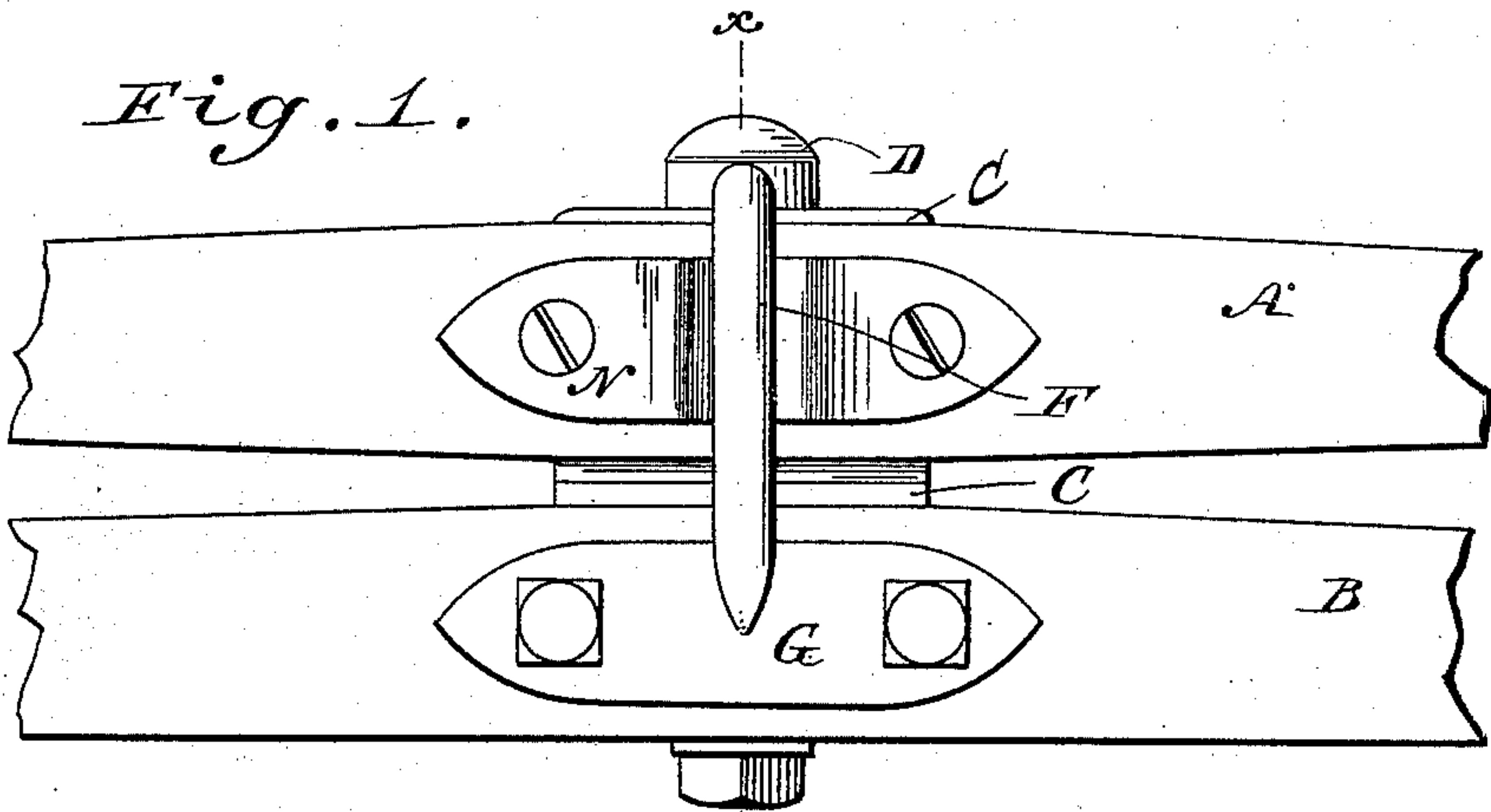


Fig. 2.

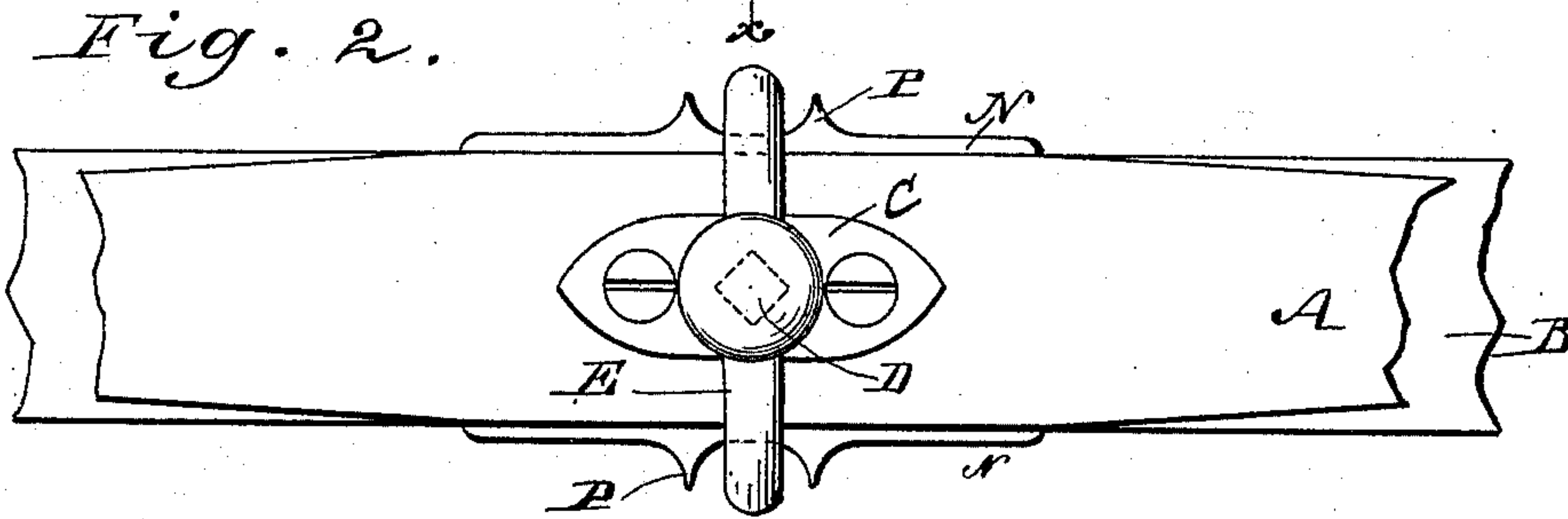
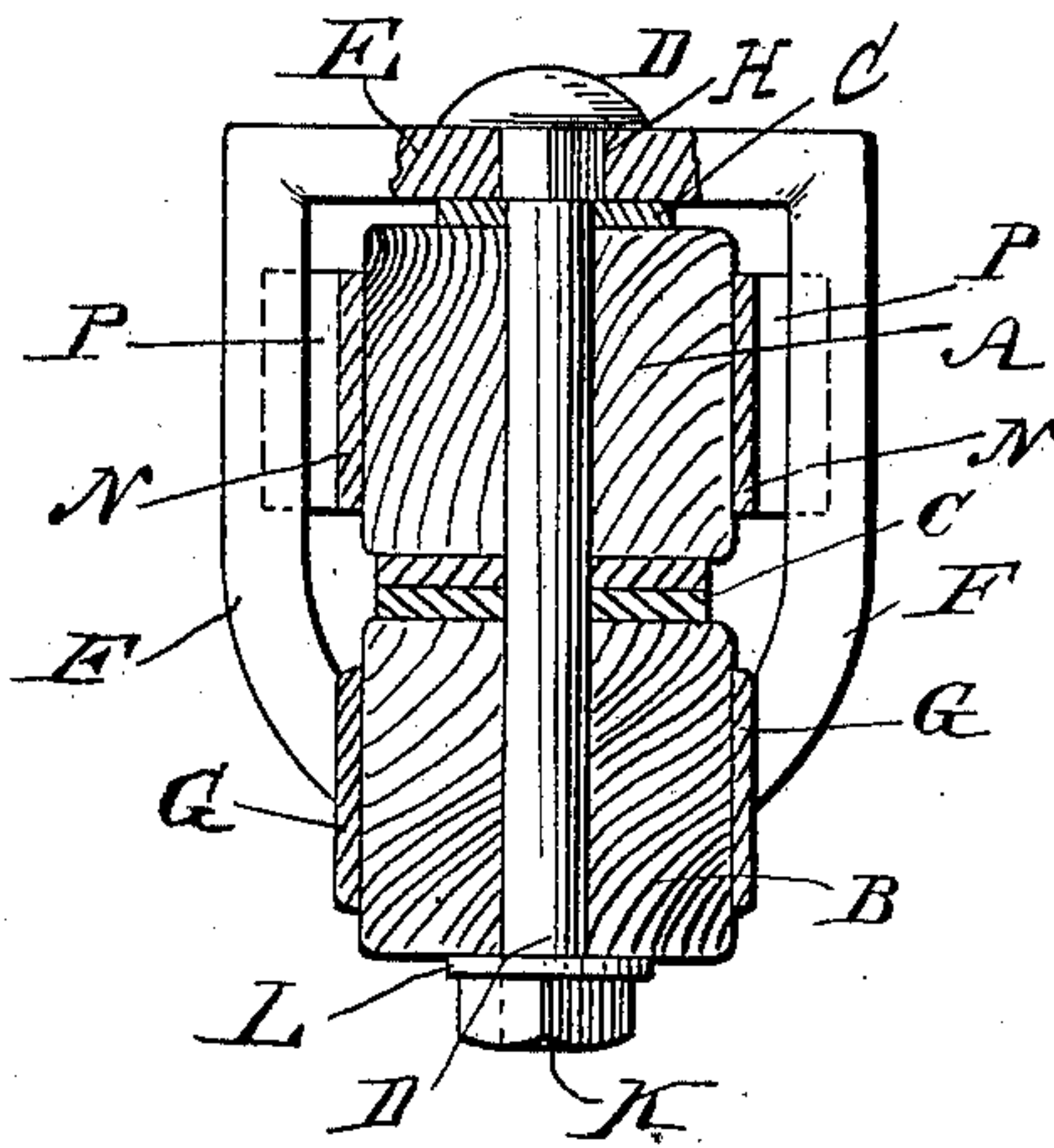


Fig. 3.



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WHIFFLETREE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 391,876, dated October 30, 1888.

Application filed April 10, 1888. Serial No. 270,217. (No model.)

To all whom it may concern:

Be it known that I, INGALLS BRAGG, of South Andover, in the county of Oxford and State of Maine, have invented a new and useful Improvement in Whiffletree-Couplings, of which the following is a full, clear, and exact description.

This invention relates to an improvement in couplings for the whiffletrees of vehicles in which the pivot-bolt connecting the whiffletree to the draft cross-bar or to the evener of the vehicle has a bearing above the whiffletree in a brace fixed to and rising from the cross-bar or evener.

The object of my improvement is to insure as much as possible against the accidental loosening and detachment of the bolt, and also to provide against the displacement of the whiffletree in case the pivot-bolt should become detached.

The invention consists of a novel construction and combination of parts, substantially as hereinafter fully described, and as distinctly claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of a whiffletree-coupling embodying my improvement. Fig. 2 is a plan view of the said coupling. Fig. 3 is a cross-sectional elevation of the same on the line *x x*, Fig. 1.

In carrying my invention into effect in the manner illustrated in the drawings the whiffletree A is mounted centrally on the draft cross-bar B of the vehicle, which, in the case of a double vehicle, may be the evener, wear-plates C being by preference placed therebetween and upon the top of the whiffletree, and both the whiffletree and cross-bar apertured to receive a vertical pivot-bolt, D, substantially in the ordinary way. An inverted-U brace formed with parallel side arms, F, parallel transverse fastening-plates G on the ends of the opposite arms F, and a squared bolt-hole, H, in the middle of its yoke E, is passed downward over the whiffletree, and its fastening-plates G secured to opposite sides of the cross-bar B, as by bolts passing through corresponding ends of the opposite plates and the interposed bar in such a manner that the

parallel side arms, F, will loosely embrace the middle of the whiffletree and the squared hole H be directly above the hole for the pivot-bolt D. The pivot-bolt D, which has a head on its upper end and next to the head a squared portion adapted to the hole H in the yoke of the U-brace, is passed through the said hole H, the whiffletree A, cross-bar B, wear-plates C, and a washer, L, and a nut, K, screwed on its lower end to bind the parts together. The squared portion of the bolt, fitting in the squared hole H, will generally prevent the bolt from working loose and becoming detached.

To opposite sides of the whiffletree and inside the brace-arms F, which are slightly distant from the whiffletree, are attached, as by screws, bearing-plates N, formed with vertical grooves in their outer faces in such a manner that the side walls, P, of said grooves will project outward on opposite sides of the respective brace-arms F and serve as shoulders to strike said arms and limit the swing of the whiffletree, and will, in case the pivot-bolt D becomes unfastened, effectually prevent the whiffletree from being displaced, while allowing it to swing as before.

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

1. The combination, in a whiffletree-coupling, of a draft cross-bar, a whiffletree, an inverted-U brace having its ends rigidly attached to opposite sides of the cross-bar and its arms loosely embracing the whiffletree at the middle, and shoulders projecting from opposite sides of the whiffletree on opposite sides of the respective brace-arms and in position to strike the same, substantially as described.

2. The combination, in a whiffletree-coupling, of a draft cross-bar, a whiffletree, an inverted-U brace having its ends rigidly attached to opposite sides of the cross-bar, its arms rising on opposite sides of the whiffletree, and its yoke having a squared hole, and a pivot-bolt passed vertically through the brace-yoke, the whiffletree, and the cross-bar, and having a squared portion fitted in the squared hole in the yoke, substantially as described.

3. The herein-described U-brace for a whiffletree-coupling, formed with a bolt-hole in the

middle of its yoke, parallel side arms, and parallel transverse fastening-plates on the ends of its opposite arms, as and for the purpose specified.

5 4. The herein-described whiffletree-coupling, consisting of an inverted-U brace having transverse fastening-plates on the ends of its arms secured to opposite sides of the draft cross-bar, its side arms loosely embracing the
10 middle of the whiffletree, and a bolt-hole in

the middle of its yoke, a bolt passed through the yoke, whiffletree, and cross-bar, and plates attached to opposite sides of the whiffletree and formed with stop-shoulders projecting outward on either side of the respective yoke- 15 arms, substantially as specified.

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Witnesses:

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