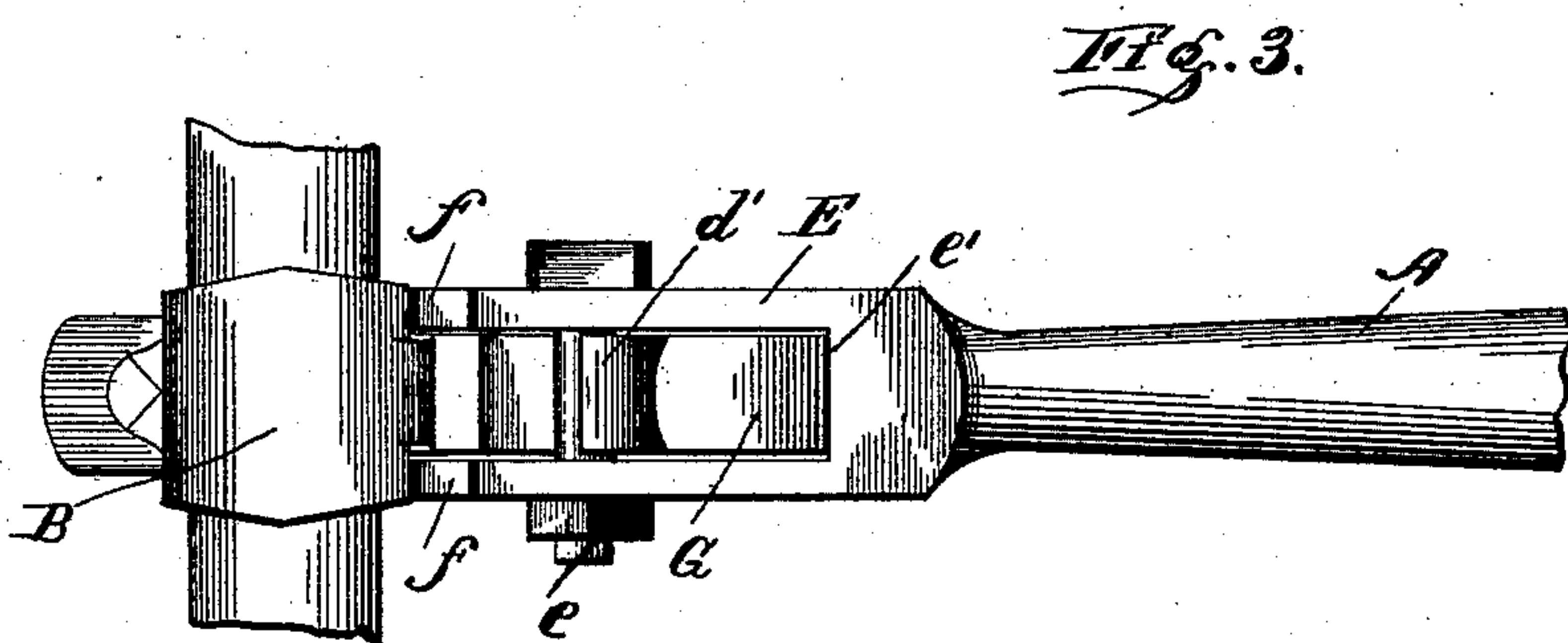
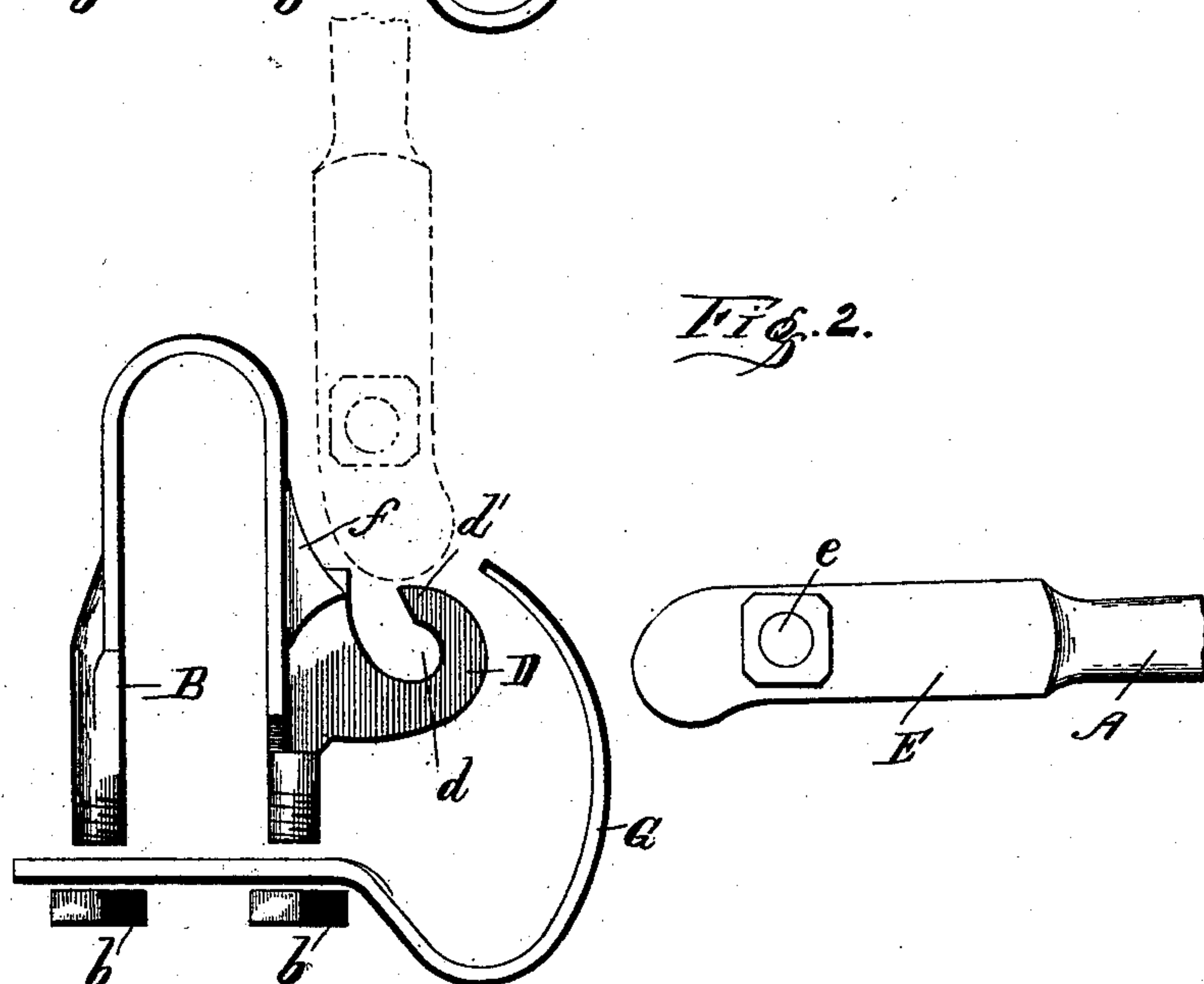
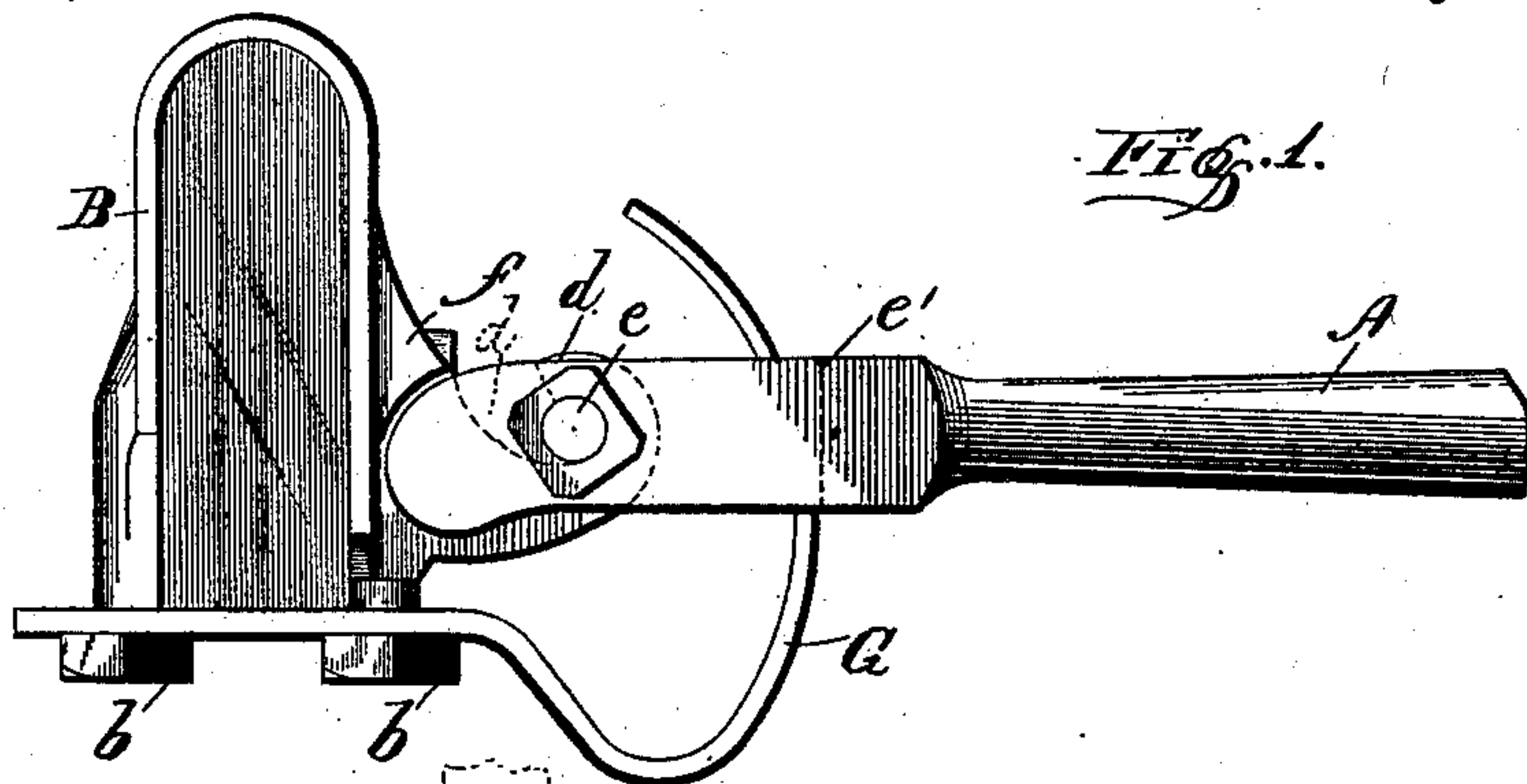


(No Model.)

W. D. STEWART
THILL COUPLING.

No. 362,403.

Patented May 3, 1887.



Witnesses
T. C. Laurie
Van Buren Hillyard

Inventor
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By his Attorneys
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UNITED STATES PATENT OFFICE.

WILLARD D. STEWART, OF MERRILL, WISCONSIN.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 362,403, dated May 3, 1887.

Application filed March 8, 1887. Serial No. 230,128. (No model.)

To all whom it may concern:

Be it known that I, WILLARD D. STEWART, a citizen of the United States, residing at Merrill, in the county of Lincoln and State of Wisconsin, have invented certain new and useful Improvements in Buggy-Pole Couplings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to thill and pole couplings which admit of the pole or thill being readily coupled to and uncoupled from the vehicle.

The object of the invention is the production of a simple and convenient means whereby the pole or thill, when coupled, is held from accidental displacement and prevented from rattling.

The improvement consists of the novel features hereinafter described, claimed, and shown in the drawings, in which—

Figure 1 is a side view of a coupling of my construction embodying my improvement. Fig. 2 is a view in side elevation, showing the parts of the coupling detached or separated. Fig. 3 is a plan view.

The coupling is composed of the coupling-rod A, which may be the thill or pole iron, and the clip B, which is adapted to be secured to the axle of the vehicle. The coupling-lug D, projected from the front of the clip, has the curved slot *d* formed therein through its upper edge, for the reception of the bolt *e*, passed through the arms E, formed by the bifurcated or separated ends of the coupling-rod. A portion of the lug overhangs the bolt *e* and holds it in position when the rod is coupled. The arms E of the coupler fit under shoulders *f* on each side of the lug, and, in connection with the overhanging portion *d'* of the lug, hold the coupling-rod against pumping or accidental displacement from the slot *d*. A space is left between the end of the lug and the end *e'* of the coupling-rod embraced between the arms E, through which

the end of the spring G passes, and bearing upon the end *e'* holds the bolt *e* close up against the forward side of the slot *d* and prevents any rattling. The spring extends back and forms the yoke for the ends of the clip, upon which it is held by the nuts *b*. The upper and forward end of the spring is curved, so it will be directed to the space between the arms E of the coupling-rod. In practice the coupling-rod can be attached to or removed from the clip by turning it in a vertical position, which disengages the arms E from the shoulders *f*. An upward movement of the rod will uncouple the parts. The reverse of this movement will couple the parts, and when the coupling-rod is turned in a horizontal position it will be held securely by the shoulders *f*, fitting over the arms E, and the portion *d'*, extending over the bolt *e*, which will be readily understood.

I am aware that it is common to have a clip provided with a bifurcated lug, a filling between the two parts of the lug, two short extensions projected toward each other from the sides of the parts of the lugs, and the coupling-rod composed of a solid end having curved grooves in its opposite sides to receive said extensions, the ends fitted between the parts of the lug and coming up underneath the filling. No claim is made, broadly, to such construction and arrangement.

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

1. The combination, with the clip having the slotted lug and the shoulders on each side thereof, of the coupling-rod having a bifurcated or separated end, forming arms which embrace the lug and are adapted to fit beneath the shoulders, and the bolt uniting the arms and fitted in the slot in the lug, substantially as set forth.

2. The combination, with the clip having the slotted lug projected therefrom and the coupling-rod having a bifurcated end forming arms which embrace the lug, and the bolt fitted in the slot and uniting the arms, of the spring uniting the ends of the clip and having its forward end curved, as shown, and pressing upon the coupler-rod between the arms

and forward end of the lug, substantially as set forth.

3. The herein shown and described coupling for the purpose described, composed of
5 the coupling-rod having a bifurcated end forming arms, the clip, the slotted lug, and the shoulders on each side of the lug projected therefrom, the lug being fitted between and the shoulders being extended over the arms, the
10 bolt passed through the slot in the lug and uniting the arms, and the spring, the rear end

thereof forming a yoke for the clip, and the forward end being curved and bearing against the end of the coupling-rod between the arms, substantially as specified. 15

In testimony whereof I affix my signature in presence of two witnesses.

WILLARD D. STEWART.

Witnesses:

D. M. PHINNEY,
GEORGE CURTIS, Jr.