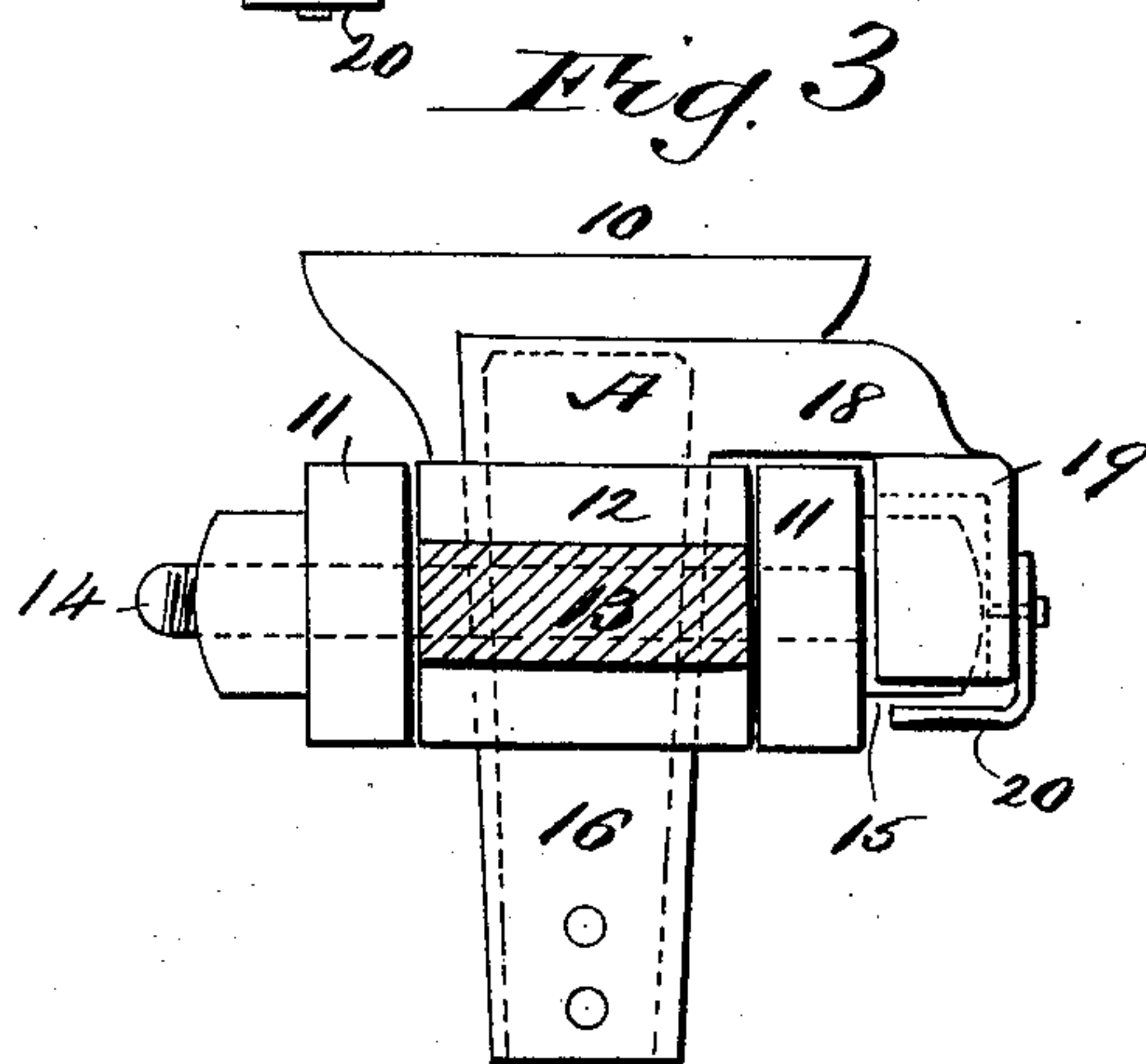
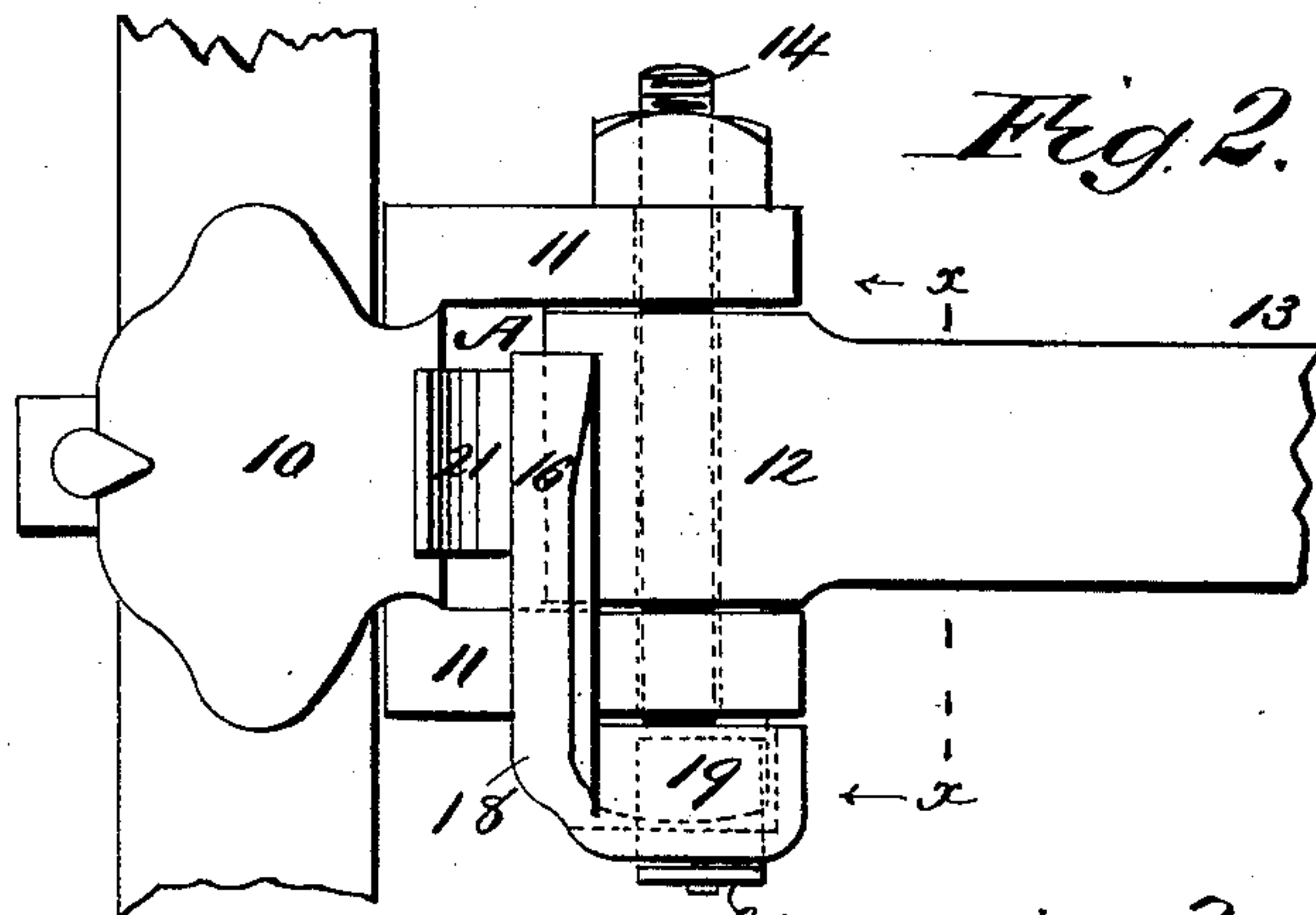
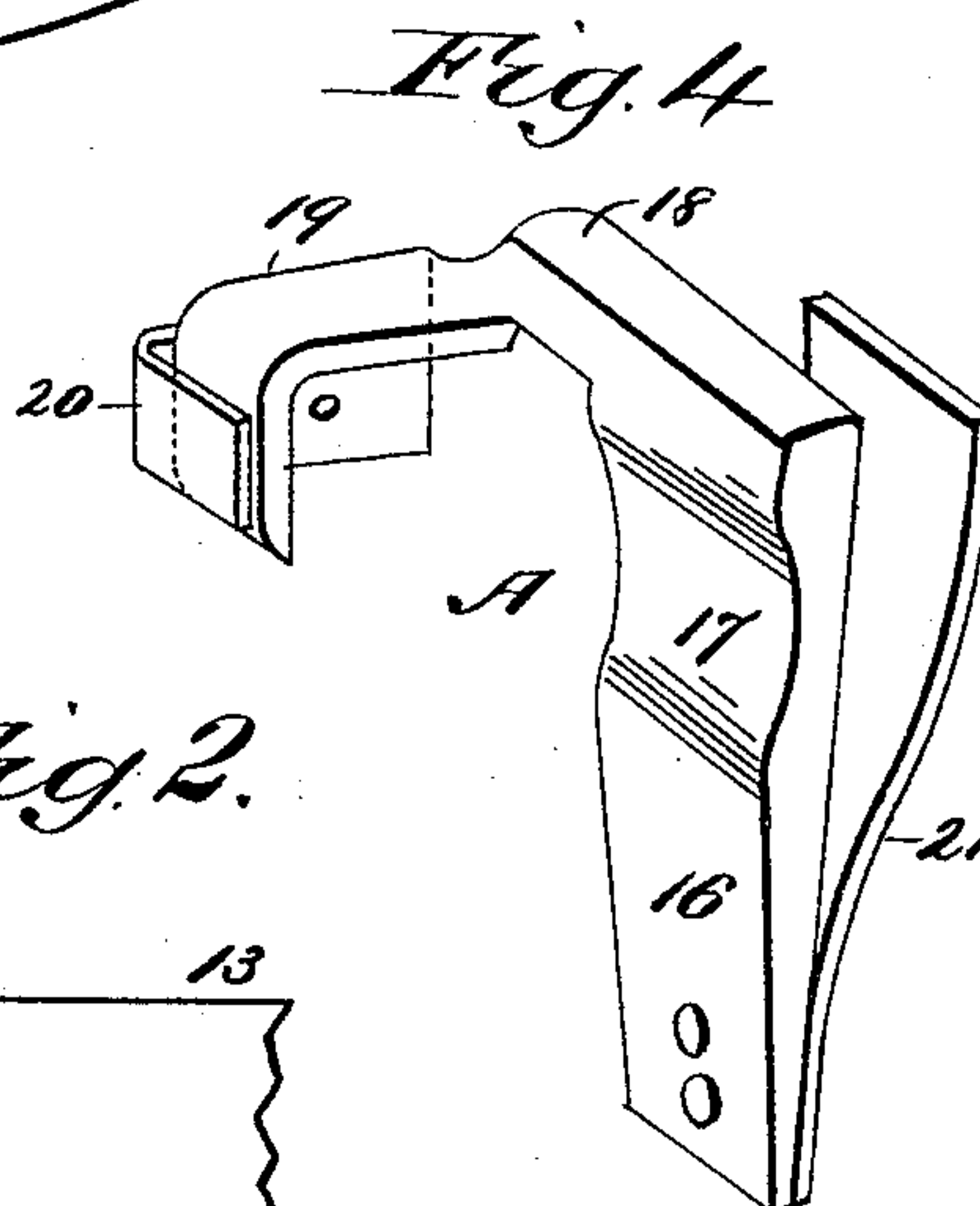
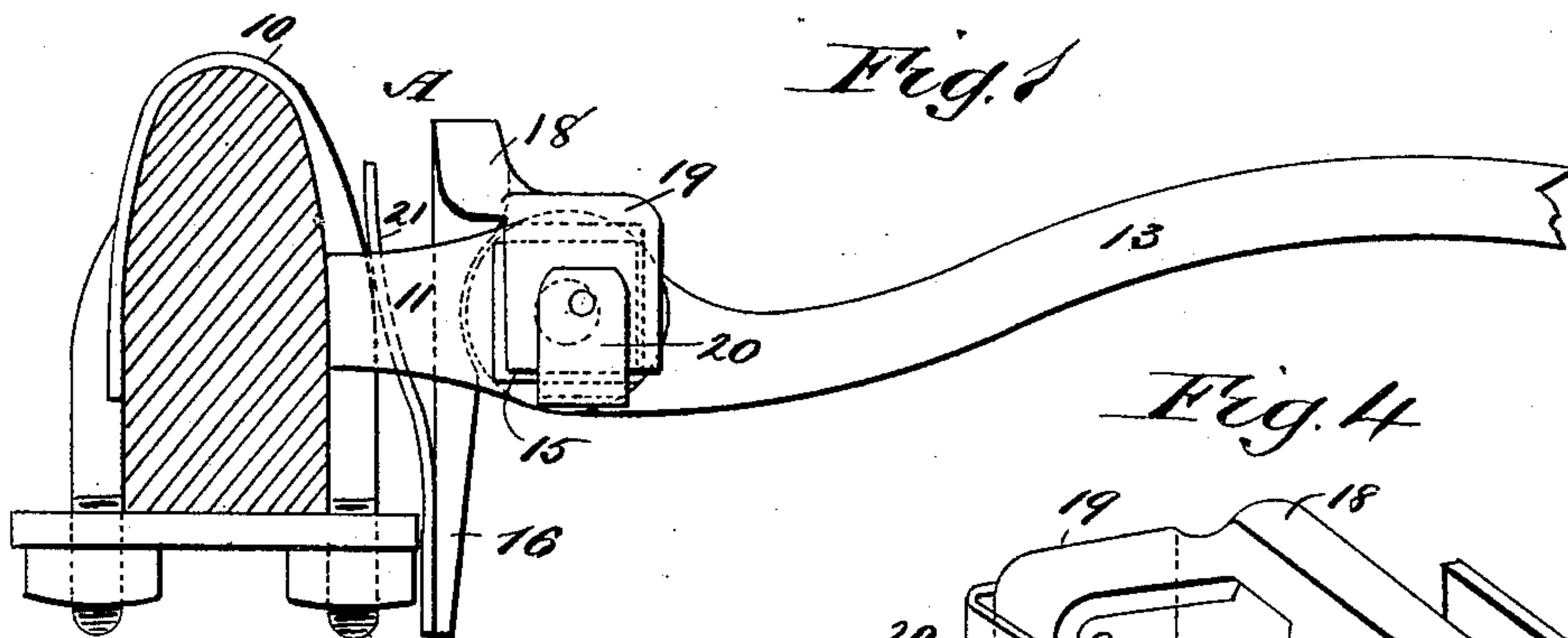


(No Model.)

A. PLICQUE.
THILL COUPLING.

No. 452,236.

Patented May 12, 1891.



WITNESSES:
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UNITED STATES PATENT OFFICE.

ANATOILE PLICQUE, OF FRANKLIN, TENNESSEE.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 452,236, dated May 12, 1891.

Application filed September 26, 1890. Serial No. 366,235. (No model.)

To all whom it may concern:

Be it known that I, ANATOILE PLICQUE, of Franklin, in the county of Williamson and State of Tennessee, have invented a new and useful Improvement in Thill-Couplings, of which the following is a full, clear, and exact description.

My invention relates to an improvement in thill-couplings, and has for its object to provide an anti-rattling device capable of attachment to any coupling, which when applied will effectually take up any lost motion and prevent any rattling of the coupling while said coupling is capable of use; and a further object of the invention is to so construct the device that the coupling will thereby be prevented from turning or shifting in its seat.

The invention consists in the novel construction and combination of these several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a side elevation of the coupling. Fig. 2 is a plan view thereof. Fig. 3 is a section on line *xx* of Fig. 2, and Fig. 4 is a perspective view of the key detached.

The coupling may be of any suitable form or of any approved style, that illustrated in the drawings consisting of a clip 10, provided with horizontally-extending ears 11, integral with its front face, between which ears the eye 12 of the thill-iron 13 is pivoted by means of a bolt 14, the said bolt having the usual head 15 at one end and being provided at its opposite end with a nut.

The improvement consists in the key A, (shown in detail in Fig. 4,) which constitutes an anti-rattling device. The key consists of a wedge-shaped body-section 16, preferably of greater thickness at the top than at the bottom, the said body-section being provided in its outer face near the top with a transverse semicircular depression or concavity 17. Integral with the top of the body member a lug 18 is formed, which extends horizontally beyond one of its sides, and a hood 19 is formed integral with the outer end of the lug 18, the said hood being located at a right an-

gle to the lug and extending forward from the main portion of the body member. The hood 19 is open at its inner face and rear and under sides, and is preferably rectangular in general contour; but its shape may be varied as occasion may demand.

Upon the outer face of the hood 19 a lip 20 is pivoted, which lip usually consists of a piece of metal bent to an essentially L shape, the vertical member being the pivoted member, and the horizontal member being adapted to extend downward below the hood or across the forward end thereof, as shown in Figs. 1 and 4. The key is completed by the attachment to the rear face of the body member at its lower end of a spring 21, which spring is curved, the upper portion of the spring being removed some distance from the opposed face of the body member 16, as is best shown in Fig. 4.

In the application of the key the body member 16 is introduced between the inner surface of the eye 12 of the thill-iron and the opposed face of the clip, the spring 21 having a bearing against the clip, and the eye of the thill-iron fitting in the concavity 17 of the device, as is clearly shown in Fig. 1. When the key is in this position, the lug 18 extends over one of the arms of the clip, and the hood 19 embraces or surrounds the head 15 of the pivot-bolt of the coupling, and the shape of the hood is made to correspond to the shape of the bolt-head. It will be observed that when the key is thus inserted in the coupling the spring will take up any lost motion and constantly keep the body member 16 in such close engagement with the eye of the thill-iron that a rattling of the joint will be an impossibility. It will be further observed that the key acts as a re-enforcing strip to the coupling at its joint, and that the necessity of using rubber, leather, or other material commonly used as an anti-rattler, and which is readily destroyed, is obviated.

The hood effectually prevents the bolt from turning or slipping; but, as an extra safeguard, the lip 20, heretofore referred to, is added, and when the key is in position in the coupling the lip may be carried downward, so that its horizontal member will extend inward beneath the lower face of the bolt-head, as best shown in Fig. 3. I desire it to be dis-

tinctly understood that the lip 20 is not absolutely necessary to the successful operation of the improvement.

Any kind of metal desired may be employed in the construction of the device. Brass, however, is preferred, the spring being of steel.

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

10 1. An anti-rattling device for thill-couplings, comprising a rigid wedge-shaped body having a spring projecting upward from its lower end and a hood projecting at right angles to one of its faces, said hood having
15 three closed sides, substantially as described.

2. An anti-rattling device for thill-couplings, comprising a rigid wedge-shaped body having a semicircular depression in one face and provided with a horizontally-projecting

lug and a hood projecting from said lug at right angles thereto, said hood having three closed sides, and a curved spring secured to the lower end of the body, substantially as described.

3. An anti-rattling attachment for thill- 25 couplings, the same consisting of a wedge-shaped body having a transverse depression produced in its forward face near its upper end, a spring attached to the rear face near its lower end, a hood attached to the front of 30 the body at the upper end thereof and extending forward at a right angle therefrom, and an angular lip pivotally attached to the hood, as and for the purpose specified.

ANATOILE PLICQUE.

Witnesses:

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