

No. 633,442.

Patented Sept. 19, 1899.

A. H. FORSYTHE.
THILL COUPLING.

(Application filed May 18, 1899.)

(No Model.)

Fig. 1.

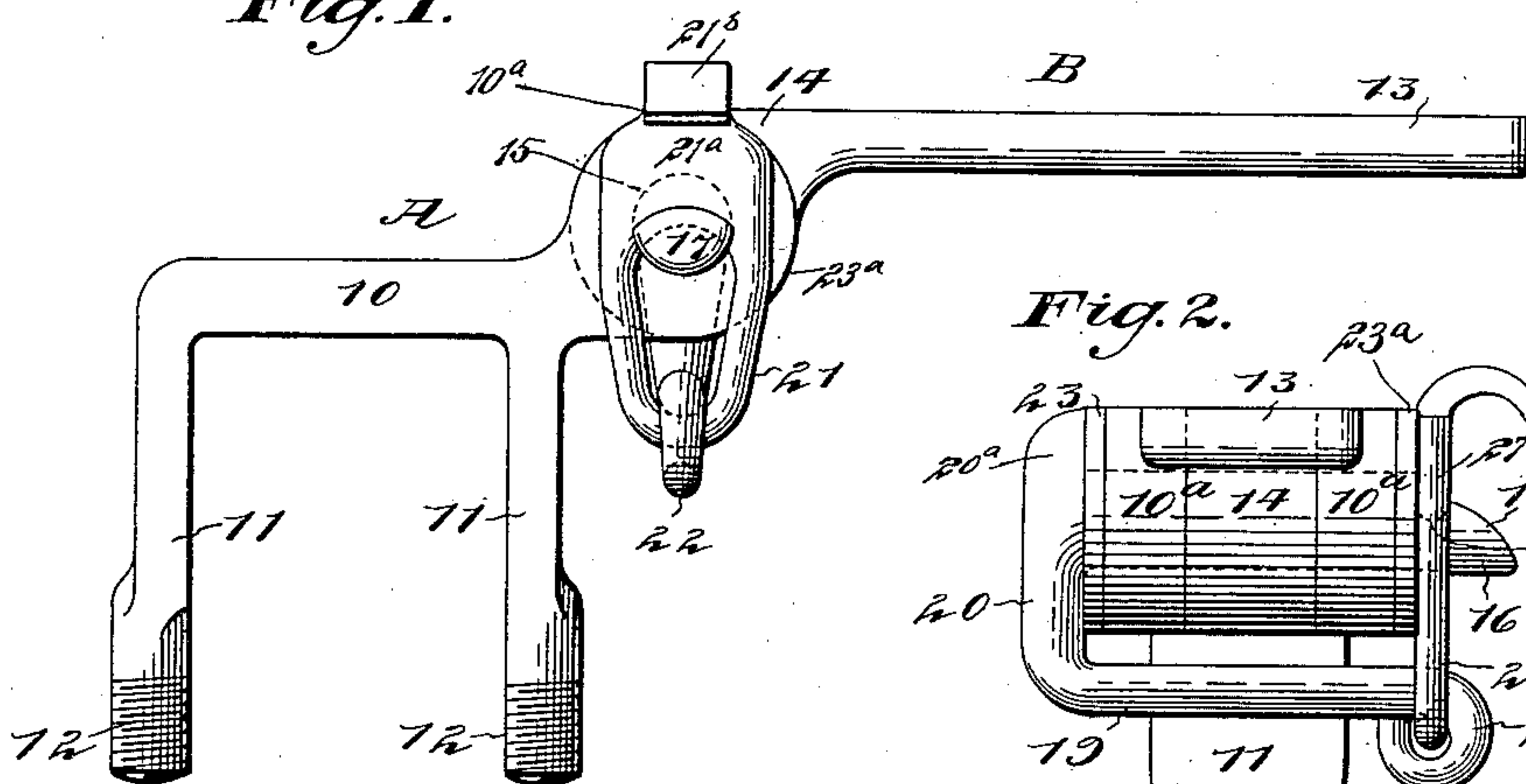


Fig. 2.

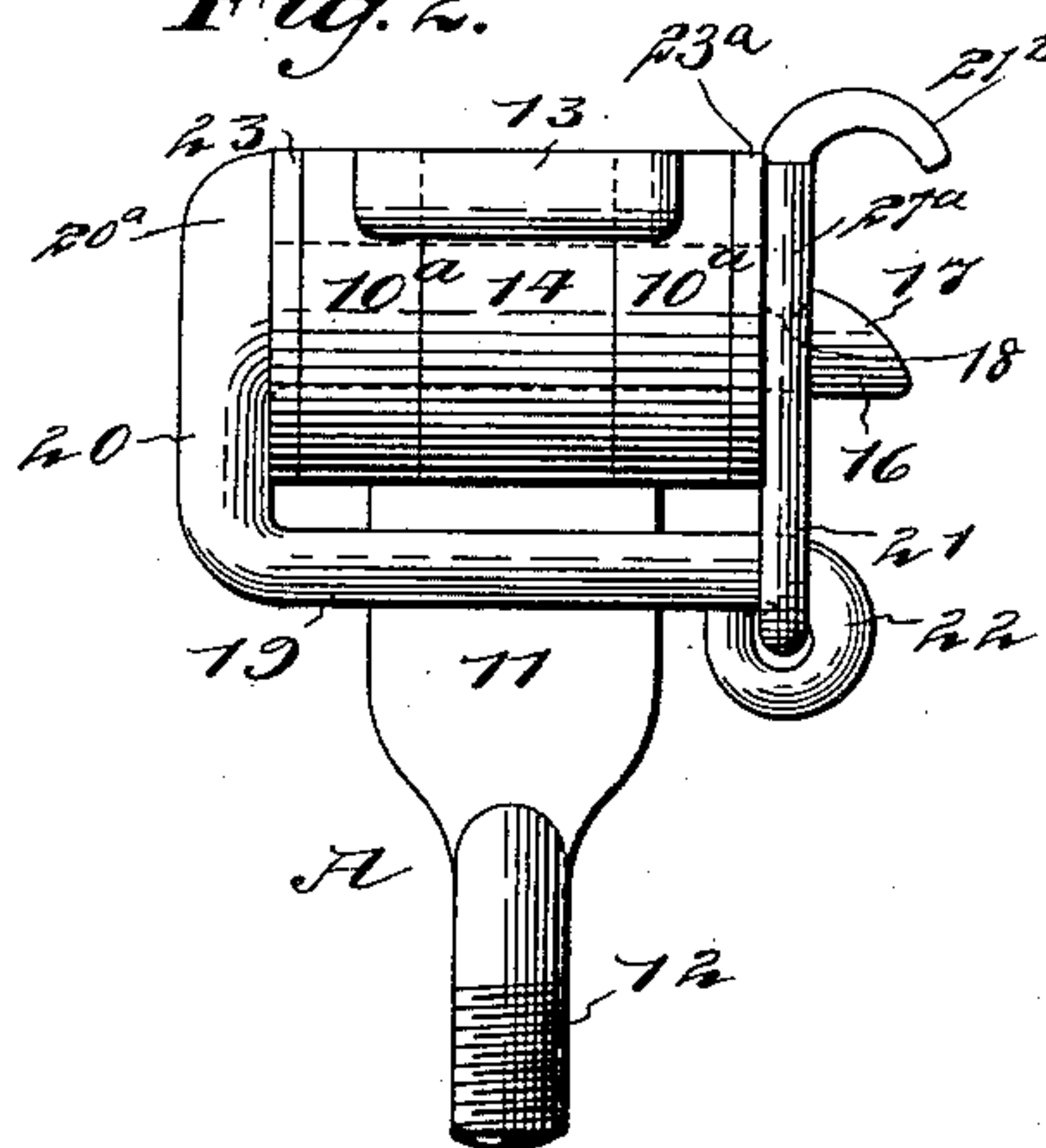


Fig. 3.

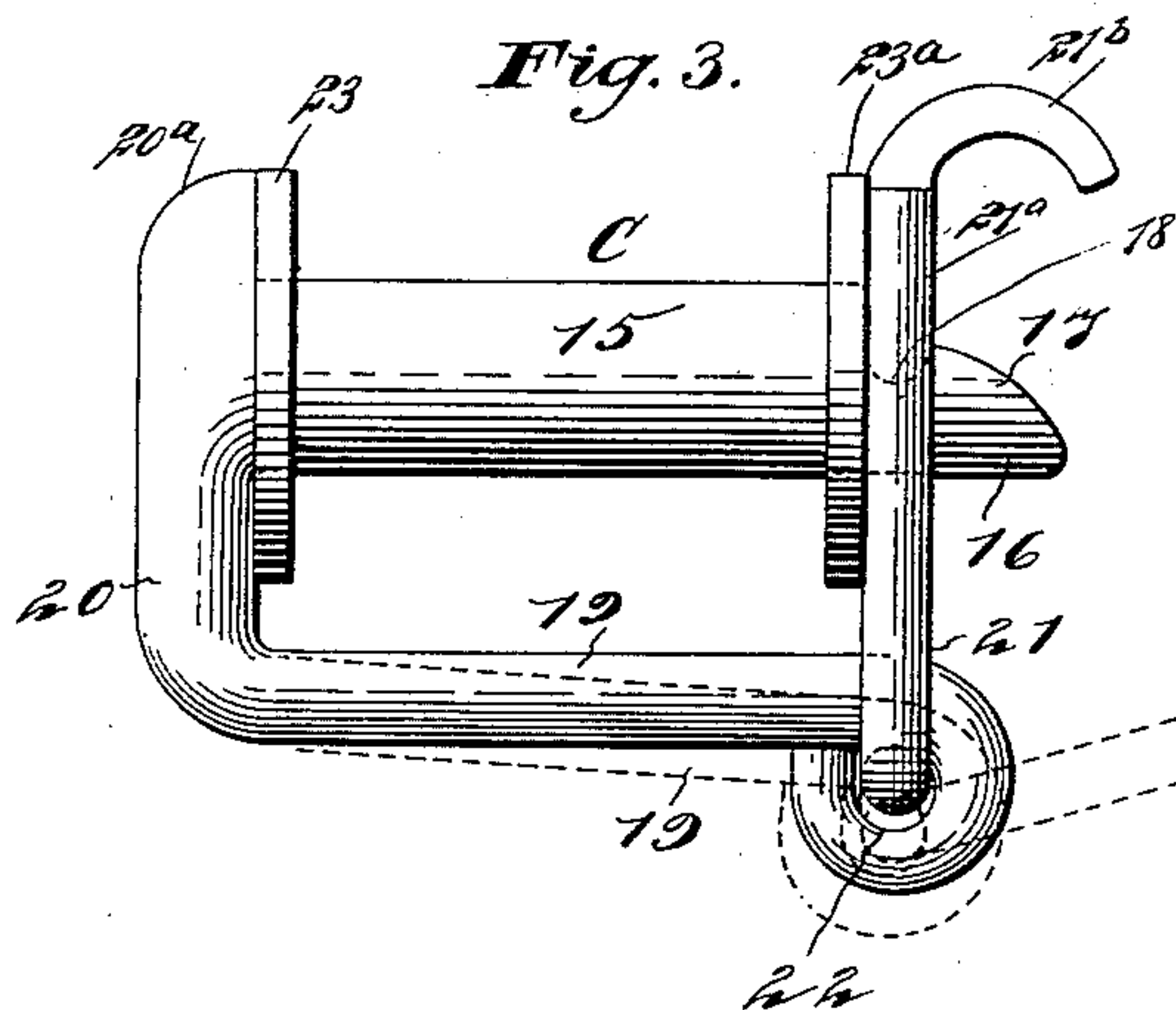
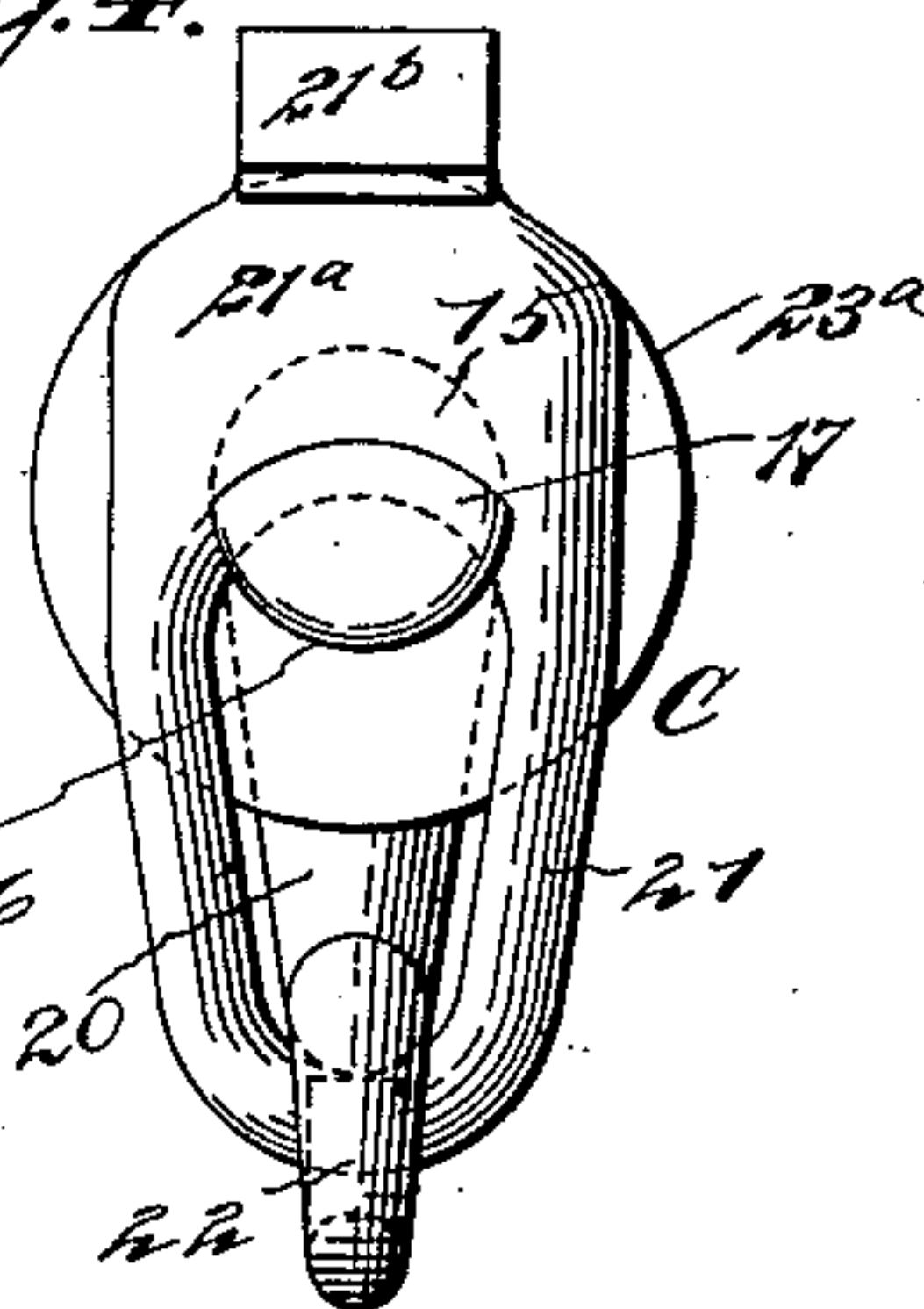


Fig. 4.



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ALBERT H. FORSYTHE, OF SARCOXIE, MISSOURI.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 633,442, dated September 19, 1899.

Application filed May 16, 1899. Serial No. 716,989. (No model.)

To all whom it may concern:

Be it known that I, ALBERT H. FORSYTHE, of Sarcoxie, in the county of Jasper and State of Missouri, have invented a new and Improved Thill and Pole Coupling, of which the following is a full, clear, and exact description.

The object of my invention is to provide a clamp or locking device for connecting the clip with the thill or pole irons or thill or pole couplings and to so construct the device that but two parts are needed, both of which are simple, yet light and strong.

A further object of the invention is to provide a clamp or locking device of the character described in which nuts are not required and that can be speedily attached to or detached from the parts to be united and which may be used for connections of the ordinary type and without any changes in the latter.

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

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

Figure 1 is a side elevation of the thill-iron and clip and an end view of the clamp or locking device connecting and locking the two parts. Fig. 2 is a front elevation of the clip and thill-iron and locking device used in connection with the two. Fig. 3 is an enlarged side elevation of the clamp or locking device, and Fig. 4 is an end view of the same.

A represents a clip of ordinary construction, comprising a top bar 10, pendent members 11, adapted for engagement one with the front and the other with the rear of the axle and provided with the usual thread 12 at their lower ends, and the ordinary eyes 10^a, formed at the forward upper portion of the said clip.

B represents a thill or pole iron which consists of a body-bar 13, adapted for attachment to the thill or pole, and a knuckle 14, adapted to fit and turn between the eyes 10^a of the clip.

The improved locking device or clamp C is illustrated in detail in Figs. 3 and 4, and consists of a pivot-bolt 15, a spring-arm 19 below the pivot-bolt, and a connecting-bar 20, that

unites one end of the spring-arm with the pivot-bolt. The connecting-bar is provided with a section 20^a, that extends above the pivot-bolt 15, and the inner face of said section 20^a is flat. The pivot-bolt 15 is of a proper diameter to pass through the openings in the eyes 10^a of the clip and the knuckle 14 of the pole or thill iron and is of sufficient length to extend beyond the outer faces of the said eyes 10^a of the clip, and at one end of the bolt 15 a keeper-head 16 is formed of less diameter than the bolt itself. The outer end of this keeper-bolt is provided with a beveled or inclined surface 17, that leads to a recess 18, preferably concave and located in the upper surface of the keeper-head adjacent to its junction with the said pivot-bolt, as is particularly shown in Fig. 3. The spring-arm 19 normally stands at an angle to the pivot-bolt, as shown in dotted lines in Fig. 3, and terminates at its free end or the end that is beneath the keeper-head 16 in an eye 22, the said eye 22 being adapted to pivotally receive one end of a link 21, the other end of the link, when the clamp is in locking position, being passed over the keeper-head and made to enter the recess 18 therein. The link 21 is provided with a deep solid section 21^a, adapted to extend above the pivot-bolt 15, and at this section 21^a a handle 21^b is formed.

In operation the knuckle of the thill-iron is placed between the eyes 10^a of the clip, and the link 21 of the clamp or locking device is dropped downward from the spring-arm, as shown in dotted lines in Fig. 3. A washer 23 is then placed on the pivot-bolt and carried to an engagement with the end connected with the spring-arm. The bolt is then passed through the eyes 10^a and knuckle 14, and a second washer 23^a is placed upon the bolt, the two washers engaging with the outer faces of the two eyes, as illustrated in Fig. 2. The link 21 by means of its handle 21^b is then carried to locking engagement with the keeper-head 16 in the manner described and cannot be shaken from such position by reason of the spring-arm 19 being drawn up parallel with the pivot-bolt when the link engages properly with the keeper-head. The section 21^a of the link forms a support for the upper portion of the washer 23.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

5 A thill-coupling, comprising a clip having eyes, a thill-iron having an eye fitted between the eyes of the clip, and a locking device or clamp comprising a pivot-bolt extending through the eyes of the clip and thill-iron, washers mounted on the pivot-bolt and located respectively at the ends thereof a connecting-bar attached to one end of the pivot-bolt, a spring-arm secured to the connecting-bar and having an eye formed in the free end thereof, the spring-arm passing beneath the pivot-bolt, and a locking-link comprising an

eye received in the eye of the spring-arm, the link also comprising a solid section at its upper end which is adapted to engage in a recess formed in the end of the pivot-bolt, said end of the pivot-bolt being beveled to permit the solid portion of the locking-link to slide up into the recess, and the locking-link also having a handled portion projected upwardly and forwardly from the front end. 15 20

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Witnesses:

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