

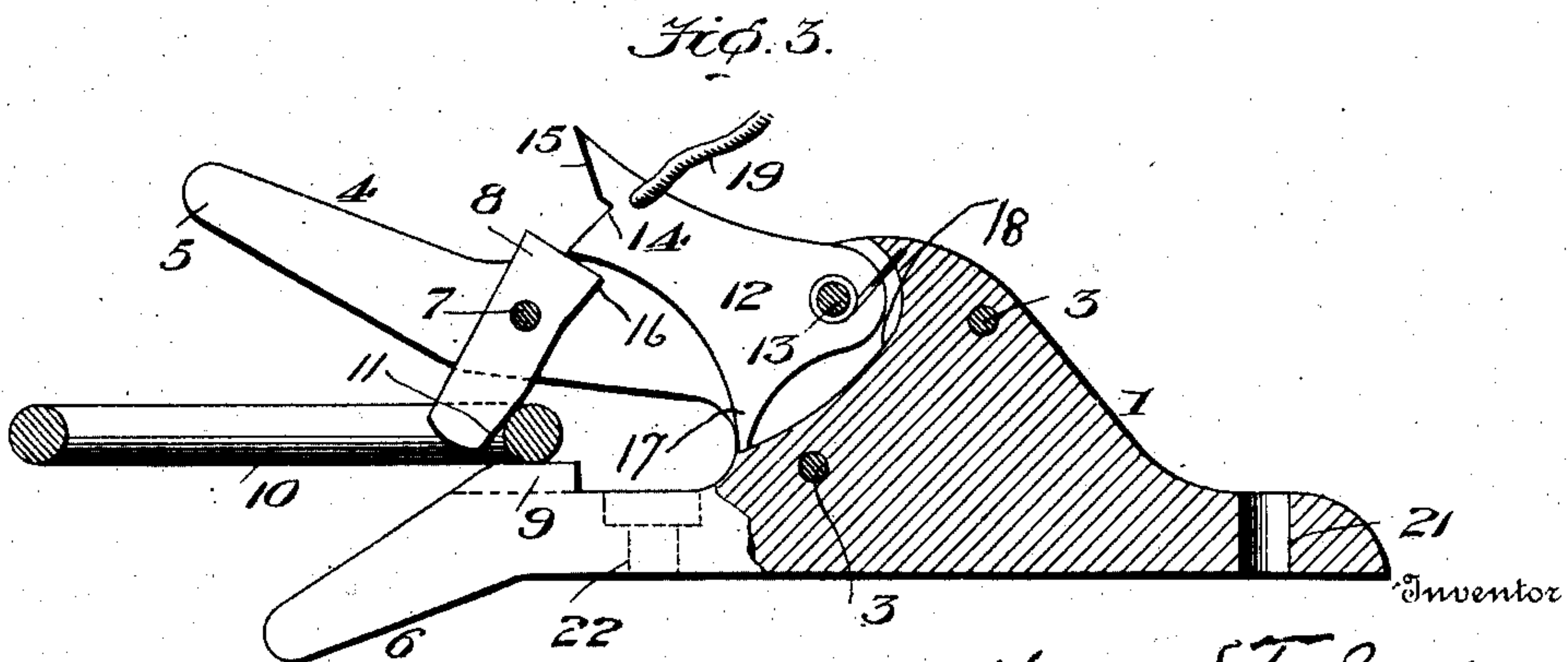
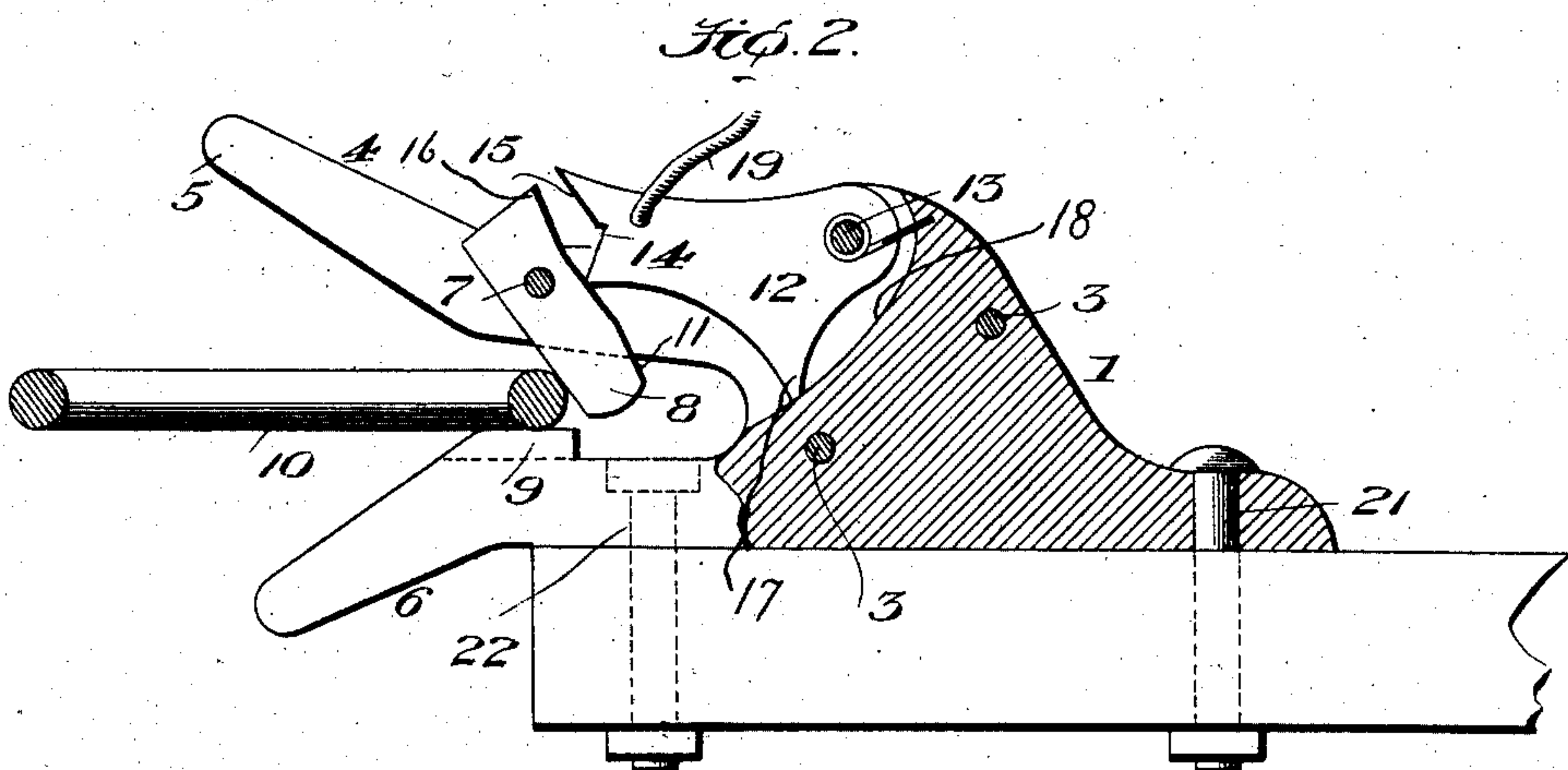
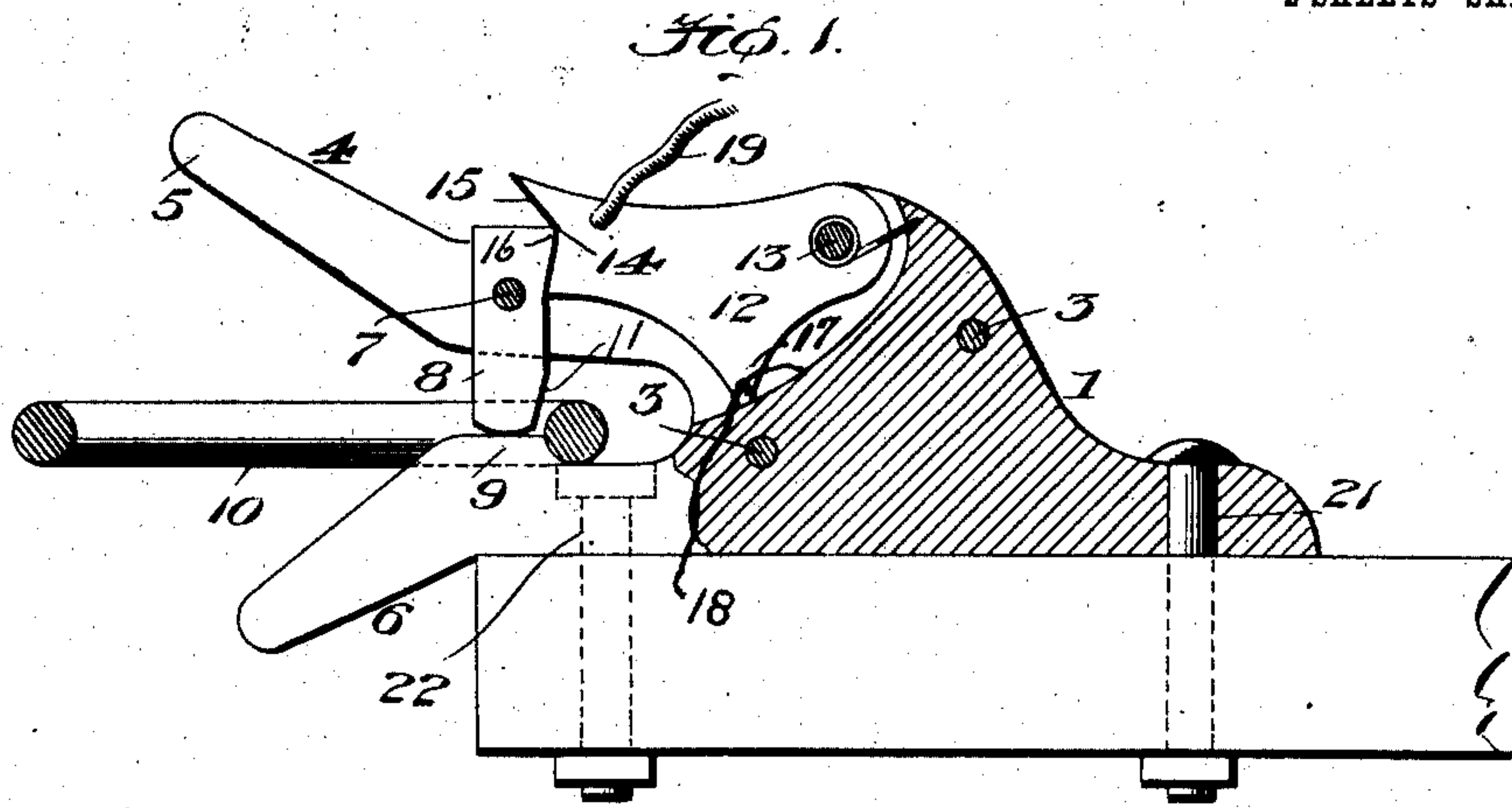
No. 854,292.

PATENTED MAY 21, 1907.

H. T. INGRAM.
COUPLING.

APPLICATION FILED JAN. 24, 1907.

2 SHEETS—SHEET 1.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 4.

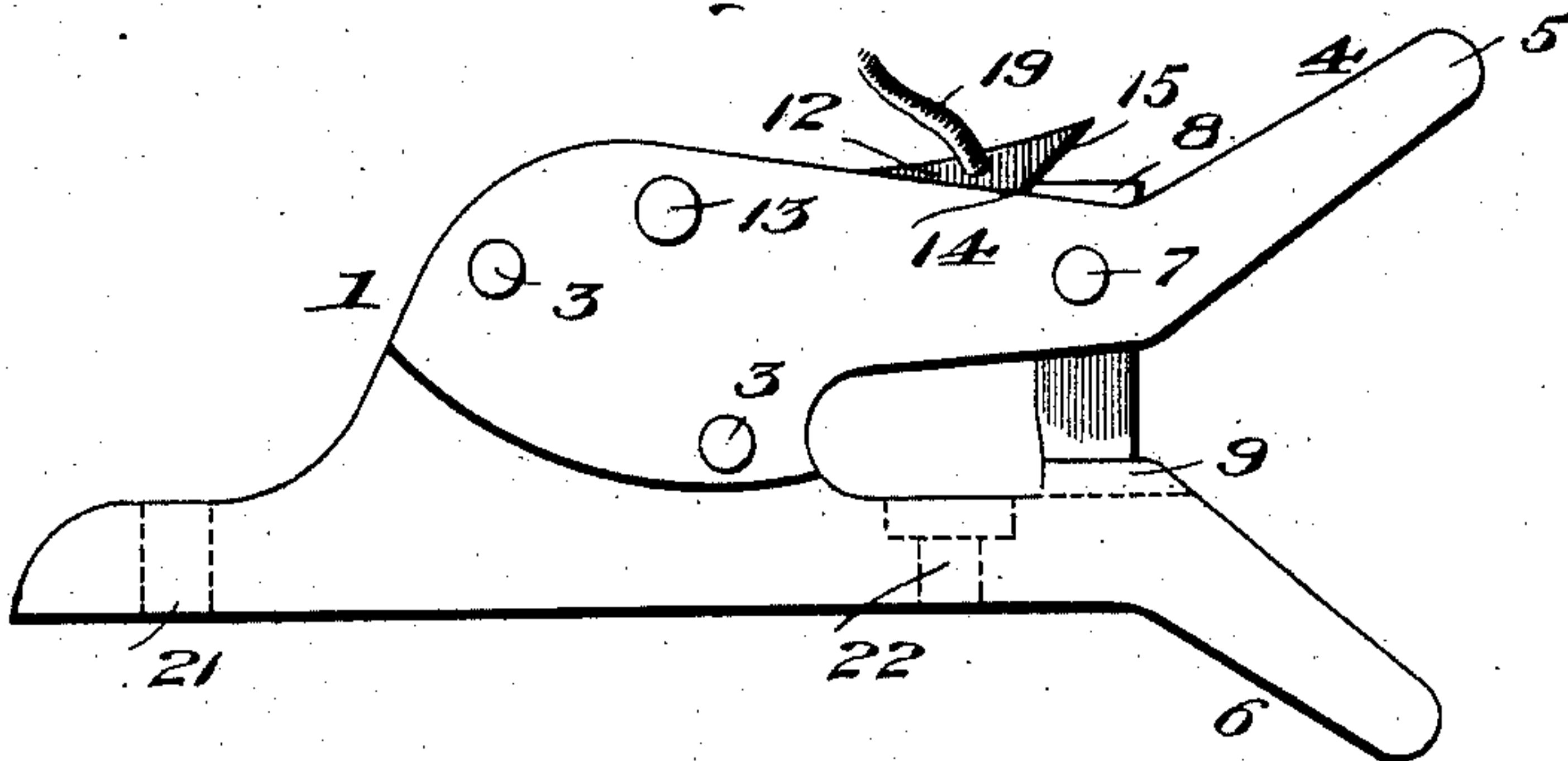


Fig. 5.

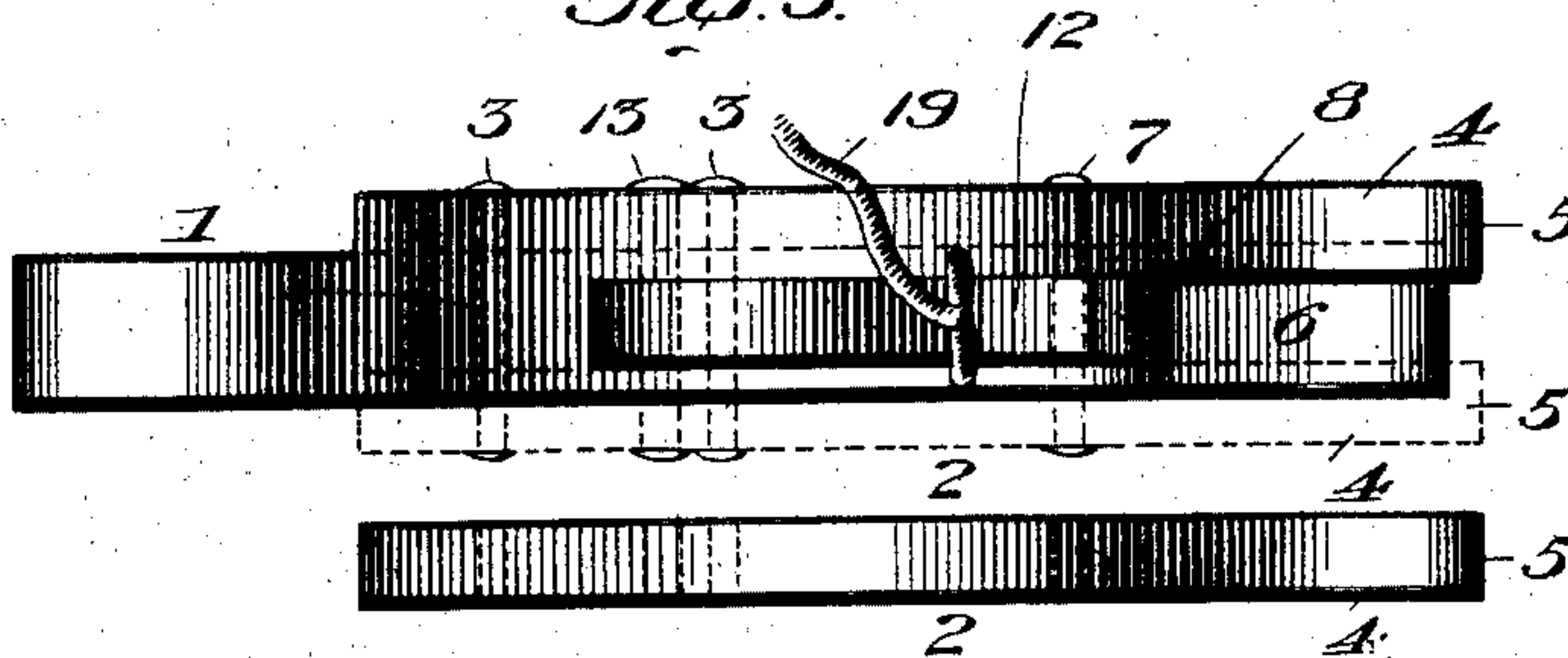


Fig. 6.

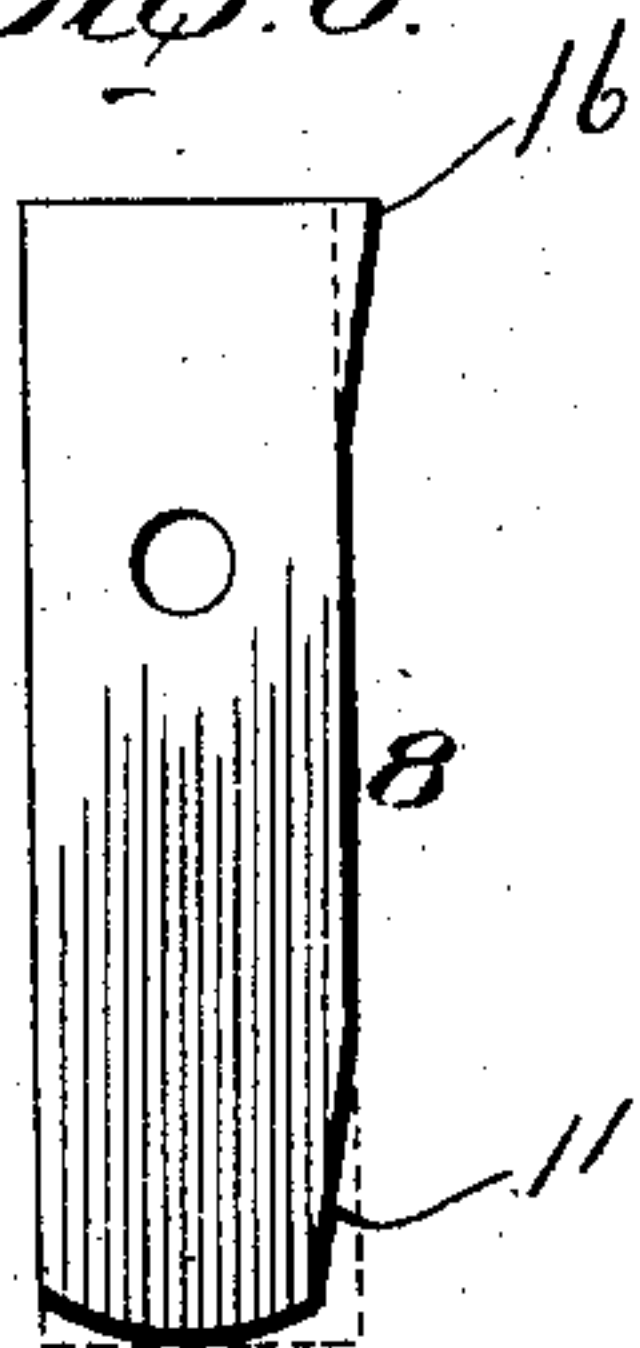
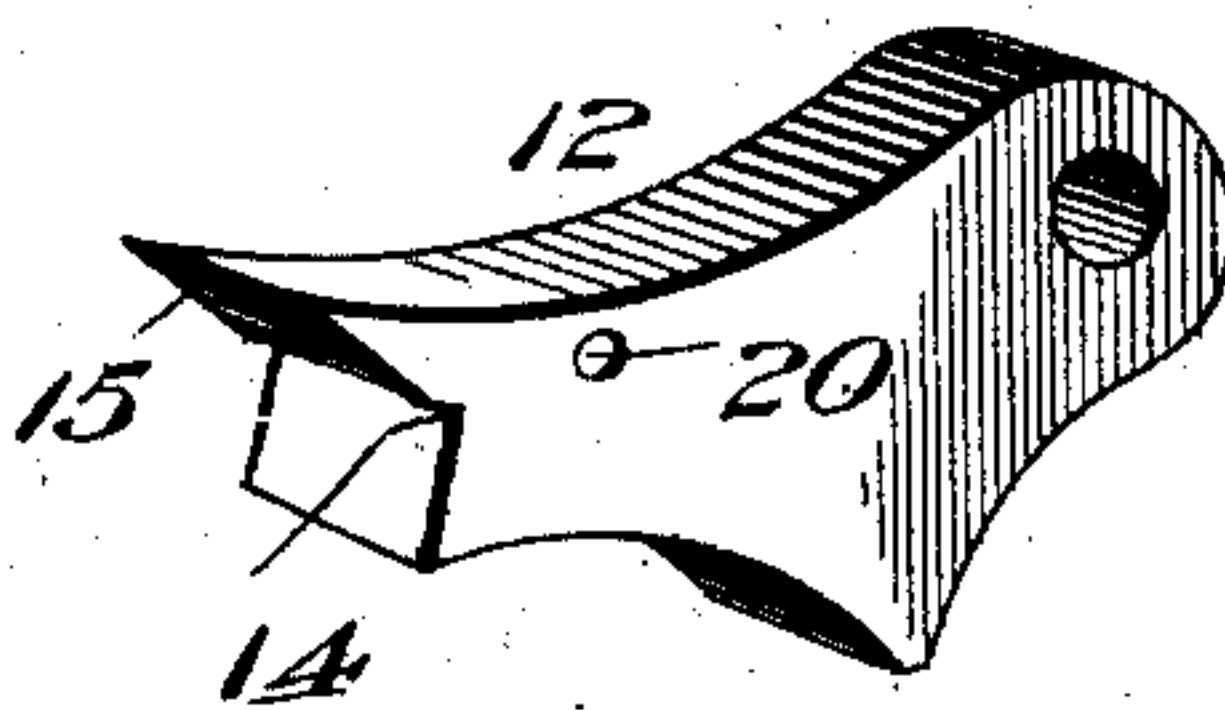


Fig. 7.



Witnesses

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UNITED STATES PATENT OFFICE.

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COUPLING.

No. 854,292.

Specification of Letters Patent.

Patented May 21, 1907.

Application filed January 24, 1907. Serial No. 353,902.

To all whom it may concern:

Be it known that I, HOWARD T. INGRAM, a citizen of the United States of America, residing at Fairfield, in the county of Jefferson and State of Iowa, have invented certain new and useful Improvements in Couplings, of which the following is a specification.

This invention relates to new and useful improvements in vehicle couplings.

It is an object of this invention to provide a novel device of this character which operates in conjunction with a link.

Furthermore, it is an object of the invention to provide a novel device of this character employing a pivoted latch thereby being a locking means employed for controlling the latch.

Finally an object of this invention is to provide a device of the character noted, which will possess advantages in points of simplicity, efficiency and durability, proving at the same time comparatively inexpensive to manufacture.

With the foregoing and other objects in view, the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail reference will be had to the accompanying drawings forming part of this specification wherein like characters denote corresponding parts in the several views, in which—

Figure 1, is a view partly in side elevation and partly in section of the coupler with the link in operative engagement therewith. Fig. 2, is a view partly in side elevation and partly in section of the invention with the link or hook entering the coupling. Fig. 3, is a view partly in side elevation and partly in section of the coupling showing the link leaving the coupling. Fig. 4, is a view in side elevation of the coupling taken from an opposite side from that shown in Figs. 1, 2, and 3, the link being omitted. Fig. 5, is a top plan view of the coupling, one side thereof being disengaged, its normal position being indicated by dotted lines. Figs. 6, 7, illustrate certain details of the invention.

In the drawings 1, indicates the body of the coupler having its upper portion bifurcated to receive the working parts of the coupling. While the upper sides of the coupling may be formed rigid or integral with the base 1, it has been found preferable to

have the side 2, removable as is shown in Figs. 4 and 5. This removable section is secured to the base through the medium of the securing means 3. This removable side permits of the ready assembling or removal of the various parts of the coupling.

Projecting from the upper portion of the sides are guards 4, which initially extend approximately horizontally and terminate in inclined portions 5. Extending from the base 1, is a second guard 6, which is approximately of the same configuration as the guard 4, with the exception that its end portion is inclined in an opposite direction as will, it is thought, be plainly apparent to those skilled in the art, as this is the well known arrangement in devices of this character. Pivotedly secured between the upper guards 4, by the pins 7, is the latch or lock 8, the lower end thereof extending within a recessed shoulder or abutment 9, on the lower guard 6. The latch 8, is pivoted adjacent the junction of the inclined portions of the guards 4, and the abutment 9, is positioned beneath the pivotal point. By this arrangement when the link 10, is in applied position, the strain will be removed from the pivotal pin 7, and in order that the strain may be almost, if not entirely, removed from the latch 8, the lower portion thereof is inclined as at 11, so that the link will slide thereon and contact positively with the abutment 9. While this inclination is disclosed in Figs. 1, 2, 3, and 4, it is further illustrated in the detail view 6. In this Fig. 6, it is to be noted that the lower end of the latch 8, is rounded. This is done in order that the movement of the latch within the recess or abutment will be free and unobstructed.

Pivoted between the bifurcated portion of the base and adjacent the rear thereof is a lock 12, for the purpose of holding the latch 7, normally against displacement. This lock is held to the base through the medium of the pivotal pin 13. The forward end of this lock or the portion thereof that contacts with the latch 8, is provided with a shoulder 14, which is intended to rest upon the upper portion of the latch 8, and thus prevent the lock from falling too low with relation to the latch 8. It is to be stated at this point that the latch 8, is pivoted intermediate its length and that the lock 12, contacts with that portion of the latch above the pivot. Thus it can be seen that the latch 8, can readily move inward for

the reception of the link 10, but is securely held against displacement when a pull is given on said link.

The portion of the end of the lock 12, above the shoulder 14, is inclined outwardly as at 15. This is to provide a guiding means for the lock when the latch 8, after being moved to receive the link 10, is being returned to its normal or operative position. The upper end of the latch 8, will contact with this inclined portion of the lock and said lock will thereby be lifted until the shoulder 14, rests upon the upper end thereof as is, it is thought, clearly obvious. In order that the engagement of the latch 8, and the shoulder 14, of the lock 12, may be positive, that portion of the latch 8, which receives the shoulder 14, is slightly projected as is plainly shown in detail Fig. 6, at 16. While the shoulder 14, is for the purpose of preventing the lock 12, falling too low, it has been found advantageous to further provide for this possibility by forming with the under edge of the lock 12, a projection 17, which will contact with the inclined wall 18, of the bifurcated portion of the base.

The operation of this device is thought to be apparent without a detail thereof, it being stated that the lock is released from the latch through the medium of the flexible connection 19, which is secured adjacent the forward end of the lock. This connection terminates at any point convenient to the operator of the vehicle to which the coupling is applied. This coupling can be applied to the

tongue of a vehicle in any well known or preferred manner but as illustrated in the drawings its rear end is provided with an aperture 21, for the passage of a securing screw while the guard 6, adjacent its inner end is provided with an opening 22, for a similar purpose it being observed that the upper portion of this opening is countersunk so that the head of the screw or bolt therein will not obstruct the service of this guard 6.

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

1. In combination with a coupling having a pivoted latch, a lock therefor contacting with an end thereof, the contacting portion of the lock being provided with a shoulder to rest on the latch when in operative position, that portion of the lock above the shoulder being inclined to form a guide for the lock with relation to the latch.

2. In combination with a coupling having a pivoted latch, a lock therefor contacting with an end thereof, the contacting portion of the lock being provided with a shoulder to rest on the latch when in operative position, that portion of the latch which engages the shoulder of the lock being projected.

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

HOWARD T. INGRAM.

Witnesses:

N. B. REGESTER,
W. D. SHIRK.