

No. 753,443.

PATENTED MAR. 1, 1904.

N. J. ST. HILAIRE.
SELF LOCKING HINGE.

APPLICATION FILED APR. 30, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

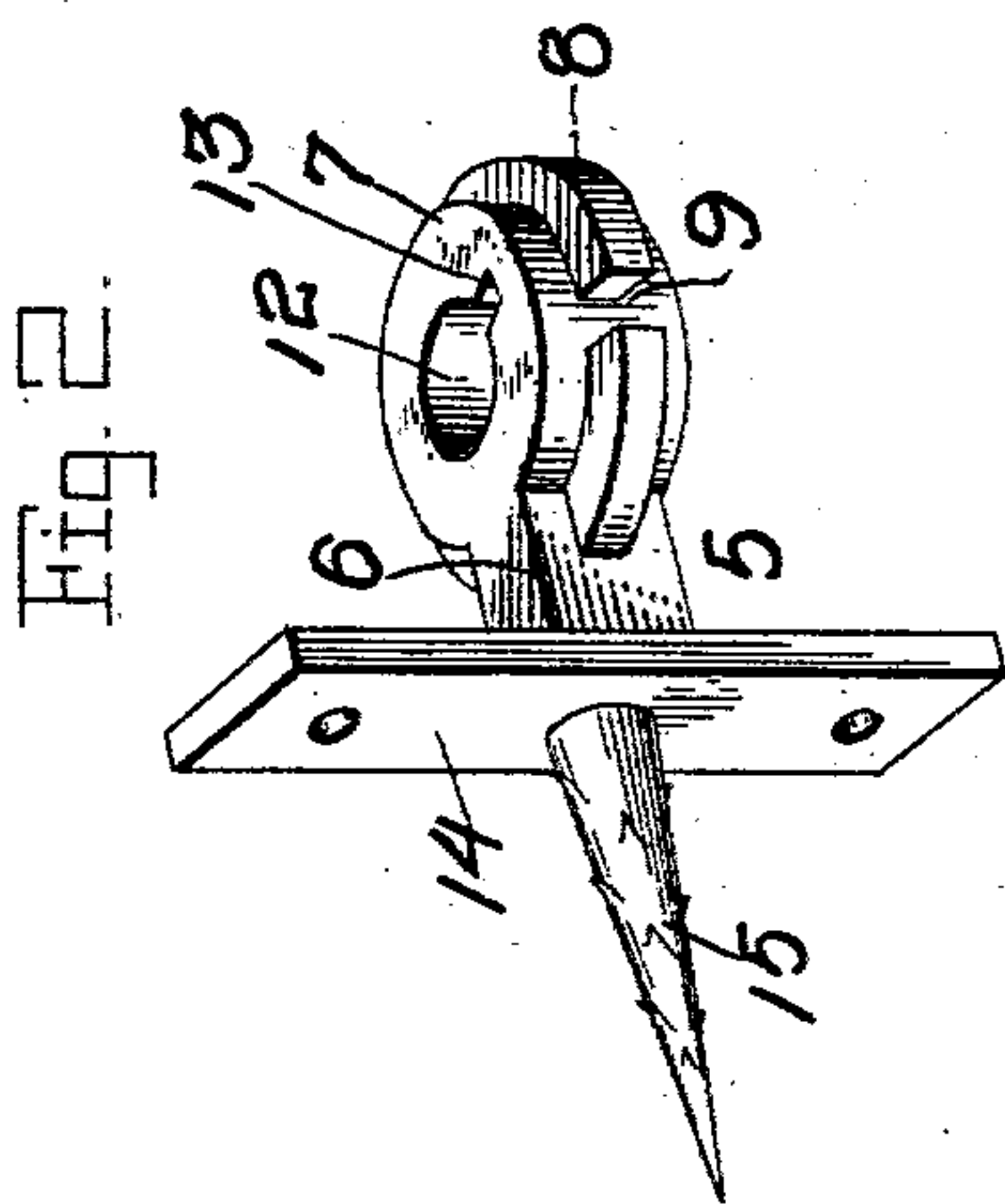


Fig. 3.

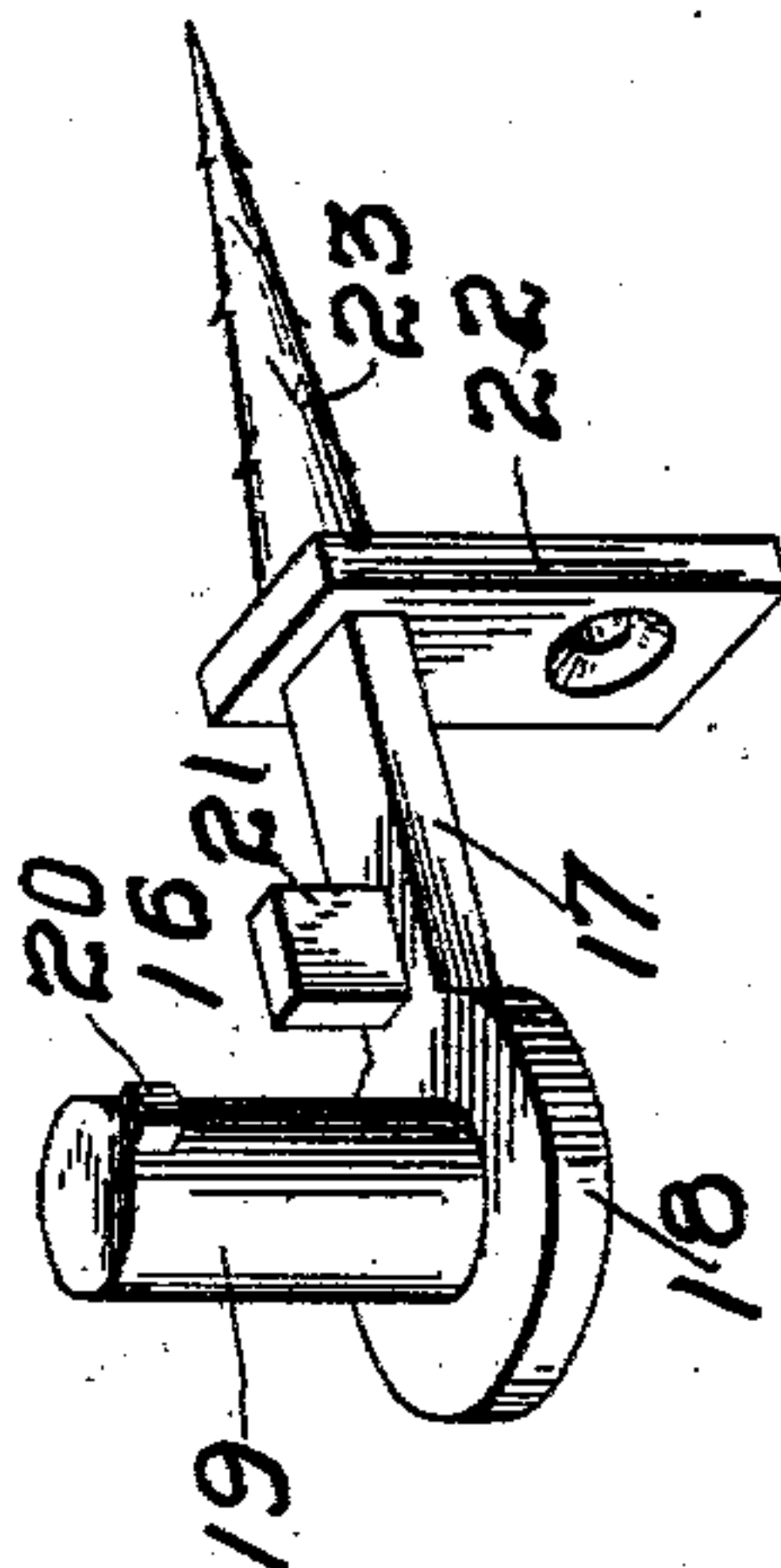
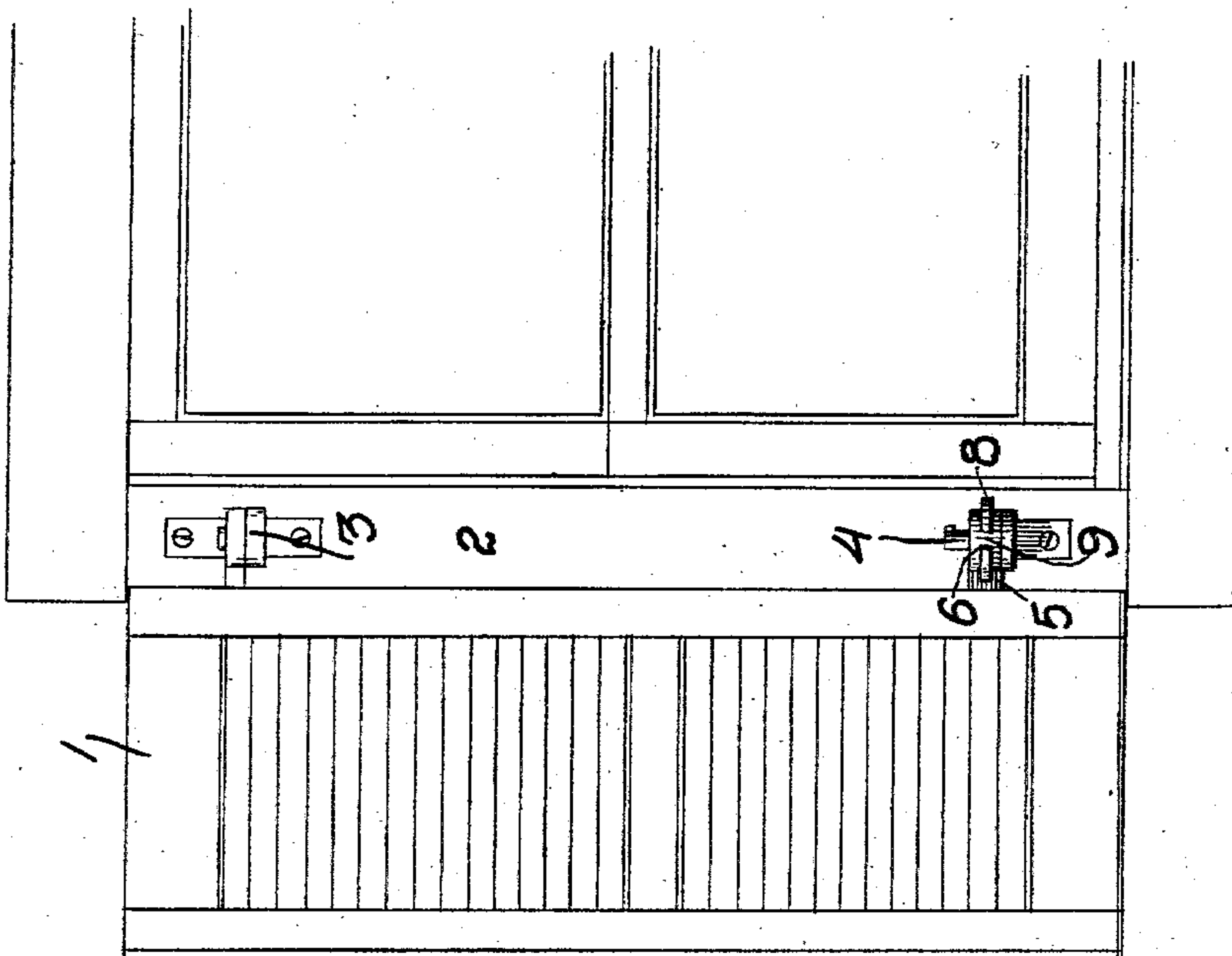


Fig. 1.



Inventor

N. J. St. Hilaire.

Witnesses

C. H. Reichenbach.

[Signature]

By

[Signature]

Attorney

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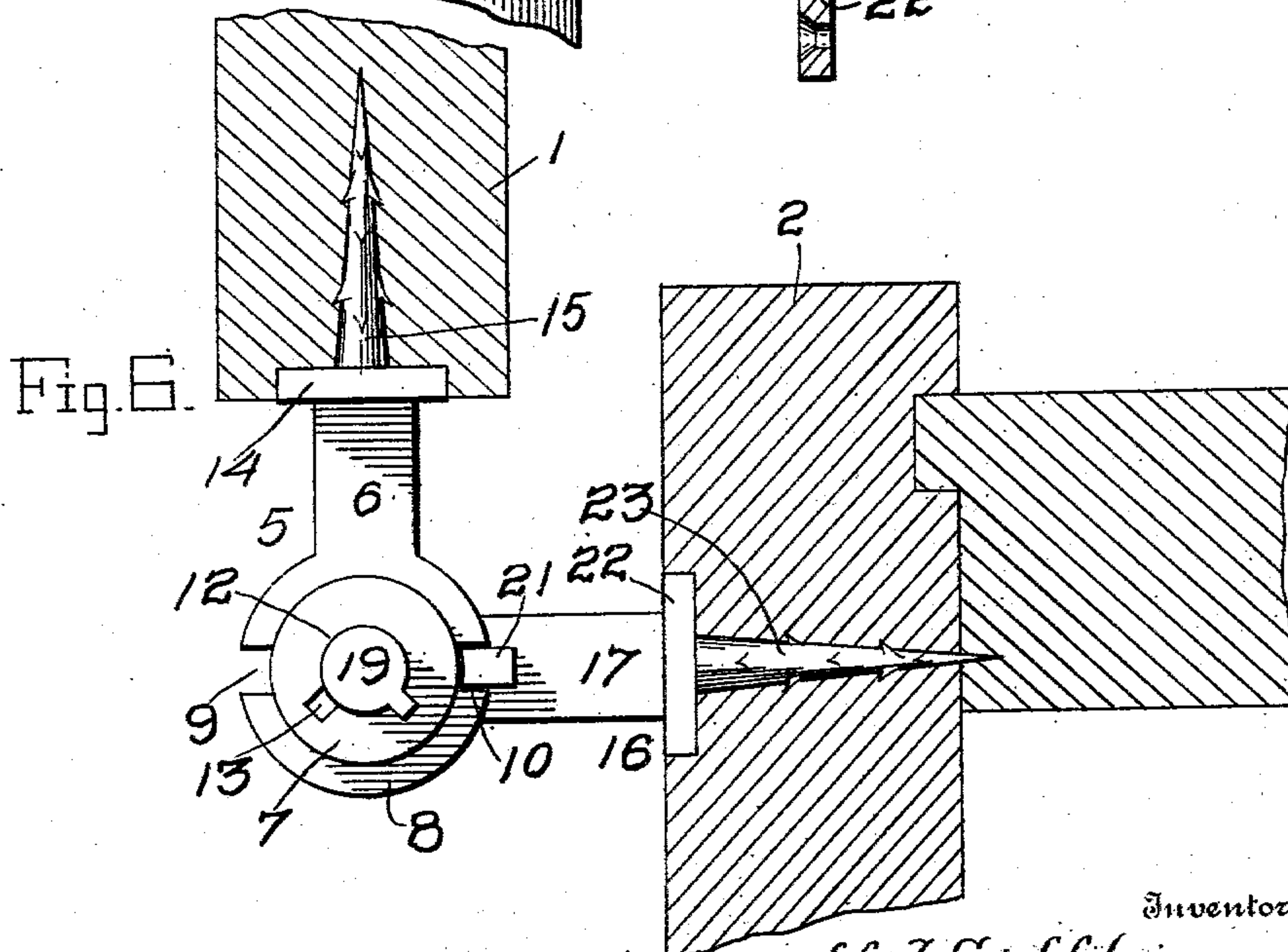
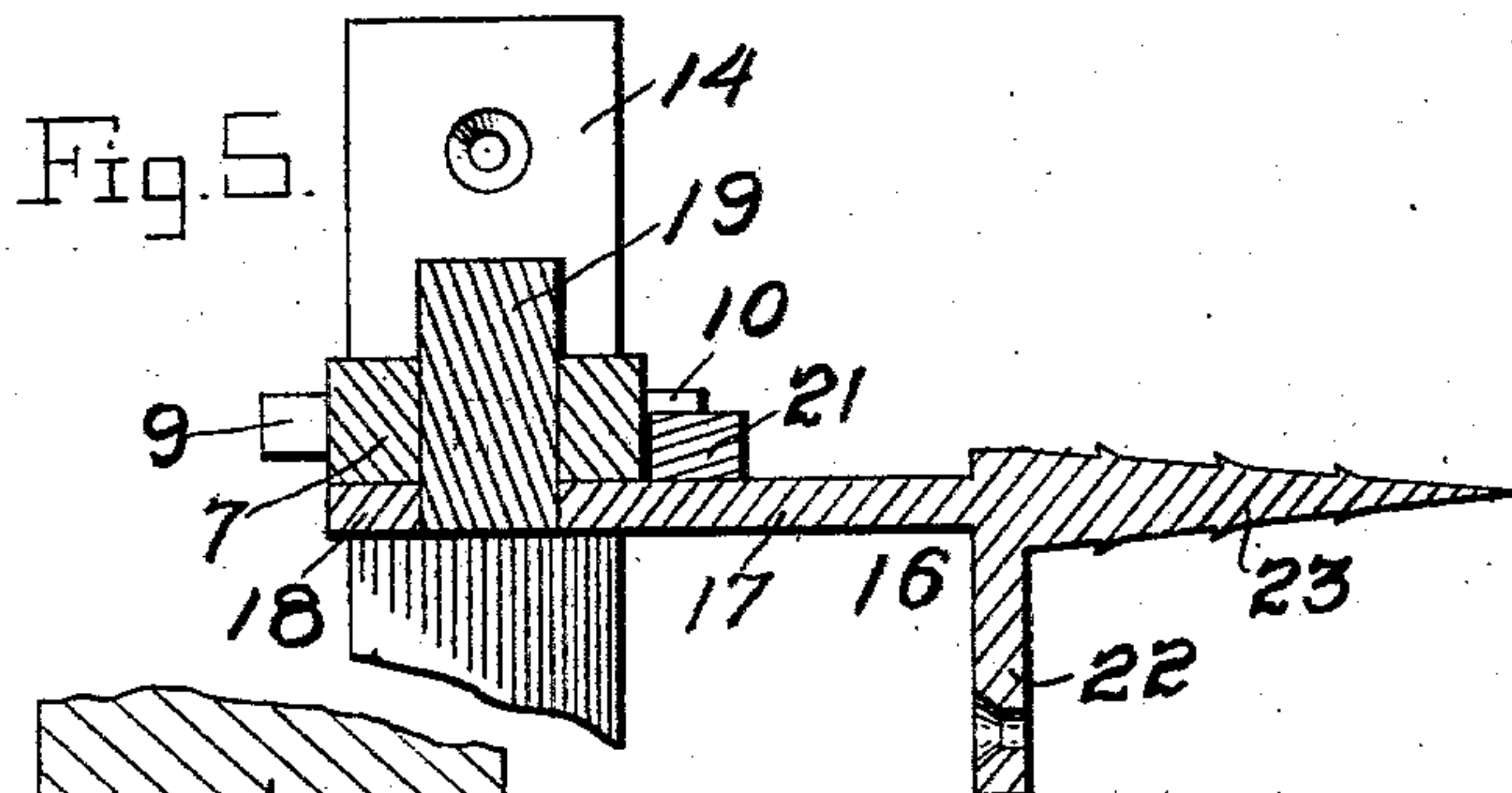
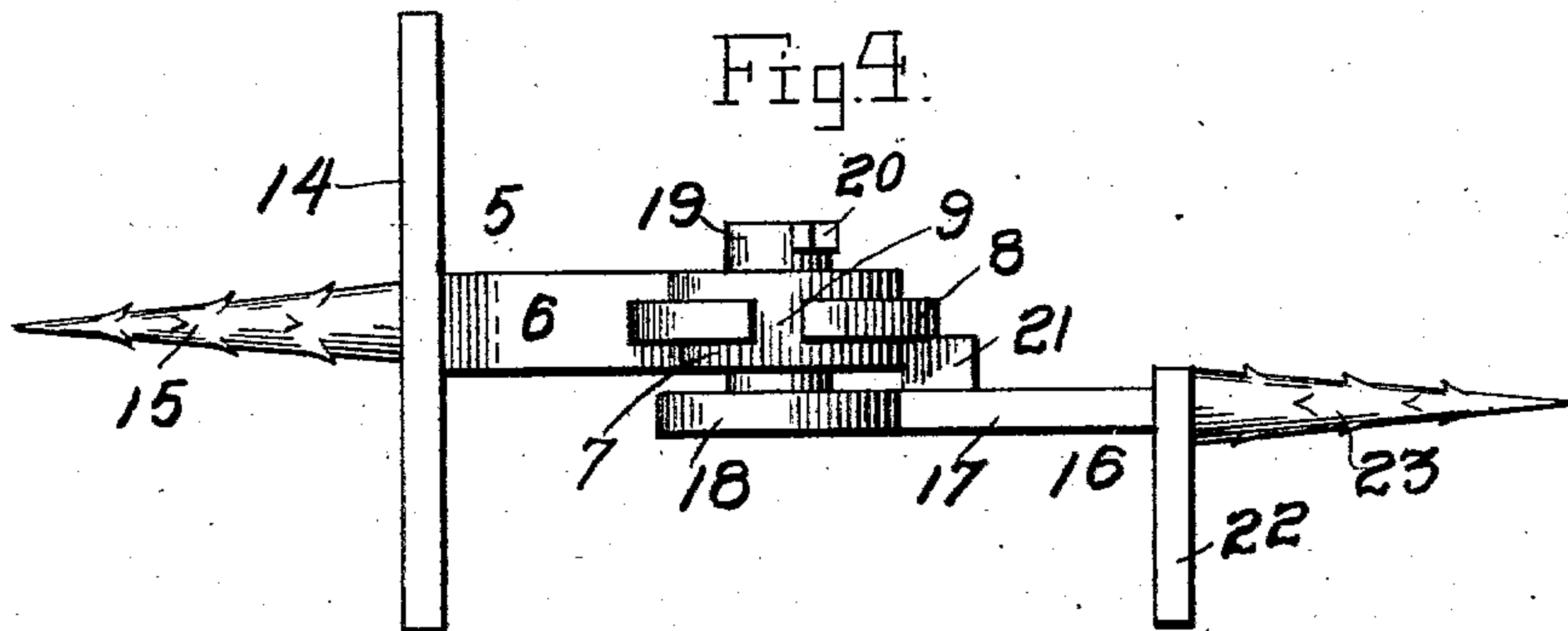
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

NAPOLÉON J. ST. HILAIRE, OF GARDNER, MASSACHUSETTS.

SELF-LOCKING HINGE.

SPECIFICATION forming part of Letters Patent No. 753,443, dated March 1, 1904.

Application filed April 30, 1903. Serial No. 154,990. (No model.)

To all whom it may concern:

Be it known that I, NAPOLÉON J. ST. HILAIRE, a citizen of the United States, residing at Gardner, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Self-Locking Hinges; 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.

This invention relates to improvements in self-locking hinges for blinds and the like.

The object of the invention is to provide a hinge for blinds, doors, gates, and the like on which the same may be supported and swung, means being provided whereby the blind, door, or gate may be locked either in an open or closed position, another object being to provide means whereby the swinging member of the hinge will be prevented from being accidentally removed from the rigid member, a further object being to provide a hinge of this character which will be simple, strong, and durable, inexpensive, and well adapted to the use for which it is designed.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended claim.

Figure 1 is a side elevation of a blind and part of a window-casing, showing the application of the hinge. Fig. 2 is a perspective view of the blind or swinging member of the hinge. Fig. 3 is a similar view of the casing or rigid member. Fig. 4 is a side elevation of the members engaged, showing the position of the parts when the blind is partly open. Fig. 5 is a vertical sectional view; and Fig. 6 is a top plan view of the connected members, showing a portion of a blind in section and in open position.

In the drawings, 1 denotes a blind. 2 denotes the window-casing. 3 denotes the upper hinge, which may be of any suitable construction, and 4 denotes the lower hinge.

5 denotes the blind or swinging member of the hinge, which consists of an outwardly-

projecting arm 6, formed on its outer end with an enlarged circular head 7, around the edge of which is formed a centrally-disposed annular flange 8, in which are formed at diametrically opposite points and at right angles to the arm 6 two slots or notches 9 and 10.

12 denotes a vertical centrally-disposed circular hole or bore formed through the head 7, and in one side of the walls of the hole is formed a vertically-disposed slot or notch 13, which extends throughout the entire depth of the hole.

14 denotes an attaching-plate formed on the inner end of the arm 6, in which are formed screw-holes by which the member may be attached to a blind.

15 denotes a barbed spike or point projecting from the plate 14 and adapted to be driven into the edge of the blind to also hold the hinge member in place.

16 denotes the casing or rigid member, which consists of an outwardly-projecting arm 17, formed on its outer end with an enlarged circular head or plate 18, on which is formed an upwardly-projecting centrally-disposed pintle 19, having formed on its inner end a laterally-projecting lug 20.

21 denotes an upwardly-projecting lug formed on the arm 16, and 22 denotes an attaching-plate formed on the inner end of the arm 17, in which are formed screw-holes by which the member may be attached to a window-casing, and 23 denotes a barbed spike or point projecting from the plate 22 and adapted to be driven into the casing as an additional support for the rigid member.

In hanging the blind the blind or swinging members of the upper and lower hinges are placed over the casing members in such a position that the slot or notch 13 in the lower blind member will be in line with the lug 20 on the pintle 19 of the lower casing member. The members of the upper hinge being in line, the parts will slip together, the upper end of the pintle and the lug 20 coming through the hole 12 and projecting above the circular head of the blind member and the flange 8 of the same resting on the lug 21 of the casing member. The blind may now be swung to an open or closed position, and when either of

these positions is reached one or the other of the notches 9 or 10 will be brought over and into line with the lug 21, when the lug will enter the notch and the blind drop and lock, as will be understood. When the blind has reached either of the positions just described and the lug 21 comes into engagement with the notches 9 or 10, the blind will be locked in such position and cannot be swung until raised sufficiently to disengage the lug from the notch. The pintle 19 is of such length that the lug 20 will be far enough above the top of the blind member to permit the same to be raised sufficiently to allow notch therein to become disengaged from the lug 21 and permitting the blind to be swung, the lug 20 on the pintle 19 serving to prevent the blind from being raised too high, thus avoiding danger of the blind coming off.

In order to remove the blind, the same is swung to such a position that will bring the notch 13 in the blind member under or in line with the lug 20 on the pintle 19, when the blind may be raised and the hinge members disengaged.

While but one form of means for attaching the members of the hinge to the blind or casing is shown, it will be understood that various other forms than those herein shown may be employed for attaching the members, especially-constructed means being employed for different kinds of structure.

From the foregoing description, taken in connection with the accompanying drawings,

the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

A self-locking hinge comprising a knuckle member 5 consisting of a shank or arm 6 formed at its outer end with a head 7 provided with an annular flange 8 having slots 9 and 10 at diametrically opposite points, the head being formed with a bore 12 provided with a vertical groove 13, an attaching-plate 14 formed on the inner end of the arm 6, and a spur 15 projecting from said plate, in combination with a pintle member comprising an arm or shank 17 provided at one end with a head 18, a pintle 19 rising from said head and provided with a lug 20, a lug 21 on the said arm 17, an attaching-plate 22 at the inner end of the arm 17, and a spur 23 projecting from said plate, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

NAPOLÉON J. ST. HILAIRE.

Witnesses:

MARSHALL N. THAYER,
KATHARINE W. RIARK.