M. E. JOHNSON.

FENCE STRETCHER.

APPLICATION FILED FEB. 26, 1908.

935,030. Patented Sept. 28, 1909.

Fig. 1.

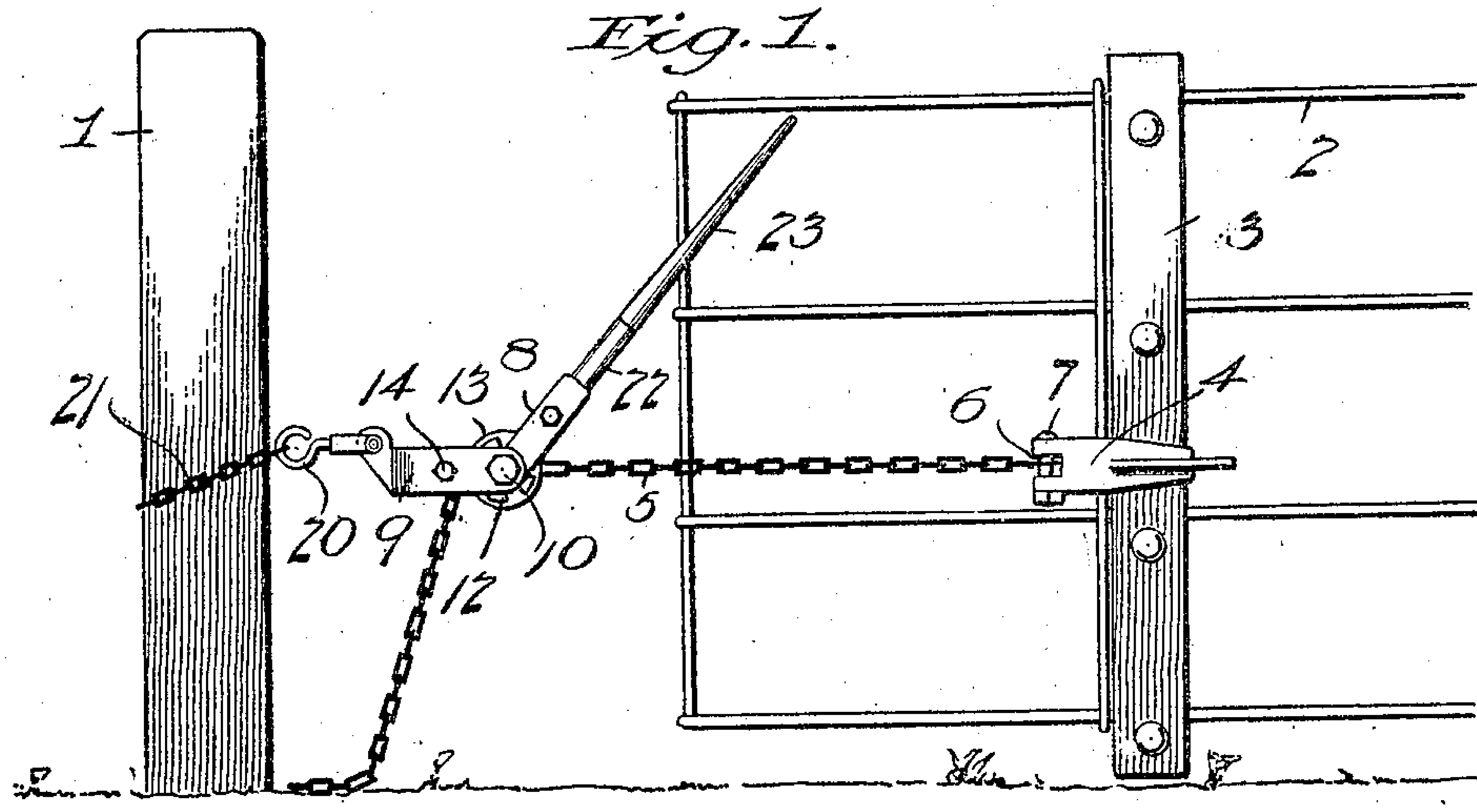


Fig. 2.

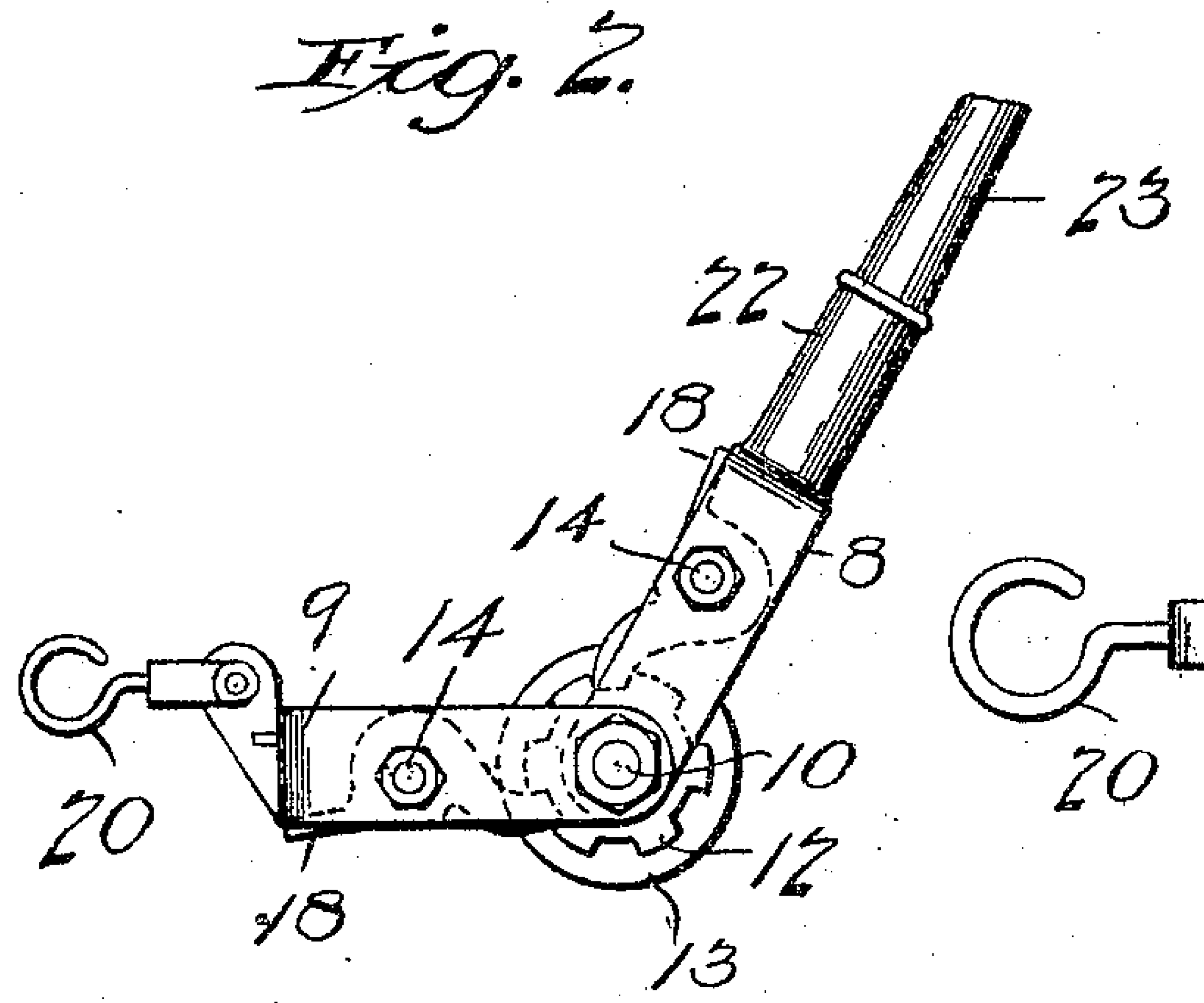


Fig. 4.

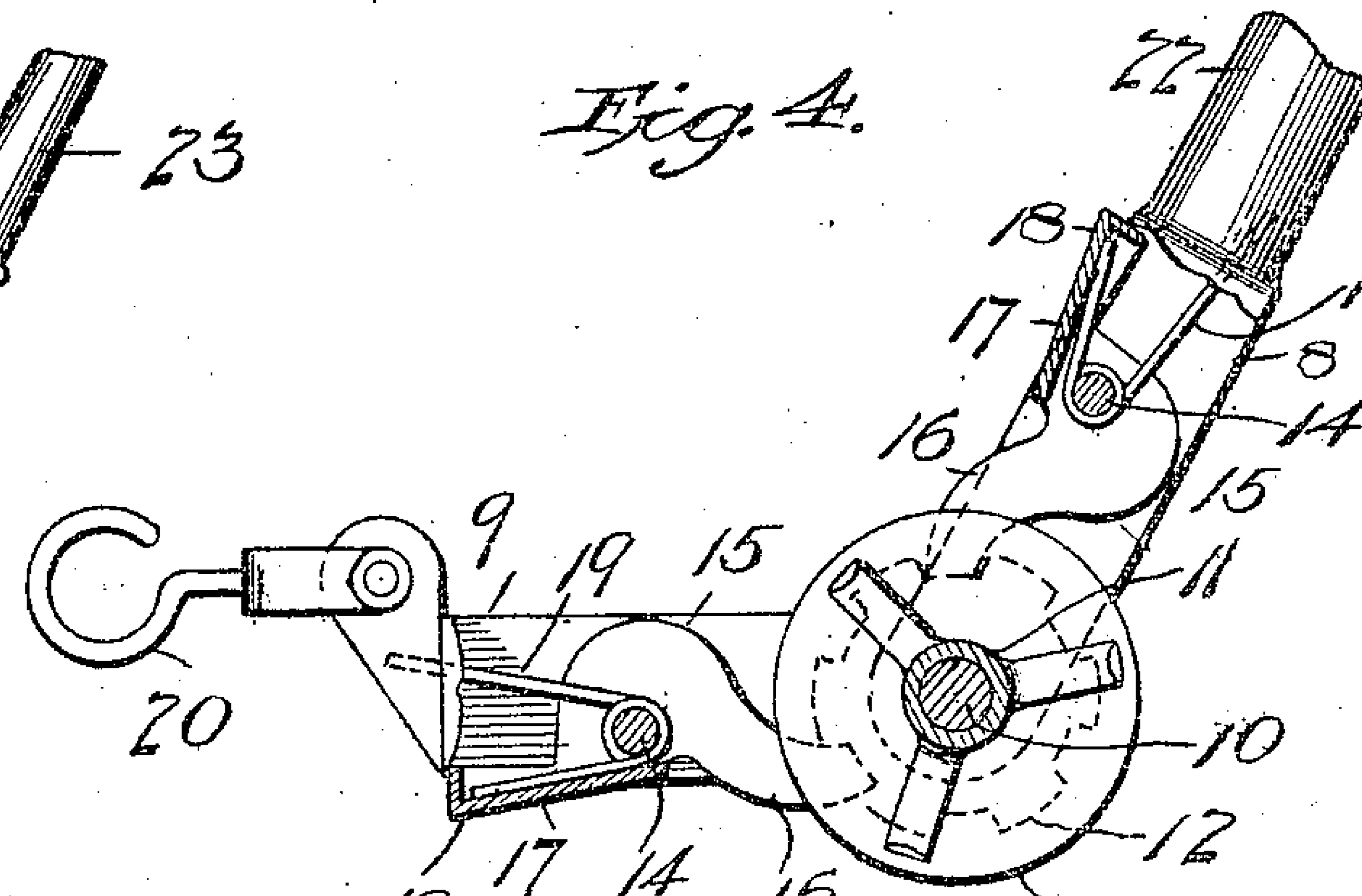


Fig. 3.

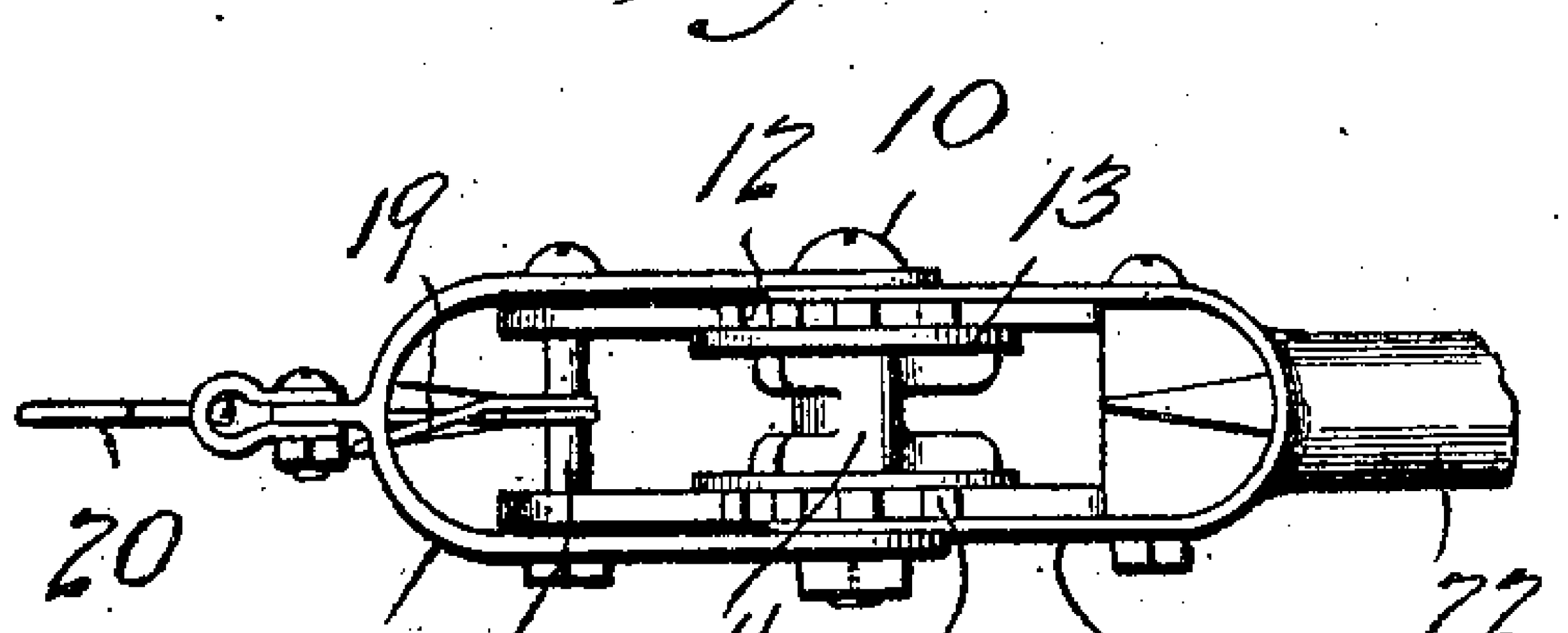
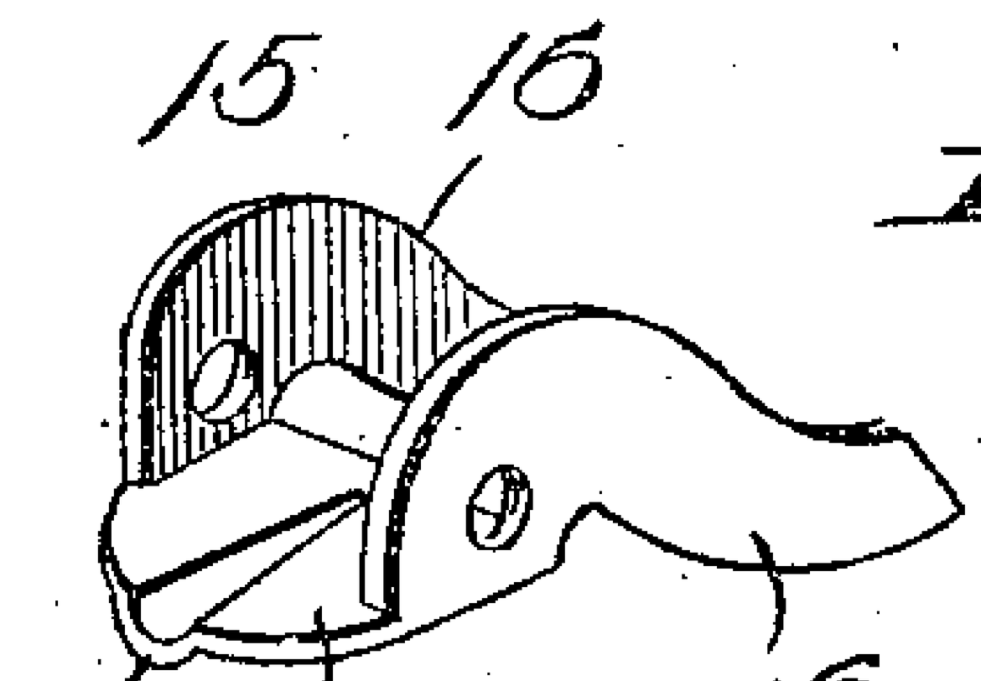


Fig. 5.



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FENCE-STRETCHER.

935,030. Specification of Letters Patent. Patented Sept. 28, 1909.

Application filed February 26, 1908. Serial No. 417,937.

To all whom it may concern:

Be it known that I, MOSES E. JOHNSON, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a certain new and useful Fence-Stretcher, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to fence stretchers, and has for its object to provide a simplified and improved form of fence stretching device whereby the fence may be gradually stretched to place with a step by step movement and without producing kinks or twists in the chain which is operated by the stretching lever, the stretching device also permitting the ready slacking of the tension chain after the fence has been stretched and fastened.

With the above and other objects in view, the nature of which will more fully appear as the description proceeds, the invention consists in the novel construction, combination and arrangement of parts as herein fully described, illustrated and claimed.

In the accompanying drawing:—Figure 1 is a side elevation showing a portion of a fence illustrating the fence stretcher applied thereto. Fig. 2 is an enlarged side elevation of the stretcher. Fig. 3 is a plan view thereof. Fig. 4 is an enlarged longitudinal section through the stretcher. Fig. 5 is a detail perspective view of one of the pawls.

Referring to the drawing, 1 designates a fixed post planted in the ground, 2 the fence to be stretched and 3 the usual wood clamp which ordinarily consists of two strips of wood bolted on opposite sides of the line wires.

4 designates the hook which is placed in engagement with the wood clamp 3 while 5 designates the stretching chain.

In carrying out the present invention, the end link of the chain is provided with a swivel eye 6 which connects with the pin or bolt 7 of the hook 4, the said swivel eye preventing the buckling, twisting or kinking of the chain 5 when placed under stress by the stretcher. The stretcher comprises a jointed frame, or in other words, a frame composed of two relatively movable frame pieces 8 and 9 which are each substantially U-shaped in plan with the terminal portions thereof overlapping, as shown in Fig. 3, and connected together by a bolt 10 or its equivalent which forms a pivotal connection between the frame pieces. Journaled on the pivot 10 is a chain wheel 11 while at opposite sides of said chain wheel there are notched wheels 12 and between the notched wheels 12 and the chain wheel 11 there are disk-shaped flanges or guards 13 which separate the chain space from the pawl space. It will be understood that the wheels 11 and 12 as well as the guard flanges 13 are all fast together and adapted to rotate as one piece upon the pivot 10.

Each frame piece is provided with a pivot 14 upon which is mounted a pawl 15 which is shown in the detail view, Fig. 5, and is of double construction, that is to say, each pawl comprises two arms 16 arranged far enough apart to lie just inside of the opposite sides of the frame piece 8 or 9 to which it is pivotally connected. The arms 16 are connected to move together by means of an interposed web or connecting portion 17 and this web is swaged to form an offset thumb piece 18 which projects slightly on the plane of one side of its respective frame piece adapting it to be readily engaged by the thumb or finger of the operator in order to throw the extremities of the arms 16 out of engagement with the notched wheels 12. Springs 19 act to hold the pawls normally in engagement with the notched wheels 12.

One of the frame pieces is provided with a swiveled eye or hook 20, or in other words, a hook having a swiveled connection with said frame piece, said hook being adapted to be connected by means of a chain or other suitable anchoring device 21 to the fixed post 1 as shown in Fig. 1. The other frame piece 8 is provided with a handle socket 22 into which a removable handle or lever 23 of any desired length may be placed. Under the arrangement described, the lever 23 may be operated from either side of the fence and at any angle between a horizontal and a vertical plane. The fence may be gradually stretched with a step by step motion produced by means of the lever 23, the lever acting in one direction to turn the compound wheel 11—12 while said wheel is held by the other pawl. After the fence has been stretched and fastened, the pawls may be rocked by thumb or finger pressure so that the compound wheel may be backed and the tension on the stretching chain relieved. The stretching device as a whole may then be removed from the fence.

Having thus described the invention, what is claimed as new, is:—

In a fence stretcher, a stretcher frame comprising overlapping pivotally connected frame pieces, a chain wheel mounted to turn on the pivot of said frame pieces and adapted to receive a fence stretching chain, notched wheels movable with said chain wheel and arranged at opposite sides thereof, and pawls carried by the frame pieces, each pawl embodying oppositely arranged arms adapted to engage the oppositely arranged notched wheels, and a web connecting said arms and having an offset thumb piece.

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

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Witnesses:

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