

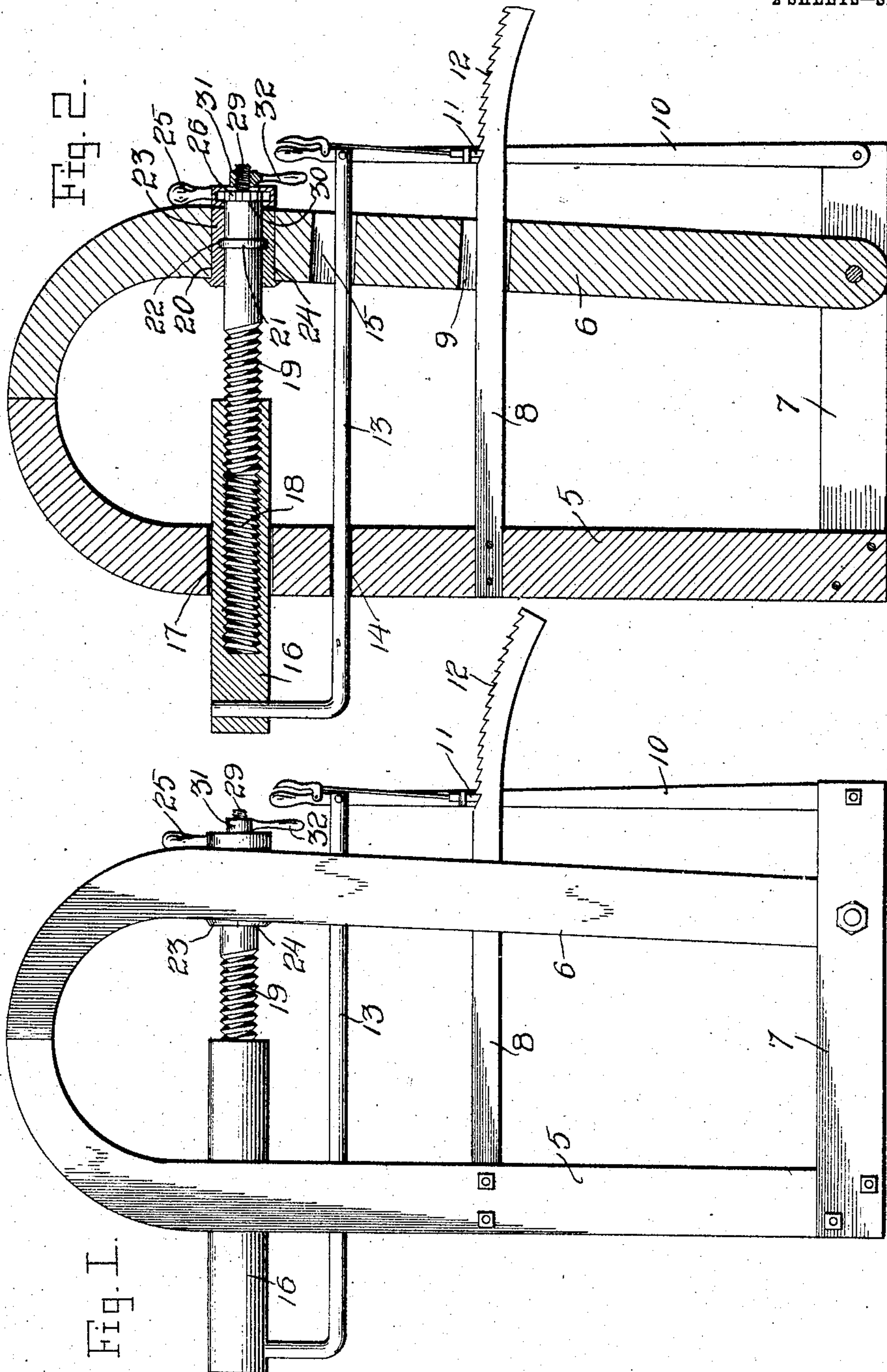
No. 790,117.

PATENTED MAY 16, 1905.

K. L. ERICKSON.  
VISE.

APPLICATION FILED OCT. 19, 1904.

2 SHEETS—SHEET 1.



Witnesses  
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H. M. Baldwin

Inventor  
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2 SHEETS—SHEET 2.

Fig. 3.

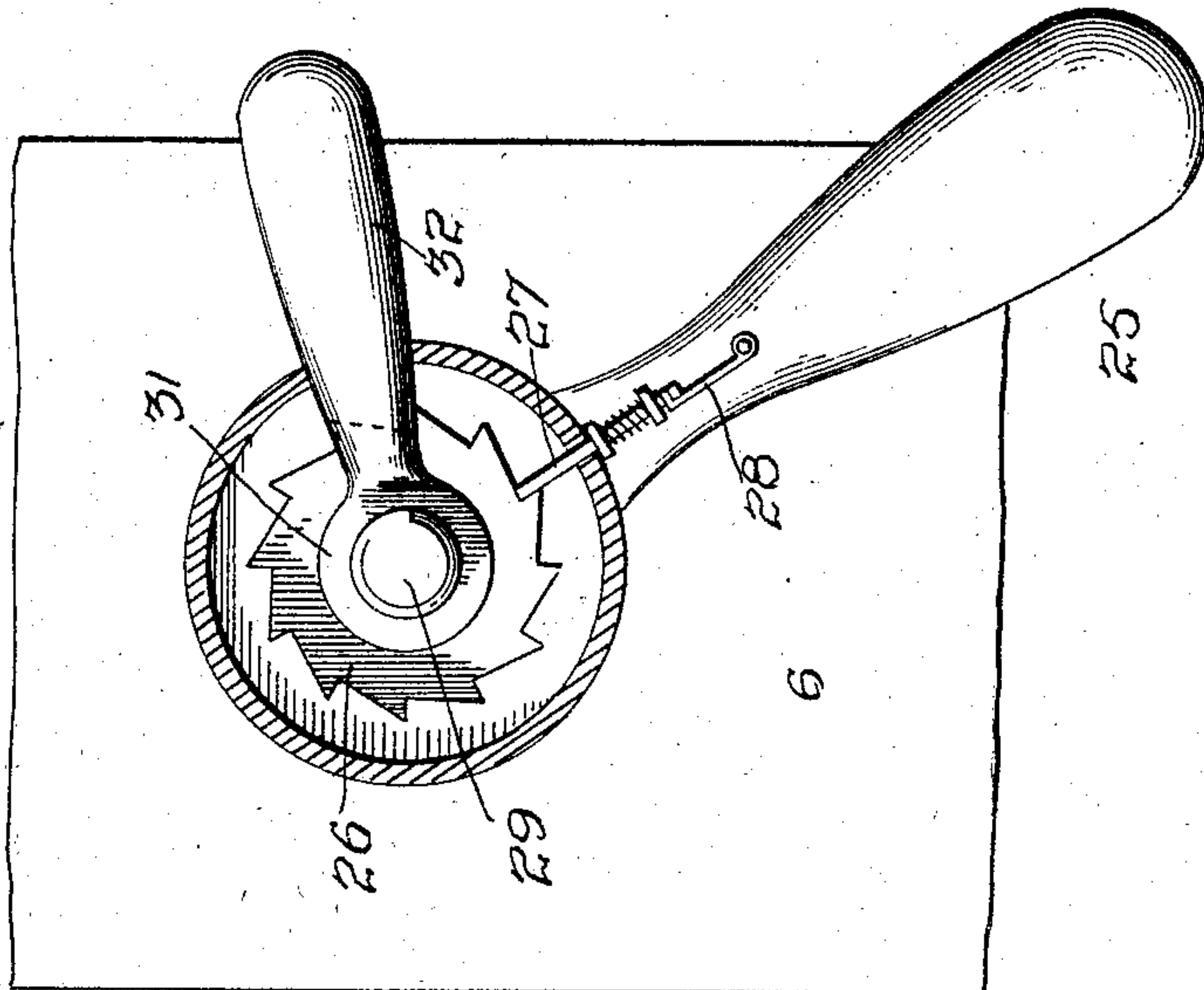
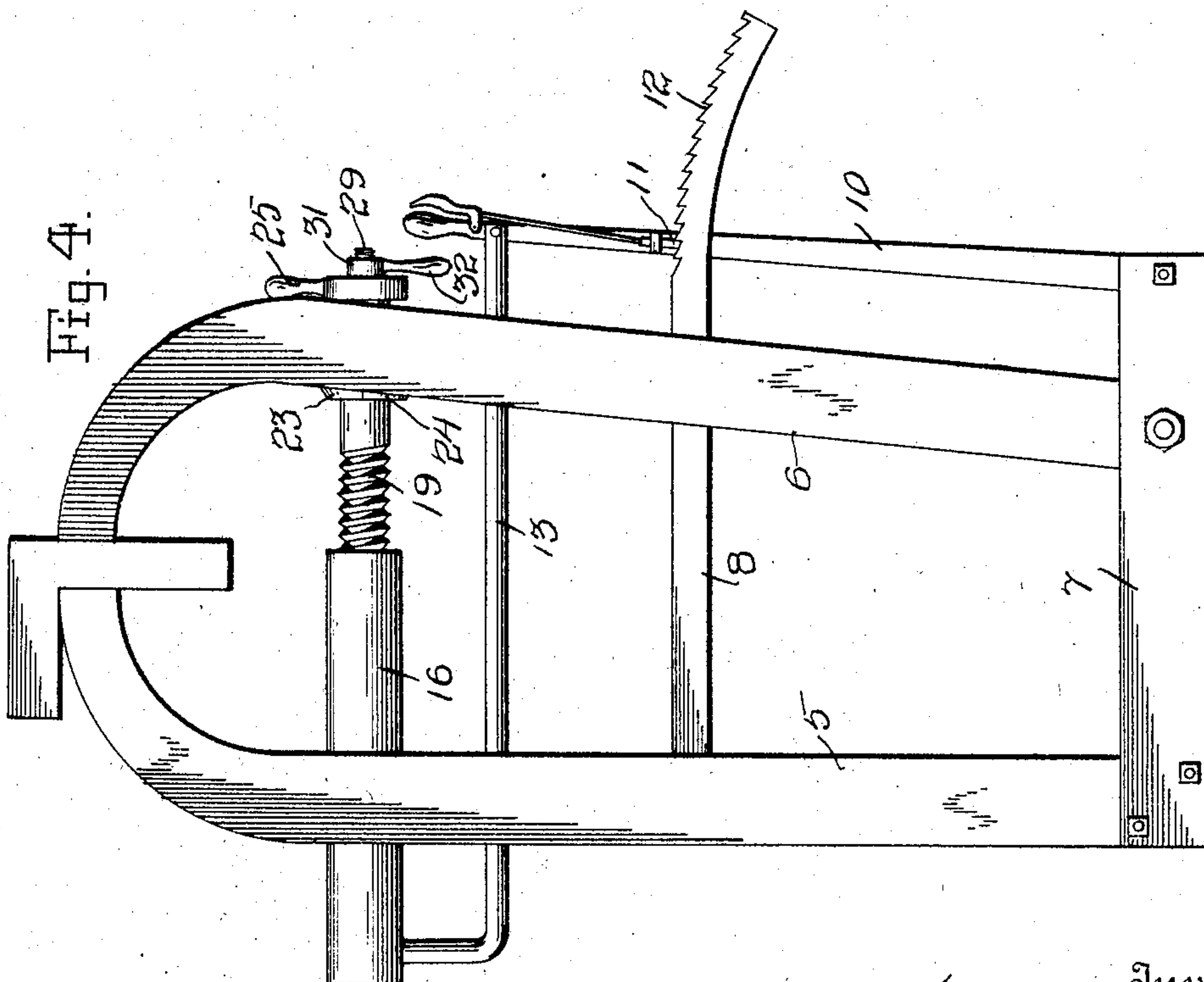


Fig. 4.



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# UNITED STATES PATENT OFFICE.

KARL L. ERICKSON, OF PAGE, WASHINGTON.

## WISE.

SPECIFICATION forming part of Letters Patent No. 790,117, dated May 16, 1905.

Application filed October 19, 1904. Serial No. 229,140.

*To all whom it may concern:*

Be it known that I, KARL L. ERICKSON, a citizen of the United States, residing at Page, in the county of Franklin, State of Washington, have invented certain new and useful Improvements in Vises; and I do hereby 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 vises, and has for its object to provide a vise which may be quickly adjusted to grasp bodies of different sizes and which will be so arranged that a body may be tightly grasped therein.

Other objects and advantages will be apparent from the following description, and it will be understood that modifications of the specific construction shown may be made and any suitable materials may be used for the various parts without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is an elevation of the device. Fig. 2 is a longitudinal section. Fig. 3 is a detail view showing the unscrewing-handle in position. Fig. 4 is a view of the device, showing it with a body grasped therein.

Referring now to the drawings, the present invention comprises coöperating gripping-jaws 5 and 6, the former being fixed and having a laterally-extending arm 7 at the lower end of its shank, to which the lower end of the latter is pivoted.

Extending forwardly from the jaw 5 is a rod 8, which is curved downwardly slightly, as illustrated, and this rod is slidably engaged in a passage 9 in the shank of the jaw 6.

Pivoted to the outer end of the arm 7 is a lever 10, which extends upwardly and is provided with a spring-actuated dog 11, arranged for engagement of teeth 12 upon the rod 8 to hold the lever at different points of its movement, and pivoted to the lever adjacent to its upper end is a bar 13, which extends inwardly and is slidably engaged in passages 14 and 15 in the jaws 5 and 6, respectively. At its inner end the bar 13 is turned upwardly and is

connected with a member 16, which is slidably engaged in a passage 17 in the jaw 5. At its inner end the member 16 is provided with an interiorly-threaded recess 18, in which is engaged a threaded rod 19, revolubly mounted in a passage 20 in the jaw 6. The rod 19 is prevented from sliding movement in the passage 20 by a peripheral rib 21, which is formed thereon and which is engaged in a continuous groove 22, formed in the inner faces of arcuate plates 23 and 24, which are disposed within the passage 20. At its outer end, which projects beyond the jaw 6, the rod 19 is provided with a handle 25, which has ratchet connection with the rod for movement thereof to screw it into the member 16, this ratchet connection consisting of the usual toothed disk 26, carried by the rod, and dog 27, carried by the handle. A finger 28 is provided and may be moved into position to hold the dog 27 out of engagement with the disk at times.

The rod 19 has its outer end reduced, as shown at 29, and the disk 26 is engaged with this reduced portion and rests against the resultant shoulder 30. The reduced portion 29 is threaded oppositely to the inner end of the rod 19, and with these threads there is engaged the threaded head 31 of a short handle 32, by means of which the rod may be unscrewed from the recess 18, the head 31 acting as a nut to hold the disk 26 in place.

In use the jaw 6 is moved toward or away from the jaw 5 by moving the lever 10, as will be readily understood, and after a body has been grasped the handle 25 is moved to clamp the jaw 6 against the body. When it is desired to remove the body from the vise, it is only necessary to move the lever 10 outwardly, and when the rod 19 has been screwed the full distance into the recess 18 it may be unscrewed therefrom by means of a handle 32, as will be readily understood.

What is claimed is—

1. A device of the class described, comprising a fixed jaw and a movable jaw, a rod secured to the fixed jaw and slidably engaged in the movable jaw, said rod having rack-teeth, a pivoted lever, a dog carried by the lever and arranged to lie normally in engagement with



the teeth of the rod, a member slidably engaged in the fixed jaw, and having a threaded socket therein, connections between the hand-lever and the member for movement of the latter, and a threaded rod revolubly mounted in the movable jaw and engaged in the threaded socket of the member.

2. A device of the class described comprising a fixed jaw, a jaw pivotally connected with the fixed jaw for coöperation therewith and for movement toward and away therefrom, a pivoted hand-lever, means for holding the lever at different points of its movement, connections between the lever and the second-named jaw for movement of the latter, and means for moving the jaw independently of the lever.

3. A device of the class described comprising a fixed jaw and a movable jaw, a pivoted hand-lever, connections between the movable jaw and the lever for movement of the former toward and away from the fixed jaw when the lever is moved, means for holding the lever at different points of its movement, and means for moving the movable jaw toward the fixed jaw independently of the lever.

4. A device of the class described comprising a fixed jaw, and a movable jaw, said jaws

having alining horizontal openings therein, a rod slidably engaged in the openings, a pivoted hand-lever, said rod being pivotally connected at one end with the lever, a rod connected with the fixed jaw and slidably engaged in the movable jaw, said rod being provided with rack-teeth, a dog carried by the hand-lever and disposed for engagement of the rack-teeth to hold the lever at different points of its movement, a member connected with the first-named rod and slidably engaged in the fixed jaw, said member having a threaded socket therein, and a threaded rod revolubly mounted in the movable jaw and engaged in the socket of the member, said member being movable with the first-named rod and the hand-lever to move the movable jaw, said threaded rod being arranged for movement with respect to the member to move the movable jaw independently of the member, the first-named rod and the lever.

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

KARL L. ERICKSON.

Witnesses:

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