

No. 890,775.

PATENTED JUNE 16, 1908.

J. F. LANSING.
WRENCH.

APPLICATION FILED DEC. 12, 1907.

2 SHEETS—SHEET 1.

FIG. 1.

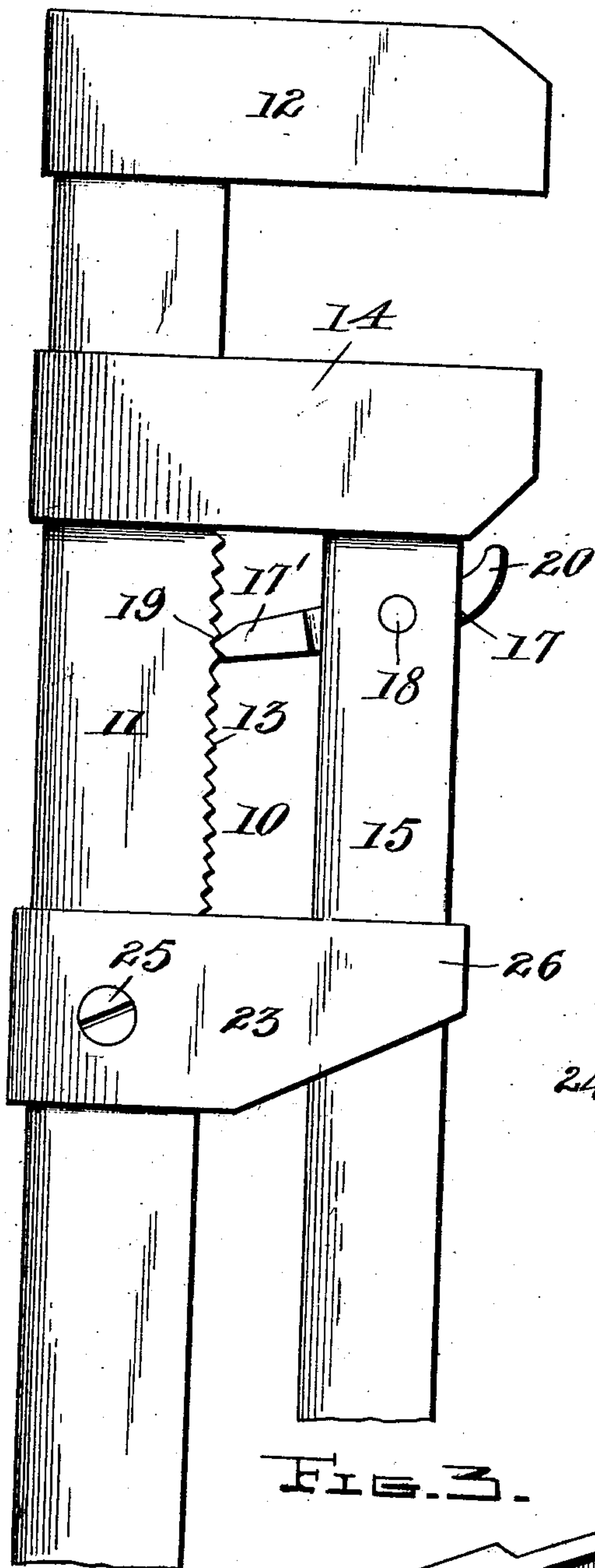


FIG. 2.

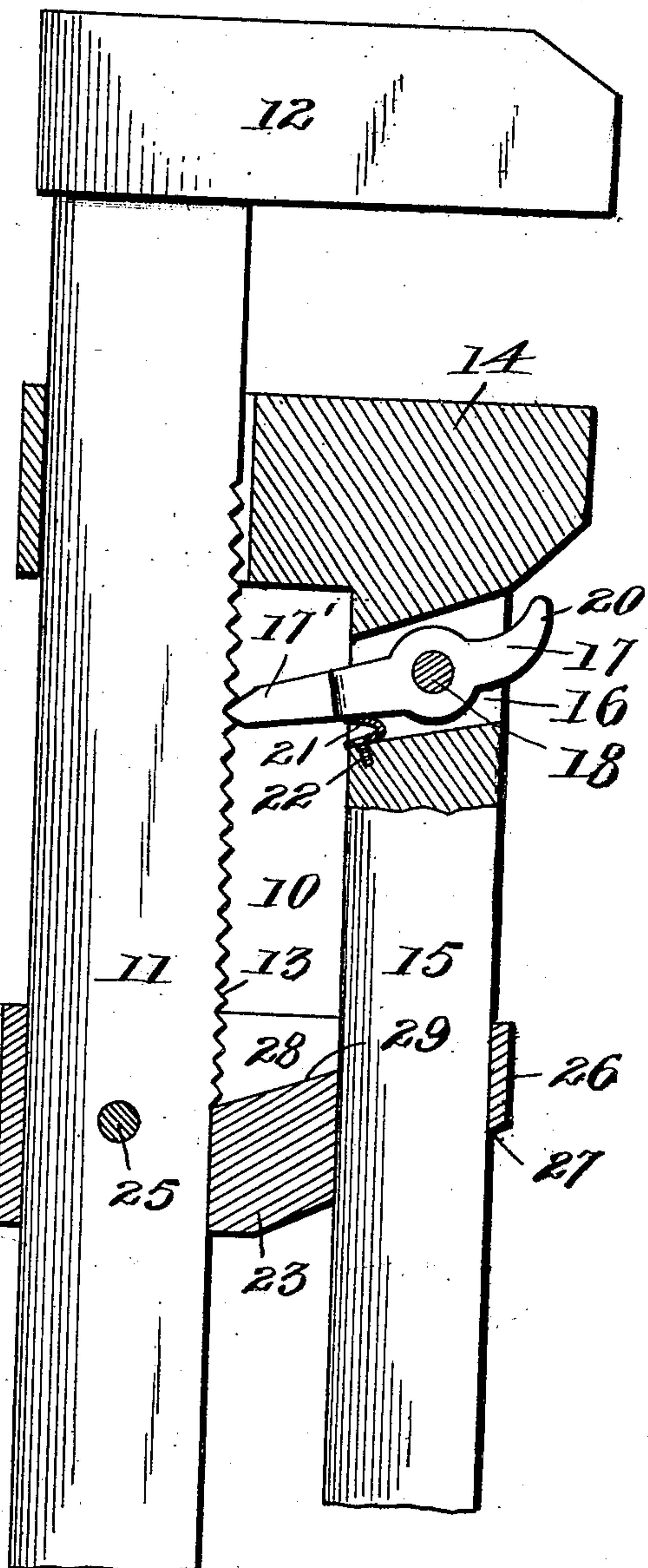
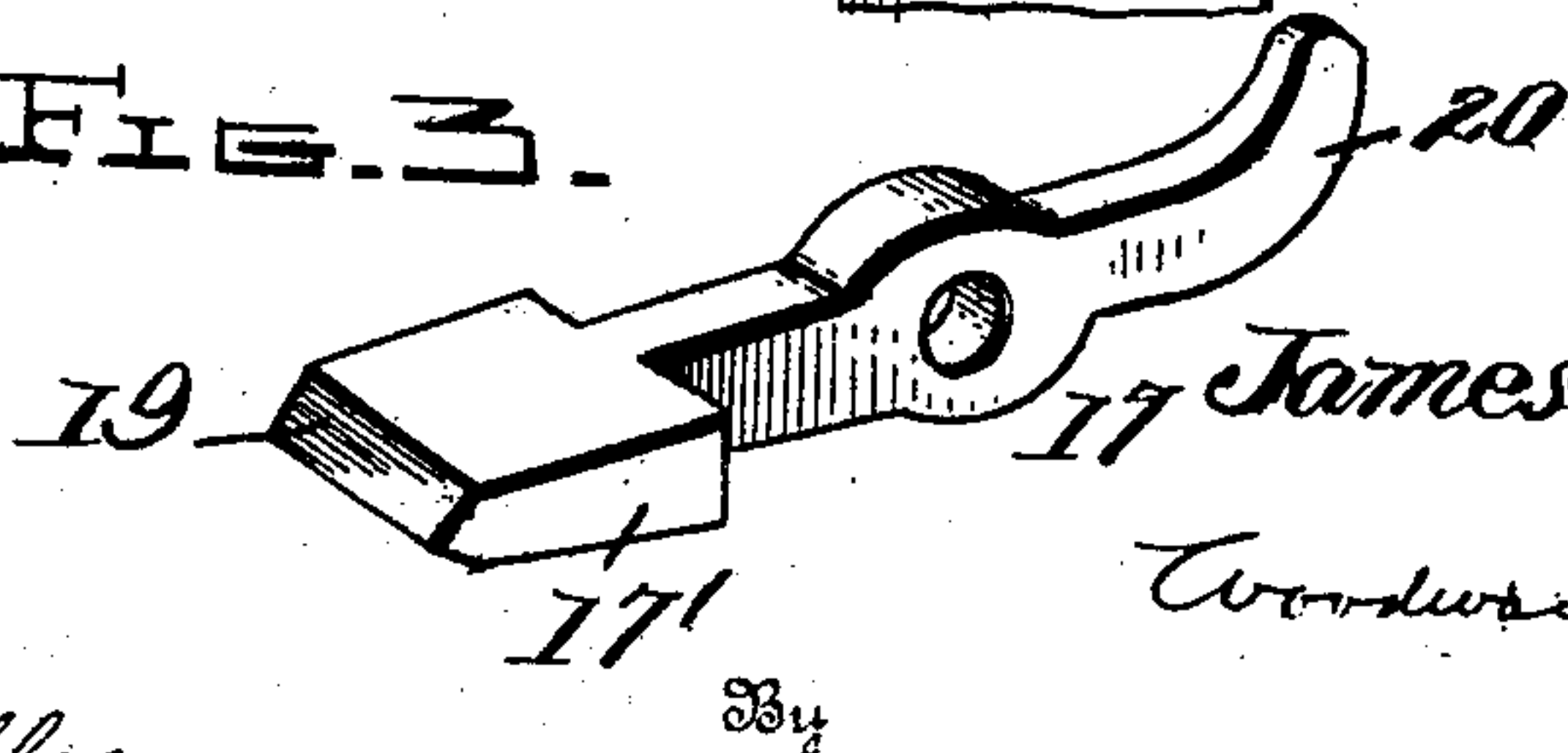


FIG. 3.



Witnesses
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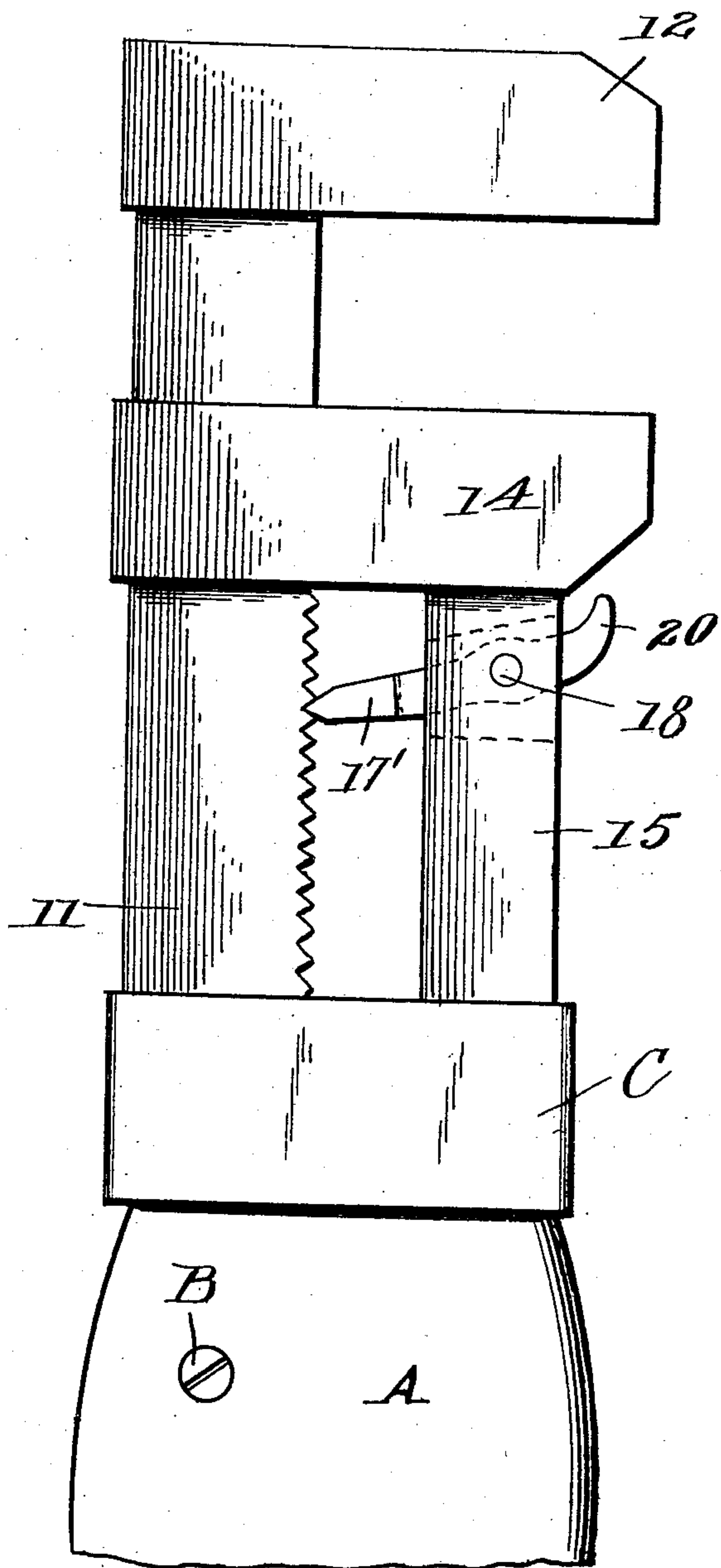
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2 SHEETS—SHEET 2.

FIG. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES F. LANSING, OF FALL RIVER MILLS, CALIFORNIA.

WRENCH.

No. 890,775.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed December 12, 1907. Serial No. 406,163.

To all whom it may concern:

Be it known that I, JAMES F. LANSING, a citizen of the United States, residing at Fall River Mills, in the county of Shasta and State of California, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to wrenches, and more particularly to ratchet wrenches and has for an object to provide a wrench of this character which will be simple, positive in its action, and quick in its adjustment.

Other objects and advantages will be apparent from the following description and it will be understood that changes in the specific structure shown and described may be made within the scope of the claims 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 a side elevational view of the present wrench, Fig. 2 is a vertical longitudinal sectional view, Fig. 3 is a perspective view of the dog, Fig. 4 is a similar view of a further modified form.

Referring now more particularly to the drawings, there is shown a wrench 10, and this wrench consists of a stock 11, and a fixed head 12. The stock 11 is provided with a plurality of substantially V shaped teeth 13, which are located upon the inner face of the stock. A sliding jaw-head 14 is arranged with a portion engaging the stock 11, and this head is provided with a depending shank 15 which is disposed adjacent the teeth 13, which are formed upon the stock 11. The shank 15 is arranged with its inner edge in spaced relation with the teeth 13, and the shank is provided with a passage 16 which opens at one end outwardly of the shank, and at the other end this opening enters towards the teeth 13. A dog 17 is arranged in the passage 16, and this dog is mounted upon a pivot screw or pin 18 which is arranged in the walls of the shank 15. The dog 17 is provided with an inwardly directed nose 17' which projects toward the teeth 13, and at the inner end, this nose is beveled as shown at 19 for engagement at times with the teeth 13. The dog 17 is further provided with a thumb engaging lip 20, and this lip is located outwardly of the passage 16, as shown. A flat leaf spring 21 is secured within the passage 16 and upon the lower portion thereof by a fastening screw 22, and this spring is thus ar-

ranged to hold the nose 17' with its beveled end 19 in engagement with the teeth 13.

Disposed beneath the sliding head 14, there is shown a guide block 23, and this guide block is arranged with a portion 24 engaging the stock 11, and this portion of the block is held to the stock by means of a screw 25. The block 23 is extended outwardly as shown at 26, and in this portion 26 there is formed a vertically disposed passage 27, and this passage is thus arranged to receive the shank 15 of the sliding jaw 14. The guide block 23 is slotted as shown at 28 upon its upper face, and the lower wall of this slot is inclined as shown at 29.

Normally the dog 17 lies at an angle and with the beveled end 19 of the nose 17' engaging the teeth 13 of the stock 11, and when it is desired to shorten the space between the fixed jaw 12 and the sliding jaw 14, the shank 15 is pushed upwardly, and in this movement of the shank it will be seen that the beveled end 19 of the nose 17' will become disengaged from the teeth 13. It will of course be understood that the lip 20 of the dog 17 may be also moved upwardly to disengage the beveled end 19 of the nose 17' from the teeth 13 when a greater adjustment of the jaws 12 and 14 respectively is required. The lower edge of the nose 17' is on the same angle as that of the lower edge 29 of the slot 28, and it will thus be seen that the nose 17' may engage the teeth 13 which are located at the lower end of the stock 11 and within the slot 28.

From the description, it will be seen that a simple, cheap and effective wrench is provided, and by means of the dog 17 which is arranged for engagement with the teeth 13 of the stock 11 it will be seen that the jaws 12 and 14 respectively may be quickly adjusted. Upon upward movement of the shank 15 or upon manipulating the lip 20, it will be seen that the beveled end 19 of the nose 17' is forced away from the teeth 13, but upon downward movement upon the jaw 14 the action of the dog 17 will of course be reversed and the beveled end 19 of the nose 17' will be securely engaged with the teeth 13.

In the form of my invention shown in Fig. 5 the jaw 14 has its shank 15 arranged for movement in a handle A secured to the stock 11 as shown at B. The handle A at its upper end is provided with a metallic band C. In this form of my invention the dog 17 is connected with the shank 15 in a manner similar

to that shown in the preferred form of my invention.

What is claimed is:

5 The combination with a stock having a plurality of transversely extending teeth upon its inner edge, a fixed head at its upper end, and a guide block secured to the stock and having a passage adjacent its outer end, said guide block having a slot located be-
10 tween the stock and said passage, of a jaw slidably engaged with the stock and having

a depending shank disposed in the passage formed in the guide block, and a spring pressed pivoted dog carried by the sliding jaw, engaged with the teeth of the stock. 15

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

JAMES F. LANSING.

Witnesses:

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M. N. McARTHUR.