

No. 791,819.

PATENTED JUNE 6, 1905.

R. RUE.
DITCHING JACK.
APPLICATION FILED FEB. 18, 1905.

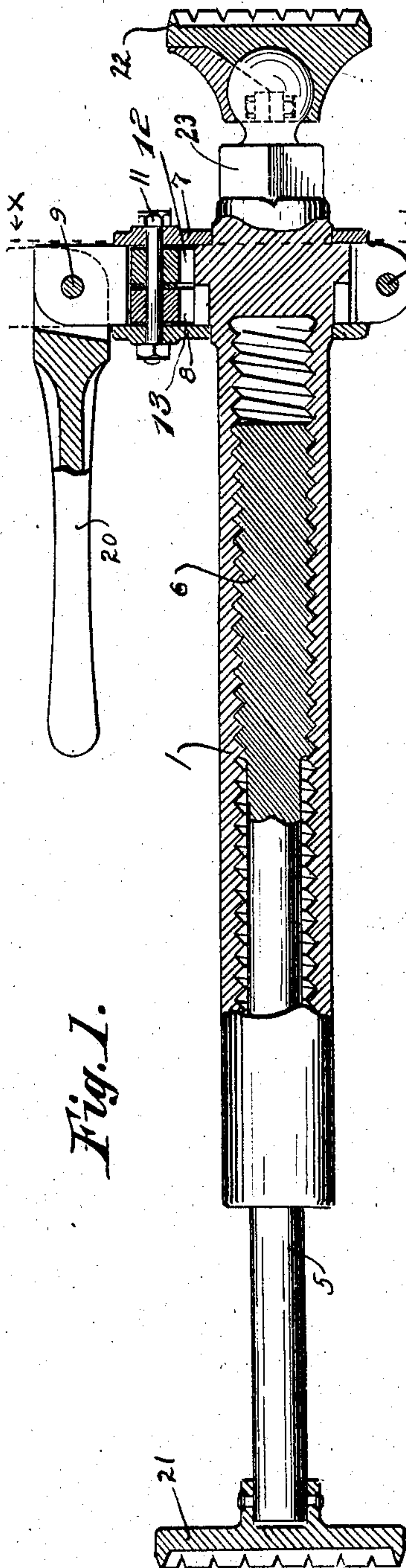


Fig. 1.

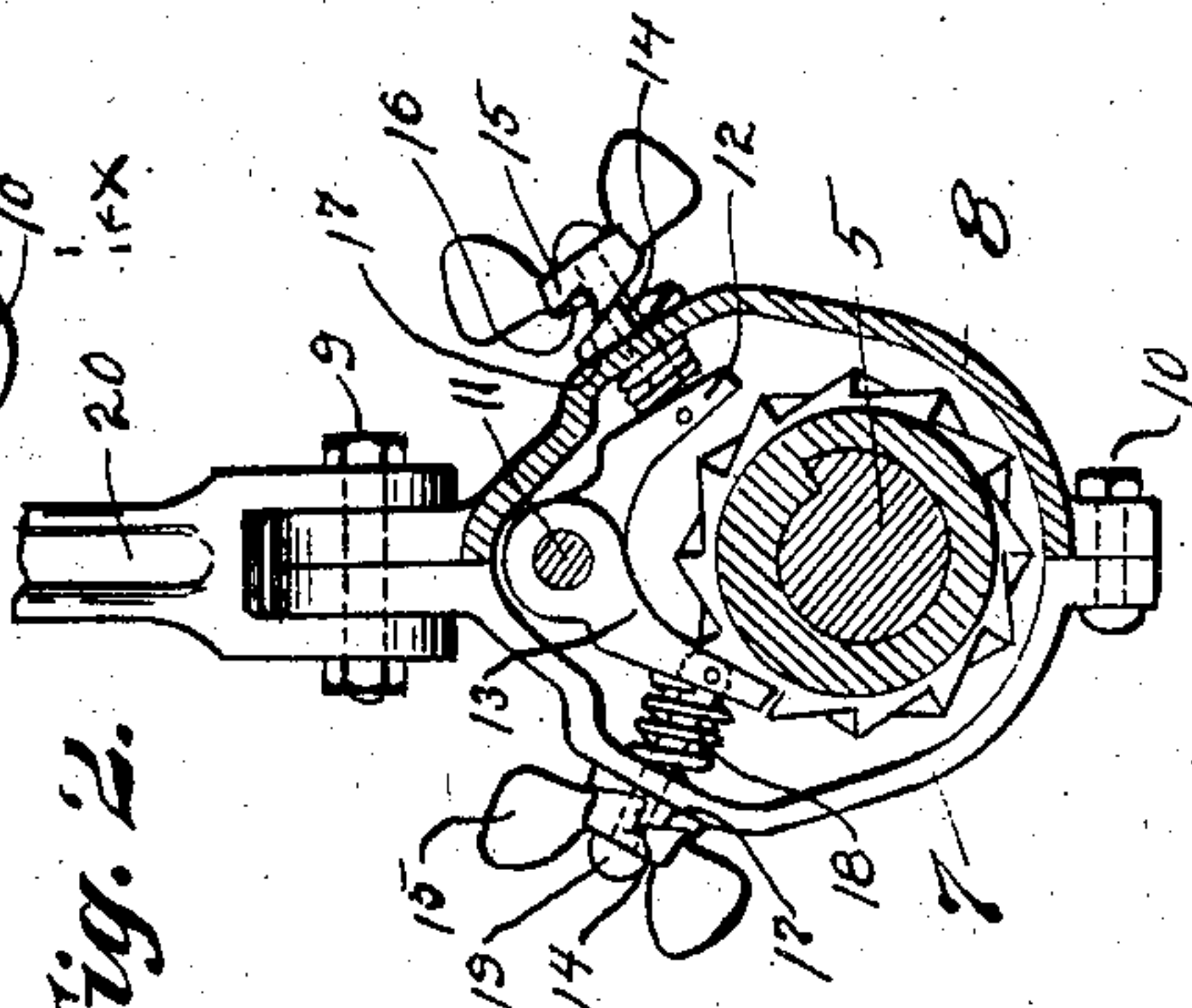


Fig. 2.

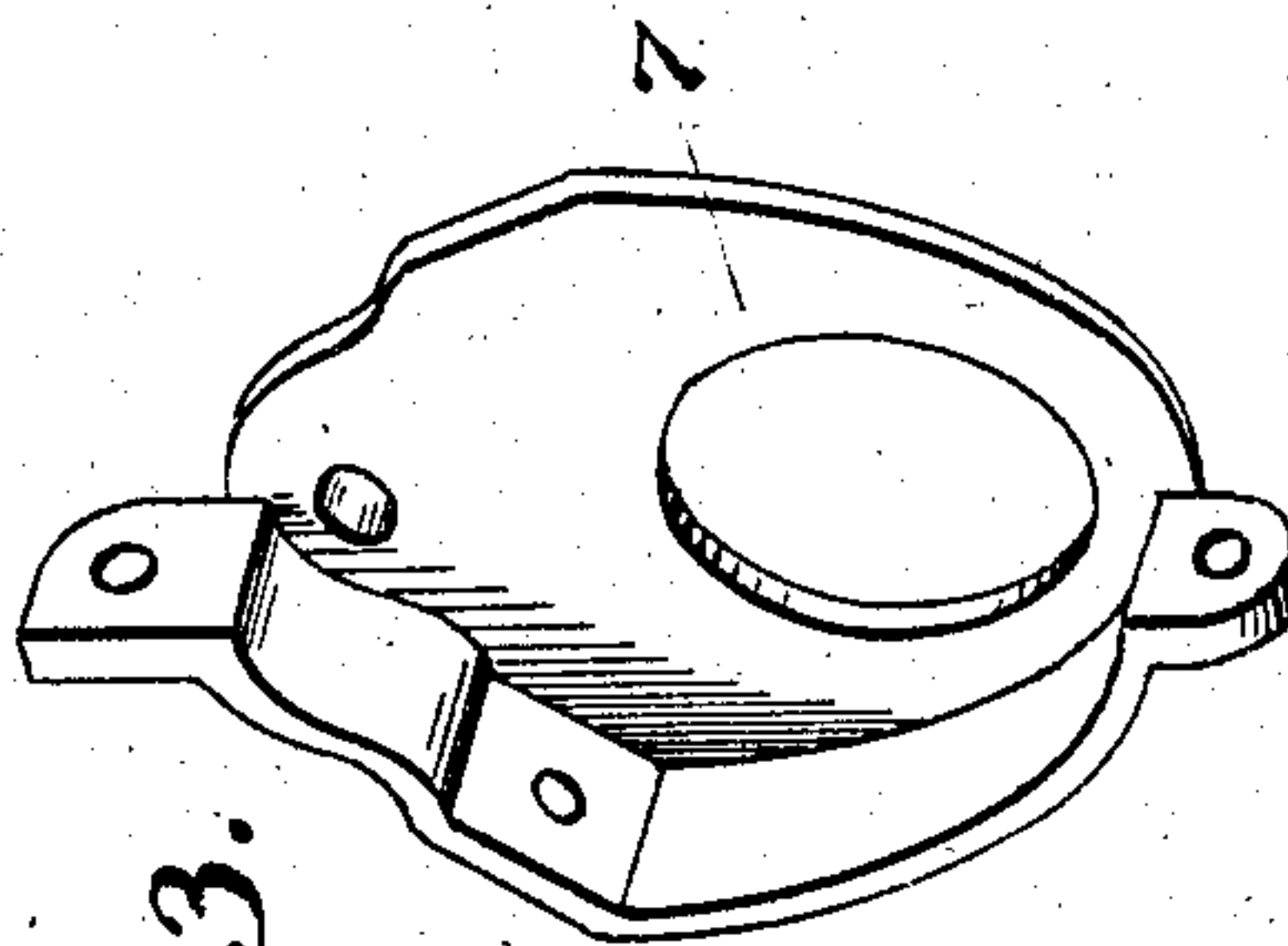


Fig. 3.

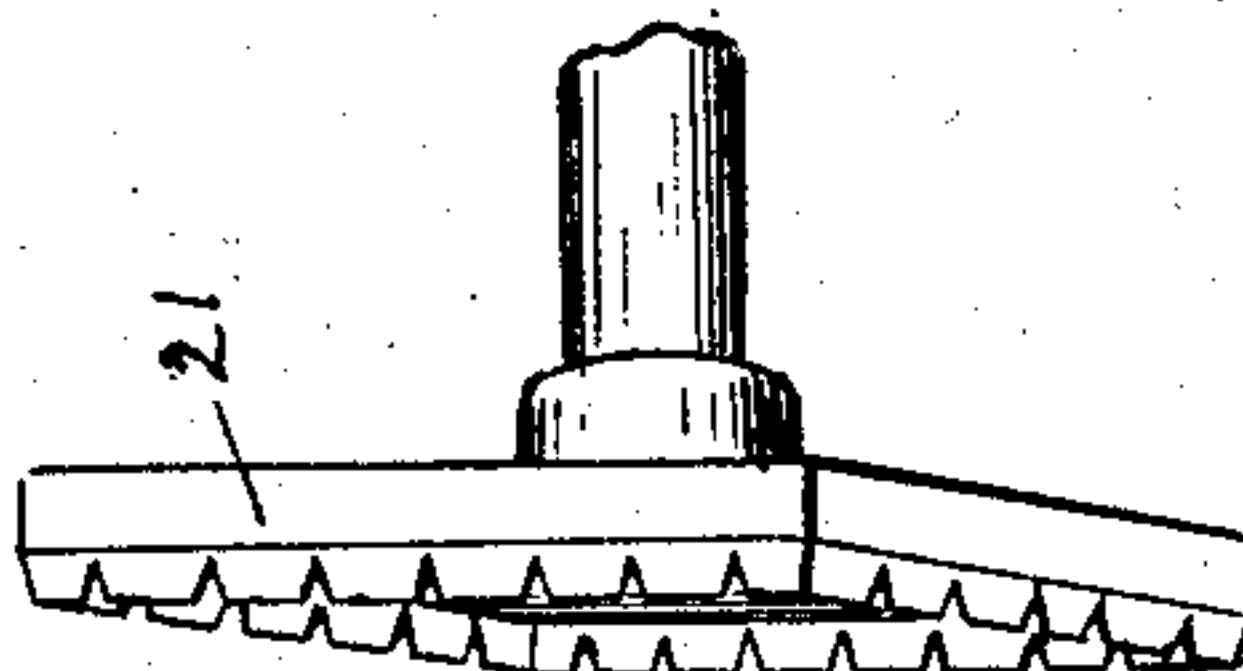


Fig. 5.

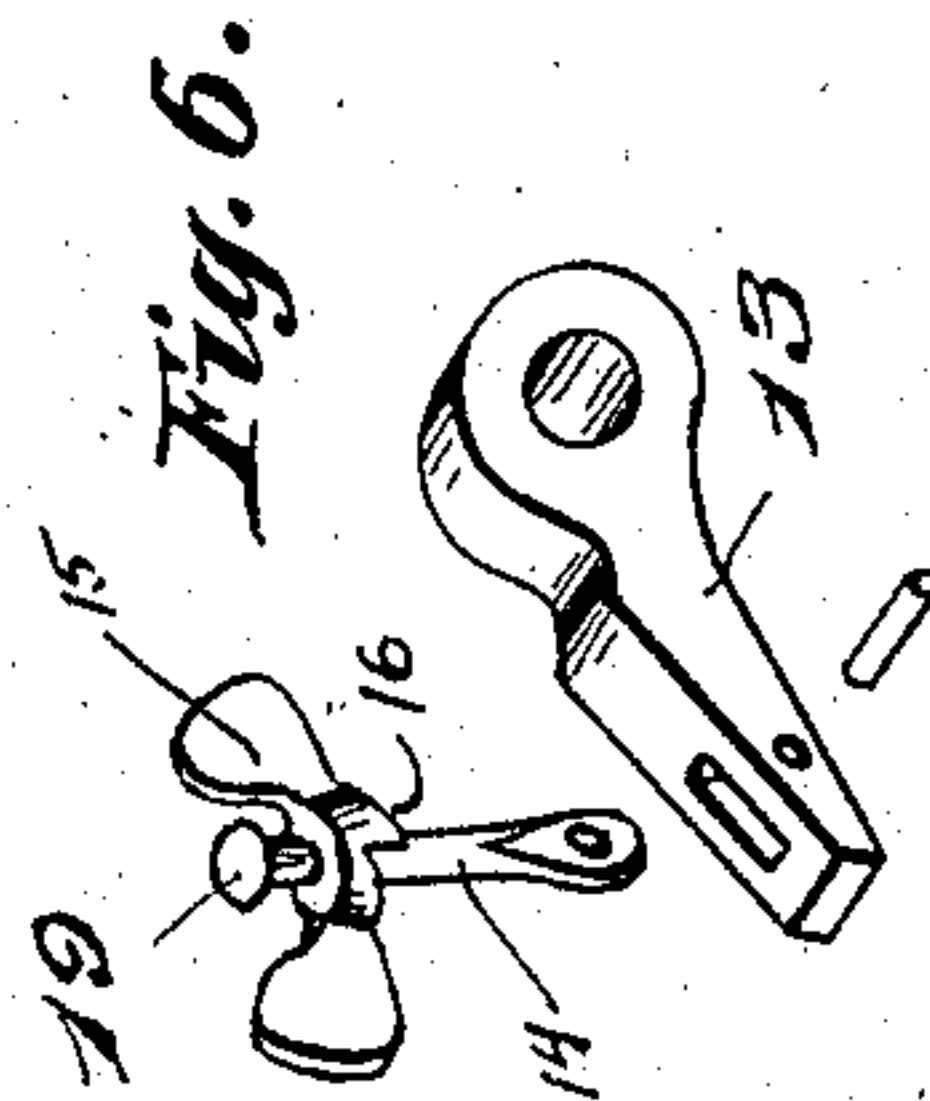


Fig. 6.

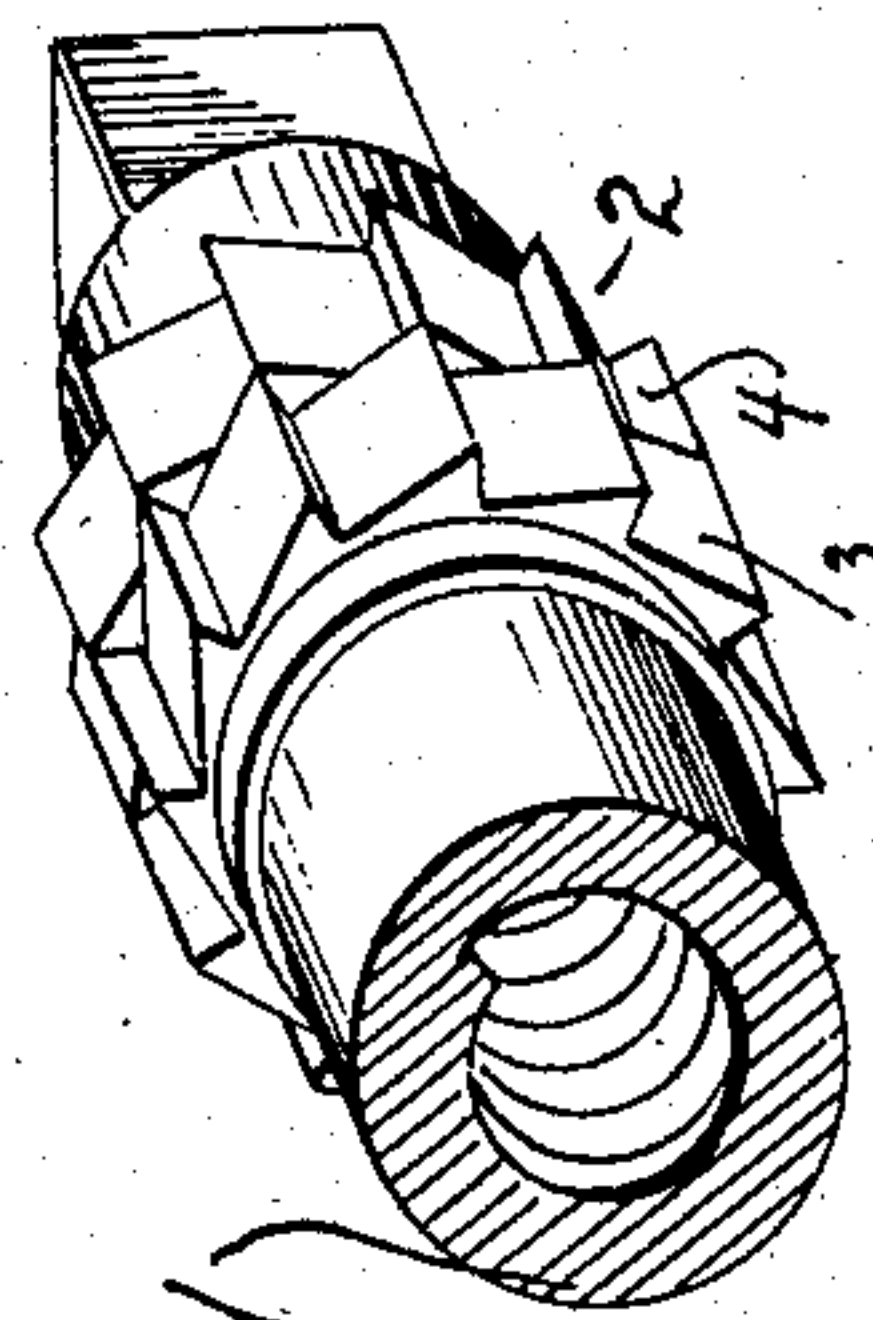


Fig. 4.

WITNESSES

Jos. J. Hosler.
L. M. Bond.

INVENTOR
Ross Rue

BY
F. W. Bond
ATTORNEY

UNITED STATES PATENT OFFICE.

ROSS RUE, OF ALLIANCE, OHIO.

DITCHING-JACK.

SPECIFICATION forming part of Letters Patent No. 791,819, dated June 6, 1905.

Application filed February 18, 1905. Serial No. 246,247.

To all whom it may concern:

Be it known that I, ROSS RUE, a citizen of the United States, residing at Alliance, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Ditching-Jacks; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the numerals of reference marked thereon, in which—

Figure 1 is a view showing the different parts of the jack properly assembled, showing parts in section. Fig. 2 is a view on line X X, Fig. 1, looking toward the ratchet-head and illustrating the inner plate removed. Fig. 3 is a detached view of one of the ratchet-head-inclosing and handle-connecting plates. Fig. 4 is a detached view of the ratchet end of the socket. Fig. 5 is a view of the stem-heads, showing a portion of the stem. Fig. 6 is a view of the different parts of one of the ratchet-dogs and its different parts.

The present invention has relation to ditching-jacks; and it consists in the novel construction hereinafter described, and particularly pointed out in the claims.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, 1 represents the socket member of the jack proper, which is formed hollow and provided with internal screw-threads. This socket member is provided with the ratchet-head 2, which head is provided with two series of ratchet-teeth 3 and 4, which teeth are located at opposite inclinations, as best illustrated in Fig. 4.

Within the hollow socket 1 is located the stem 5, which stem is provided with an enlarged portion 6, which enlarged portion is provided with screw-threads which receive the inner screw-threads of the socket-stem 1, as illustrated in Fig. 1. Upon the sides of the ratchet-head 2 are located the inclosing plates 7 and 8, which plates are clamped together by means of the bolts 9 and 10, said bolts being located substantially as shown in Fig. 2. To the plates 7 and 8 is attached the cross-bolt 11, to which cross-bolt are pivotally attached

the ratchet-dogs 12 and 13, said ratchet-dogs being so arranged that each one will engage the teeth of the ratchet-head, one of said dogs being a right-hand one and the other a left-hand one, by which arrangement the socket 1 can be rotated in either direction. To the dogs 12 and 13 are pivotally attached the stems 14, which stems are extended through the casing-plates 7 and 8, as best illustrated in Fig. 2. Upon the stems 14 are located the thumb-nuts 15, which thumb-nuts are provided with the inclined faces 16, which inclined faces rest upon corresponding inclined faces 17, formed upon the flanges of the plates 7 and 8.

For the purpose of holding the dogs in proper engagement with the teeth 3 and 4 the springs 18 are provided, which springs are located around the stems 14. When it is desired to have the proper dog brought into engagement with the proper set of teeth, the proper thumb-nut 15 is turned so that it will permit the stem 14 to move endwise with the movement of the thumb-nut and the spring 18 automatically hold the dog in engagement with the teeth. When it is desired to bring one or both of the dogs 12 and 13 out of action, the shanks 14 are moved endwise by means of the thumb-nuts 15 and said thumb-nuts held in an outward position by means of the inclined faces 16 and 17. It will be understood that in order to properly hold the shanks 14 their outer end should be provided with the heads 19, which heads are seated against the outer faces of the thumb-nuts 15.

For the purpose of providing a means for rotating the socket member 1 the handle 20 is provided, which handle is pivotally attached to the flanges of the plates 7 and 8, said handle being pivotally attached for the purpose of bringing it out of the way when not in use. For the purpose of providing proper contact for the ends of the jack proper the heads 21 and 22 are provided, which heads are of the usual construction and need no detailed description. If desired, the socket member 1 may be provided with the angled end 23, which angled end is for the purpose of applying a wrench of any desired kind, by which arrangement the socket member 1 can be rotated without disturbing the plates, or, in other

words, the relative movement as between the socket member 1 and the plates, together with the pivoted handle, is independent.

I have described the invention as pertaining to ditching-jacks; but it will be understood that the mechanism herein described can be employed for other purposes, and I do not desire to be confined to the exact arrangement and particular use as applied to ditching-jacks.

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

1. In a ditching-jack, the combination of socket and stem members, the socket member provided with a ratchet-head having two series of teeth inclined in opposite directions, inclosing plates located upon opposite sides of the ratchet-head, dogs pivotally attached to the plates, and means for holding the dogs in engagement with the teeth of the ratchet-head, and a handle pivotally attached, and heads connected to the socket and stem members respectively, substantially as and for the purpose specified.

2. In a ditching-jack, the combination of screw-threaded members, one of the members provided with a ratchet-head, plates inclosing the ratchet-head, dogs pivotally attached to

the plates and adapted to engage the teeth of the ratchet-head, shanks pivotally attached to the dogs and extended through the flanges of the plates, and the plates provided with inclined faces, nuts located upon the shanks pivoted to the dogs, said nuts provided with inclined faces and springs adapted to hold the dogs in engagement with the teeth of the ratchet-head, and a handle pivotally attached to the plates, substantially as and for the purpose specified.

3. The combination of screw-threaded members, one of the members provided with a ratchet-head, plates inclosing the ratchet-head, dogs pivotally attached to the plates and adapted to engage the teeth of the ratchet-head, shanks pivotally attached to the dogs and extended through the flanges of the plates, and means for holding the dogs out of engagement with the teeth of the ratchet-head, and a pivoted operating-handle, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ROSS RUE.

Witnesses:

A. S. ARMSTRONG,
HAZEL D. URIG.