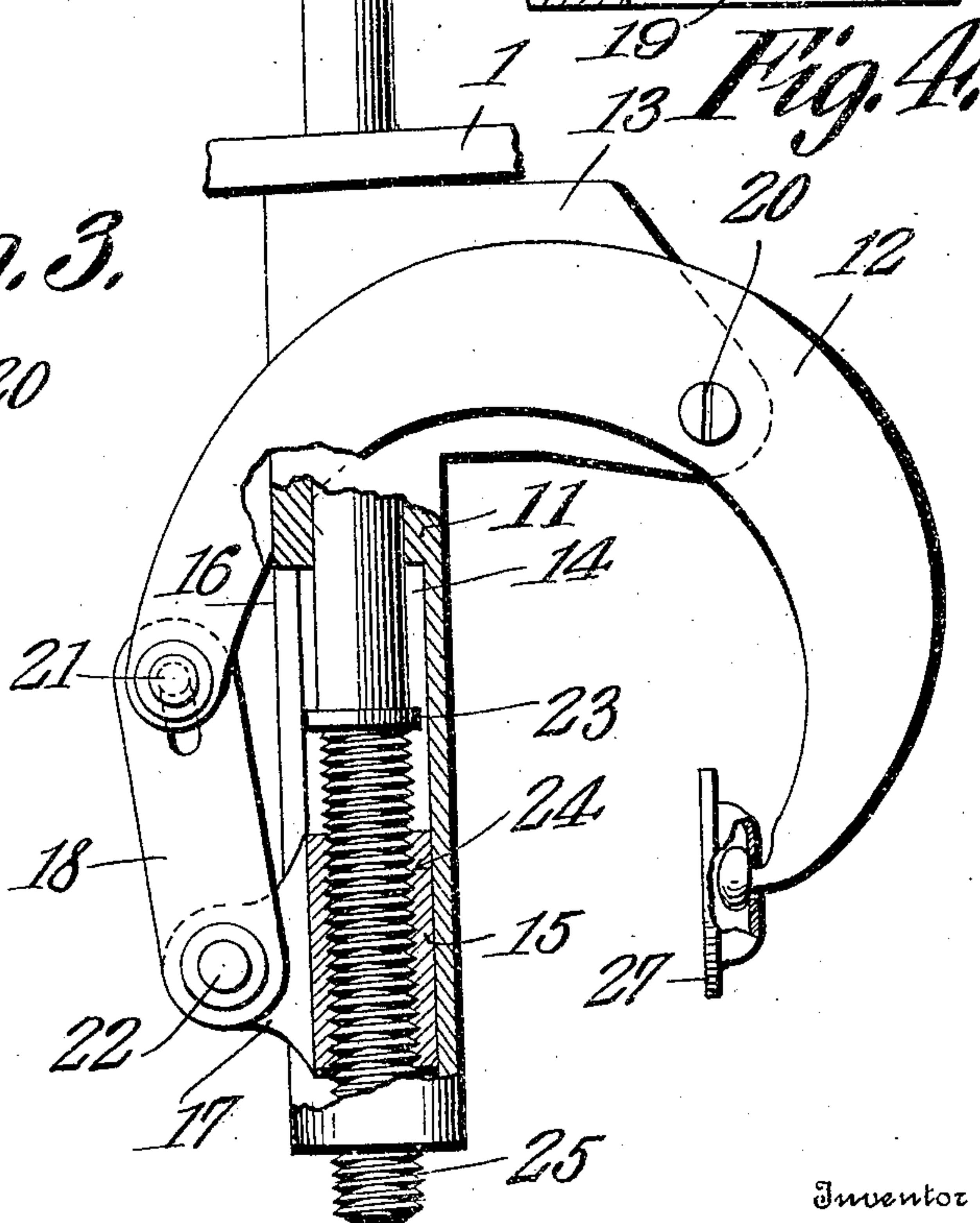
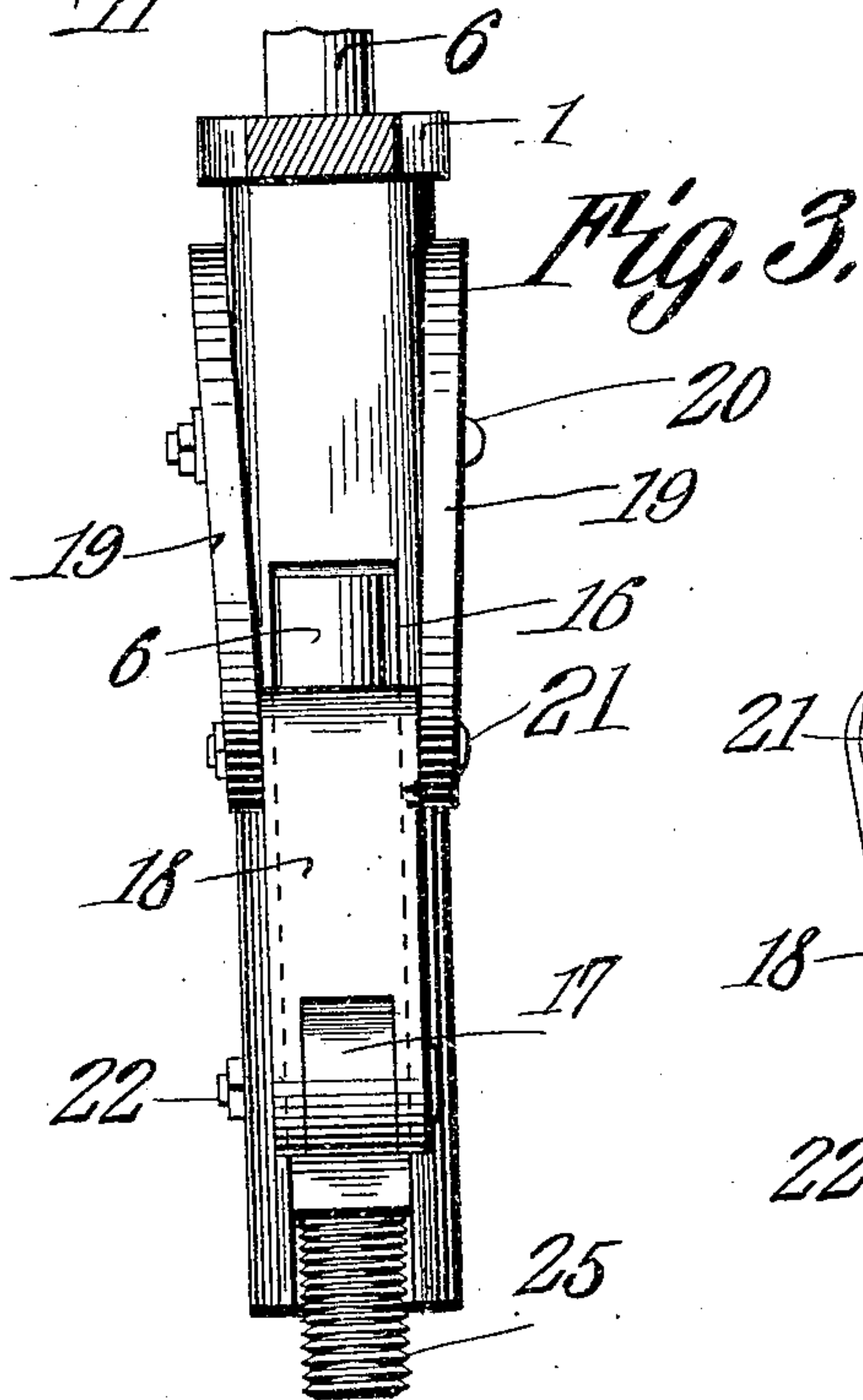
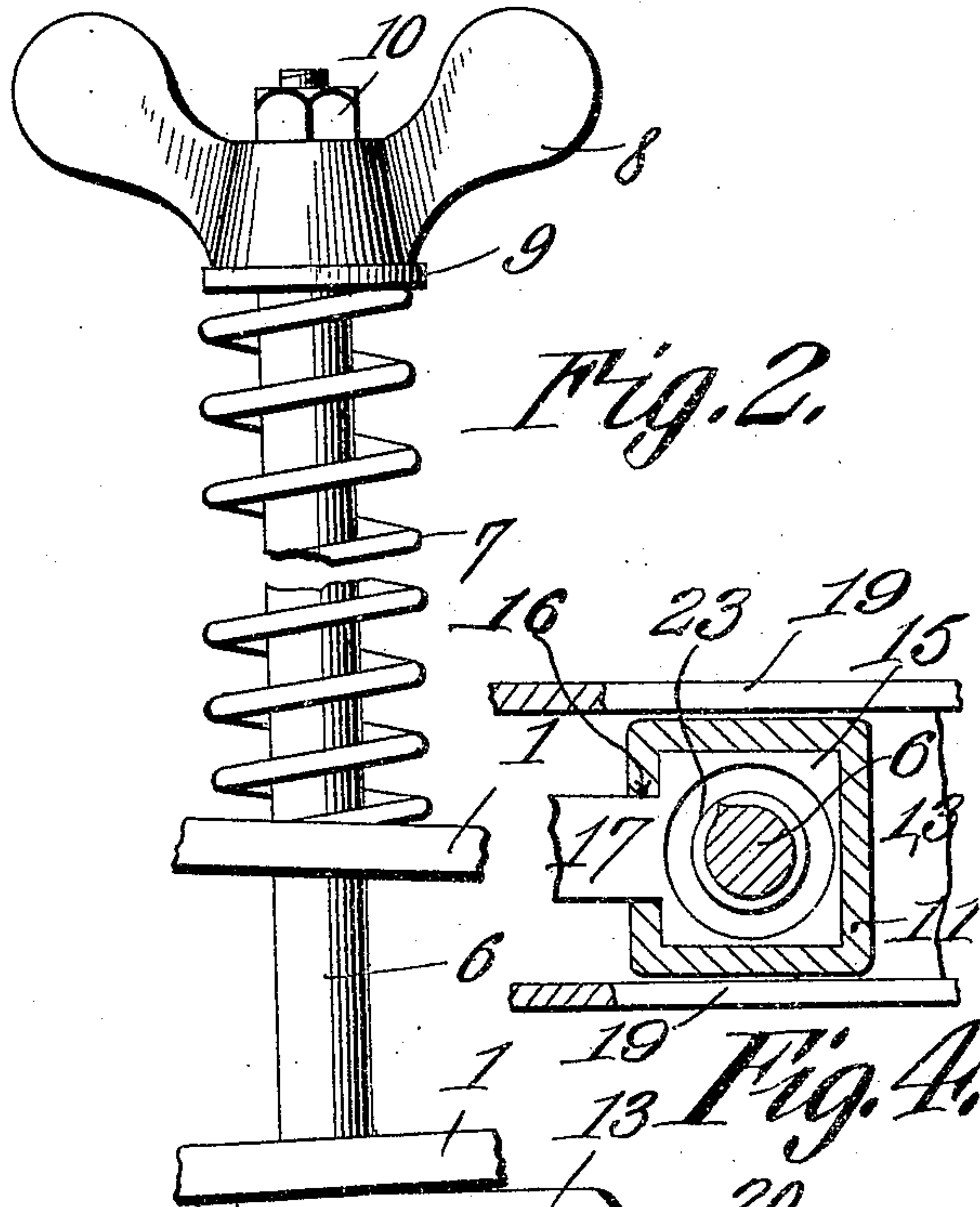
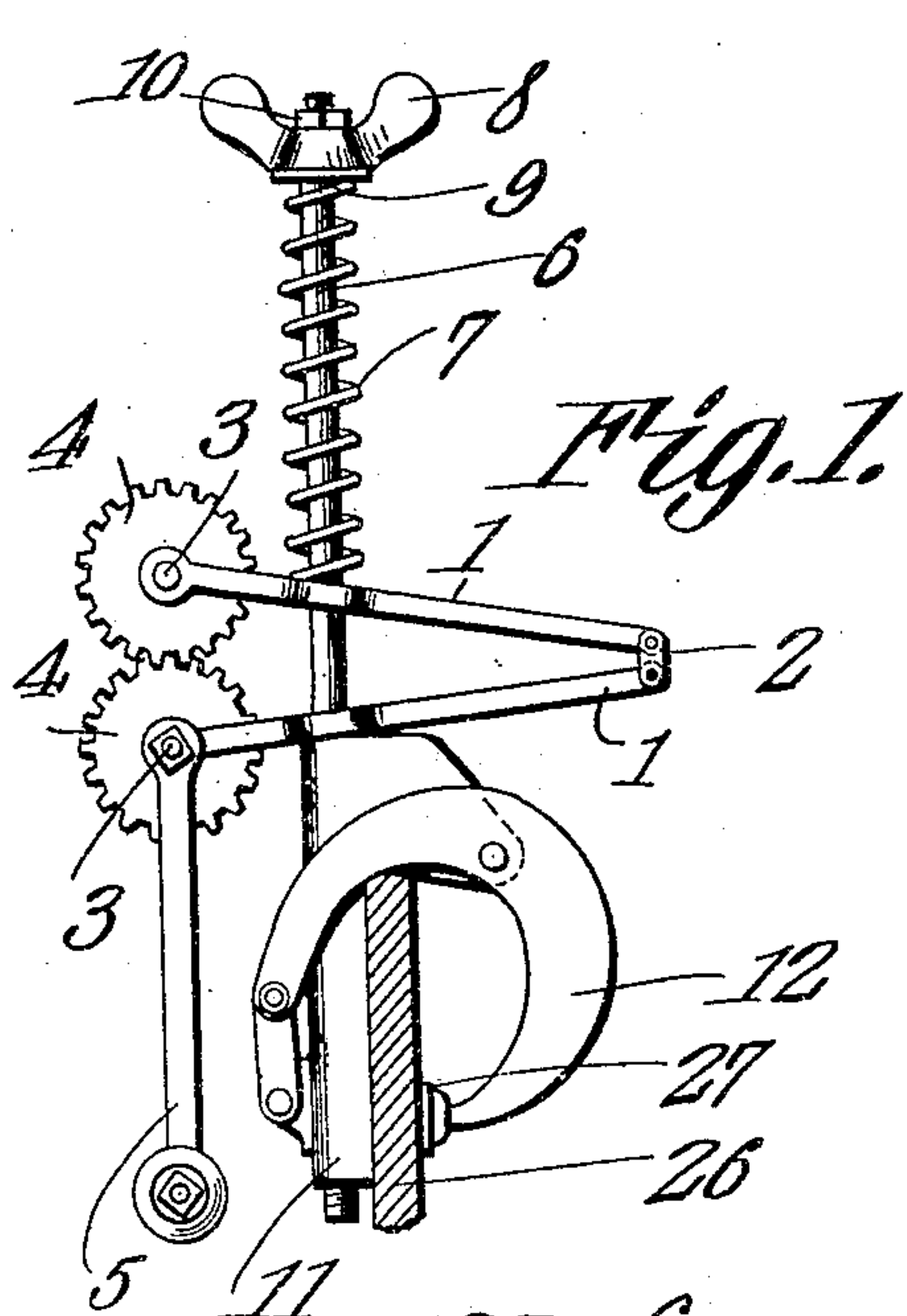


P. HELFRICH.
WRINGER CLAMP.
APPLICATION FILED JAN. 5, 1909.

938,855.

Patented Nov. 2, 1909.



Witnesses

E. J. Hunt
Mason B. Lawton.

Inventor

Peter Helfrich.

By *C. A. Snow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

PETER HELFRICH, OF ORLEANS, NEBRASKA.

WRINGER-CLAMP.

938,855.

Specification of Letters Patent.

Patented Nov. 2, 1909.

Application filed January 5, 1909. Serial No. 470,832.

To all whom it may concern:

Be it known that I, PETER HELFRICH, a citizen of the United States, residing at Orleans, in the county of Harlan and State of Nebraska, have invented a new and useful Wringer-Clamp, of which the following is a specification.

The objects of the invention are, generally, the provision, in a merchantable form, of a device of the above mentioned class, which shall be inexpensive to manufacture, facile in operation, and devoid of complicated parts; specifically, the provision of a support-engaging wringer clamp which shall be operable by and simultaneously with, the roller-pressure adjusting-means of a wringer, of a fixed and movable jaw of novel and improved construction, and of novel means for assembling connecting, and operating the said jaws; other and further objects being made manifest hereinafter as the description of the invention progresses.

The invention consists in the novel construction and arrangement of parts, herein after described, delineated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that, within the scope of what is claimed, divers changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the drawings.

In the accompanying drawings:—Figure 1 shows in side elevation my invention assembled with a wringer; Fig. 2 is a side elevation of my invention upon an enlarged scale, parts being broken away better to illustrate the structure; Fig. 3 is an end elevation, and Fig. 4 is a transverse section of the fixed jaw.

The improved wringer clamp forming the subject matter of this application for Letters Patent may be used in connection with a variety of wringers. In order, however, to present a concrete embodiment and to show its application clearly, I have delineated in Fig. 1, a wringer comprising arms 1 pivoted terminally to each other at 2 and carrying at their other terminals shafts 3, upon

which are mounted the usual wringer rolls, the said shafts 3 being provided with intermeshing cogs 4, and one of the shafts having the usual operating handle 5. These arms 1 are provided with alined apertures arranged to receive the rod 6 of my clamp. The roller-pressure adjusting-means include the compression spring 7 mounted upon the rod 6 and arranged to bear upon the upper arm 1, and a wing nut 8 which is rigidly assembled with the upper terminal of the rod 6, being held in place by a lock nut 10, a washer 9 being interposed between the wing nut 8 and spring 7.

Referring now to Figs. 2 and 3 wherein the details of the clamp are more clearly shown, it will be seen that the same comprises a fixed jaw 11 from which projects a bridge piece 13. The movable jaw 12 is provided with forked arms 19 arranged to inclose the bridge piece 13 and pivotally united therewith by the member 20, the forked arms 19 being extended to the rear of the fixed jaw 11. The fixed jaw 11 is provided with an axial channel 14 in which the rod 6 is slidably mounted. The rear of the fixed jaw 11 is provided with a longitudinal slot 16 and the rod 6 carries a shoulder 23 positioned to engage the fixed jaw 11 at the upper terminal of the slot 16, as shown most clearly in Figs. 2 and 4.

Slidably mounted in the lower end of the axial channel 14 of the fixed jaw is a rider 15 having a threaded channel 24, the lower terminal of the rod 6 being threaded as shown at 25 to engage the channel 24 of the rider. A shoulder 17 projects from the rider 15 through the slot 16 in the fixed jaw, and a link 18 is pivoted at 21 between the terminals of the forked arms 19 of the movable jaw and at 22 to the shoulder 17 of the rider. The free terminal of the movable jaw 12 carries a button 27 united to the said jaw by a universal joint.

The practical operation of the device is as follows:—Assuming the device to be in a loosened condition, the fixed jaw 11 and the movable jaw 12 are placed upon opposite sides of the edge 26 of a tub or washing machine, and the wing nut 8 is rotated carrying with it in its rotation the rod 6. The rotation of the rod 6 will cause the rider 15 to move upward in the axial channel 14 of the fixed jaw carrying with it in its upward

movement the link 18, which in its turn will tilt the movable jaw 12, bringing the button 27 into contact with the edge 26 of the tub.

It will be seen that while the above operation is being carried forward, the spring 7 will be compressed so that while the jaws of the clamp are being set upon the tub, the rolls of the wringer will at the same time be brought together. In thus adjusting the jaws of the clamp to the edge of the tub, it is not necessary that they be clamped extremely tight for the reason that when the clothes are introduced between the rolls of the wringer, the rolls will be separated causing the members 1 to move upon the compression spring 7 and increasing the security of the grip of the jaws on the tub.

When a wringer clamp of the construction herein pointed out is employed, it is impossible to remove the wringer from the tub without at the same time loosening the rolls of the wringer, and it is therefore impossible when the washing process has been completed to remove the wringer from the tub and to put the same away with the rolls thereof clamped closely together.

When it is desired to remove the wringer from the tub, the rod 6 may be rotated, to cause the said rod to move upward in the fixed jaw. The spring 7 will cause the jaws to remain in engagement with the edge of the tub, until the shoulder 23 abuts against the fixed jaw, adjacent the upper end of the slot 16, the structure whereby this abutment is secured, being shown most clearly in Figs. 2 and 4. After the shoulder 23 has come into abutment with the fixed jaw within the channel 16, a continued rotation of the rod will cause the rider 15 to move downward upon the rod 6, tilting the movable jaw away from the edge of the tub, and, since the shoulder 23 is in abutment with the fixed jaw as hereinbefore pointed out, the device may be raised from the edge of the tub without danger of the movable jaw engaging the edge of the tub, and impending the process of removal.

In Fig. 1 I have shown but one end of a wringer equipped with the clamp of my invention. It is to be understood, however, that the other end is to be equipped with a similar clamp and that the opposite end of the wringer would present an appearance

precisely the same as that shown in Fig. 1 save that the operating handle 5 would be absent.

Having thus described my invention, what I claim as new and desire to protect by Letters Patent is:—

1. A wringer clamp comprising a fixed jaw having a projecting bridge piece; a movable jaw pivoted to the bridge piece and having forked arms to inclose the fixed jaw; a rod slidably mounted in the fixed jaw; and means for operatively connecting the terminal of the rod with the movable jaw.

2. A wringer clamp comprising a fixed jaw; a movable jaw pivoted to the fixed jaw; an internally threaded rider slidably mounted in the fixed jaw; a rod slidably and rotatably mounted in the fixed jaw and terminally threaded to engage the rider; and means for operatively connecting the rider with the movable jaw.

3. A wringer clamp comprising a fixed jaw having a projecting bridge piece; a movable jaw pivoted to the bridge piece and having forked arms to inclose the fixed jaw; an internally threaded rider slidably mounted in the fixed jaw; a rod slidably and rotatably mounted in the fixed jaw and externally threaded to engage the rider; and a link pivotally connecting the rider with the terminals of the arms of the movable jaw.

4. A wringer clamp comprising a fixed jaw; a movable jaw pivoted to the fixed jaw; a rider slidably mounted in the fixed jaw; a link pivotally uniting the rider with the movable jaw; and means for reciprocating the rider in the fixed jaw.

5. A wringer clamp comprising a fixed jaw; a movable jaw pivoted to the fixed jaw; a rider slidably mounted in the fixed jaw; a link pivotally uniting the rider with the movable jaw; and a rod slidably mounted in the fixed jaw and operatively connected with the rider, the rod being provided with a shoulder to engage the fixed jaw to limit the sliding movement of the rod.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

PETER HELFRICH.

Witnesses:

H. C. SMITH,
J. A. STEWART.