

No. 821,559.

PATENTED MAY 22, 1906.

M. WARNER.  
SECURING CLAMP FOR WASHING MACHINES.

APPLICATION FILED JULY 27, 1905.

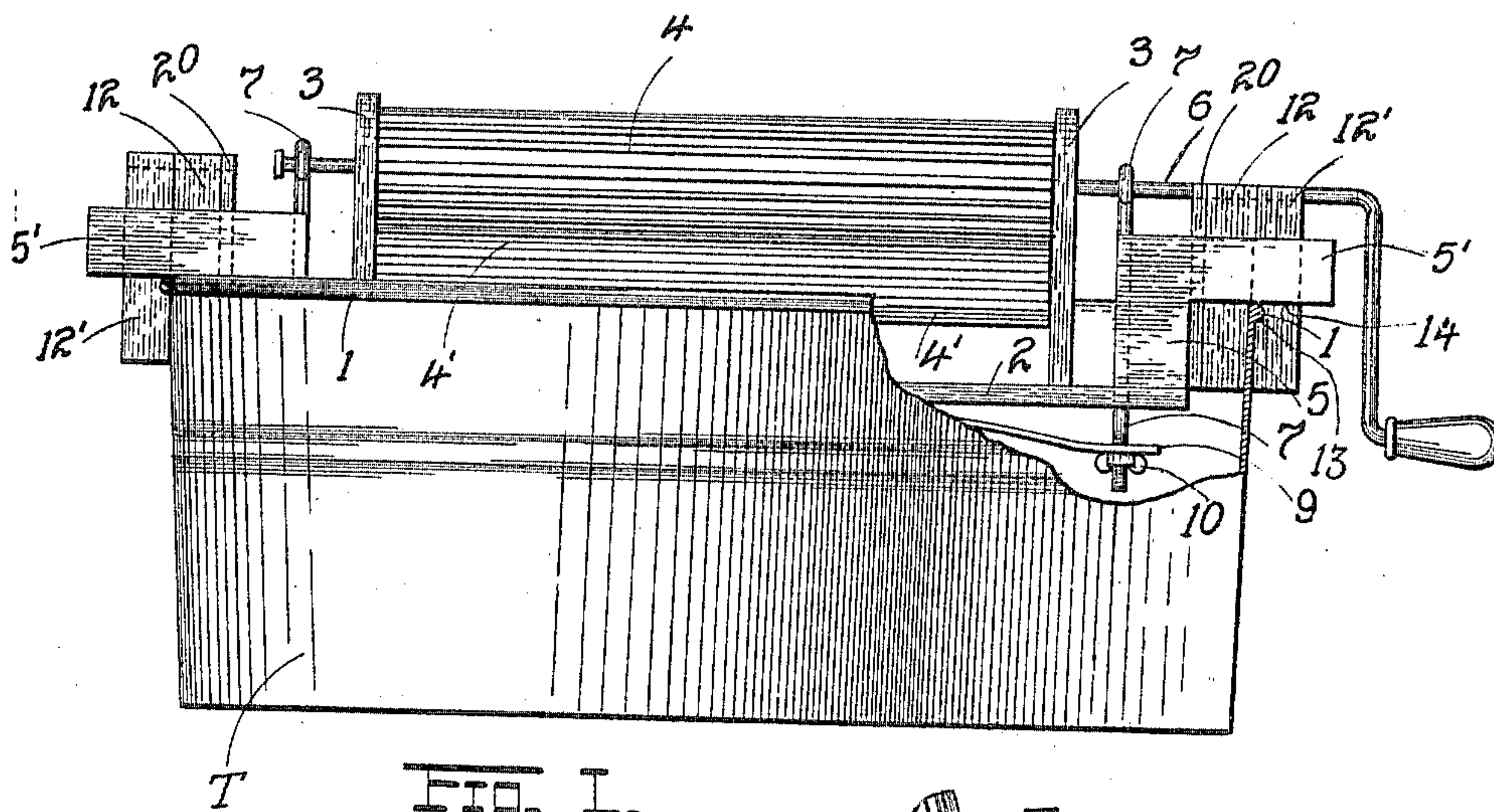


FIG. 1.

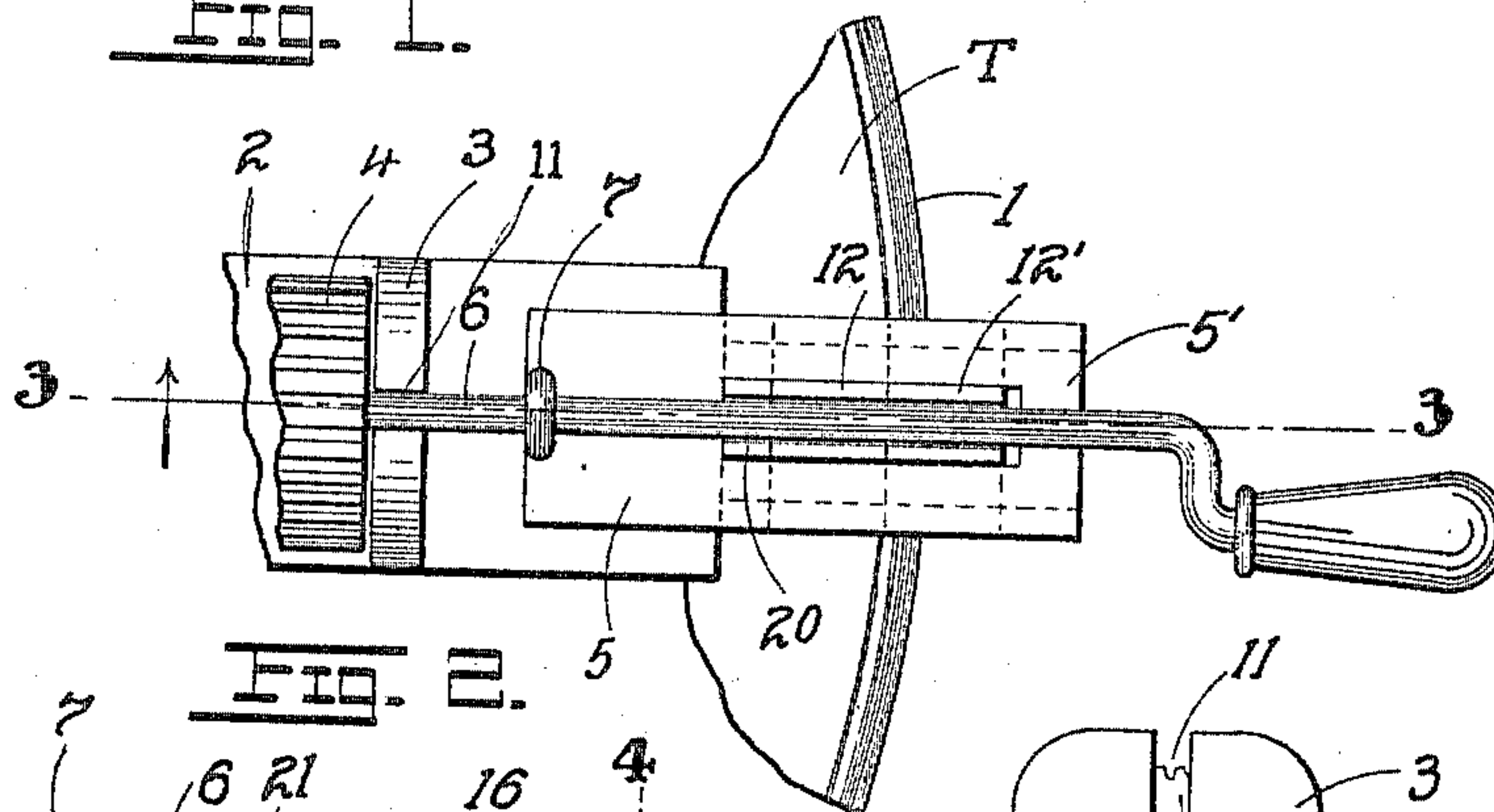


FIG. 2.

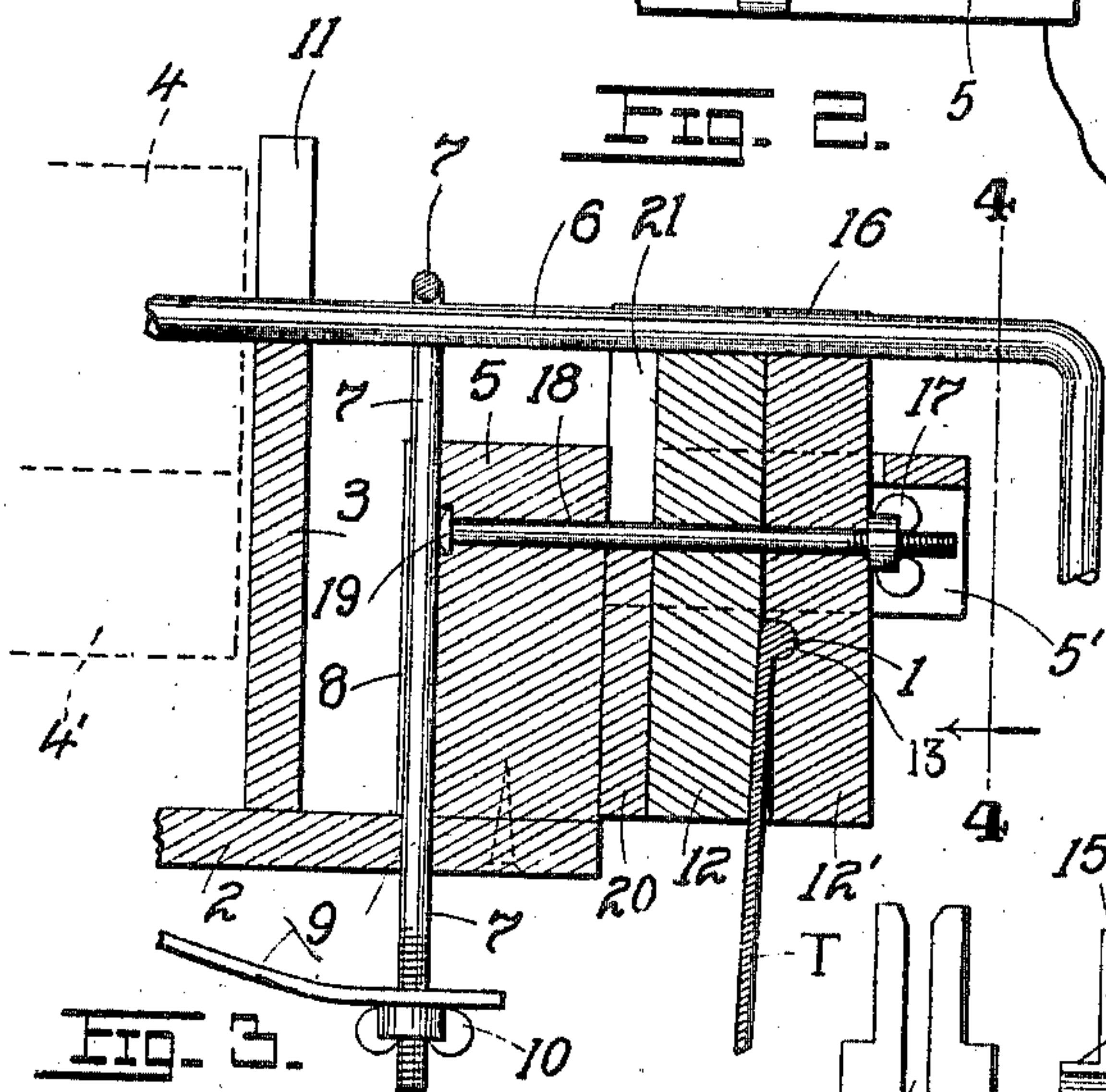


FIG. 3.

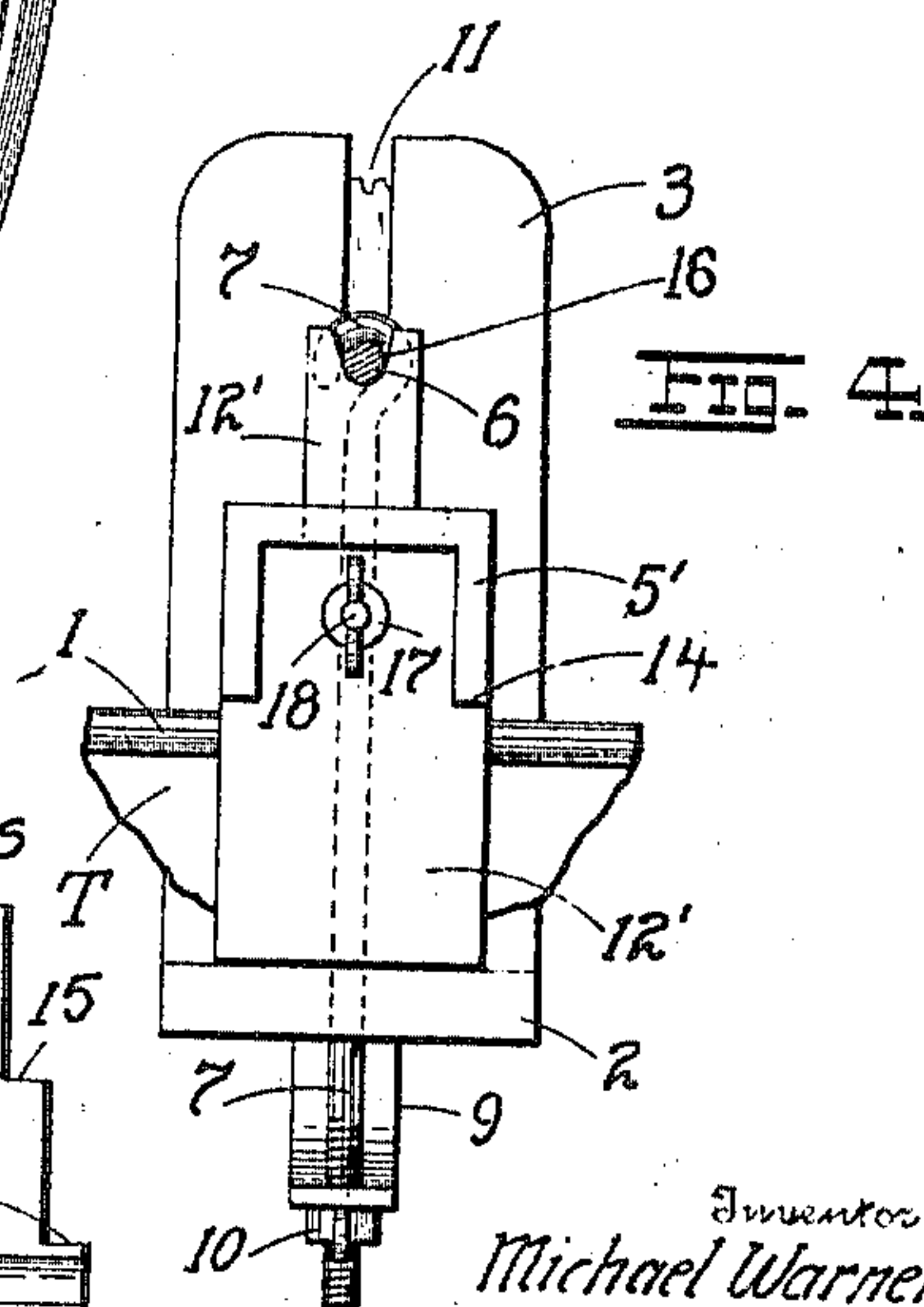


FIG. 4.

FIG. 5.

FIG. 5.

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# UNITED STATES PATENT OFFICE.

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## SECURING-CLAMP FOR WASHING-MACHINES.

No. 821,559.

Specification of Letters Patent.

Patented May 22, 1906.

Application filed July 27, 1905. Serial No. 271,482.

*To all whom it may concern:*

Be it known that I, MICHAEL WARNER, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Securing-Clamps for Washing-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to securing-clamps for washing-machines; and it consists in the novel details of construction more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is an elevation of a tub, with a washing-machine clamped thereto. Fig. 2 is an enlarged top plan of the clamp with portion of the machine. Fig. 3 is a vertical section on line 3 3 of Fig. 2. Fig. 4 is a transverse vertical section on line 4 4 of Fig. 3. Fig. 5 is a detached view of the spacing-key, and Fig. 6 is a detached view of the inner face of the outside clamping-block.

The object of my invention is to provide a clamp for washing-machines of the wringer type, whereby the same can be secured to the upper edge of a tub and preferably to a metal tub provided with an upper marginal reinforcing-bead.

A further object is to provide a clamp which can be used on wooden tubs as well.

In detail the invention may be described as follows:

Referring to the drawings, T represents a metal tub having an outer marginal bead 1. The washing-machine comprises a lower horizontal member or bar 2, standards 3 3, between which the grooved rollers 4 4' are mounted, terminal heads 5, to which the ends of the member 2 are secured, and the channeled extensions or wings 5' of said heads overlapping the edges of the tub. From the crank-shaft 6 of the upper roller 4 depend, on either side of the standards 3 3, links 7, passing within vertical grooves 8, formed on the inner faces of the heads 5, the lower ends of the links passing through the member 2 and being screw-threaded. To the screw-threaded ends are secured the adjacent ends of the arched tension-bar 9, the tension between the rollers being regulated by varying the position of the nuts 10 against the ends of the bar 9, and thus drawing the upper roller 4 more or less tightly against the lower roller 4'. The vertical adjustment for

the roller is permitted by the grooves 11, formed in the standards 3 3, through which the shaft 6 passes.

Passed loosely through the upper wall of the channeled extension or wing 5' are the clamping-blocks 12 12', respectively, the inner face of the outer block 12' being provided with a transverse groove 13 to embrace the bead 1 of the tub. The blocks are formed in a shape substantially as shown in Fig. 6, being provided with a basal portion terminating in shoulders 14, which bear against the lower edges of the vertical sides of the channel in the extension 5', with an intermediate portion terminating in shoulders 15, which bear against the base of the channel in the extension 5', and with an upper reduced extension provided with a terminal groove 16 for the support of the crank-shaft extension on one side of the machine. Of course only one end of the crank-shaft need be supported by the blocks 12 12', though both sets of blocks may be provided with terminal grooves 16, if desired. After the blocks are in place, as indicated, the outer block is forced against the tub by the controlling-nut 17, operating at the outer screw-threaded end of a bolt 18, passed loosely through the blocks and terminating in a head 19 in the part 5 behind the link 7, the inner block being subsequently forced against the inner face of the tub by a key 20, which is provided with a recess 21 for the passage therethrough of the bolt 18. In the event it is desirable to employ the clamp to wooden tubs, where the walls are thicker than those of metallic tubs, the keys 20 may be dispensed with.

Having described my invention, what I claim is—

1. A clamp for washing-machines of the class described, comprising a head coupled to the machine-frame having a terminal channeled extension overlapping the edge of the tub, blocks passed through the base of the channel and serving to support the operating-shaft of the machine, a transverse groove formed on the inner face of the outer block, a bolt passing through and connecting the blocks to the head, a terminal clamping-nut at the outer end of the bolt, and a key for forcing the inner block toward the inner face of the wall of the tub and having a recess for the free passage of the bolt, said key being inserted between the inner block and the adjacent face of the head, substantially as set forth.

2. In combination with a tub having a marginal bead, blocks embracing the sides of the tub and the outer block being provided with a groove for embracing said bead,  
5 means for forcing the blocks into frictional engagement with the tub-walls, a head having a channeled extension overlapping the edge of the tub, the blocks being passed through the extension, a bolt coupling the

blocks to the head, and a recessed key interposed between the head and the inner block, substantially as set forth.

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

MICHAEL WARNER.

Witnesses:

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