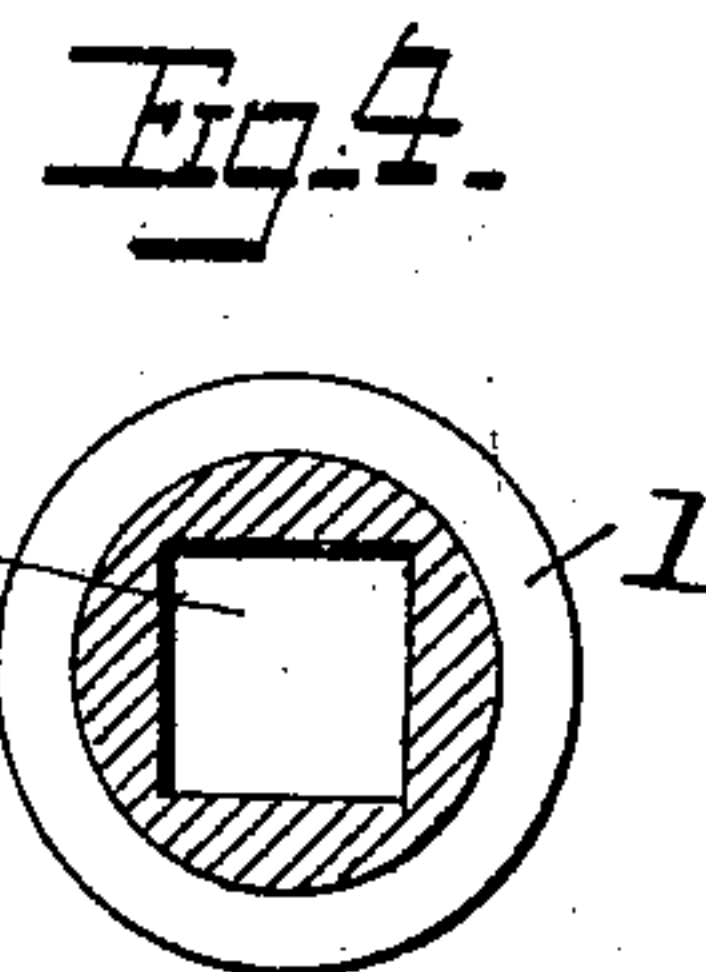
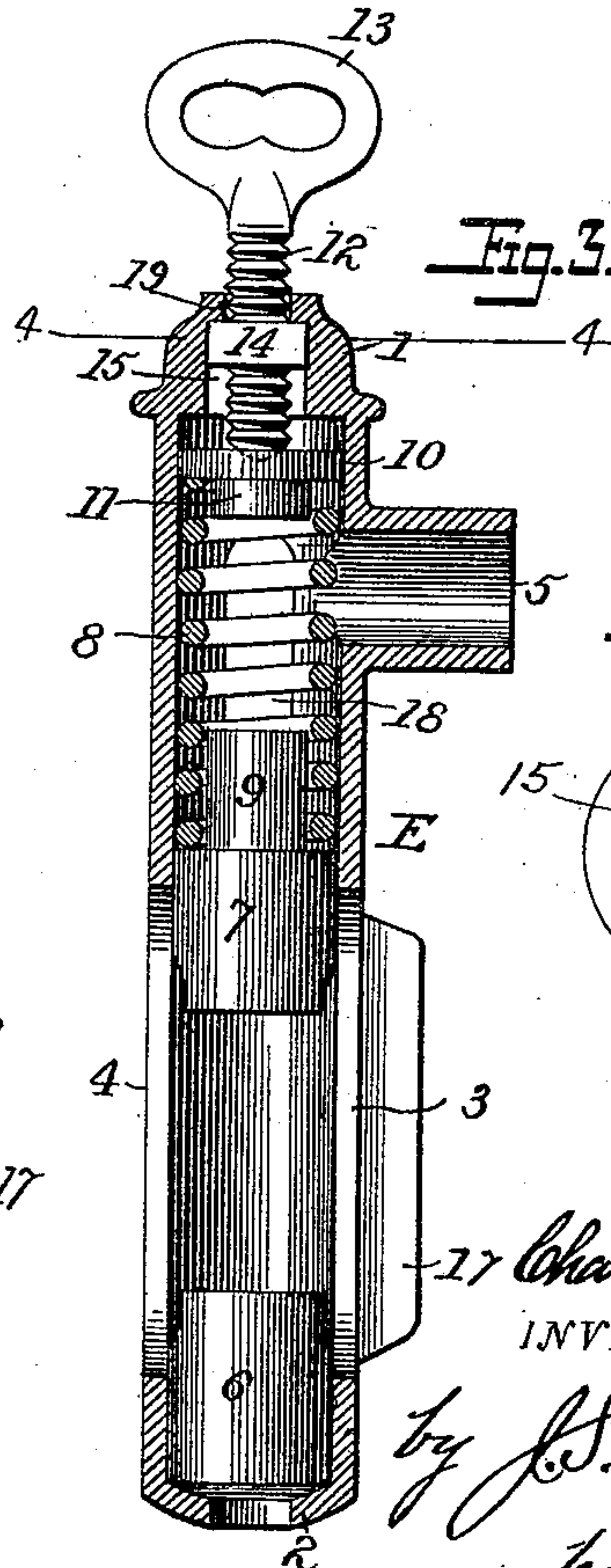
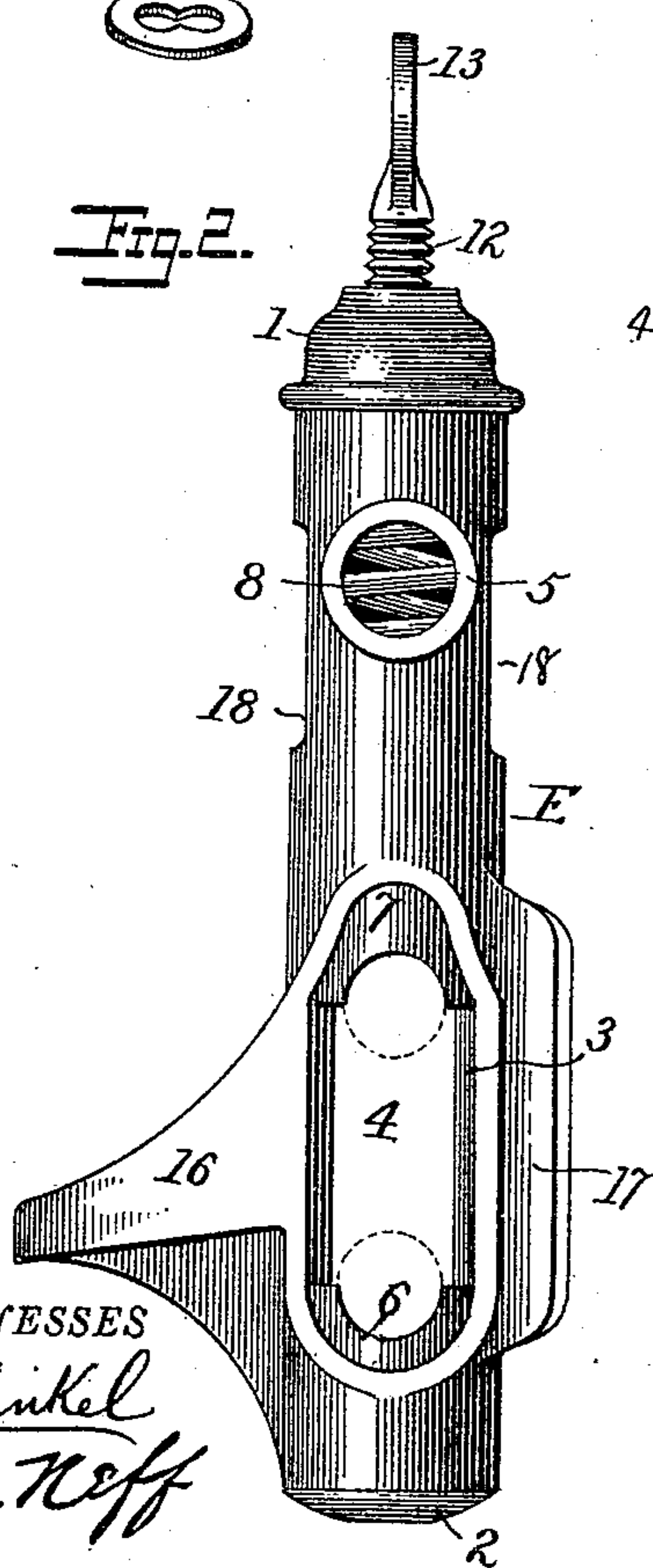
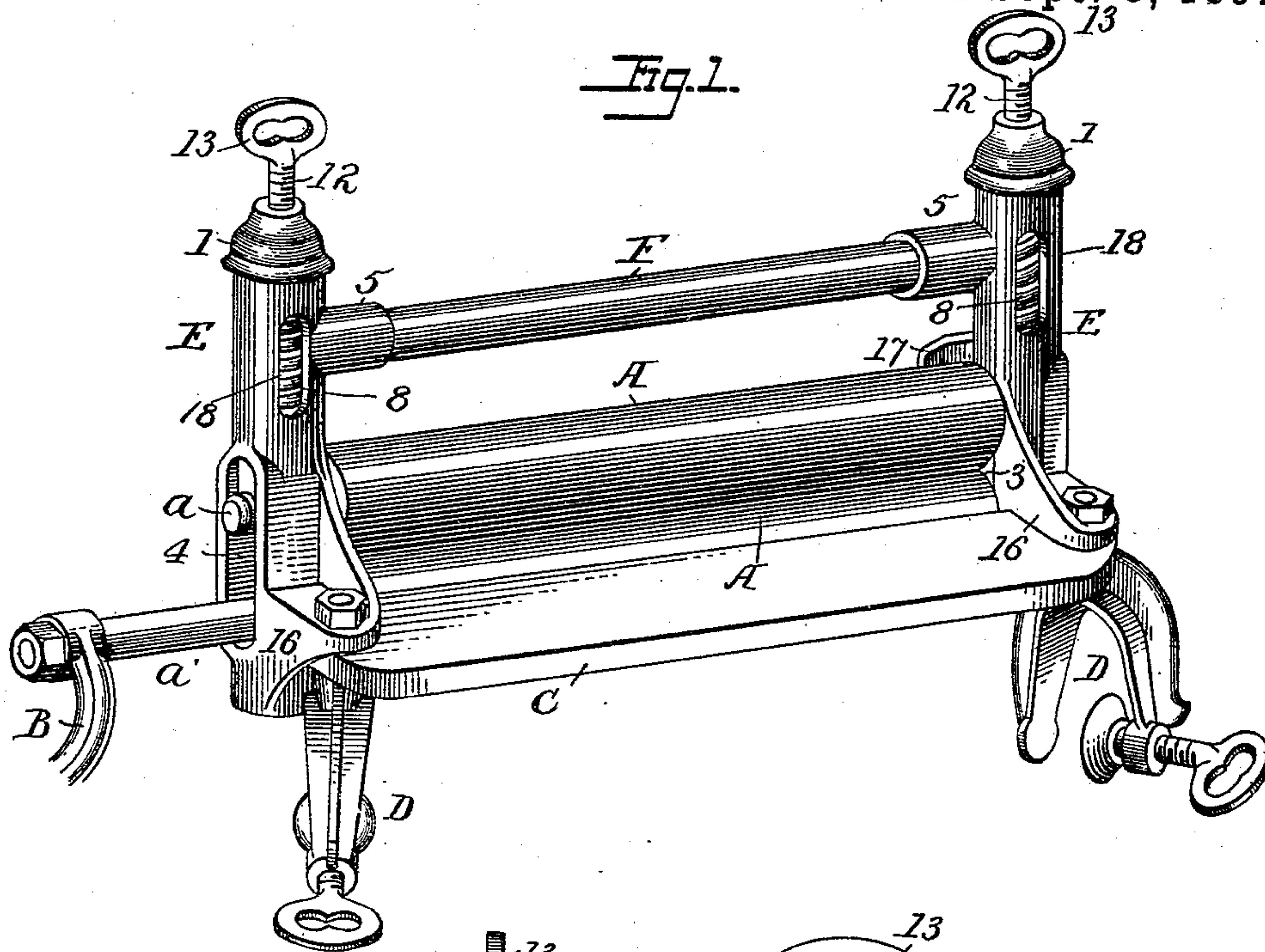


(No Model.)

C. MILLER.  
CLOTHES WRINGER.

No. 459,341.

Patented Sept. 8, 1891.



WITNESSES  
*John Hinkel*  
*Wm E. Neff*

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INVENTOR  
*by J. S. Barker,*  
his Attorney.



# UNITED STATES PATENT OFFICE.

CHARLES MILLER, OF AUBURN, NEW YORK, ASSIGNOR TO CYRENUS WHEELER, JR., OF SAME PLACE.

## CLOTHES-WRINGER.

SPECIFICATION forming part of Letters Patent No. 459,341, dated September 8, 1891.

Application filed January 20, 1891. Serial No. 378,467. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES MILLER, a citizen of the United States, residing at Auburn, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Clothes-Wringers, of which the following is a specification.

This invention relates to clothes-wringing machines of that character in which is employed a separate spring at each end of the rollers and independent adjusting devices for these springs; and it has for its object to simplify the construction and the manufacture of the side supports or standards for the roller-bearings, the springs, and their adjusting devices, so that the standards may be cast entire at a single operation, in complete form for use.

The invention therefore consists of the novel construction of the side supports or standards, as will be hereinafter pointed out.

In the drawings, which illustrate my invention, Figure 1 is a perspective view of a clothes-wringer embodying the invention. Fig. 2 is an inside face view of one of the side pieces or standards. Fig. 3 is a vertical longitudinal section through one of the standards. Fig. 4 is a cross-section of one of the standards on the line 4 4, Fig. 3.

In such drawings, A A represent the wringing-rollers, the shaft  $a'$  of one of which is extended to receive a handle B. C is the plate or board upon which the clothes run out as they pass from between the rollers, and D D are the clamps by which the wringer is secured to the tub. The parts thus far described may be of any usual or preferred construction.

E E represent the side supporting pieces or standards. Each of these is of tubular shape, having a closed top 1 and bottom 2—that is, the top and bottom are sufficiently closed to form rests against which the parts of the apparatus supported within the standard may have bearing.

The opposite sides of the lower portion of the standard are preferably somewhat flattened, and those sides which are at right angles to the longitudinal axes of the rollers are slotted, as at 3 and 4, to receive the shafts or journals  $a'$  of the rollers, the slots being long

enough to permit the up-and-down movement of the adjustable or movable roller.

Each standard is provided near its upper end with a hollow boss or socket 5, into which is fitted and secured one end of the connecting-bar F, which is situated at a suitable height above the rollers, and serves, together with the board or plate C, to unite the standards E and properly hold them relatively to each other.

In the bottom portions of the standards E are placed the bearings for the shafts of the lower rollers, such bearings consisting, preferably, of blocks 6, of wood, having concave upper bearing-faces. Wooden bearings 7 are arranged in the hollow side pieces, above the projecting ends of the shaft of the upper roller, against which they are held with a yielding pressure by the springs 8, preferably coiled metal springs.

The upper bearing-block 7 is by preference provided with a centrally-arranged reduced portion 9, which extends for a short distance upward in the center of the spring, and tends to properly hold the bearing in place against the shaft end.

Upon the upper end of each spring rests a bearing-plate 10, which may be provided with a downward-projecting stud 11, which, extending for a short distance through the center of the spring, keeps the plate in place on the top thereof. It has a socket or recess in its upper face in which rests the end of the screw 12, which extends through an opening 19 in the top of the side piece or standard and is at its upper end provided with a turning-handle 13. The screw engages with a nut 14, which fits into an angular socket 15 in the upper part of the standard, (see Fig. 4,) by which it is held from turning and in which the spring 8 holds it. One of the openings in the sides of the standard, preferably the inner one 3, is of a size sufficiently large to allow the bearings 6 and 7 and the spring 8 to be passed through it, it being through this opening only that these parts can be placed in the standard.

The brackets 16, to which the board or plate C is secured, are cast in one piece with



the standard E, and so, also, are the guard-flanges 17.

The standards are preferably provided with slots 18 18, arranged opposite to each other 5 and at right angles to the slots 3 and 4 and above them. These permit access to and inspection of the upper interior portions of the standards and permit the nuts 14 and the plates 19 to be fitted into their places much 10 more readily than could be done were the upper parts of the standards entirely closed, and they also allow a tool to be passed through and made to engage with the springs should it at anytime become stuck fast in the standard. 15 It will be seen that the standards or side frame-pieces E may be cast entire and perfect, the castings requiring only to be cleaned and galvanized, when desired, to be ready for use. The hole 19 in the top or cover 1 of the 20 standard is sufficiently large to permit the stem of the screw 12 to pass through it freely, the engagement of the screw being with the nut 14, as has been described.

When the parts of the wringer are properly 25 assembled and it is ready for use, the springs and the parts engaging therewith or bearing

thereon are entirely protected, so that the clothes are in no danger of coming in contact therewith and being soiled.

A wringer such as has been described may 30 be cheaply and easily made, is simple in its construction and not liable to get out of repair, and fully protects or covers all bearing-faces.

What I claim as my invention is— 35

A standard or side piece for a clothes-wringer, consisting of a single piece of cast metal of tubular shape, having the slots 3 and 4 near its lower end, the slot 3 being larger 40 than the slot 4, the hollow boss or socket 5 above the said slots, the closed perforated top, the substantially closed bottom, and the angular socket 15 on the interior of the standard, below the top thereof, substantially as set forth. 45

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

CHARLES MILLER.

Witnesses:

GERRIT LOUGHBOROUGH,  
JNO. G. HOSMER.