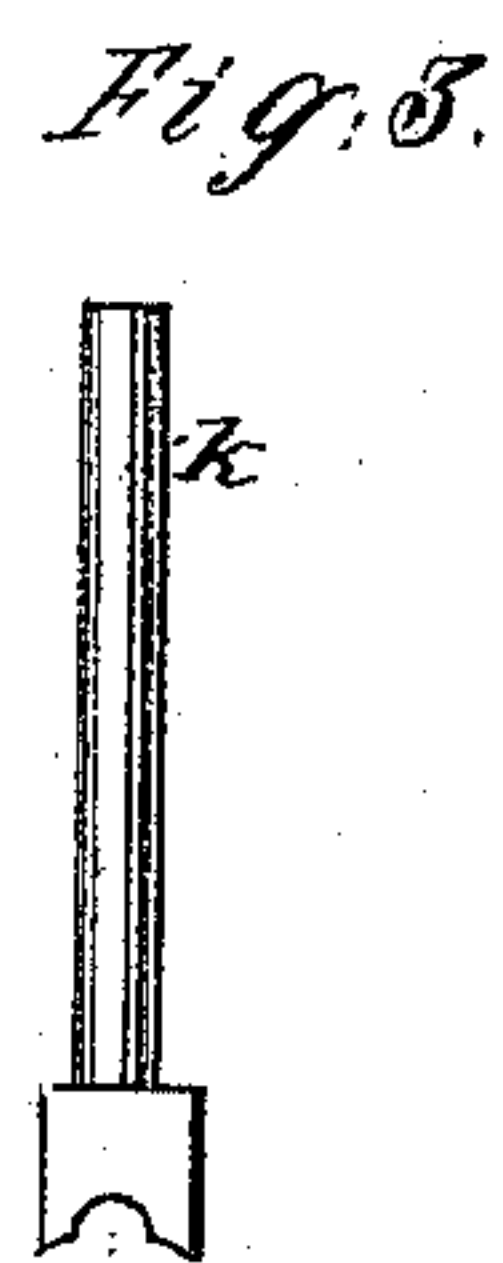
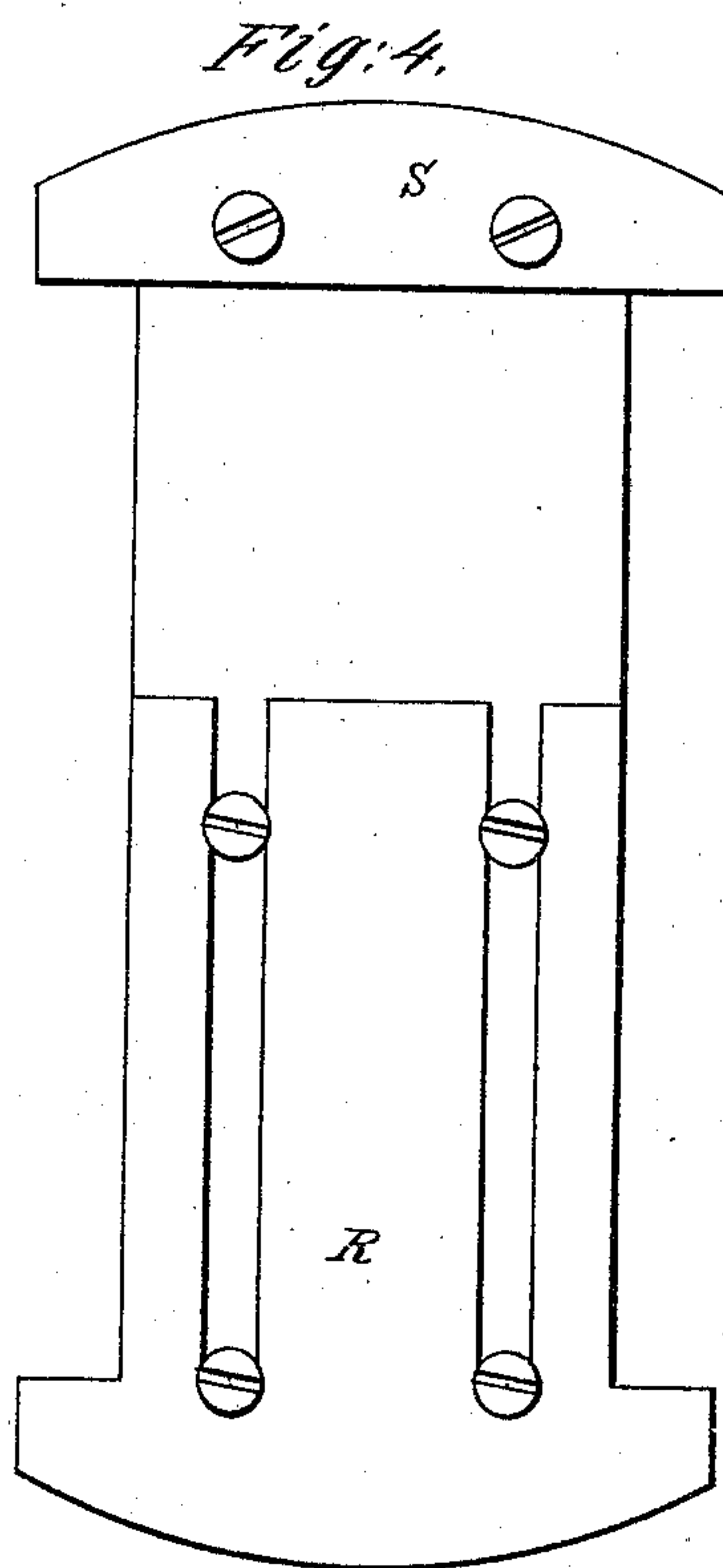
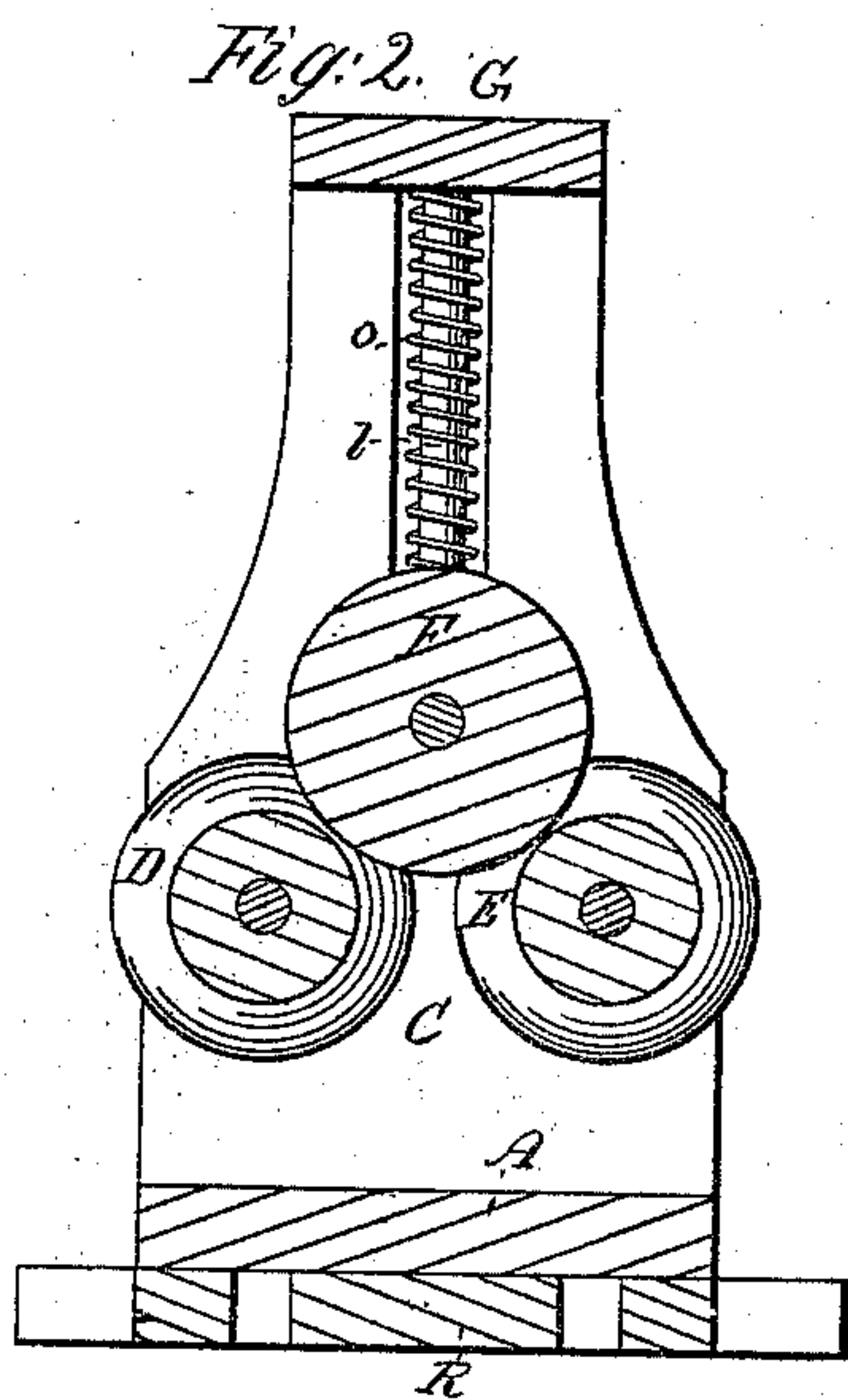
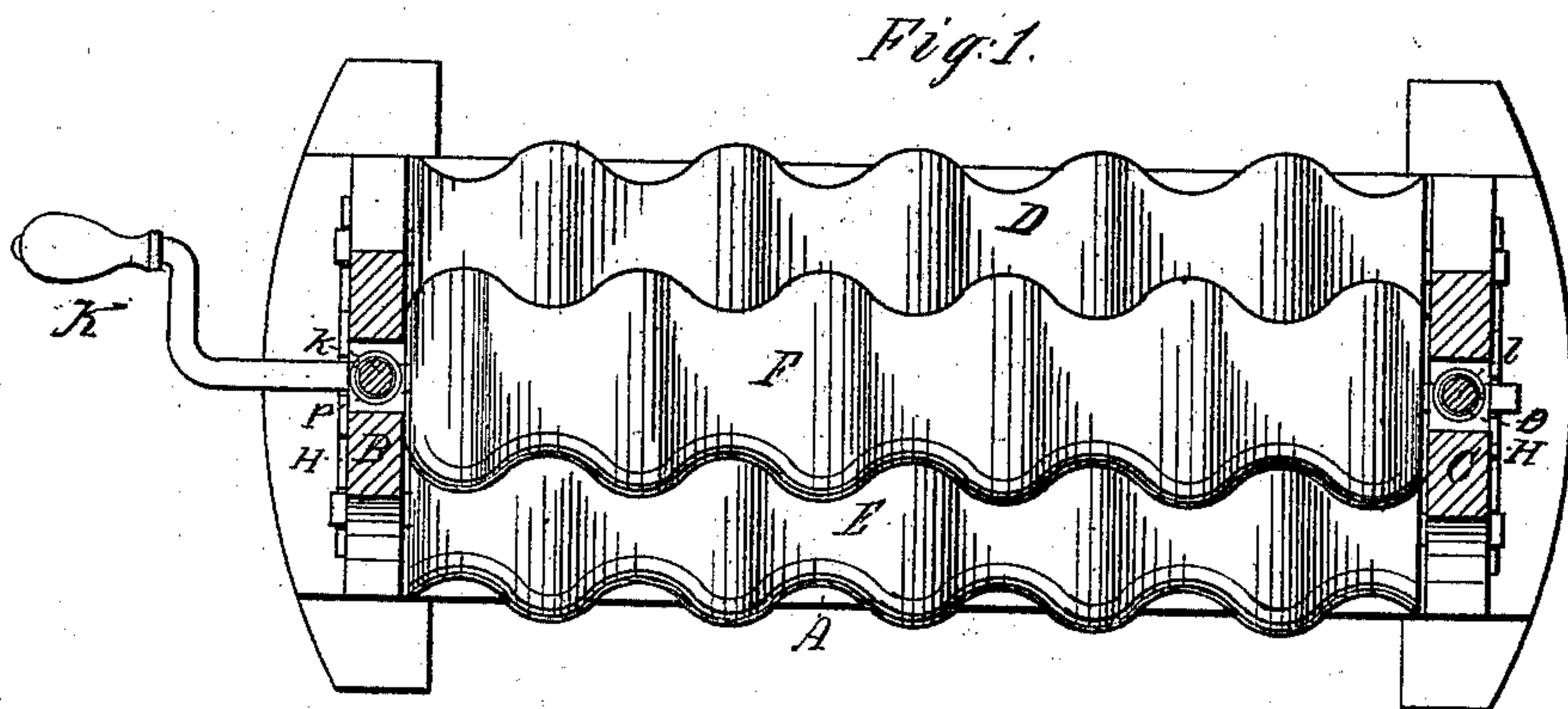


H. N. TUCKER.

Improvement in Washing-Machines.

No. 130,772.

Patented Aug. 20, 1872.



Witnesses

W. B. Ballou
J. S. Favelle

Inventor

Horace N. Tucker

UNITED STATES PATENT OFFICE.

HORACE N. TUCKER, OF STOUGHTON, MASSACHUSETTS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 130,772, dated August 20, 1872.

To all whom it may concern:

Be it known that I, HORACE N. TUCKER, of the town of Stoughton and county of Norfolk, in the State of Massachusetts, have invented a new and useful Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction, character, and operation of the same, reference being had to the accompanying drawing which makes part of this specification, in which—

Figure 1 is a plan view of the apparatus, showing the three rollers, posts, cross-bars, &c. Fig. 2 is a vertical section. Figs. 3 and 4 are detail views.

My improvement consists in the use of three rollers fluted or beaded transversely, so as to form transversely corrugated surfaces, so arranged that the most prominent portions of one will work in the most depressed portions of the other two, producing both a squeezing and rubbing operation, as the clothes are drawn up from and lowered again into the water by revolving the crank alternately in opposite directions until they are quickly and thoroughly cleansed; the journals of the upper roller working in slots, and held down by the metallic bearings and springs, which yield for the passage of buttons or other variations in thickness.

I make the frame of the working apparatus of the cross-bar A into which are fitted the posts B and C, and after receiving the rollers D and E, are secured by screws or otherwise to the cross-bar A. I make the posts B and C with metallic journal-bearings attached for rollers D and E, as indicated by H, and with slots for the roller F, from the top to a point far enough down to allow the roller F to rest upon the rollers D and E. Into the slots I fit metallic journal-bearings, *k* and *l*, around which I coil springs—as, *a* and *p*. I then fit the top rail G with holes, into which the upper

end of the journal-bearings play, and secure it to posts by screws or otherwise. I make the rollers D, E, and F, with transverse beads and grooves, and so arrange them that the most depressed portions of the two lower ones will receive the most prominent portions of the upper one, so that when the upper roller F is revolved the friction of the grooves and beads will cause the two lower ones to revolve in opposite direction, so as to feed the article to be washed through in either direction. I make the adjustable slide as represented by Fig. 4. The piece indicated by S is fastened by screws to the end of the cross-bar A. The section indicated by R is secured to the end of the cross-bar marked *r*, and by it the machine is adjusted to any size tub.

To use this machine, I adjust the slide R to the diameter of the tub, and fasten by turning down the screws; then press the machine into the tub until it is held securely; then put into the tub a sufficient quantity of water and put in the clothes, applying soap at discretion; put one end of the article to be washed between the rollers F and D or F and E, revolve the crank K until the article has passed nearly through; then turn the crank in the opposite direction and so on alternately till the article or articles are fully cleansed—the roller F working with equal effectiveness on rollers D and E.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the three rollers D, E, and F, with the posts B and C, the springs *o* and *p* and the journal-bearings H, *k*, and *l*, when constructed, arranged and fitted for use, as herein described.

HORACE N. TUCKER.

Witnesses:

M. B. BALLOU,
F. S. SAVELS.