

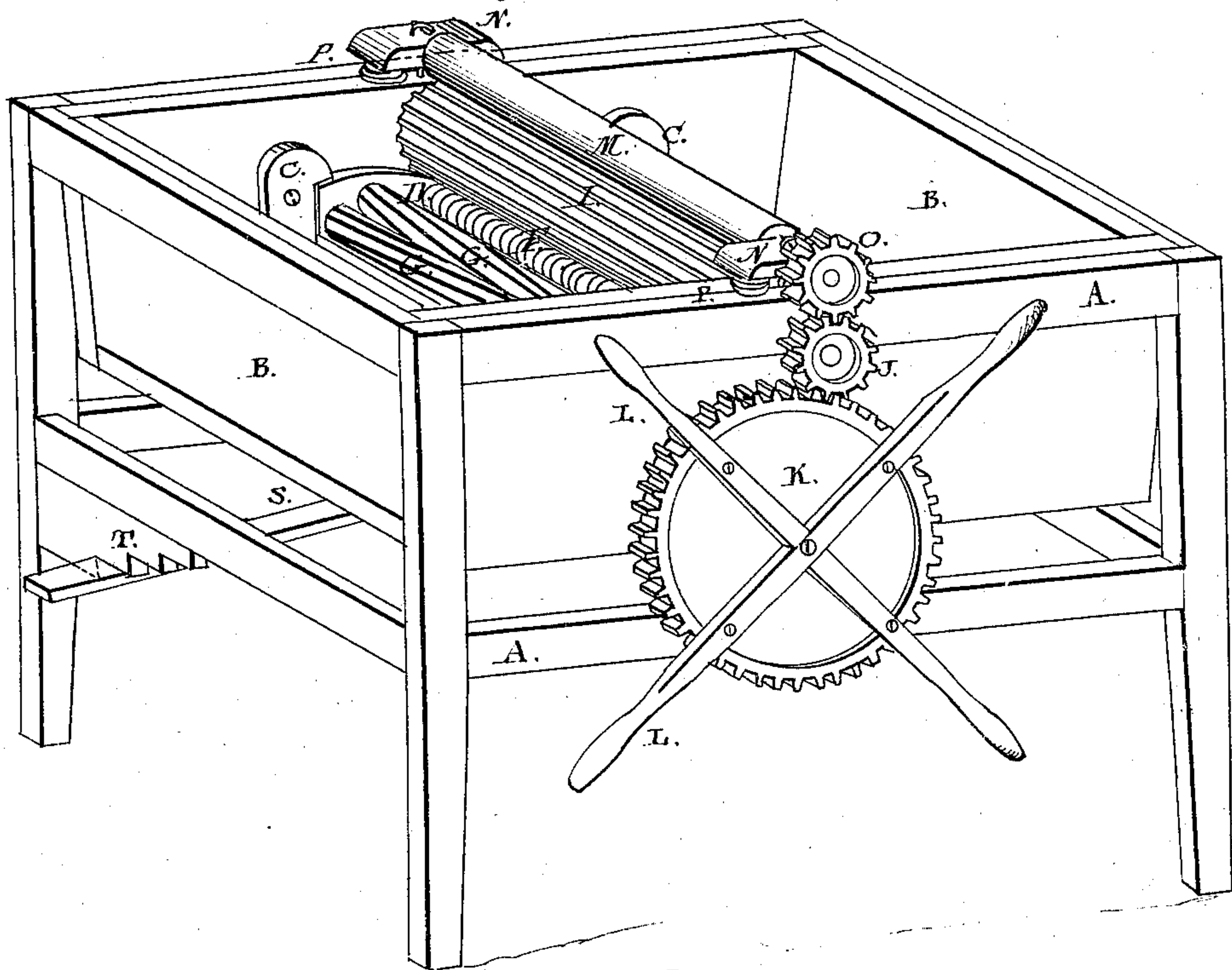
*A. Schlingman*

*Washing Mach.*

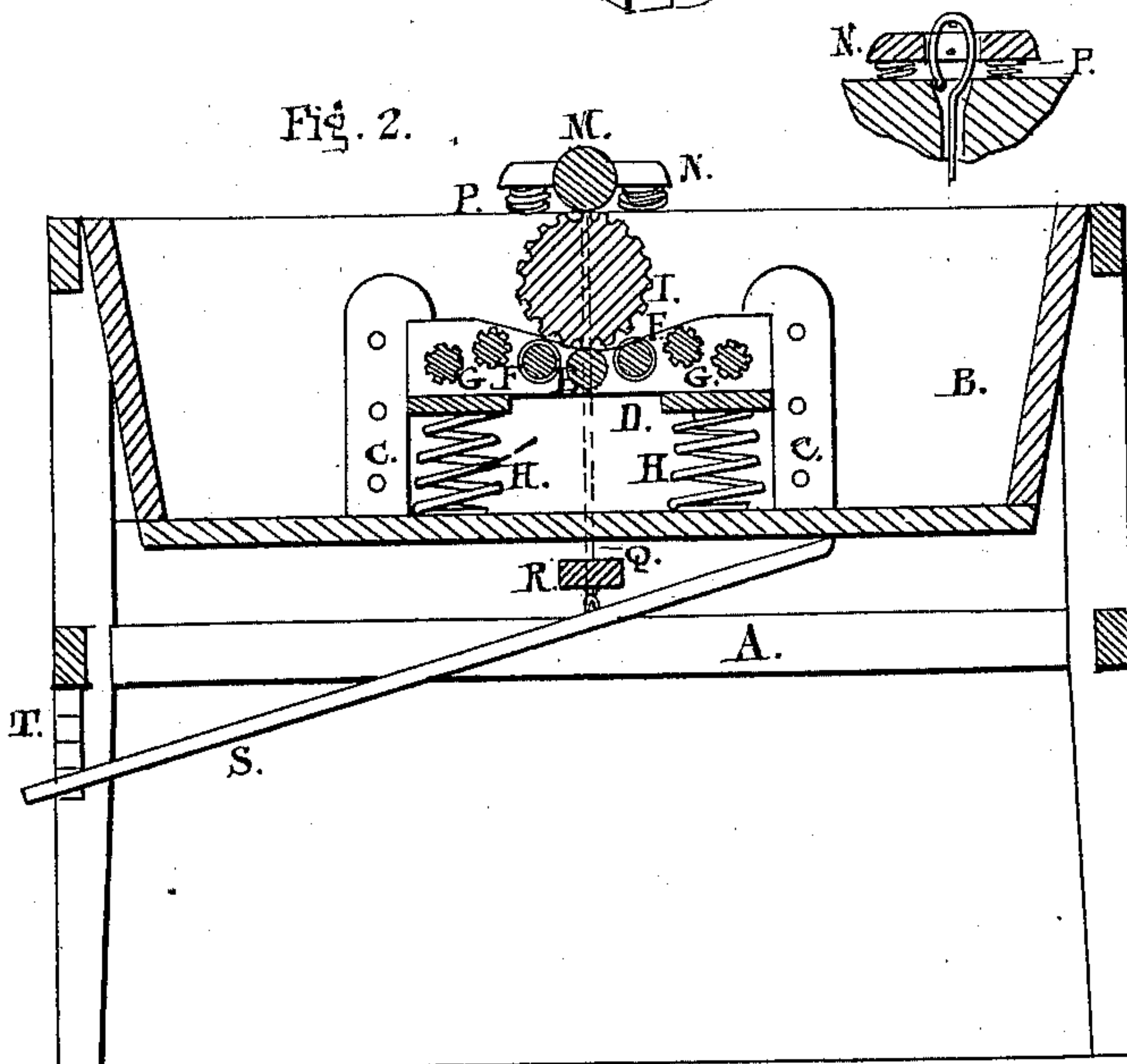
*N<sup>o</sup> 88,418.*

*Patented Mar 30, 1869.*

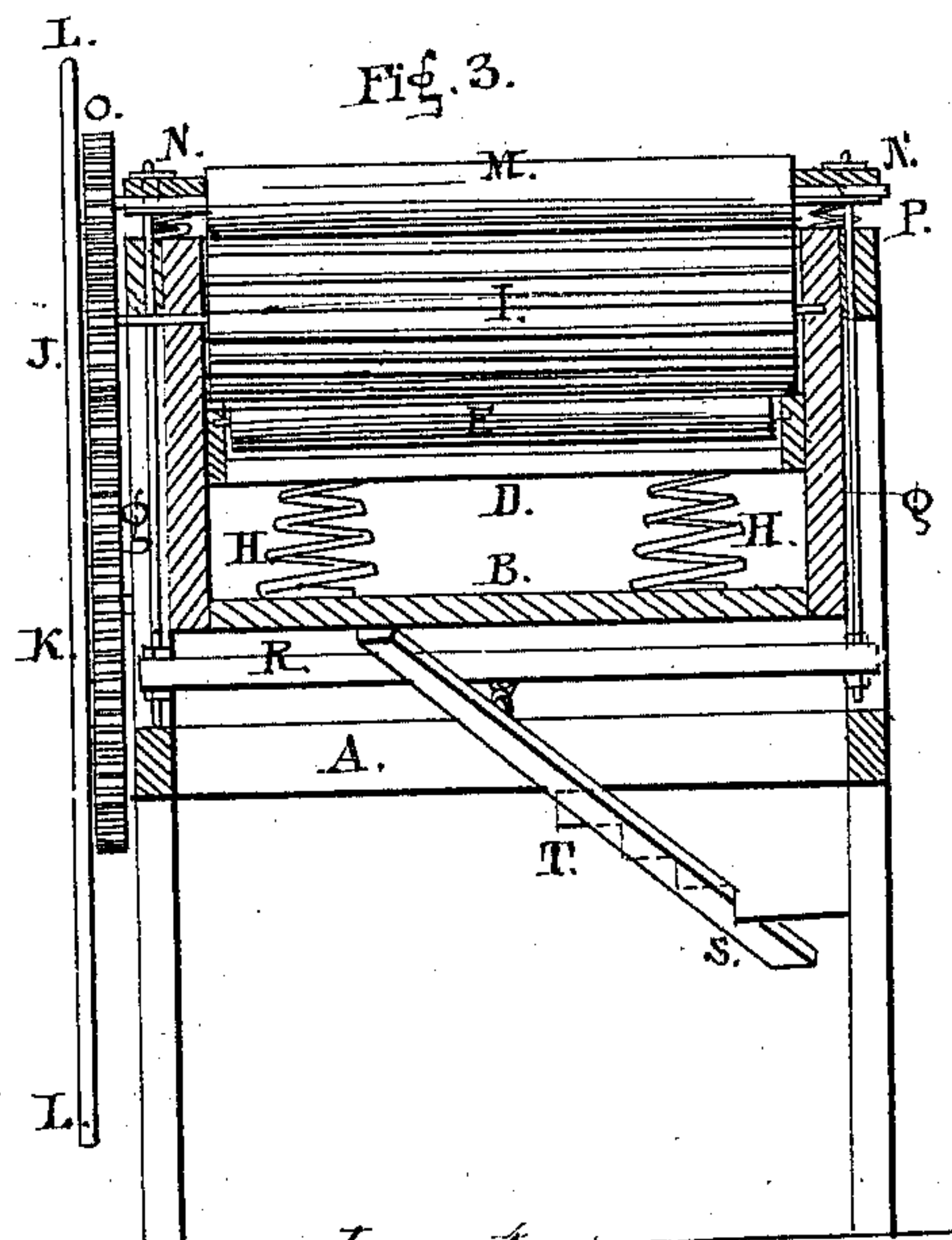
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses:*  
*Geo H. Layman,*  
*Saml. Knight.*

*Inventor:*  
*A. Schlingman*  
*by Knight Bros*  
*Attors*



# United States Patent Office.

ADOLPH SCHLINGMAN, OF WEST ALEXANDRIA, OHIO.

Letters Patent No. 88,418, dated March 30, 1869.

## IMPROVED WASHING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

### To whom it may concern:

Be it known that I, ADOLPH SCHLINGMAN, of West Alexandria, Preble county, Ohio, have invented certain new and useful Improvements in Washing-Machines; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making making part of this specification.

My invention consists in the combined arrangement of a yielding rubber, or wash-board, consisting of a series of rollers, mounted in a yielding frame, constituting the lower rubber, or wash-board, a main rubbing-roller, and a yielding roller, mounted above the latter, and operating in connection therewith for wringing-purposes.

In the drawings—

Figure 1 is a perspective view of a washing-machine, embodying my improvements;

Figure 2 is a longitudinal section; and

Figure 3, a transverse section of the same.

B is the tub, supported on a suitable stand, A; and secured to the sides of the tub are cleats, or guides C, acting as guides to a wash-board frame, D.

At the mid-length of the wash-board is a plain cylindrical roller, E, which is flanked by circumferentially-scored, or grooved rollers F, and upon the outer sides of the rollers F are spirally, or longitudinally-grooved rollers G.

Beneath the wash-board are four or more spiral springs H, which serve to press the clothes against the longitudinally-grooved roller I.

Upon the shaft of the roller I, is a pinion J, which is situated outside the tub, and meshes with a spur-wheel K, which is turned by levers L, extending radially from it.

Above the roller I is a plain roller, M, which is journalled in boxes N, and the shaft of this roller carries a pinion, O, which may or may not be made to engage the pinion J, as the wringer is or is not in operation.

The rollers may be made of metal or wood, and coated with rubber, if desired.

Beneath the ends of the boxes N, are spiral springs P, tending to hold up the roller M, and prevent the engagement of the pinions J and O.

Hanging to the boxes N are links Q, which are connected at the lower ends to a cross-bar, R; and hinged to the middle of the cross-bar, is a lever, S, whose in-

ner and upper end rests against the bottom of the tub, and whose outer end extends past the end of the frame.

Beneath one of the transverse cross-bars of the frame, is a series of graduated notches, T, into any one of which the lever may be placed, to hold the wringer-roller M downward, with more or less force, as may be required; the flexibility of the lever allowing the roller the necessary upward play, according with the varying thickness of the goods passed beneath.

The operation of the machine is as follows:

The clothes, after immersion in the suds, are passed over the spring wash-board, and beneath the roller I, by the unequal reciprocation of the latter, by means of the cog-gearing J K, and levers L. The board is fitted so loosely in the tub, that any corner or side thereof may have greater depression than the others, without jamming, and so allow substances of varying thickness to be equally acted on in all their parts.

For wringing, the clothes are passed over the roller I, and beneath the roller M, which latter is held down with the required force by the lever S, whose end is made to rest in one of the graduated notches T.

As a modification, the roller M may be similarly grooved to the roller I, and the meshing of the grooves together renders the pinion N unnecessary.

I am aware that washing-machines have before been made, with a horizontal series of rollers, mounted in a frame, and a main rubbing-roller above them. I am also aware that other machines have been made, in which a central roller worked, in connection with a lower roller for washing, and with an upper roller for wringing. I therefore do not claim either of these inventions; but

What I do claim, and desire to secure by Letters Patent is—

The combined arrangement, substantially as herein described, of the main roller I, the rubber D E F G H, and the upper roller M, acting with variable pressure on the roller I, for the purposes set forth.

In testimony of which invention, I hereunto set my hand.

ADOLPH SCHLINGMAN.

Witnesses:

GEO. H. KNIGHT,

JAMES H. LAYMAN.