

(No Model.)

W. R. TURNER, M. HAMILTON & A. T. LONG.
WASHING MACHINE.

No. 444,964.

Patented Jan. 20, 1891.

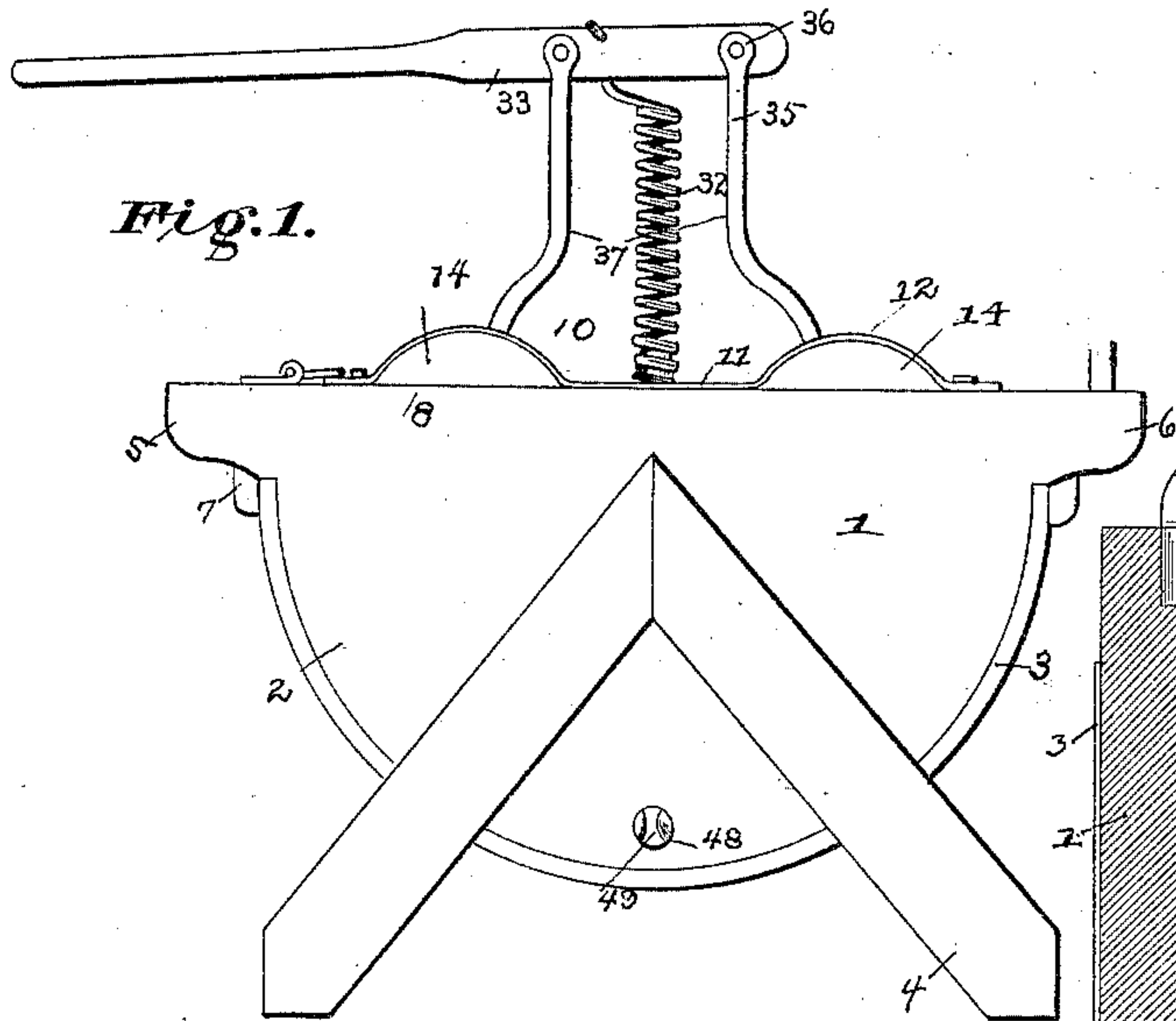


Fig. 1.

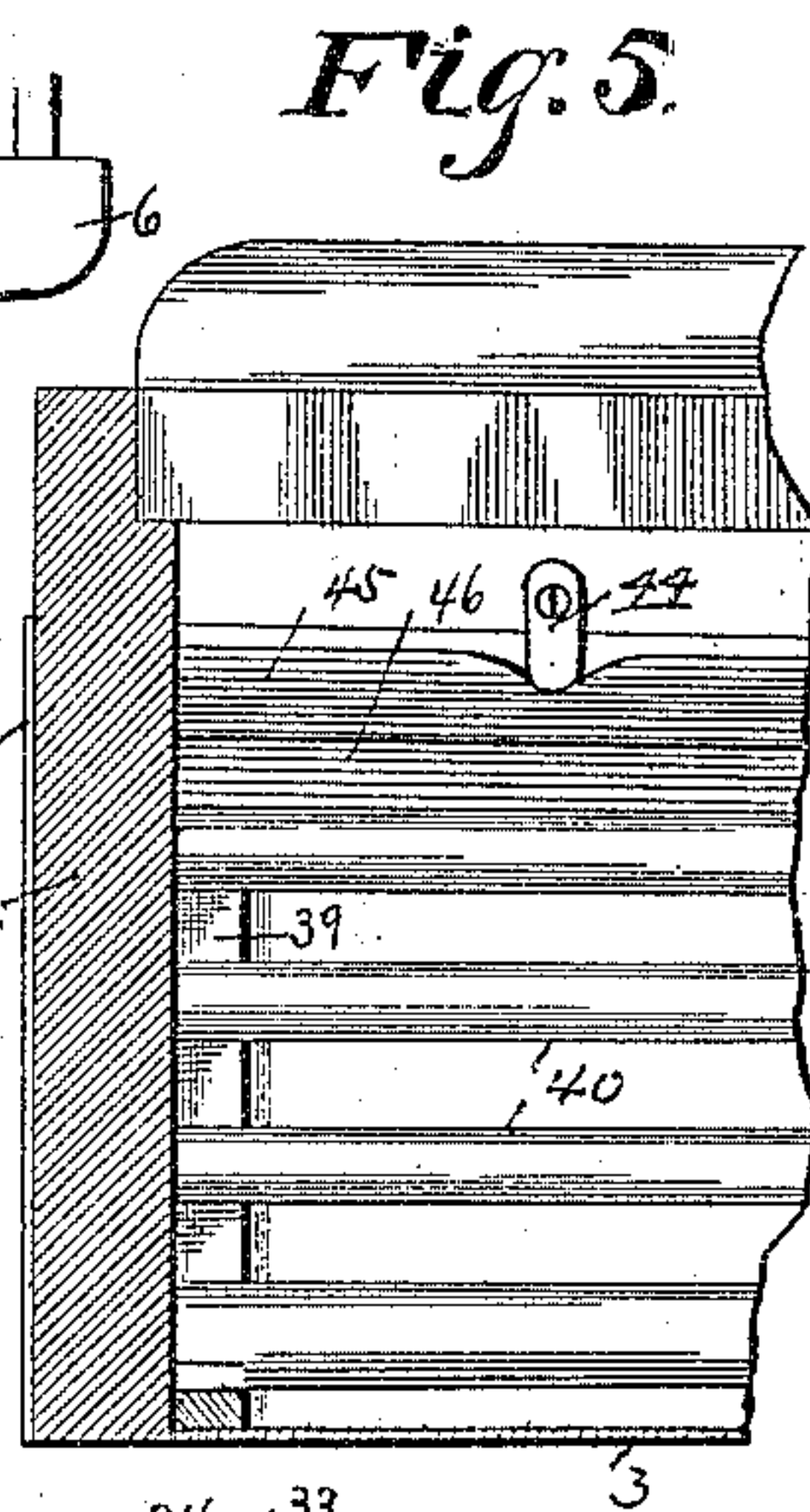


Fig. 5.

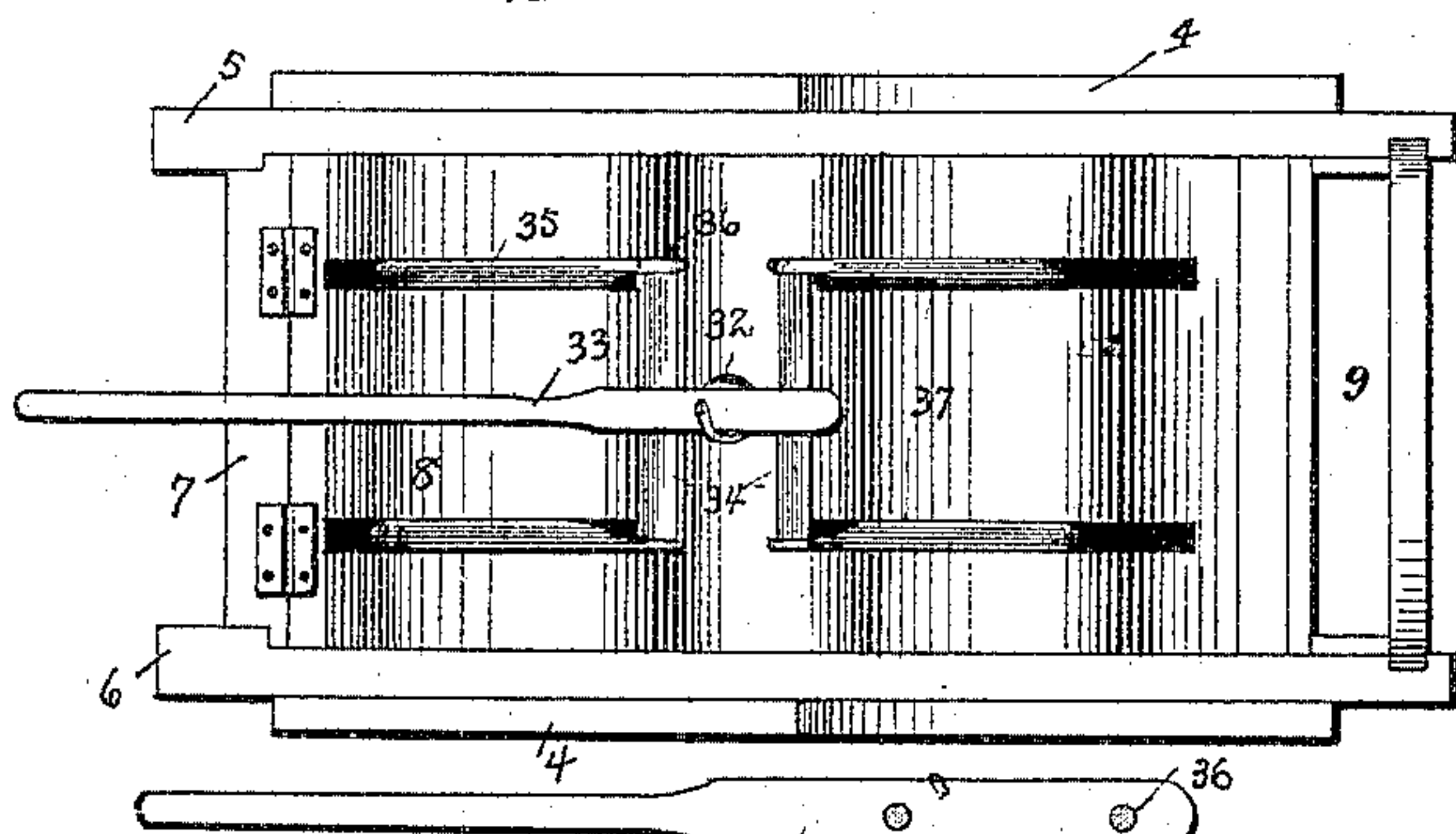


Fig. 2.

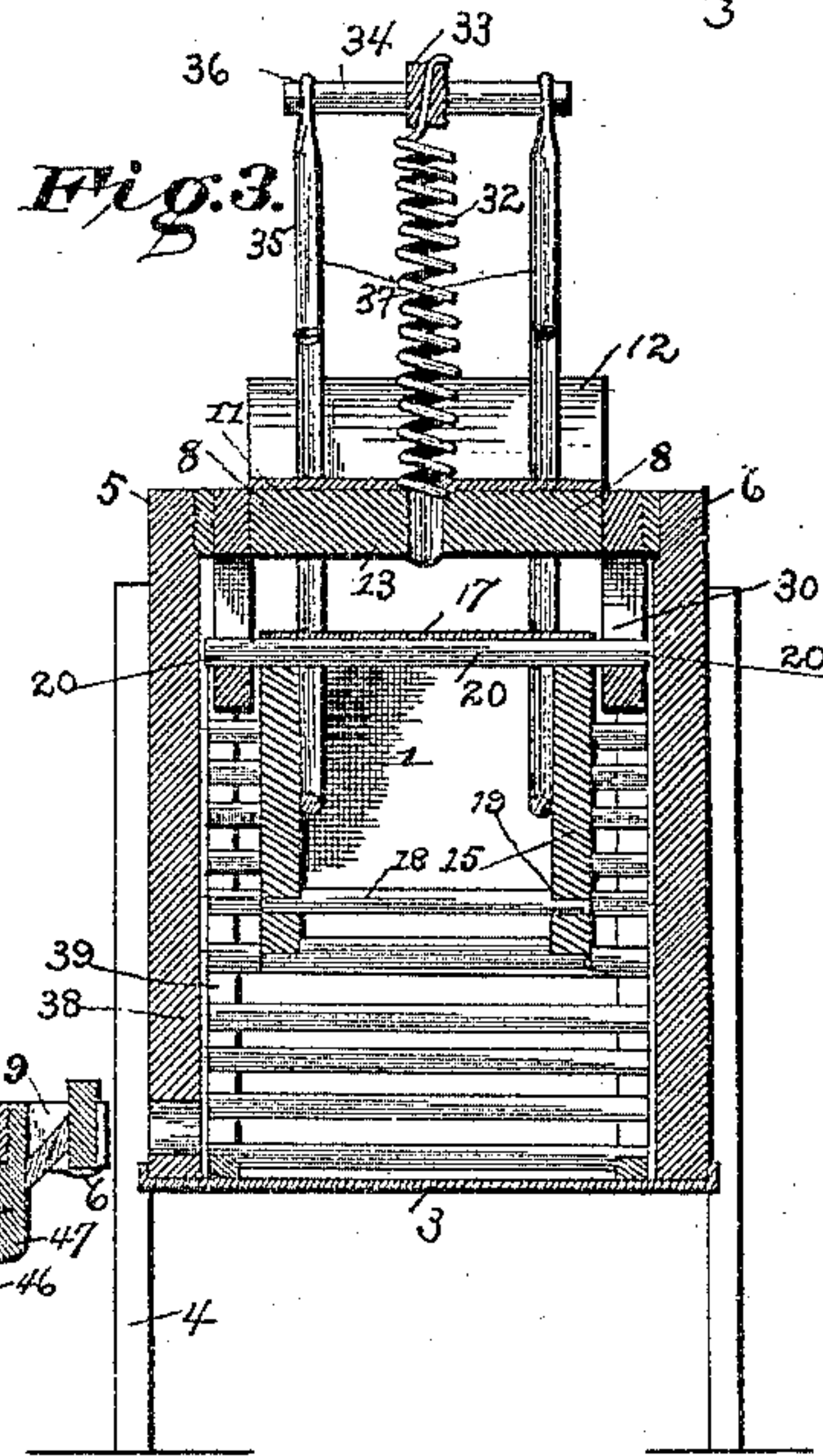
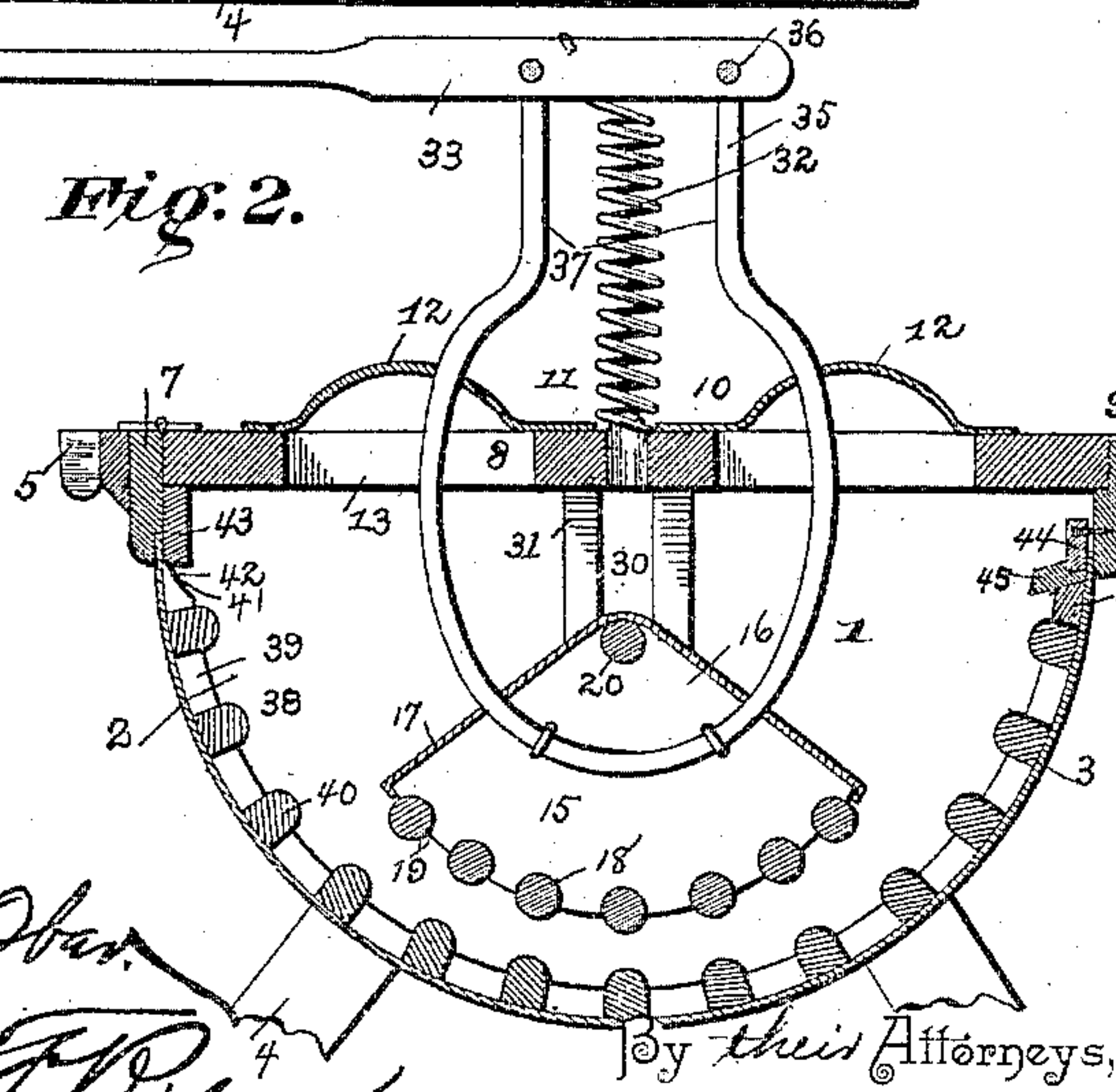


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM R. TURNER, MARTIN HAMILTON, AND ALBERT T. LONG, OF
BOWERS, INDIANA.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 444,964, dated January 20, 1891.

Application filed July 30, 1890. Serial No. 360,421. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM R. TURNER, MARTIN HAMILTON, and ALBERT T. LONG, citizens of the United States, residing at Bowers, in the county of Montgomery and State of Indiana, have invented a new and useful Washing-Machine, of which the following is a specification.

The invention relates to improvements in washing-machines.

The object of the present invention is to improve the construction of rubber washing-machines and increase their capacity without enlarging the body of the machine and to enable them to be more conveniently operated.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a side elevation of a washing-machine constructed in accordance with this invention. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a central transverse sectional view. Fig. 4 is a plan view. Fig. 5 is a detail sectional view on line *xx* of Fig. 2.

Referring to the accompanying drawings, 1 designates the body of a washing-machine approximately semi-cylindrical, and composed of semicircular side pieces 2 and a curved sheet-metal bottom 3, secured to the peripheries or curved edges of the side pieces 2. The body is supported by oppositely-inclined legs 4, arranged at an angle to each other and secured to the outer faces of the sides 2, and the latter are provided at their upper edges with longitudinal projections 5 and 6, which extend beyond the curved bottom and have secured between them a cross-piece 7, to which is hinged a cover 8, and a soap-box 9, which is rigidly secured between the portions 6. The cover consists of a rectangular frame 10 and a sheet-metal plate 11, which is provided at each end with an arched portion 12, arranged above an opening 13 of the frame 10 and supported at each side of the cover by segmental pieces 14, and these arched portions of the plate form semi-cylindrical cavities at each end of the cover 8, adapted to re-

ceive an end of a swinging rubber 15, whereby the capacity of the machine is greatly increased without enlarging the body thereof, which is advantageous. The swinging rubber is composed of sector-shaped side pieces 16, a sheet-metal back 17, secured to the straight edges or angular portions of the side pieces, and cylindrical rubber-bars 18, arranged upon the curved edges of the side pieces and connecting the same and secured in curved recesses 19, and the said rubber is provided with journals 20, extending laterally from its apex and arranged in vertical slots 30 of depending hangers 31, which are secured to the sides of the cover 8 between the openings 13, and the said rubber is free to move vertically to adjust itself to the amount of clothes contained in the body of the machine, and is normally held in contact with the clothes by a spiral spring 32. The spiral spring 32 is centrally secured to the upper face of the cover or hinged top 8 and has its upper end attached to an operating lever or handle 33, which has one end arranged over the center of the cover, and provided with parallel bars 34, secured in perforations and extending laterally from the inner end of the operating-lever, and the latter extends to one end of the machine and is within easy reach of the operator and does not necessitate the latter bending or leaning while operating the machine. The spiral spring 32, which is interposed between the cover and the operating-lever, is distended, and its tendency is to draw the lever to the cover, and thereby force the oscillating rubber to the bottom or lower ends of the slots 30, as the said rubber is connected with the laterally-extending bars of the operating-lever by supporting-rods 35, which are provided with circular portions and are secured to the inner faces of the sector-shaped side pieces of the rubber and pass through openings in the sheet-metal back 17 and are arranged in longitudinal slots 36 of the plate 12, and the said supporting-rods have parallel portions 37, provided at their ends with perforations to receive the reduced ends of the laterally-extending bars 34 of the operating-lever.

The oscillating rubber 15 acts in conjunction with a stationary rubber 38, composed of

curved side bars 39 and rubber-bars 40, having their ends rabbeted and secured at intervals to the curved side bars, and are provided with curved faces which are presented to the clothes.

5 The stationary rubber conforms to the configuration of the bottom of the body, and the side pieces at one end of the rubber project beyond the end rubber-bar and are beveled at 41 and are arranged to engage recesses 42 in the
10 inner face of a cross-piece 43, attached to the body of the churn to afford means for securing the adjacent end of the stationary rubber, and the other end of the stationary rubber is secured by a button 44, that engages a
15 removable cross-bar 45, which is interposed between the button and the end of the rubber, and is provided with a depending portion 46, that engages the adjacent rubber-bar, and the outer face is beveled and provided with
20 a depression 47 to receive the button. By removing the cross-bar or key 45 the stationary rubber may be removed.

It will be seen that the larger part of the steam contained in the clothes is retained
25 within the body, and that the raised portions or cavities of the cover enable a large amount of clothes to be washed at one time.

One side of the body is provided with an opening 48, which is normally closed by a
30 plug 49, that is adapted to be readily removed to permit the water to be drained from the body.

What we claim is—

1. The combination, in a washing-machine,
35 of the body, the cover provided with the arched portions or recesses, and the swinging rubber suspended from the cover and adapted to be partially received in the arched portions or recesses, substantially as described.

40 2. The combination, in a washing-machine, of the body, the cover provided with depending hangers having vertical slots, the rubber provided with journals arranged in the slots of the hangers, the supporting-rods secured
45 to the rubber, the operating-lever attached to the supporting-rods, and the spring arranged to hold the journals in the bottom of the slots, substantially as described.

50 3. The combination, in a washing-machine, of the body, the cover comprising the rectan-

gular frame and the plate secured to the frame and provided with arched portions and having longitudinal slots, the rubber, the operating-lever, and the supporting-rods secured to the rubber and arranged in the slots of the
55 cover and connected with the operating-lever, substantially as described.

4. The combination, in a washing-machine, of the body, the cover having arched portions, the rubber comprising the sector-shaped side
60 pieces, the sheet-metal back secured to the straight edges of the side pieces, and the rubber-bars secured to the curved edges of the side pieces, the operating-lever, and the supporting-rods secured to the side pieces of the
65 rubber and connected with the operating-lever, substantially as described.

5. The combination, in a washing-machine, of the body, the cover, the rubber, the operating-lever provided with the parallel bars
70 34, and the supporting-rods having the circular portions secured to the sides of the rubber and the parallel portions secured to the bars of the operating-lever, substantially as described.

6. In a washing-machine, the combination
75 of the body, the cover having the arched portions, the longitudinal slots, and the depending hangers, the rubber provided with laterally-extending journals arranged in the hang-
80 ers, the operating-lever having the parallel bars extending laterally from it, the supporting-rods provided with circular portions secured to the rubber and arranged in the longitudinal slots of the cover, the parallel
85 portions secured to the ends of the laterally-extending bars, and the spring secured to the operating-lever and the cover and adapted to hold the journals at the bottoms of the hangers, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

WILLIAM R. TURNER.
MARTIN HAMILTON.
ALBERT T. LONG.

Witnesses:

I. WOODARD,
IDEOMA ARMSTRONG.