

No. 824,529.

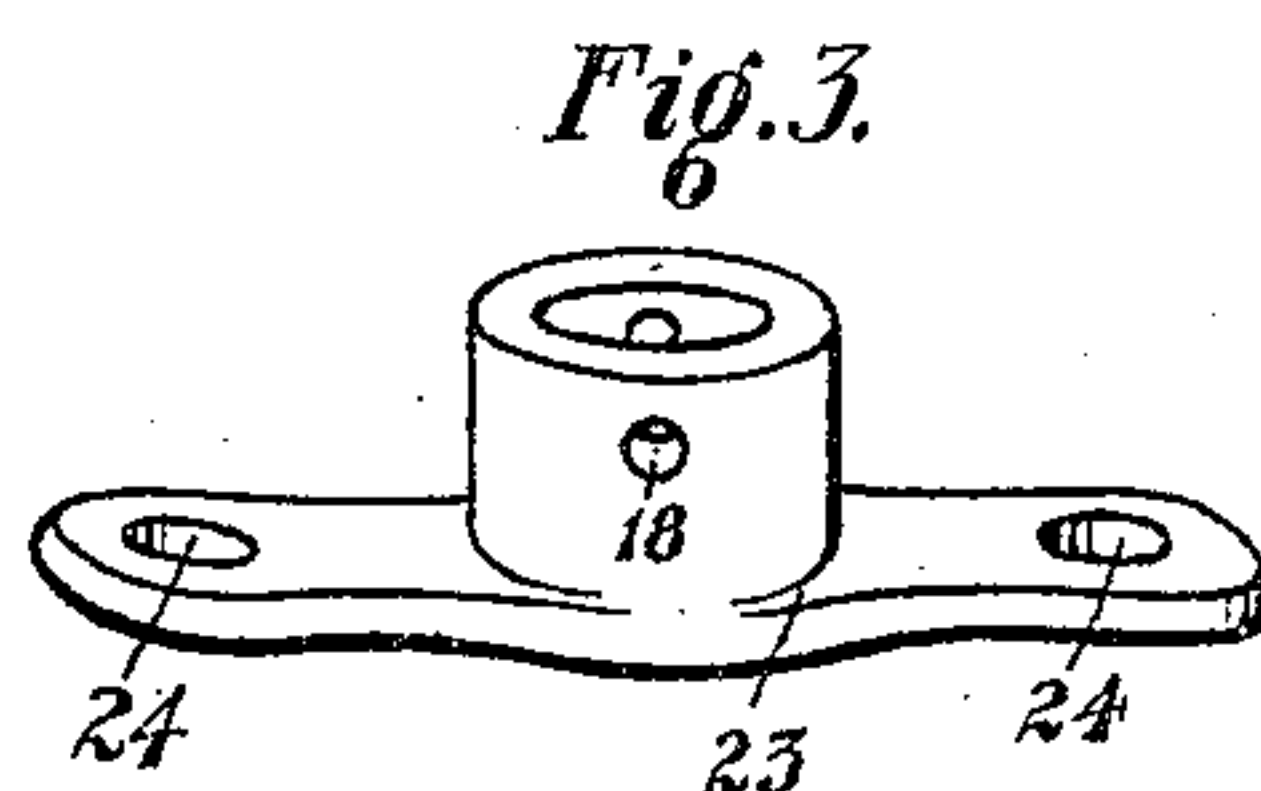
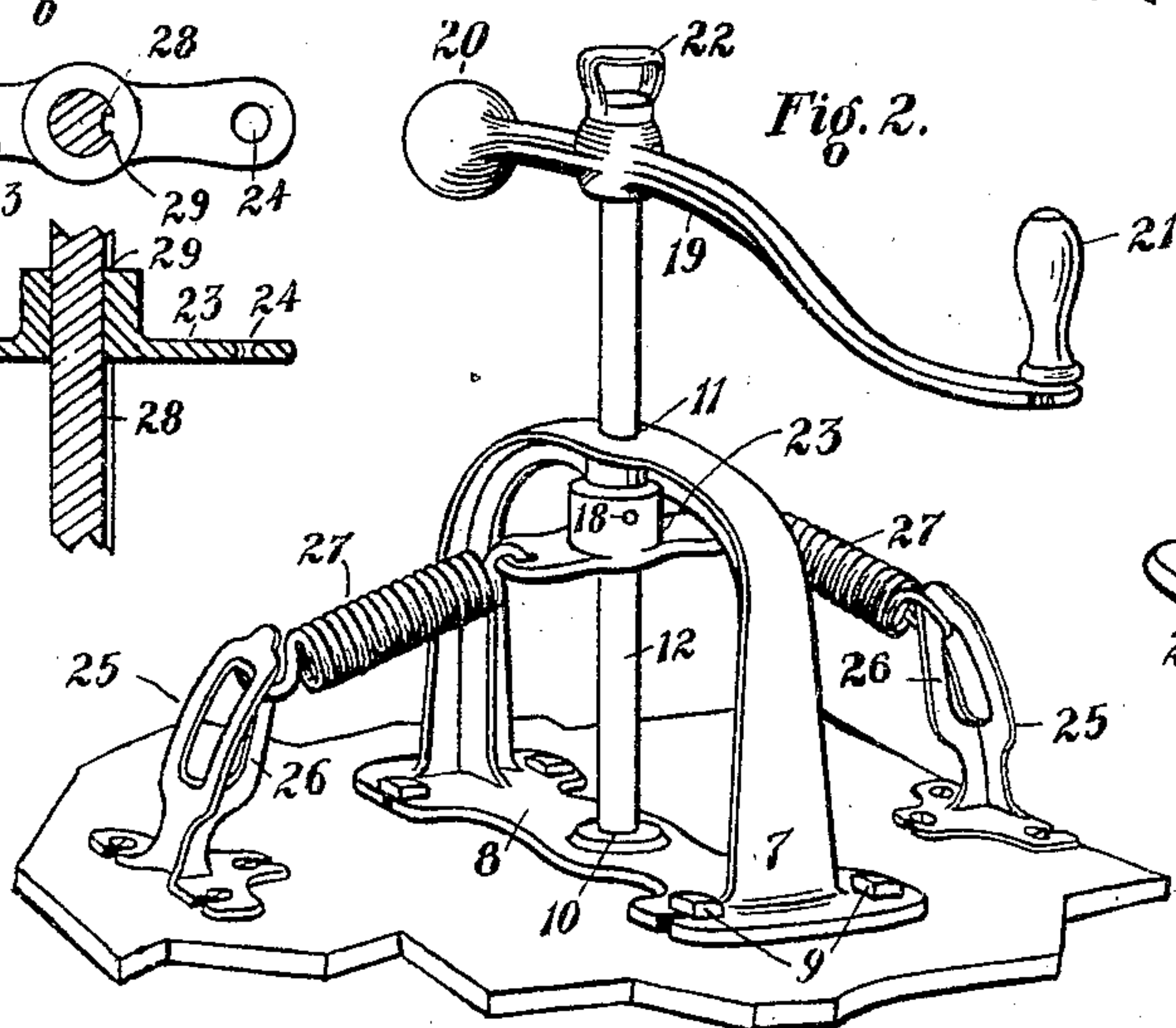
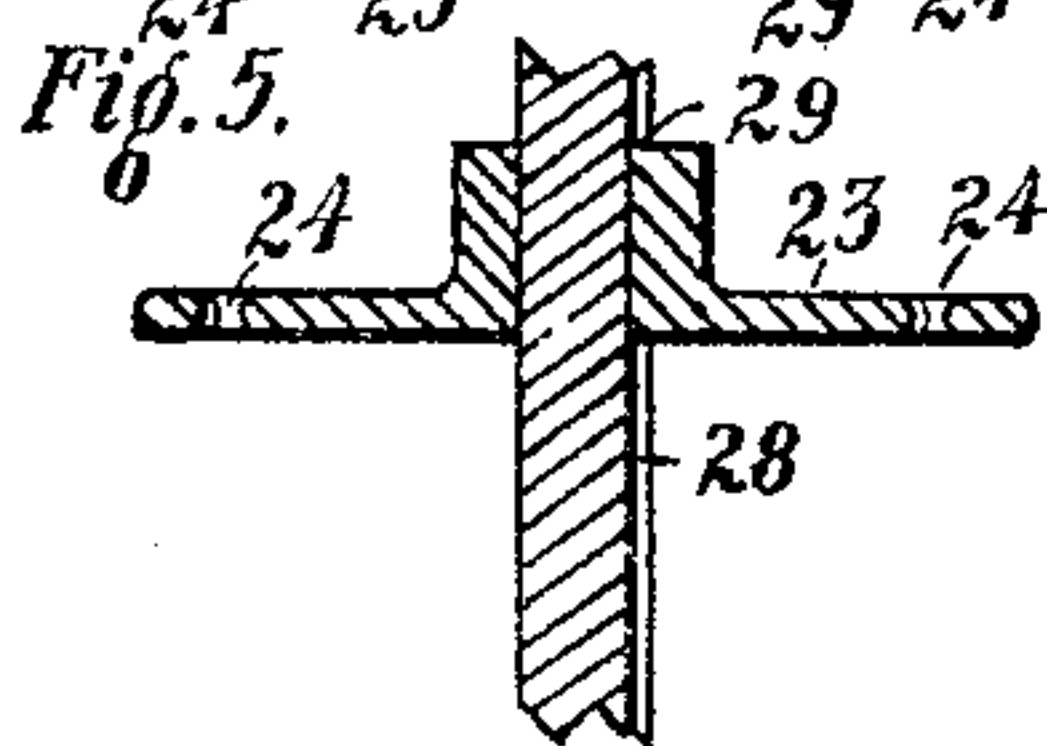
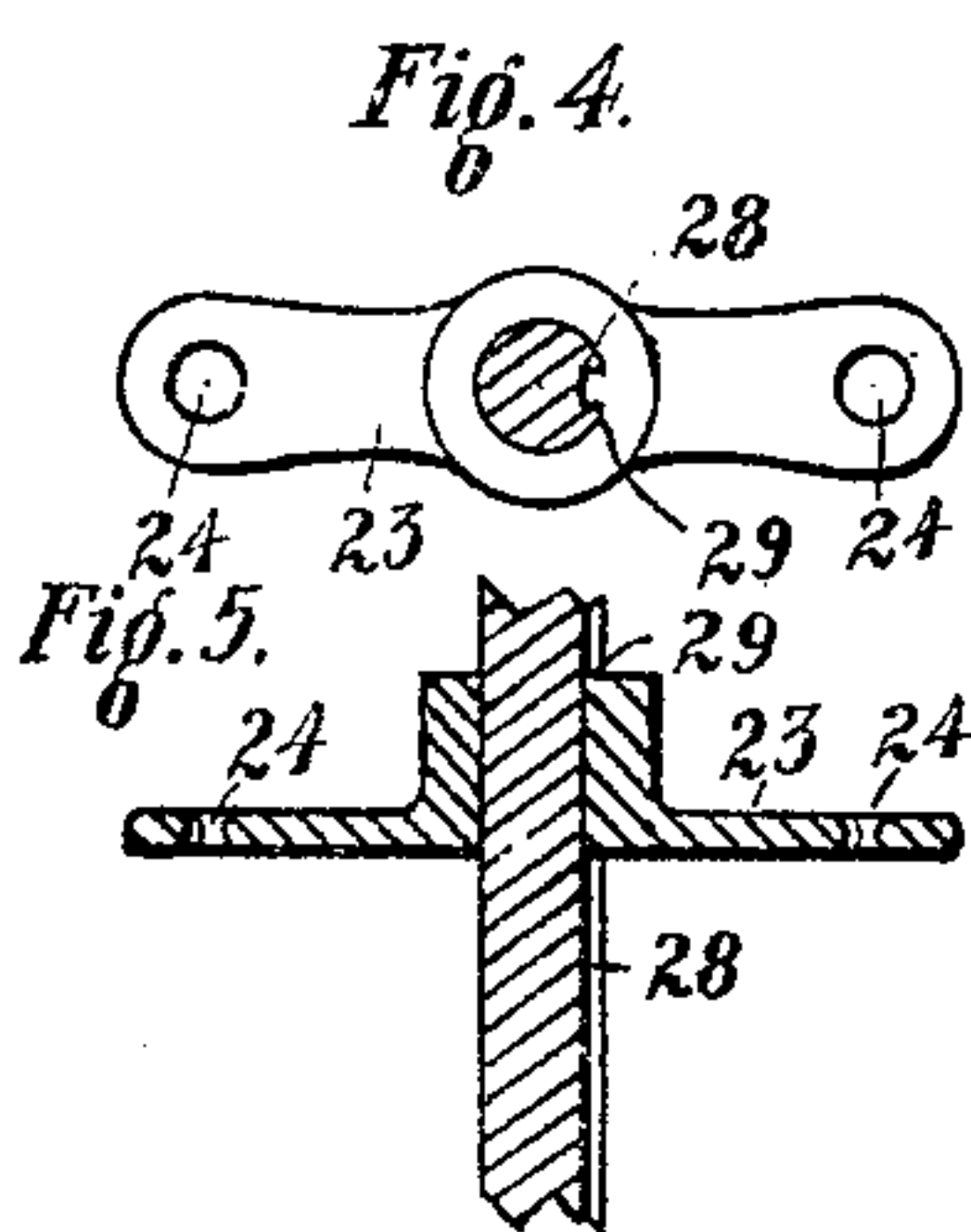
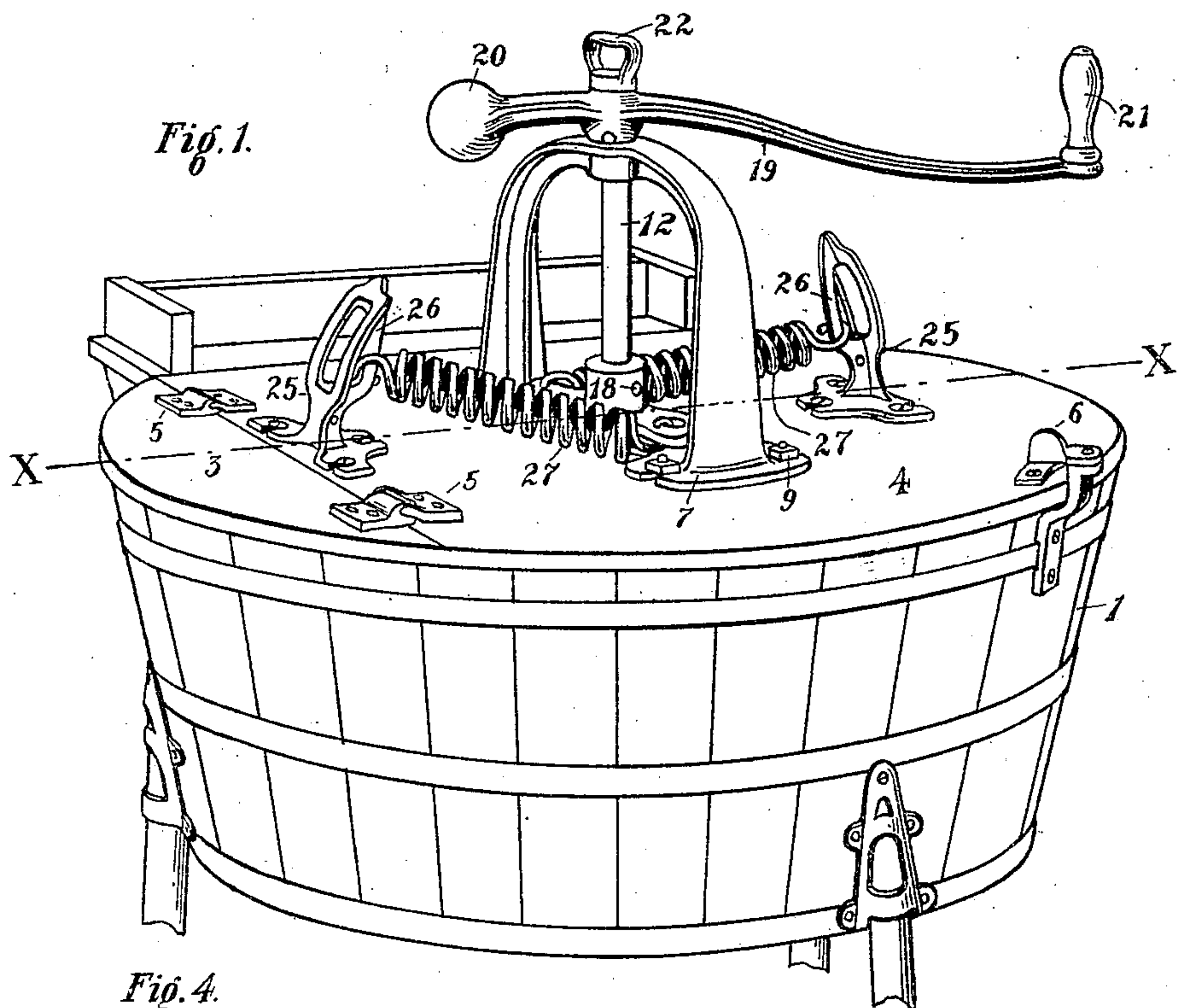
PATENTED JUNE 26, 1906.

C. DIETZ.

WASHING MACHINE.

APPLICATION FILED FEB. 12, 1904.

2 SHEETS—SHEET 1.



WITNESSES:
Florence M. Power.
H. O. Fry

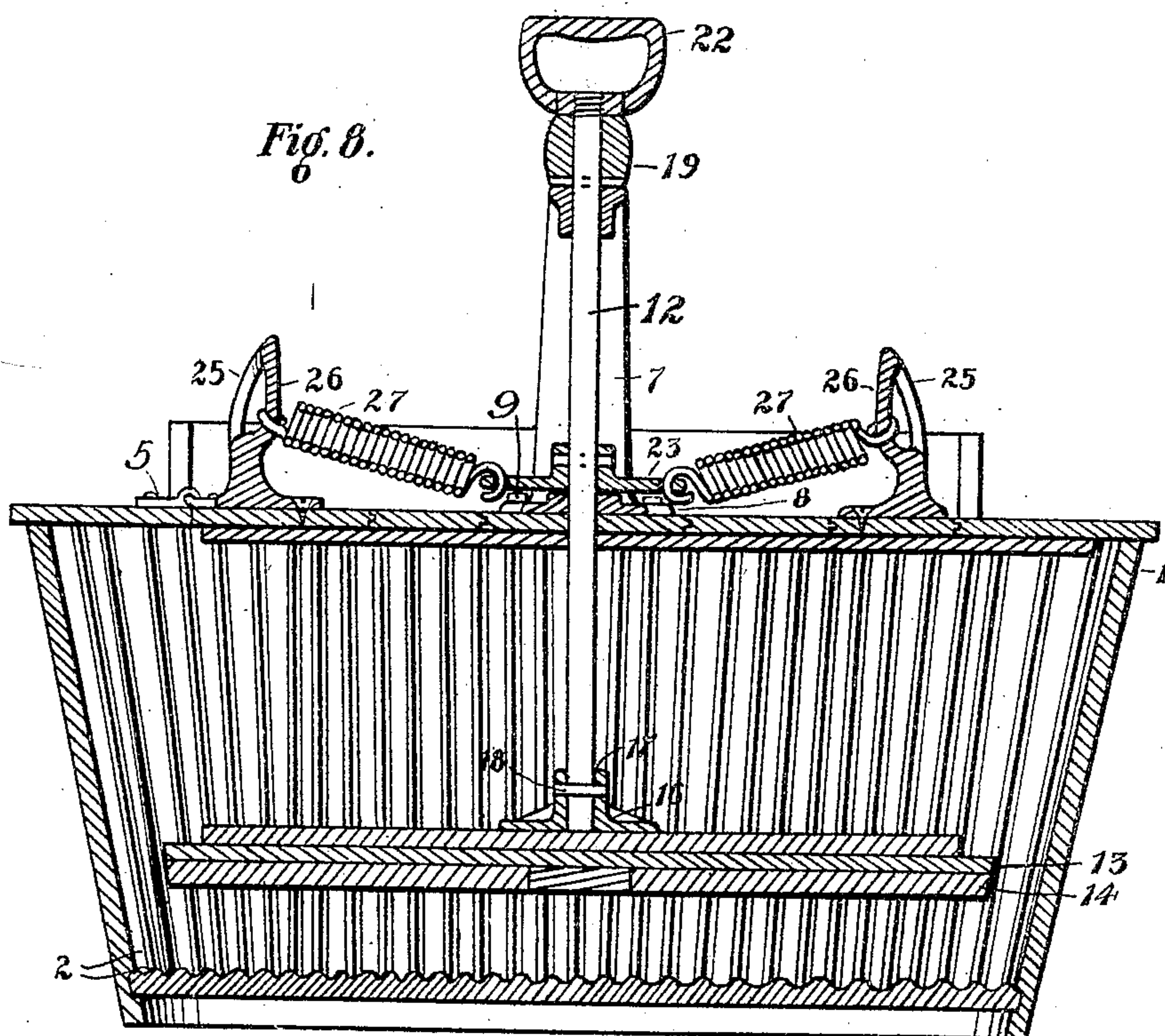
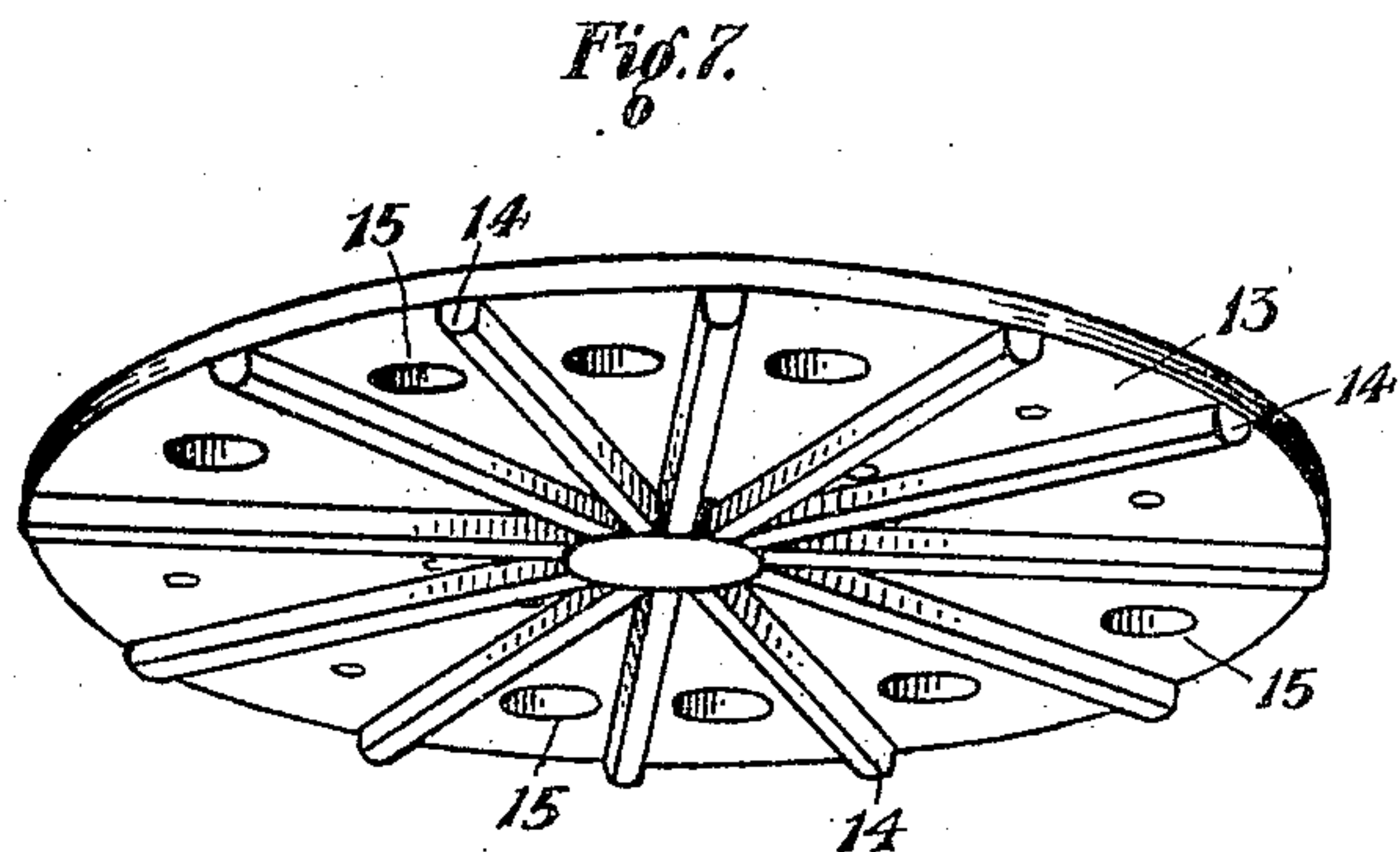
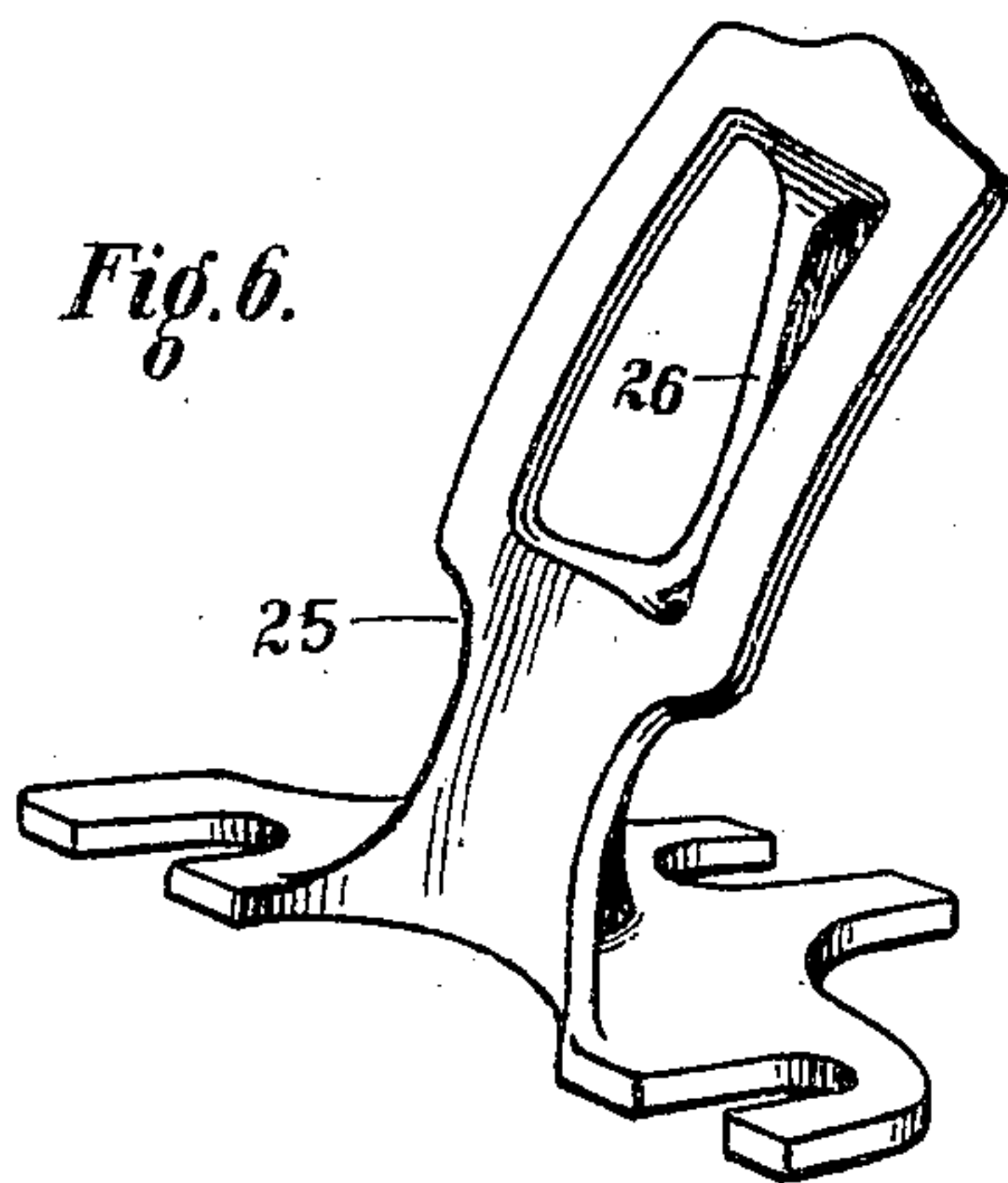
INVENTOR,
Conrad Dietz
BY
James H. Ramsey
ATTORNEY.

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UNITED STATES PATENT OFFICE.

CONRAD DIETZ, OF CINCINNATI, OHIO.

WASHING-MACHINE.

No. 824,529.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed February 12, 1904. Serial No. 193,221.

To all whom it may concern:

Be it known that I, CONRAD DIETZ, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification.

My invention relates to improvements in tub washing-machines.

The object of my invention is to simplify and cheapen the cost of construction and increase the efficiency of the machine for use.

My invention consists in the parts and combination and arrangement of the parts herein set forth and as particularly pointed out in the claim.

In the drawings which serve to illustrate my invention, Figure 1 is a perspective view of the tub, showing the operative parts in lower position. Fig. 2 is a perspective view showing the operative parts elevated. Fig. 3 is a perspective view of the spring-holder. Fig. 4 is a top view of a modified spring-holder and a cross-section of a modified shaft for the rubbing-board. Fig. 5 is a vertical section of the same. Fig. 6 is a perspective view of one of the spring-supports. Fig. 7 is a bottom view of the rubbing-board. Fig. 8 is a vertical section on the line *xx* of Fig. 1, except that the operative mechanism is rotated through an angle of ninety degrees.

I preferably construct the machine embodying my invention substantially as follows:

The tub or casing 1 has suitable corrugations or rubbing-surfaces 2 upon the inner side walls and bottom, and the walls are preferably inclined inwardly from top to bottom, thus producing a smaller area at the bottom of the tub than at the top. The tub 1 is provided with a closed top consisting of a fixed part 3 and movable lid 4, secured thereto by hinges 5 and to the tub by clamp 6. Mounted upon the lid 4 is a housing 7, formed with a flat base 8 to rest upon and be secured to said lid by any well-known means, such as bolts 9 and in the manner shown. A vertical bearing 10 through said base and a corresponding vertical bearing 11 through the center of the arch over said base and forming part of the housing are provided to receive the shaft 12. This shaft has secured at its bottom a rubbing-board 13, having upon its lower surface ribs or corrugations 14 and preferably having openings 15 through it.

The rubbing-board may be attached to the shaft in any suitable manner, such as by means of a casting 16, secured to the upper surface of the board and having a socket 17, adapted to receive the lower end of the shaft and be held in place therein by means of a pin 18 passing through said casting and shaft. Mounted upon the shaft above the arch is a crank 19, preferably having a weight 20 upon one end and a handle 21 on the other. This crank is held in place on the shaft by a handle 22, screwed or otherwise held on the end of the shaft, and by means of this handle the clothes-rubbing board may be conveniently lifted and the lid swung upward on its hinges to open the tub.

Mounted upon the shaft is a spring-holder 23, adapted to rotate in unison with the shaft and provided with openings 24. A spring-support 25 is secured to the top of the lid on opposite sides of the shaft, preferably in the positions shown, and each support is provided with an elongated loop 26, to which one end of each spring 27 is attached. Each spring is secured at one end to the spring-holder and at its other end to the loop of the spring-support, so that when the crank is given a partial revolution and its movement is ready to be reversed the spring gives the initial return movement and assists in the rebound, and so on at each reversal of movement. These springs thus serve as cushions to prevent the crank from going so far as to make it difficult for the operator to reverse it.

In Figs. 2 and 8 I have shown the spring-holder rigidly mounted upon the shaft, so that as the shaft is elevated to provide for the clothing, as shown in Fig. 2, the springs will slip to the upper ends of the loops, thus readily adapting the machine to varying thicknesses of clothing beneath the rubbing-board and at the same time subjecting the same to practically uniform spring tension or pressure. I have also shown a modified construction and arrangement of the shaft and spring-holder, as seen in Figs. 4 and 5, in which they are shown connected together by a groove 28 and rib 29, whereby they rotate in unison; but the spring-holder moves longitudinally upon the shaft.

My construction and arrangement brings the clothing beneath the rubbing-board at all times during the operation of washing and prevents any tearing or injury thereto. It is an extremely simple and cheap construction.

tion. By having the reversible revolving rubbing-board the clothing is always evenly distributed and no bunching occurs.

I claim—

5 In a washing-machine, a casing, a cover therefor, a mechanism connected to said cover capable of oscillation both rotatively and vertically, a spring-holder mounted upon said mechanism and adapted to oscillate
10 therewith, spring-supports each having a

loop elongated in a direction parallel to the line of vertical oscillation of said mechanism, and a spring connecting the spring-holder with each loop, each adapted to slide vertically in one of said elongated loops, as and for the
15 purposes specified.

CONRAD DIETZ.

Witnesses:

JAMES N. RAMSEY,
FLORENCE M. POWER.