

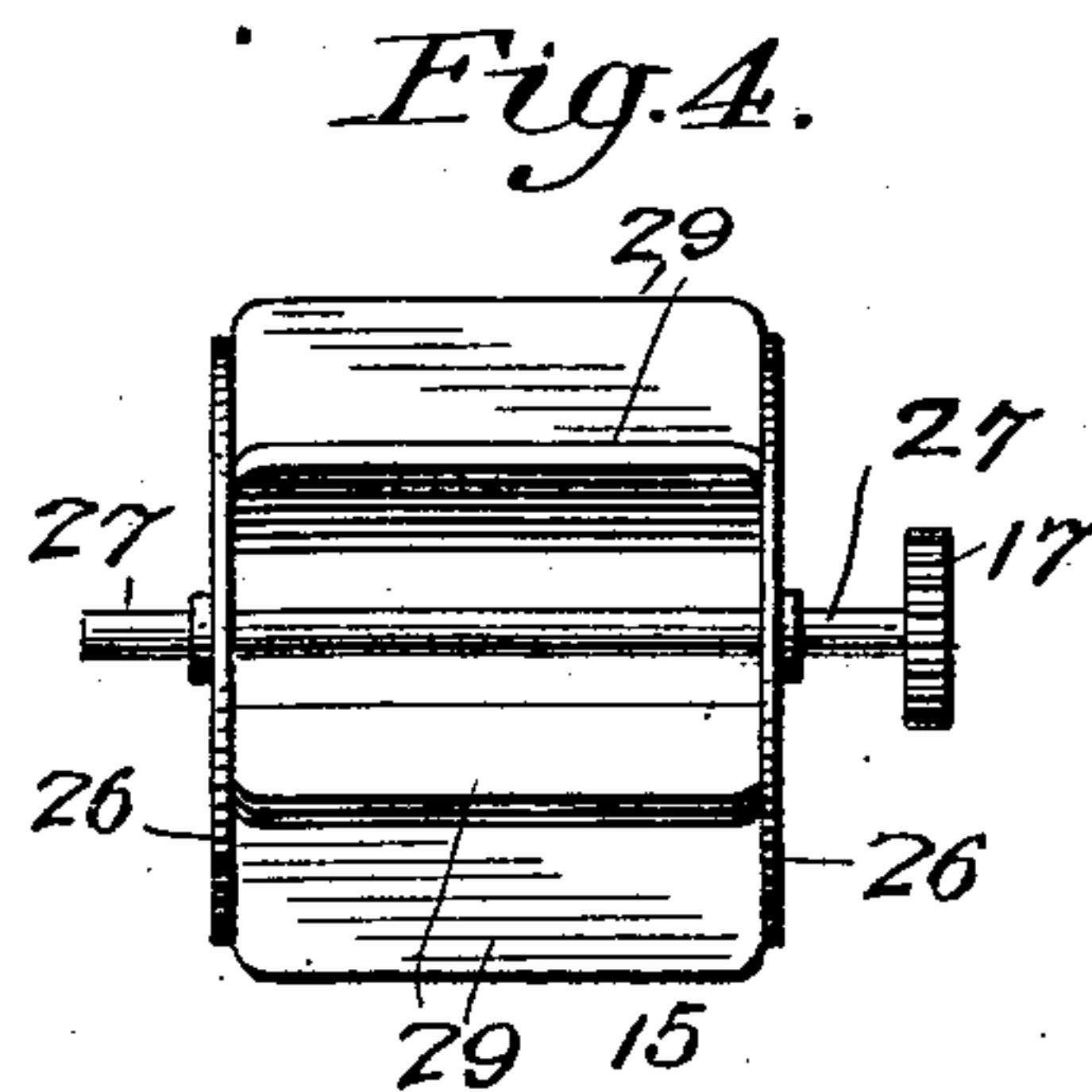
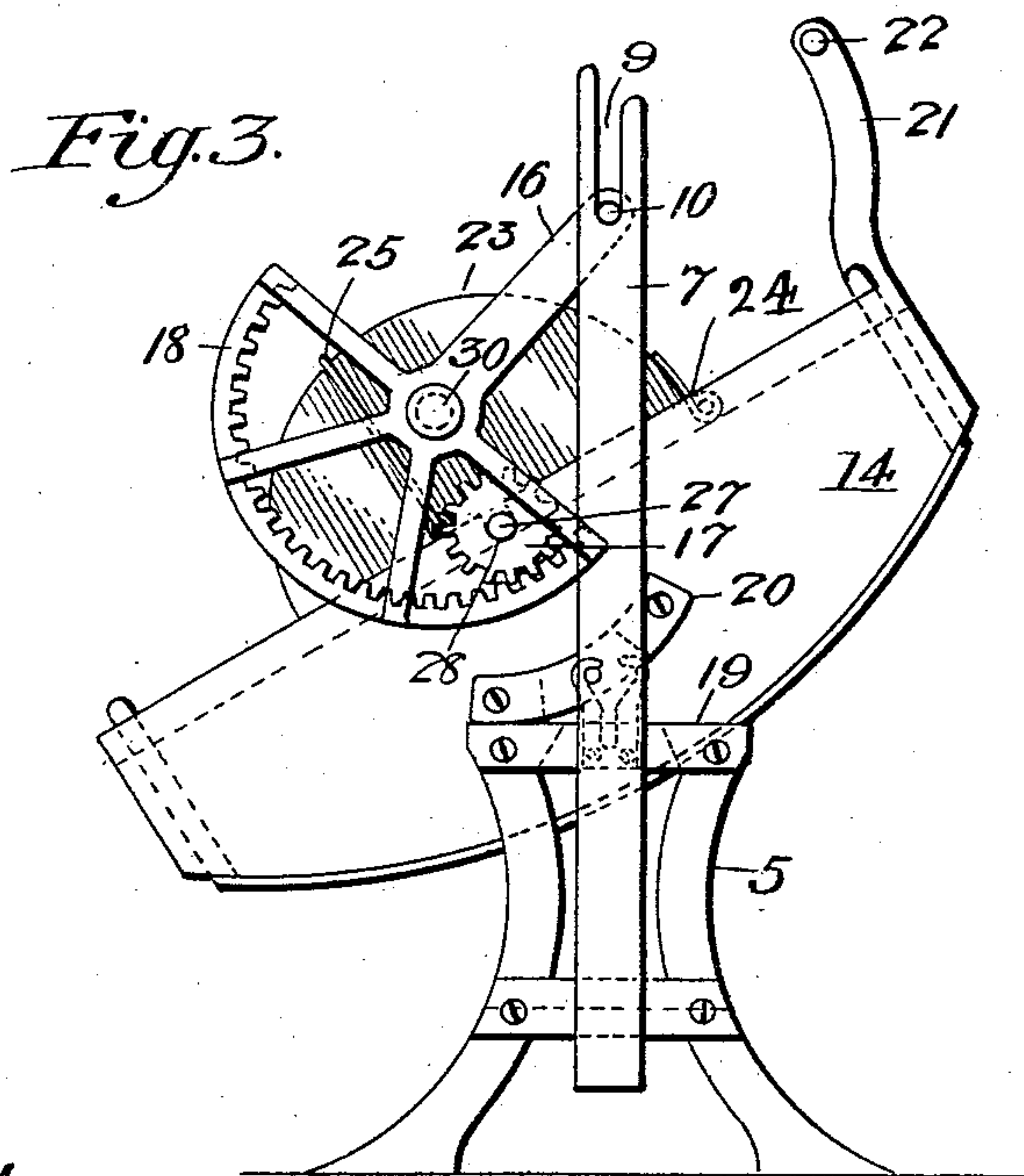
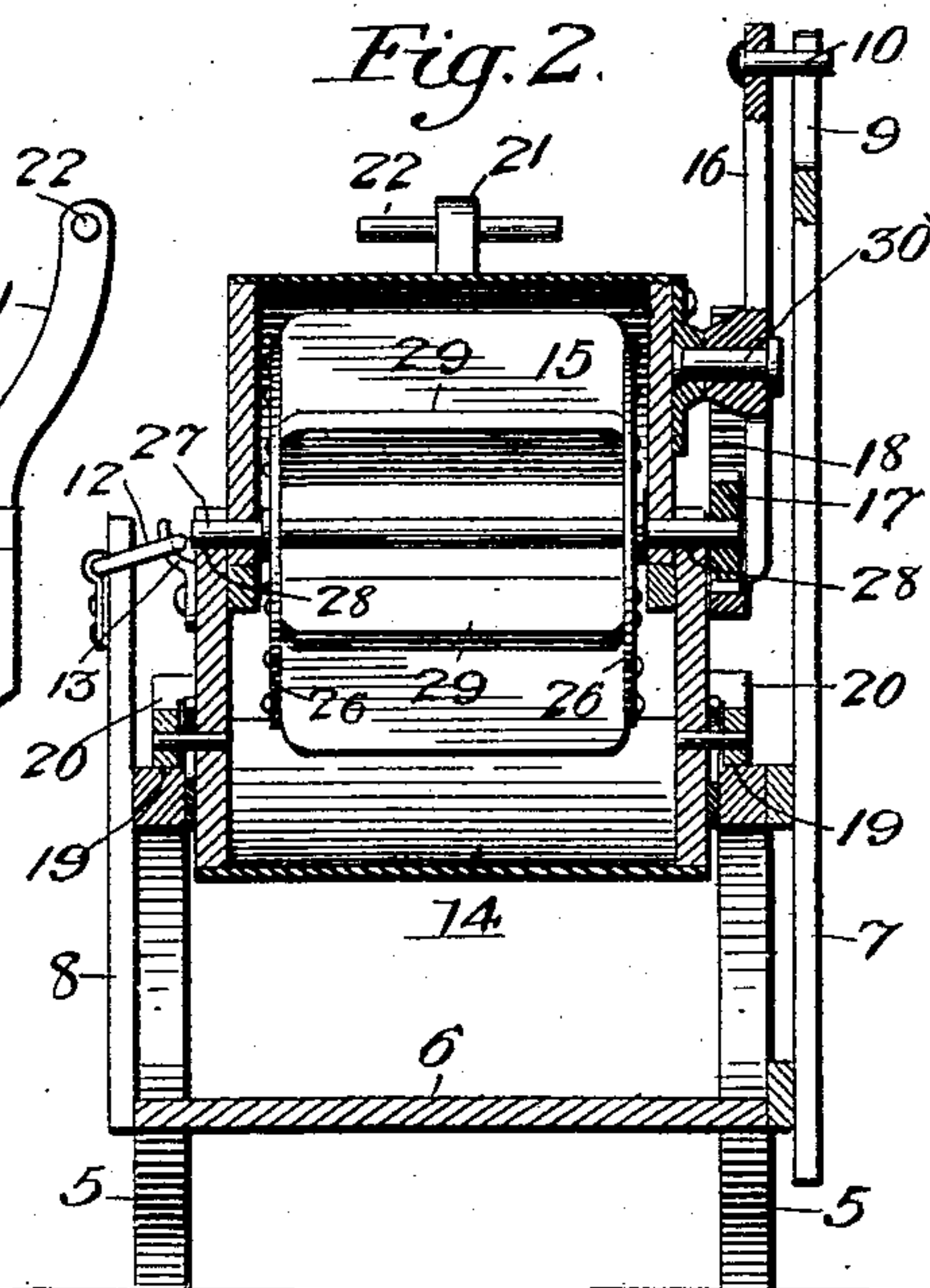
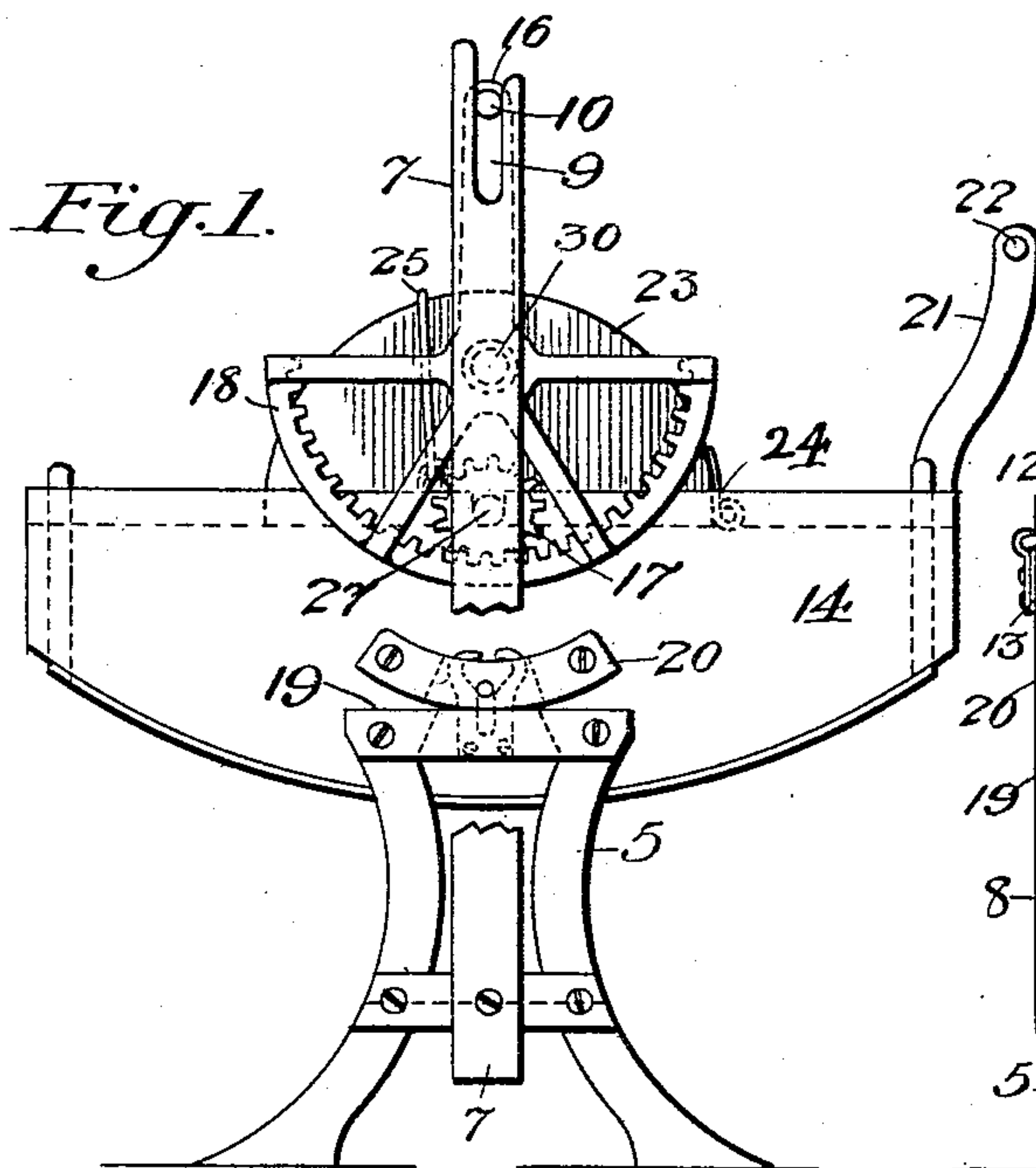
No. 684,135.

Patented Oct. 8, 1901.

W. THORNTON.  
CLOTHES WASHING MACHINE.

(Application filed Dec. 8, 1900.)

(No Model.)



Witnesses:  
Milton Gladish.  
W. L. Emerson.

Inventor:  
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# UNITED STATES PATENT OFFICE.

WILLIAM THORNTON, OF CHATTANOOGA, TENNESSEE.

## CLOTHES-WASHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 684,135, dated October 8, 1901.

Application filed December 8, 1900. Serial No. 39,154. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM THORNTON, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented certain new and useful Improvements in Clothes - Washing Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to washing-machines, consisting of a water-tight box equipped with curved rockers mounted on a track and also having an automatic horizontal reversible paddle-wheel or drum across the box. The object of this arrangement of parts is to reduce the amount of power required to operate the machine and also to reduce the friction of the rocking mechanism.

The invention therefore consists in the construction, arrangements, and combination of parts, substantially as will be hereinafter described and claimed.

In the annexed drawings, illustrating my invention, Figure 1 is a side elevation with a portion of the upright 7 broken away, showing the box in horizontal position. Fig. 2 is a central vertical transverse section. Fig. 3 is a side elevation showing the extreme position of the box and the reversible rocking mechanism. Fig. 4 is a side view of the drum or paddle-wheel.

Similar figures of reference designate corresponding parts throughout the different views.

The legs or side supports 5 are connected by the cross-brace 6, and the standards or upright posts 7 and 8 are attached to said side supports, one having a slot 9 in its upper end for a guide for the roller or pin 10. The other standard supports the loop or link 12, that holds the box 14 in a horizontal position by dropping in the hook 13. These constitute the stationary framework of the machine. The box 14, equipped with the horizontal drum or paddle-wheel 15, connected to the segment-gear 18, having an upper vibrating arm, by means of the pinion 17, meshing in the vibrating segment-gear, and the pin or roller 10, moving in the slot 9, constitute the operating

oscillating or movable mechanism, as hereinafter described.

On the outside of each support 5 a post or upright 7 and 8 is firmly secured and extends above said supports. The post 7 has a slot 9 in its upper end, that forms a guide for the top end of the arm 16 of the segment-gear 18. The post 8 has a link or loop 12 hinged near the top end in such a position that it can be forced down in the hook 13, fixed to the side of the box 14, so as to hold the box 14 in a horizontal position while it is being charged with or emptied of clothes.

The box or reservoir 14 consists of a water-tight receptacle of suitable form to retain the clothes while being agitated or washed. A rocker 20 is firmly attached to each side of said box, said rockers resting on the iron track 19 on top of the supports 5, which thus support the weight of said box attachments and contents. An arm 21 is secured to one end of the box carrying the handle-bar 22, by means of which the box is rocked or oscillated and the drum or paddle-wheel made to revolve, as hereinafter described. The drum or paddle-wheel 15 is mounted in the cover of the charging-door 23, which is hinged at 24 and secured when closed, by a loop 25, which is hinged to the top of the box 14. The metallic ends 26 have journals 27 mounted in the bearings 28. These ends are connected together by paddles 29, reaching from one to the other and securely fastened to them. One of the journals of the paddle-wheel passes through the end of the door 23 and has a pinion or cog-wheel secured to it, and just above this pinion is a pivot 30, fastened to the end of the door 23, and pivoted on this pivot is the segment-gear 18, whose teeth engage the teeth of the pinion 17.

In operating the machine the box is rocked to and fro by means of handle 21, carrying the pivot 30 in its movement. This swings the segment 18 back and forth, as the upper end of the arm 16 is prevented from having a horizontal movement by the pin or roller 10 moving vertically in the slot 9. This swinging movement of the segment rotates the pinion 17 back and forth, and with it the paddle-wheel 15.

The pin or roller 10 on the upper end of the

arm 16 acts as a safety-stop in combination with the slot 9 in the top of the post 7.

In charging or removing garments the loop or link 25 is thrown forward, when the door 5 or cover 23 may be lifted up and swung back against the arm 21.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

10 In a washing-machine the combination of the box 14 provided with rockers, a suitable support on which the rockers rest, the standards 7 and 8 adjacent the support one provided with a slot 9, the other provided with  
15 the link 12, the paddle-wheel 15 journaled

in the box, the pinion 17 fixed to the journal of said wheel and a segment-gear pivotally mounted on the box meshing with said pinion and provided with an upwardly-projecting arm provided with a pin moving in 20 said slot, all arranged and combined substantially in the manner set forth and for the purposes stated.

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

WILLIAM THORNTON.

Witnesses:

F. A. SILVERNAIL,  
OSCAR T. PEEPLES.