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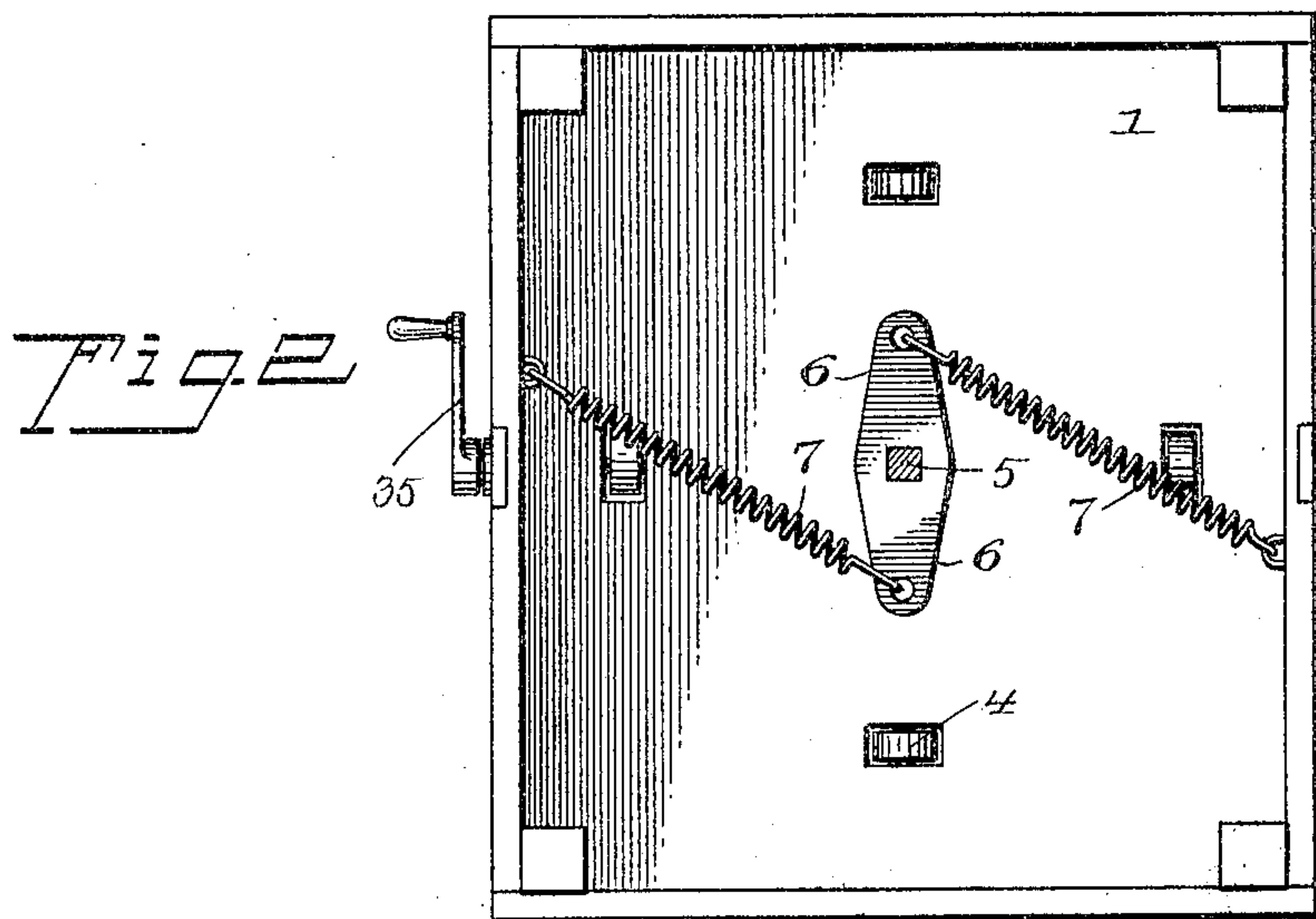
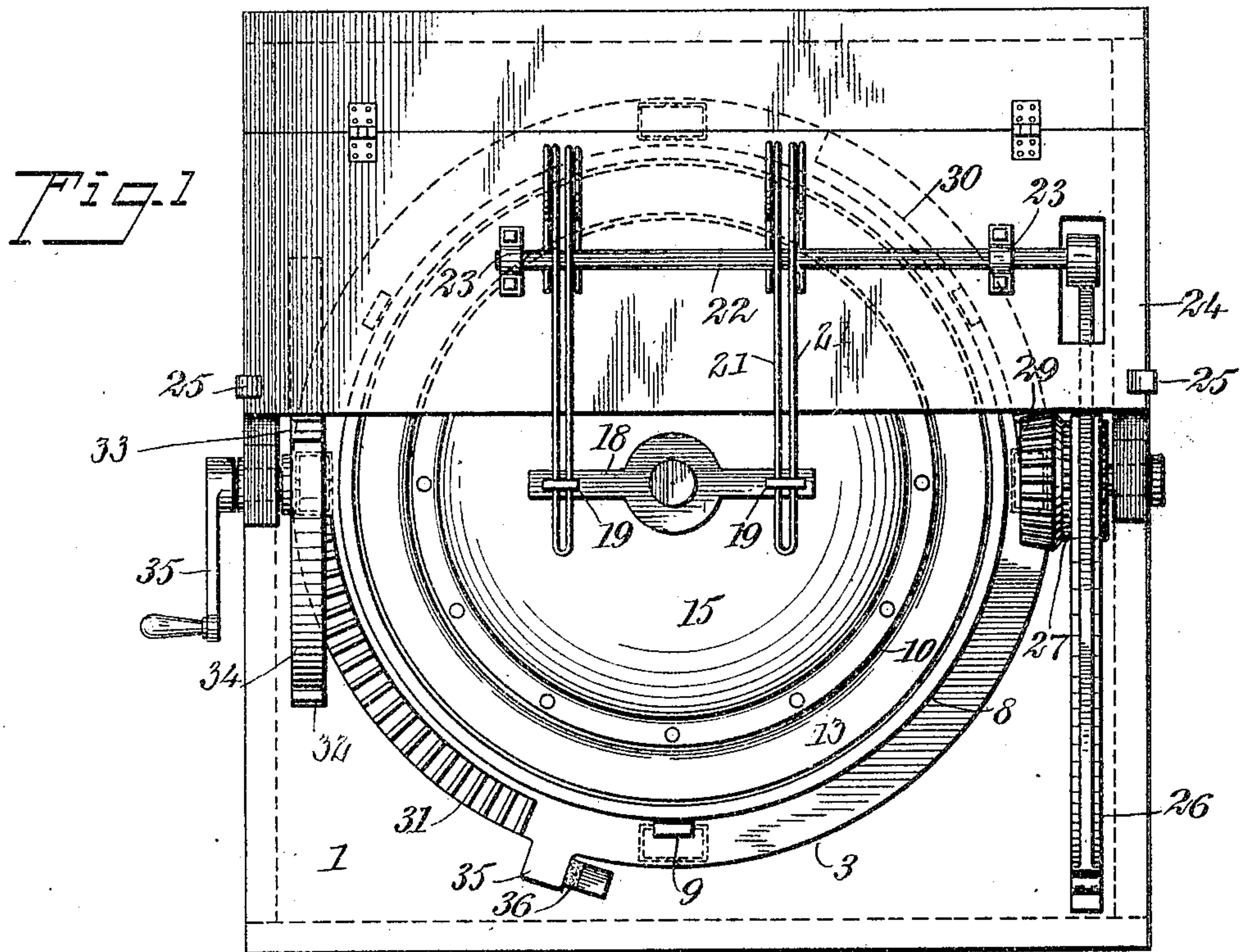
PATENTED JUNE 5, 1906.

G. H. WISNER.

WASHING MACHINE.

APPLICATION FILED JULY 19, 1905.

3 SHEETS—SHEET 1.



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3 SHEETS—SHEET 2.

Fig. 4

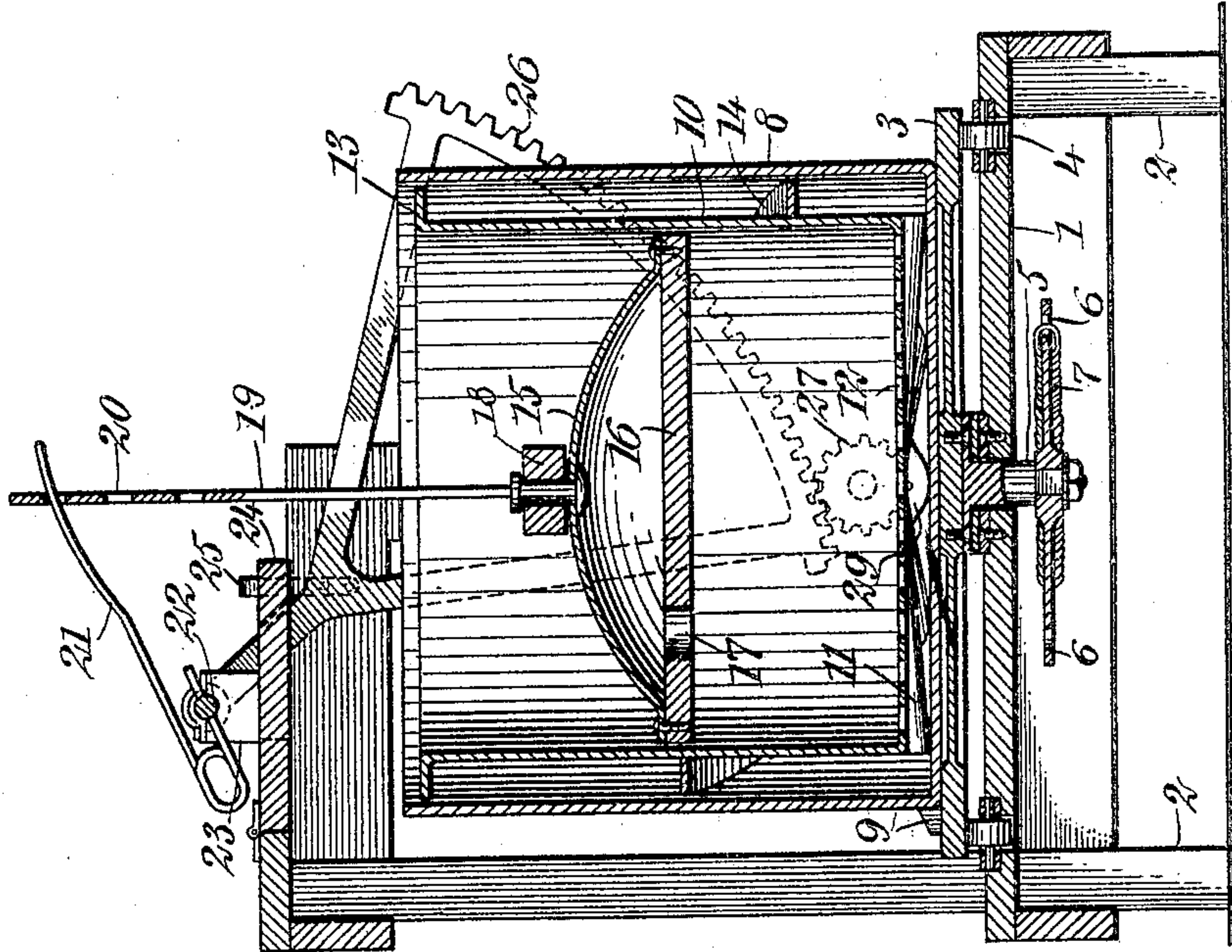
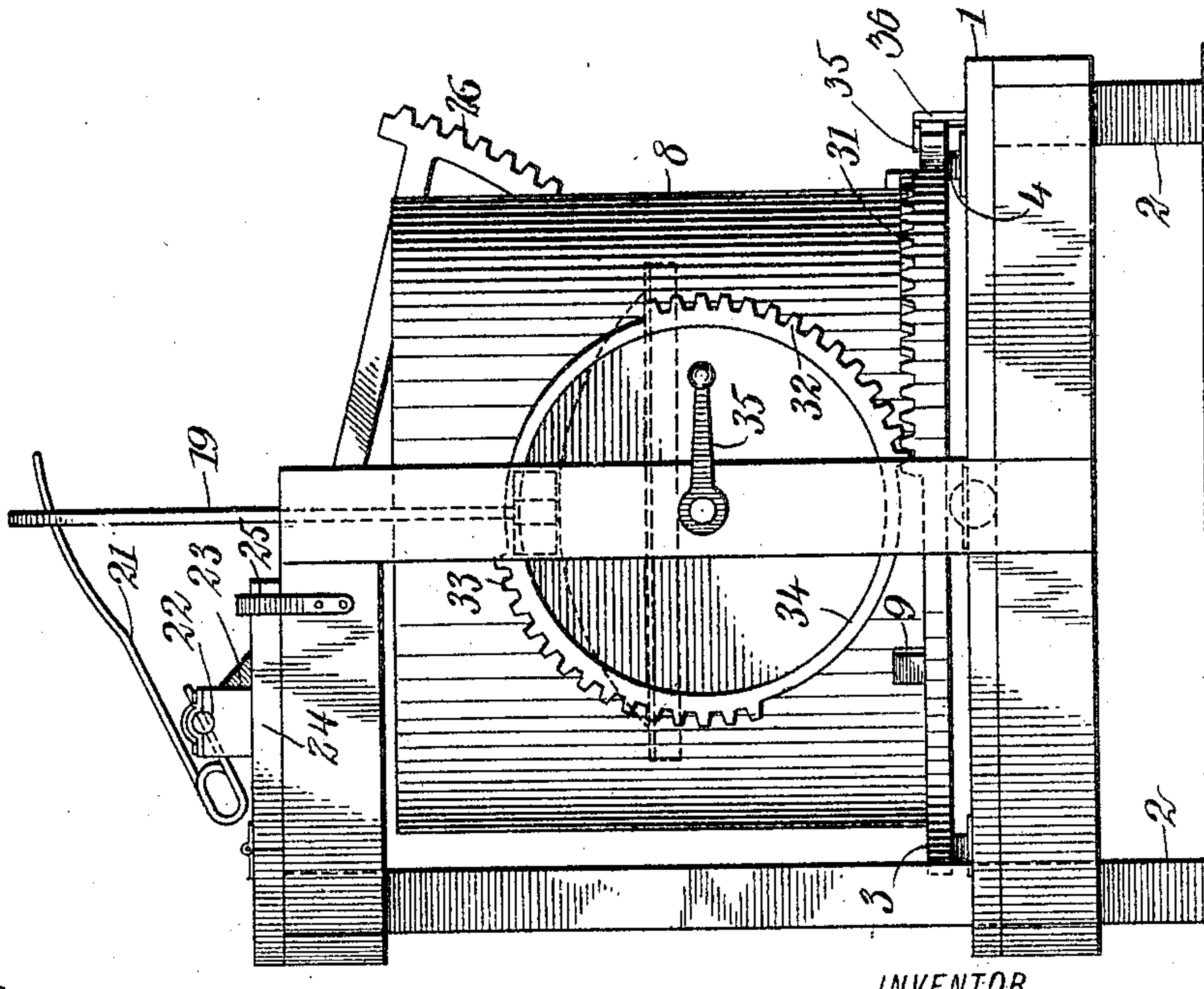


Fig. 5



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3 SHEETS—SHEET 3.

Fig. 5

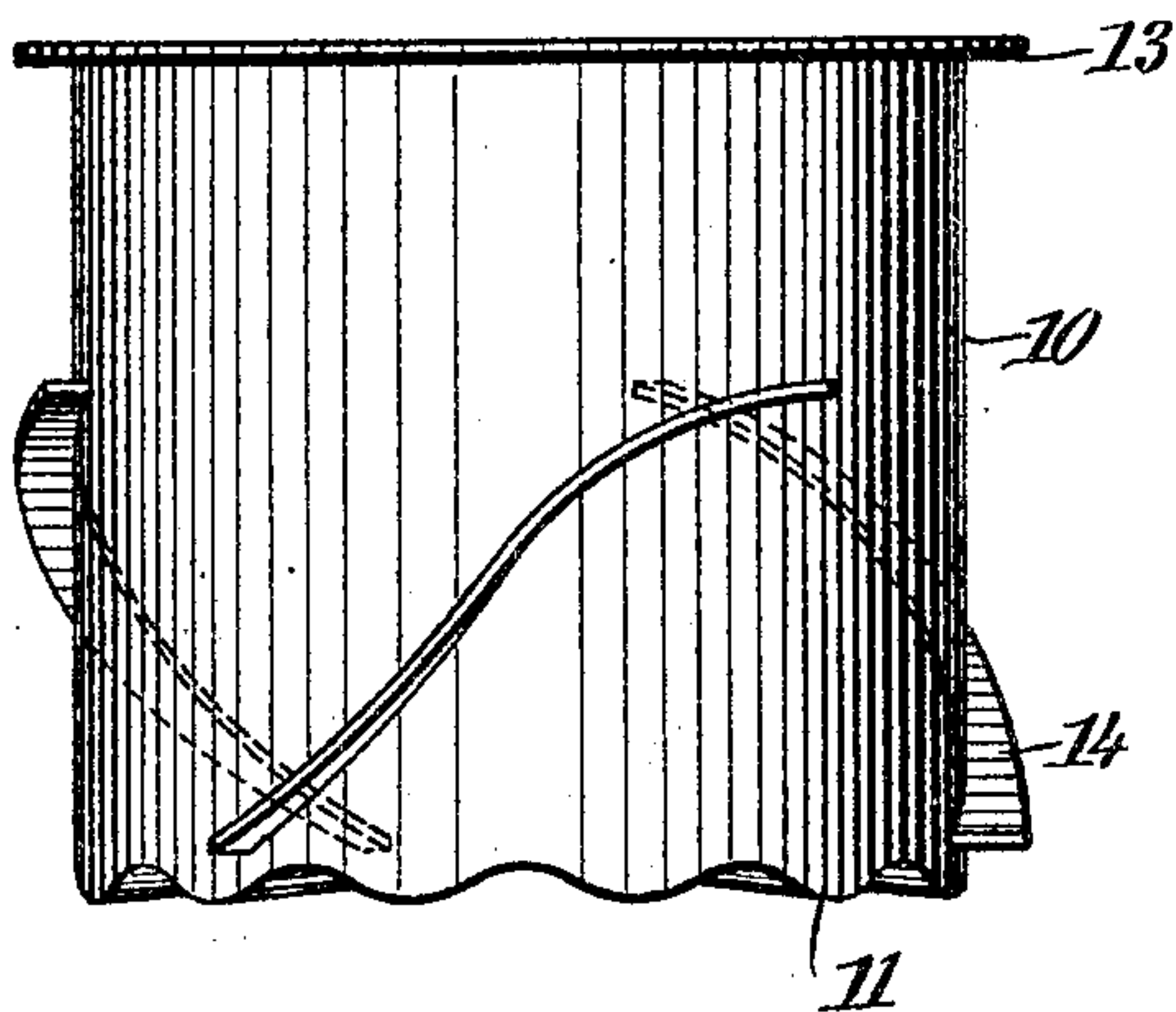


Fig. 6

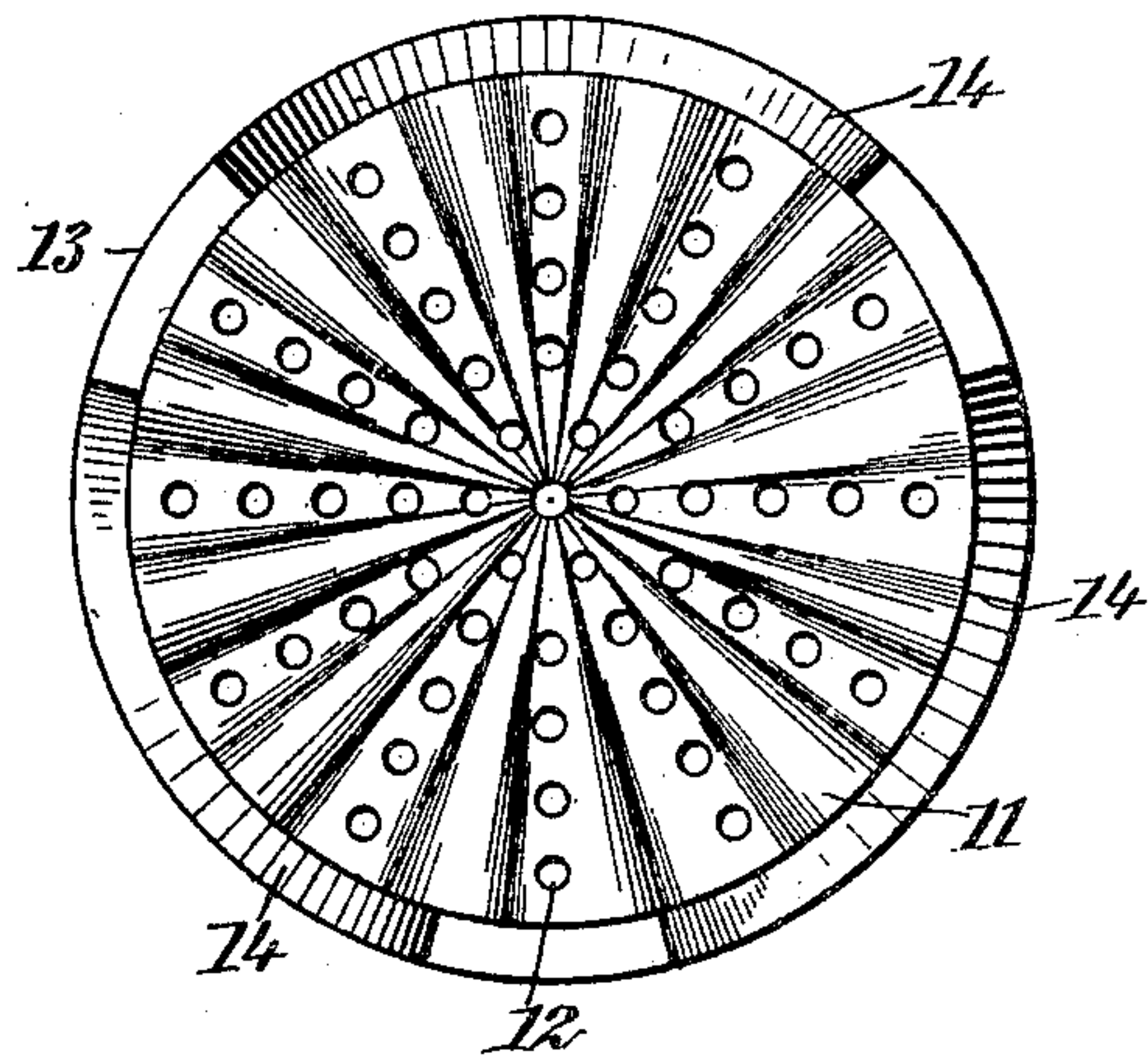


Fig. 7

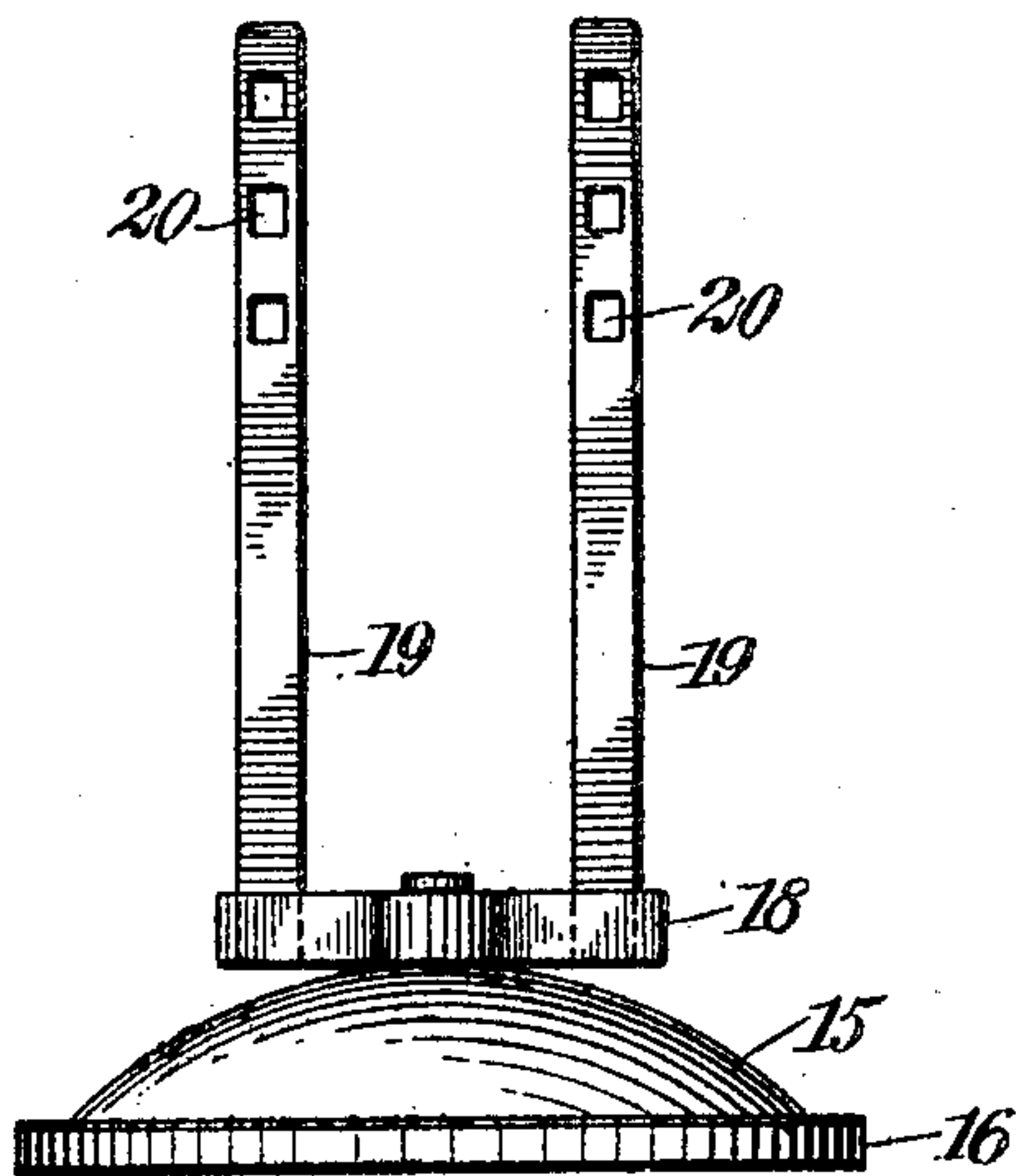


Fig. 8

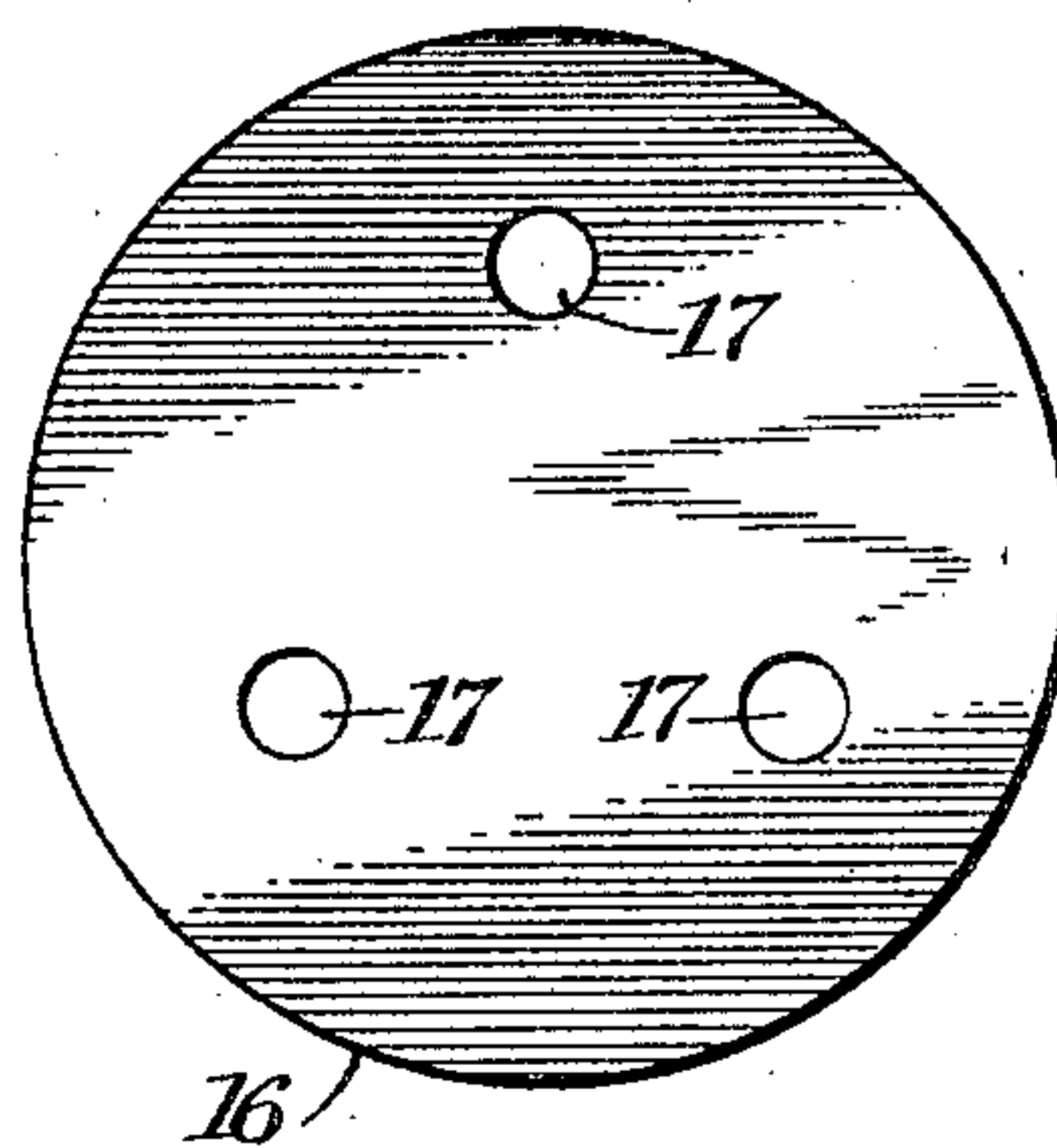
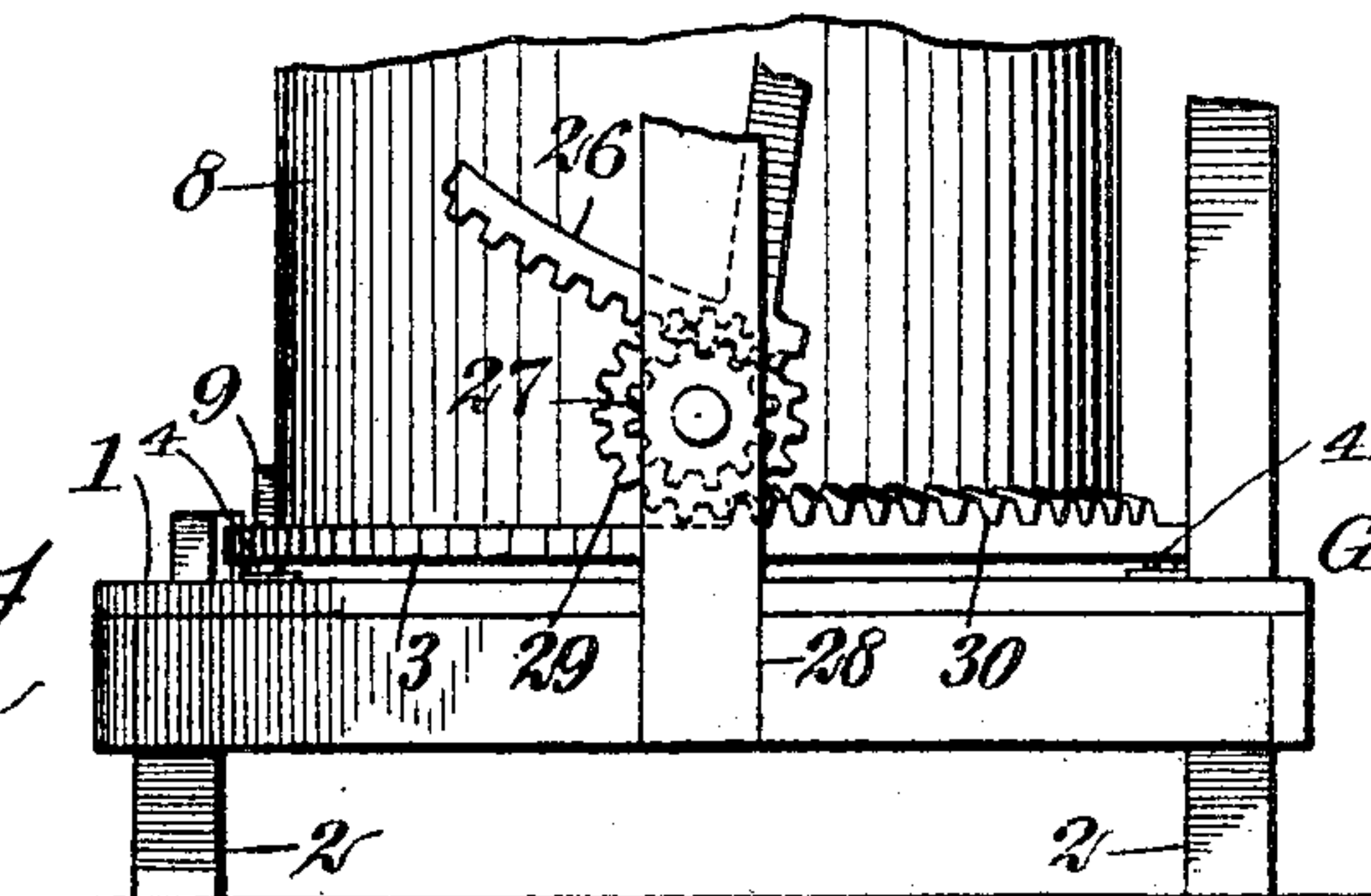


Fig. 9



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UNITED STATES PATENT OFFICE.

GUSTAVUS HEANNYOR WISNER, OF PIONEER, MONTANA.

WASHING-MACHINE.

No. 822,331.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed July 19, 1905. Serial No. 270,382.

To all whom it may concern:

Be it known that I, GUSTAVUS HEANNYOR WISNER, a citizen of the United States, and a resident of Pioneer, in the county of Powell and State of Montana, have invented a new and Improved Washing-Machine, of which the following is a full, clear, and exact description.

This invention relates to improvements in washing-machines, the object being to provide a machine by means of which garments may be rapidly and thoroughly cleansed.

I will describe a washing-machine embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a top plan of a washing-machine embodying my invention. Fig. 2 is a bottom plan thereof. Fig. 3 is a side elevation. Fig. 4 is a sectional elevation. Fig. 5 is a side view of an inner tub employed. Fig. 6 is a bottom view thereof. Fig. 7 shows the plunger or pounder in elevation. Fig. 8 is a bottom view of the plunger, and Fig. 9 is a side elevation opposite that of Fig. 3.

Referring to the drawings, 1 designates a platform supported on suitable legs 2, and arranged to rotate on the platform is a turn-table 3. As here shown, the turn-table is supported on antifriction-rollers 4, mounted on the platform, and it has a central shaft 5, extended through an opening in the platform 1, and on the lower end of this shaft 5 are oppositely-extended arms 6, from the ends of which springs 7 extend to connection with the platform, these springs being designed to move the turn-table in one direction, as will be hereinafter described.

Removably supported on the turn-table is an outer tub 8, which is centered by lugs 9 on the platform, which engage with the outer side of said outer tub. Removably placed in the tub 8 is an inner tub 10, in which the clothing is designed to be placed. The bottom of this inner tub 10 is provided with radial corrugations 11, which rest upon the bottom of the tub 8, supporting the inner tub slightly above the bottom of said outer tub, so that water may readily pass through perforations 12 in the bottom of the inner tub.

The upper end of the inner tub is provided with a flange 13, which by engaging with the inner surface of the tub 8 will hold the inner

tub in central position, and on the outer side of this inner tub are spirally-disposed flanges 14. Movable up and down in the inner tub is a plunger or pounder, comprising a concave upper portion 15 and a flat disk-like lower portion 16, provided with openings 17, through which water may circulate as the plunger squeezes the clothing downward. Extended upward from a cross-head 18 on the plunger are rods 19, having openings 20 for receiving spring-arms 21, extended from a shaft 22. These spring-arms provide for a yielding pressure of the plunger upon the material to be washed, and by providing a series of openings 20 in each rod 19 the degree of movement of the plunger may be regulated. The shaft 22 is supported in bearings 23 on a hinged cover 24, which is held down when the machine is in operation by means of spring-latches 25. By hinging the cover it is obvious that it may be raised when it is desired to remove the tubs.

Connected to the shaft 22 is a segment-rack 26, which meshes with a pinion 27, having its shaft-bearings in a standard 28, and on the shaft of the pinion is a bevel-gear 29, meshing with a segment-rack 30 on the upper side of the turn-table. At the opposite side of the turn-table is a segment-rack 31, designed to be engaged alternately by teeth 32 33, which are spaced apart on a wheel 34, which may be driven by any suitable power. I have here shown a crank 35, connected to the shaft of said wheel 34.

In the operation when the wheel 34 is turned one set of teeth thereon by engaging with the rack 31 will turn the table 3 and the tubs, and the turning of the table through the medium of the gearing and the segment rack 30 will cause a downward movement of the plunger or pounder. As the set of teeth 32 or 33 passes out of engagement with the rack 31, or, in other words, as the plane portion of the wheel 34 passes over said rack 31, the springs 7 will cause a quick reverse movement of the turn-table and the tubs, and on this reverse movement the gearing will cause an upward movement of the plunger. On the downward movement of the plunger the water in the inner tub will be forced through the clothing and out through the perforations 12 and thence up the sides of the inner tub, and upon the reverse rotary movement the flanges 14 will force the water down the sides of the inner tub and up through the perforations. It will therefore be seen that

the water is kept in practically constant agitation.

It will be noted that the turn-table has a peripheral lug 35, designed to engage with a cushion 36 on the platform to relieve the turn-table from undue shock when it is moved by means of the springs.

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

1. A washing-machine comprising an outer tub and an inner tub having perforations in its bottom, spirally-disposed flanges on the outer side of said inner tub, means for rotating the tubs and a plunger operating in the inner tub.

2. A washing-machine comprising an outer tub, an inner tub, means for imparting rotary motion to the tubs, the said inner tub having its bottom corrugated and perforated, spirally-disposed flanges on the outer side of the inner tub, and a plunger for operating in the inner tub.

3. A washing-machine comprising a platform, a turn-table mounted thereon, tubs supported on the turn-table, a gearing for moving the turn-table in one direction and a spring for moving the turn-table in the opposite direction.

4. A washing-machine comprising a turn-table, outer and inner tubs supported on the turn-table, a plunger for operating in the inner tub, a mutilated gear mechanism for rotating the turn-table in one direction, a spring for rotating the turn-table in the opposite direction, and gearing operated from the turn-table for imparting up-and-down motion to the plunger.

5. In a washing-machine, a platform, a turn-table mounted thereon, inner and outer

tubs supported on the turn-table, a shaft extended from the center of the turn-table through the platform, oppositely-extended arms on said shaft, spring connections between said arms and the platform, a segment-gear on the turn-table at one side, a mutilated gear-wheel for engagement with said segment gear or rack, a segment-rack on the opposite side of the turn-table, a segment-rack having gear connections with said last-named rack on the turn-table, and a plunger operated thereby.

6. In a washing-machine, a platform, a turn-table mounted thereon, inner and outer tubs supported on the turn-table, a gearing mechanism for imparting a partial rotary movement to the turn-table in one direction, a spring mechanism for moving the turn-table in the opposite direction, a plunger in the inner tub, a shaft-spring arm connections between the said shaft and the plunger, and means actuated by the turn-table for imparting motion to the shaft.

7. In a washing-machine, a platform, a turn-table thereon, a tub supported on the turn-table, a segment-rack on the turn-table, a bevel-gear engaging with said rack, a pinion on the shaft of the bevel-gear, a segment-rack engaging with the pinion, a shaft to which said last-named segment-rack is attached, a plunger having connection with said shaft, and means for imparting reciprocating rotary movement to the turn-table.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GUSTAVUS HEANNYOR WISNER.

Witnesses:

JAMES K. UHL,

JOSEPH CREMEN.