

No. 717,302.

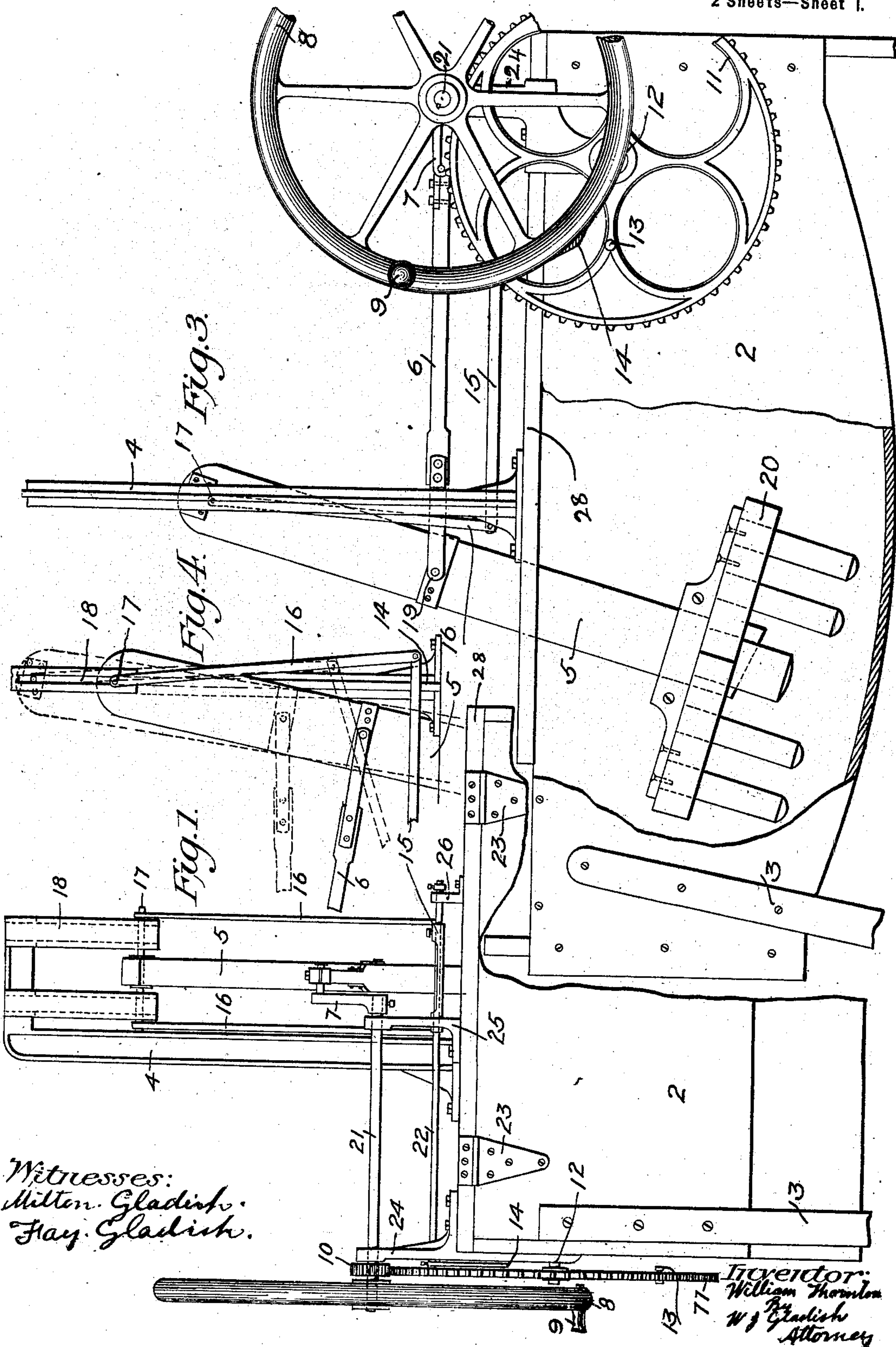
Patented Dec. 30, 1902.

W. THORNTON.
CLOTHES WASHING MACHINE.

(Application filed Nov. 25, 1901.)

(No Model.)

2 Sheets—Sheet 1.



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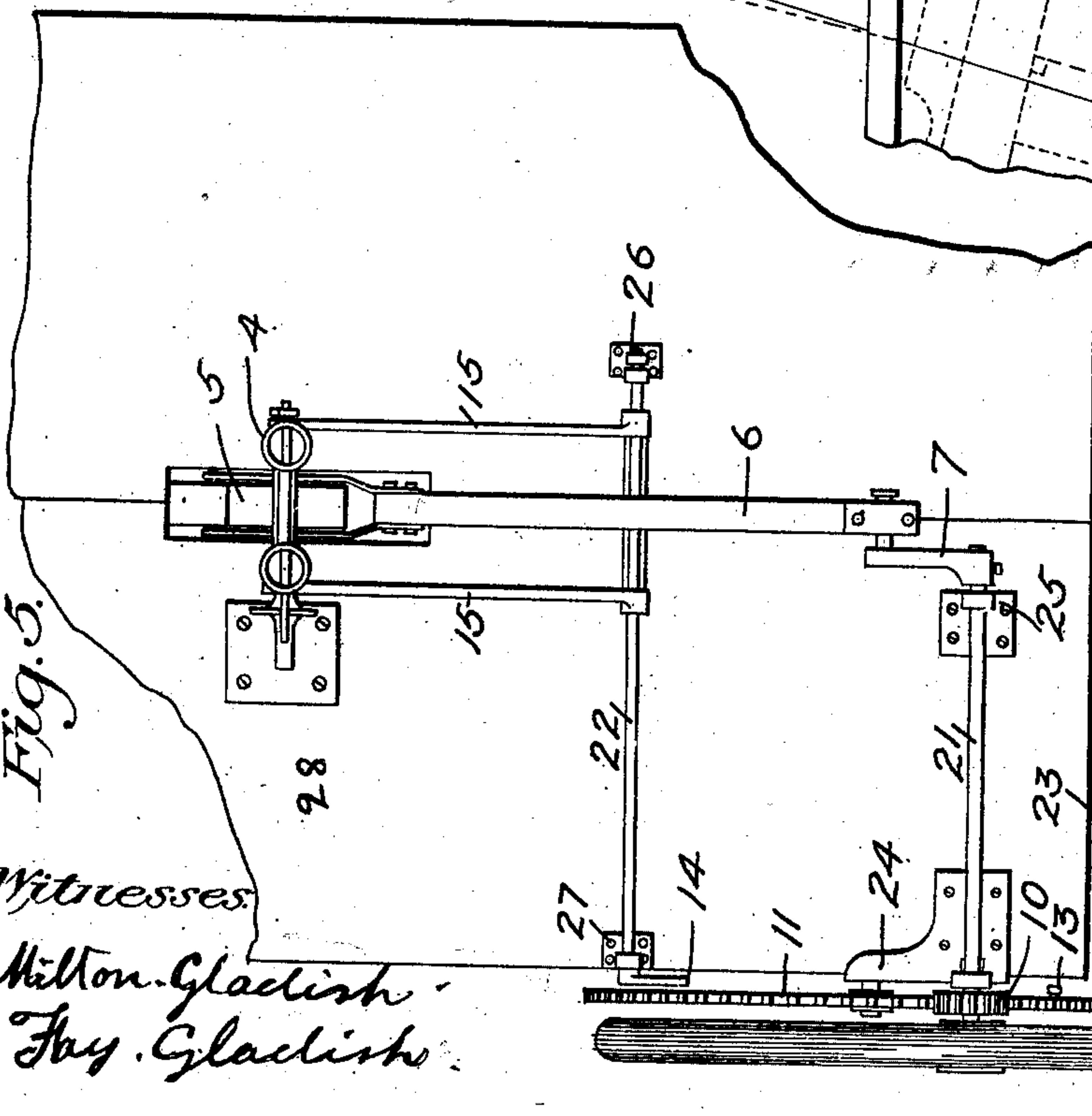
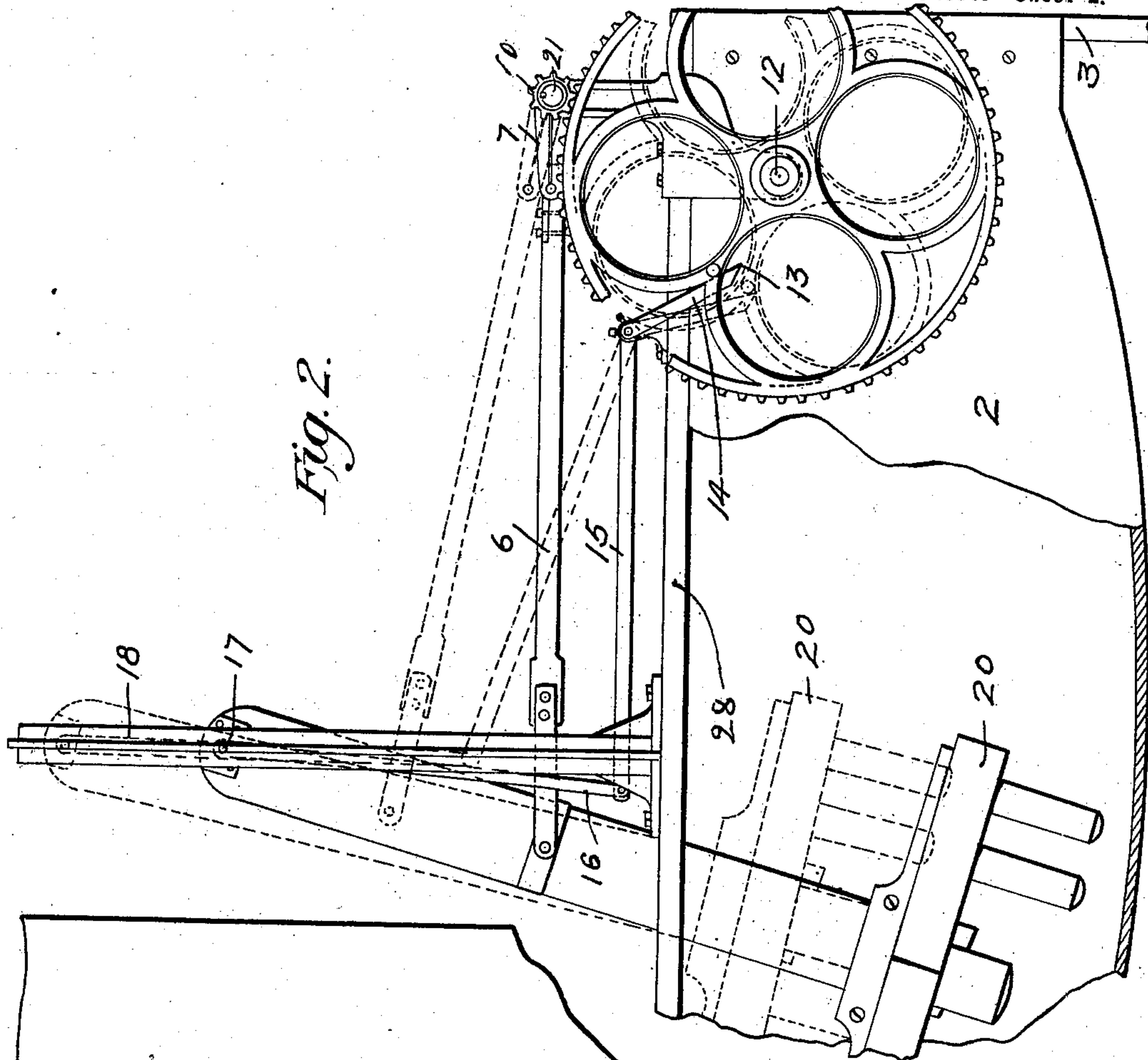
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2 Sheets—Sheet 2.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM THORNTON, OF CHATTANOOGA, TENNESSEE.

CLOTHES-WASHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 717,302, dated December 30, 1902.

Application filed November 25, 1901. Serial No. 83,679. (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, (post-office address No. 15 East Seventh street, Chattanooga, Tennessee,) have invented a certain new and useful Improvement 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.

This invention relates to certain new and useful improvements in washing-machines, and the novelty resides in the peculiar combination, construction, and arrangement of parts, all as more fully hereinafter described and then particularly pointed out in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the numerals of reference marked thereon, form a part of this specification, and in which—

Figure 1 is an end elevation with a portion of the tub broken away. Fig. 2 is a view in side elevation with a portion of the tub broken away and parts shown in section. Fig. 3 is a similar view showing the balance-wheel, which latter is omitted from Fig. 2. Fig. 4 is a detail in elevation showing the swinging support for the agitator. Fig. 5 is a top plan with portions broken away.

Like numerals of reference indicate like parts throughout the several views.

Referring now to the drawings, 2 designates the box or tub, of known construction, supported upon the legs or supports 3.

4 designates an upright guide secured to the lid or cover 28 of the tub.

5 is the swinging support for the agitator or pounder 20.

6 is a horizontal pitman, one end of which is pivotally mounted, as at 19, upon a ring or band secured to the swinging support 5 and at the other end to the crank 7, connected with the horizontal shaft 21, mounted in

bearings 24 and 25 and provided with a balance-wheel 8, and the latter having a handle 9.

10 is a pinion on the shaft 21, meshing with a spur cog-wheel 11 on a stub-shaft 12, and 13 is a lateral projecting pin carried by said spur cog-wheel.

14 is a short lever keyed on the end of a rock-shaft 22, mounted in suitable supports or brackets 26 and 27 in parallel relation with the shaft 21, as seen best in Figs. 1 and 5.

15 represents lifting-rods or rock-arms disposed at substantially right angles to the shaft 22 and which are pivotally connected with the lifting-rods 16, which are connected with a cross-pin 17, mounted in the upper end of the swinging support 5 and movable in slots 18, supported by the guide-arm 4, as shown in Figs. 1, 3, and 4, whereby the upper end of the swinging support 5 is guided vertically, as will be understood.

The top or lid 28 is preferably hinged to the end of the suds-tub or box 2, as shown in Fig. 1.

With the parts constructed and arranged substantially as above described the operation is as follows: The box or washtub is made water-tight and with a curved bottom, being of usual construction so far as regards the tub itself. Motion being imparted to the balance-wheel 8, the gear 10 meshing with the gear 11 imparts rotary motion thereto, and as the relative size of the pinion 10 and gear 11 is about one to ten the spur cog-wheel 11 will be revolved proportionately, and as this wheel revolves the pin 13, striking the arm or lever 14, will rock the shaft 22, and this rocking of the shaft will cause the rock-arms 15 and rods 16 to raise the swinging support 5 of the agitator at the same time that it is being given its forward and backward motion by means of the pitman connection 6 and 7, and thus the agitator is caused to rise and fall and also to move by a swinging motion through the clothes, turning them and causing them to be rubbed in a new place, with the result that they are quickly and thoroughly cleansed.

What I claim as new is—

In a washing-machine, the combination with a tub and an agitator and its swinging support, of a pitman connected with said support, means for operating the pitman, a rock-
5 shaft, an arm carried thereby, a spur-gear operatively connected with the pitman-actuating means, a pin carried by said gear-wheel to engage said rock-arm, and means operatively connecting the rock-shaft and the up-

per end of the agitator-support for lifting the same as it is rocked by the pitman connection, substantially as described.

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

WILLIAM THORNTON.

Witnesses:

GEO. E. MATTICE,
W. W. FRENCH.