No. 841,878. PATENTED JAN. 22, 1907.

C. LUSK.

WASHING MACHINE.

APPLICATION FILED JAN. 22, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

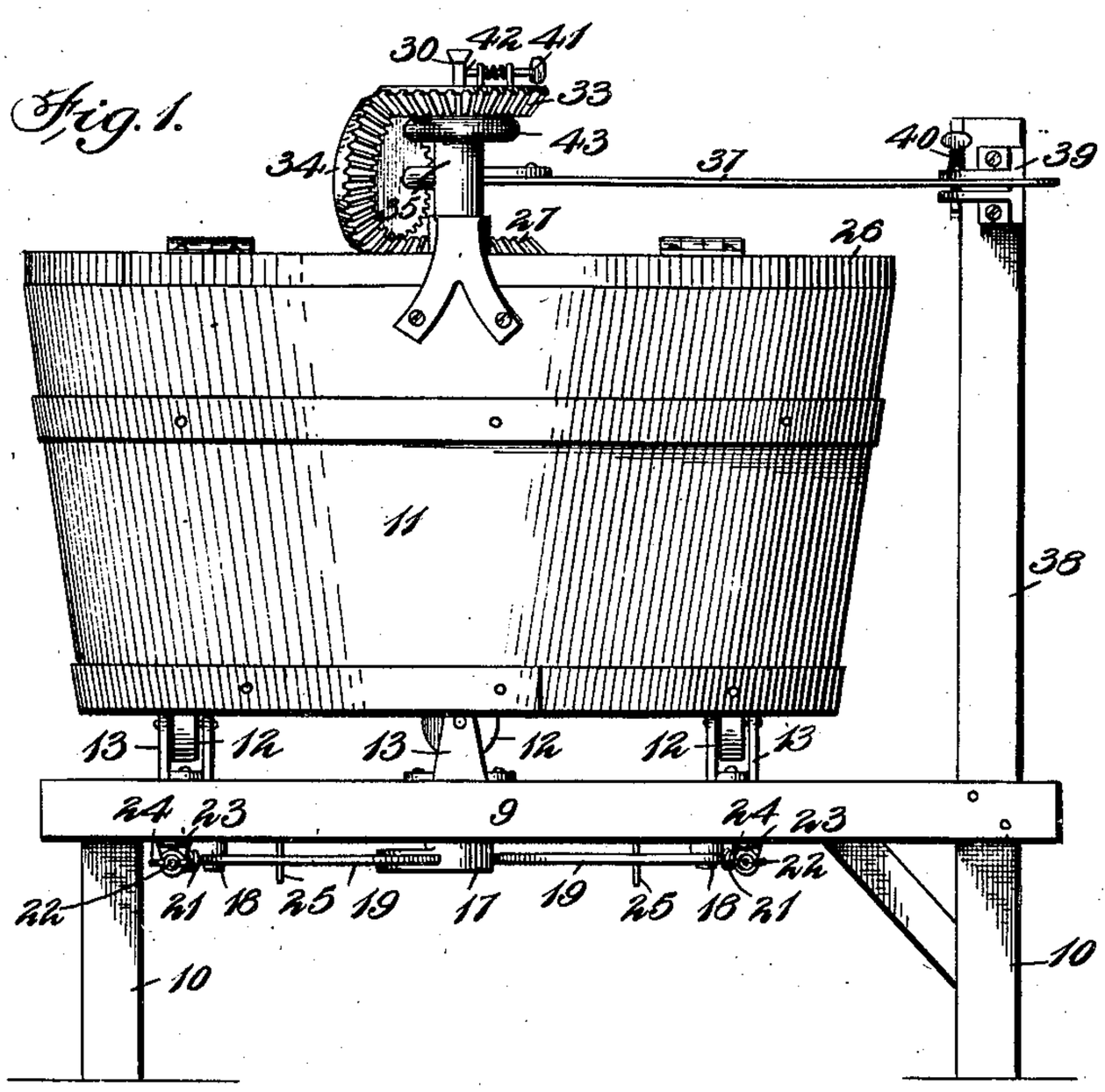
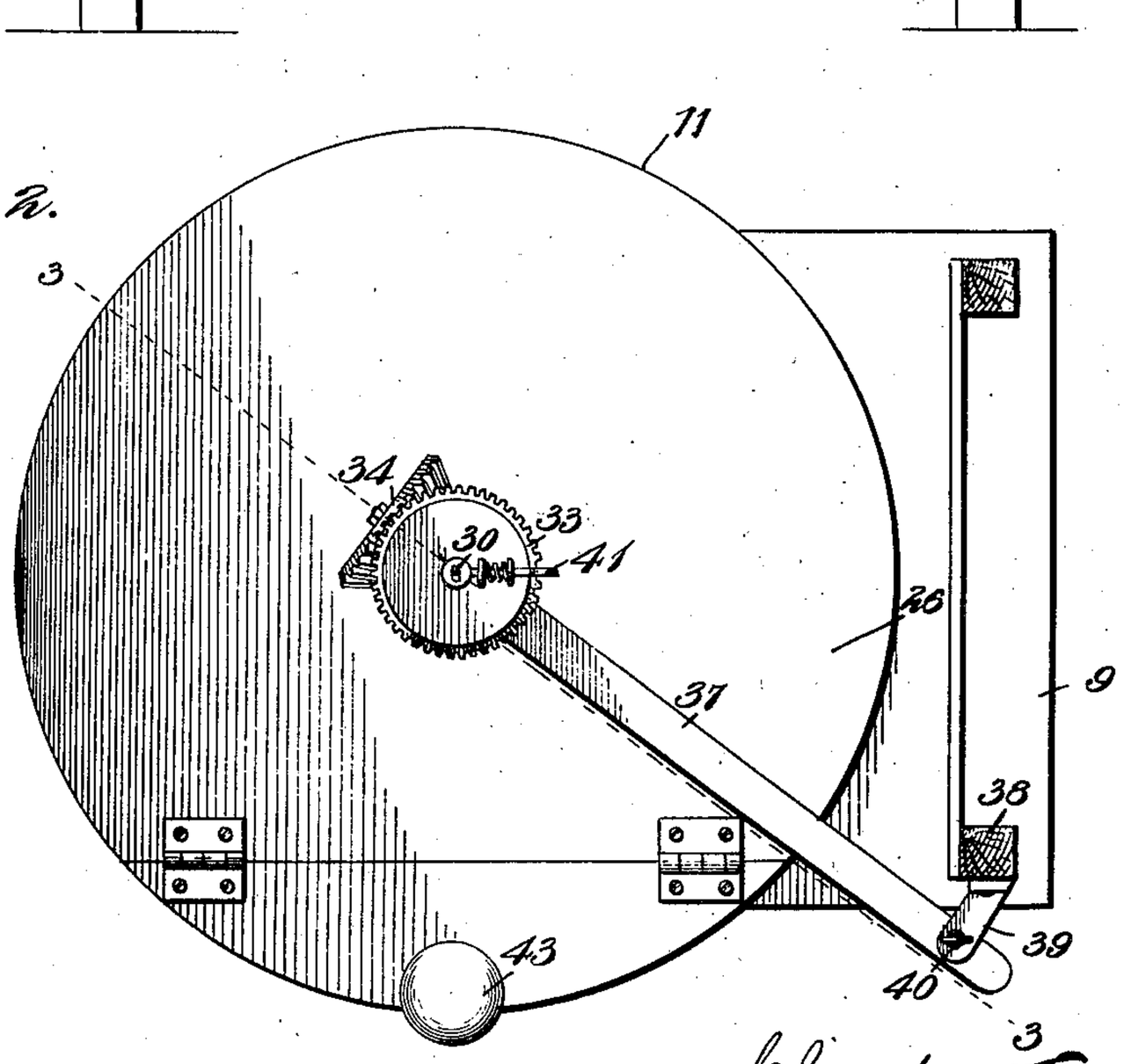


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3

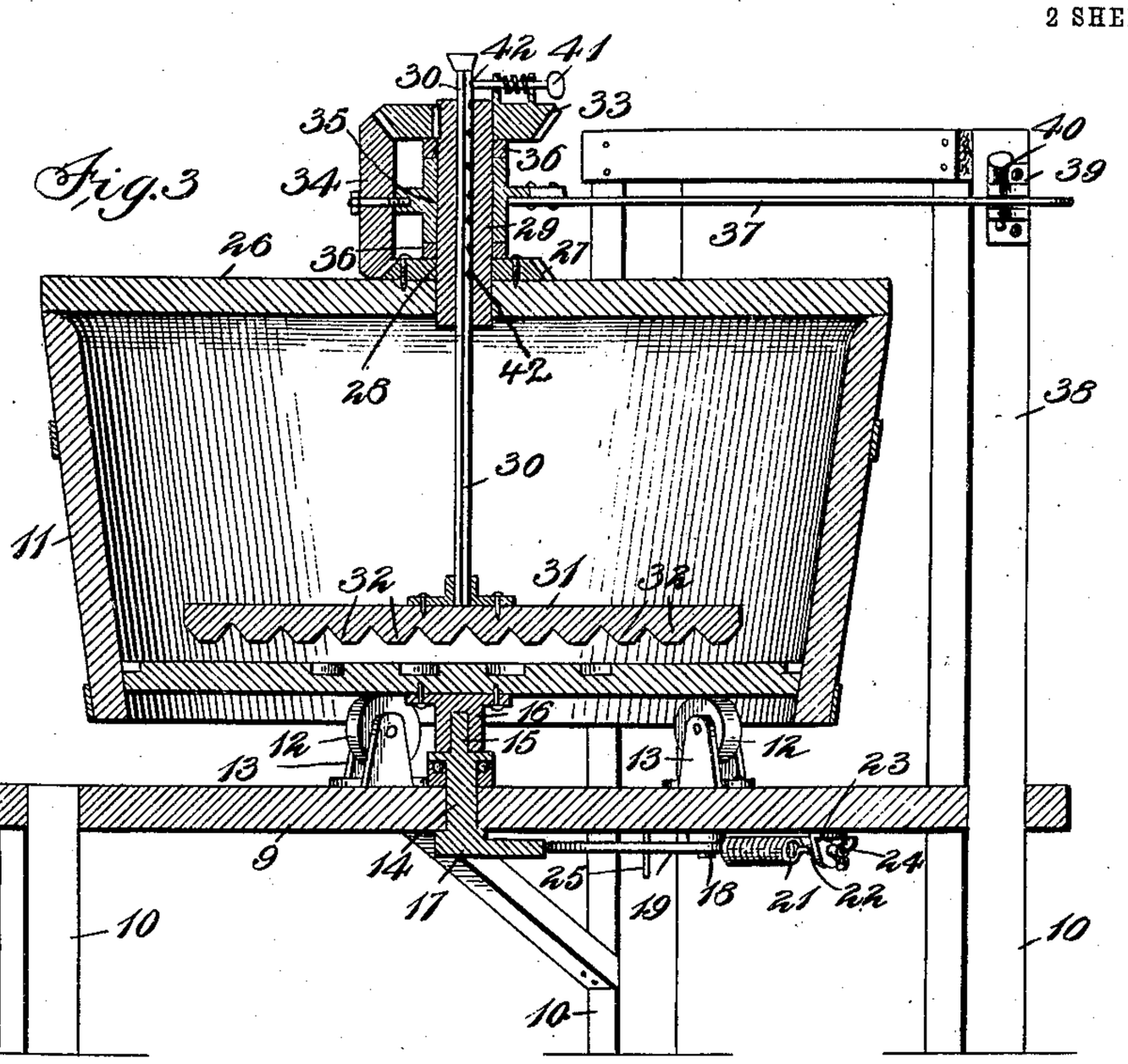
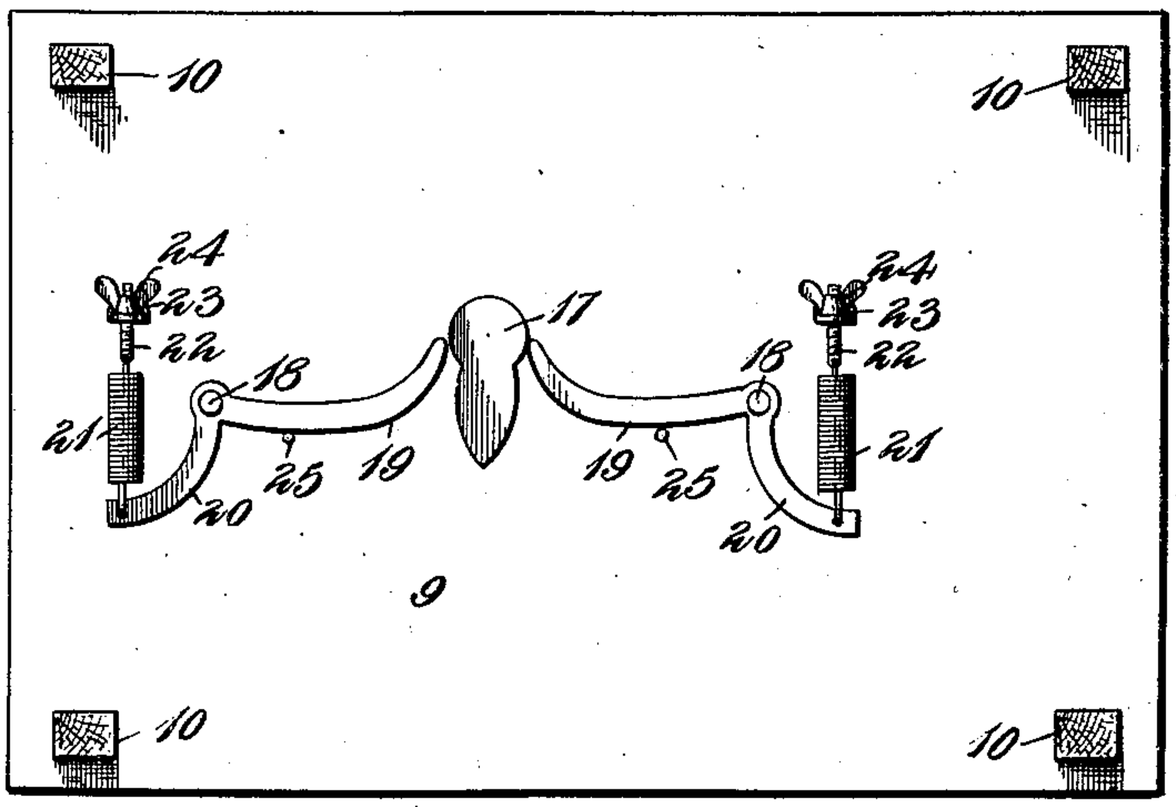


Fig. 4.



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UNITED STATES PATENT OFFICE.

CLAUDE LUSK, OF WAPAKONETA, OHIO.

WASHING-MACHINE.

No. 841,878. Specification of Letters Patent. Patented Jan. 22, 1907.

Application filed January 22, 1906. Serial No. 297,324.

To all whom it may concern:

Be it known that I, CLAUDE LUSK, a citizen of the United States, residing at Wapakoneta, in the county of Auglaize and State of Ohio, have invented new and useful Improvements in Washing-Machines, of which the following is a specification.

This invention is a washing-machine, and more particularly that kind comprising a rotatable tub provided with a rubber which is rotated in opposite direction to the tub.

The object of the invention is to provide an improved machine of this kind embodying certain novel features of construction hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of the invention. Fig. 2 is a plan view. Fig. 3 is a vertical section on the line 3 3 of Fig. 2. Fig. 4 is a bottom plan view.

Referring specifically to the drawings, '9 denotes a suitable stand or platform provided with legs 10. The tub 11 is supported by and rotates on rollers 12, journaled in bearings 13 on the platform. A vertical shaft 14 is journaled in the platform, and above the latter the shaft has a squared end 15, which enters a socket-piece 16, secured to the bottom of the tub. Below the platform the shaft 14 carries a cam 17. On opposite sides of the cam are bell-crank levers, which are pivoted, as at 18, to the under side of the platform. The arms 19 of said bell-cranks extend into the path of the cam, and to the other arms 20 of the bell-cranks are fastened springs 21. The opposite ends of the springs are connected to threaded rods 22, which extend through brackets 23, secured to the platform. Thumb-nuts 24, screwed on the rods, provide means for regulating the tension of the springs. Stop-pins 25, extending from the platform and engageable by the bell-cranks, limit the return movement of the latter.

In the operation of the machine when the tub is swung in one direction the shaft 14 and the cam 17 thereon turn in the same direction. When the cam engages one of the bell-cranks, it will turn the latter on its pivot, and thus stretch the spring 21. When the tub is rotated in the opposite direction, said spring in restoring the bell-crank to its original position will aid in the reverse rotation of the tub. As there are two bell-cranks and springs, they will alternately aid in rotating the tub, each bell-crank and spring exerting its power in an opposite direction to that of the other, so that the tub is started on its return movement and the labor of operating the machine thus greatly reduced.

The top of the tub has a hinged lid 26, to which is made fast a miter-wheel 27. This wheel has a central opening 28, through which a vertical tubular stem 29 loosely extends. Said stem also extends loosely through a registering opening in the lid. A shaft 30 extends through the stem 29 into the tub and carries at its lower end a rubber comprising a disk 31, having corrugations 32 on its under side. The bottom of the tub also has corrugations. The shaft 30 is angular, and the opening in the stem 29, through which it extends, is shaped accordingly, so that said shaft and stem will rotate together. At the top of the stem 29 is made fast a miter-wheel 33, which meshes with a miter-wheel 34, also in mesh with the wheel 27. The miter-wheel 34 is carried by a sleeve 35, which is loosely mounted on the stem 29. Between the ends of said sleeve and the wheels 27 and 33 are placed the washers 36.

An arm 37 is made fast to the sleeve 35, the outer end of the arm being fastened to a standard 38, rising from the leg 10. The standard carries a bracket 39, to which the arm is secured by a spring-bolt 40.

The shaft 30 is sufficiently loose in the stem 29 so that it can be raised and lowered to adjust the rubber 31, according to the quantity of clothes in the tub. To hold the shaft 30 in adjusted position, a spring-bolt 41 is provided, which is mounted on the wheel 33 and enters openings 42, made in the shaft 30.

In use the arm is made fast to the standard, as stated, and the tub is rotated first in one direction and then in the other. A handle 43 is provided for rotating the tub. By means of the gearing herein described the rubber 31 is caused to rotate in the opposite direction to the tub, whereby a thorough and rapid cleansing of the clothes is effected. Upon releasing the arm 37 from the standard 38 the lid of the tub can be swung open to remove the clothes therefrom.

I claim—

1. In a washing-machine, a platform, a rotatable vertical shaft journaled in the platform, and having a squared portion, a tub, a socket-piece depending from the bottom of the tub, and receiving the aforesaid squared portion, a cam on the shaft, levers pivoted to the platform, each having one of its ends ex-

tending into the path of the cam, and springs connected to the other ends of the levers to start the tub on its return movement.

2. In a washing-machine, a platform, a rotatable tub mounted thereon, a miter-gear fastened to the lid of the tub, and having a central opening, a rotatable tubular stem extending through the aforesaid opening, a miter-gear made fast to the stem, a sleeve loosely mounted on the stem, and carrying a miter-gear meshing with the aforesaid gears, a vertically-adjustable shaft extending through the aforesaid stem, and rotatable therewith, a rubbing-disk at the end of the shaft, an arm extending from the aforesaid sleeve, and a standard rising from the platform, and having means for locking the free end of the arm, whereby the sleeve is held against rotation.

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

CLAUDE LUSK.

Witnesses:
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W. RAY HOWE.