

A. T. LOFTSGAARDEN.
 WASHING MACHINE.
 APPLICATION FILED OCT. 9, 1911.

1,054,428.

Patented Feb. 25, 1913.

2 SHEETS—SHEET 1.

FIG. 4

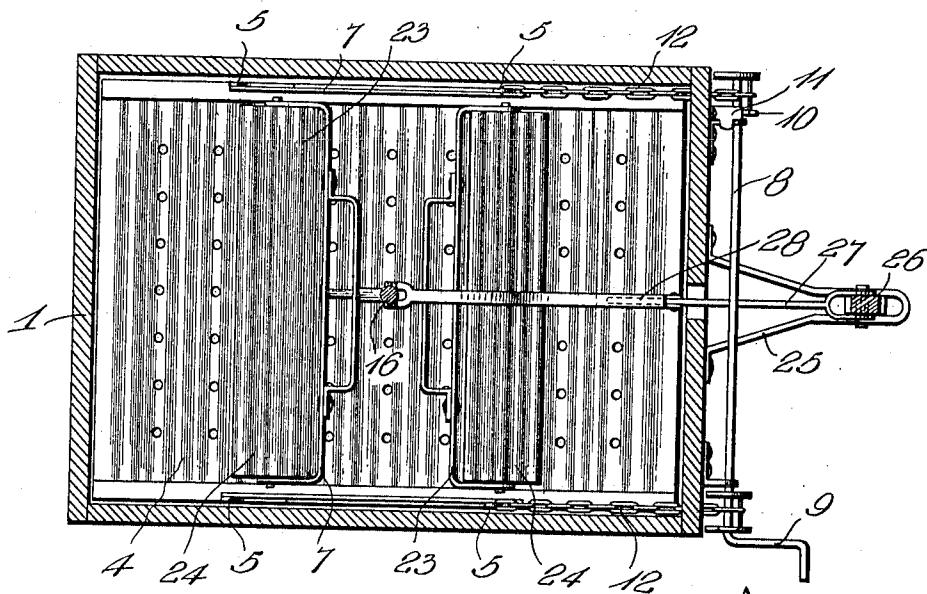
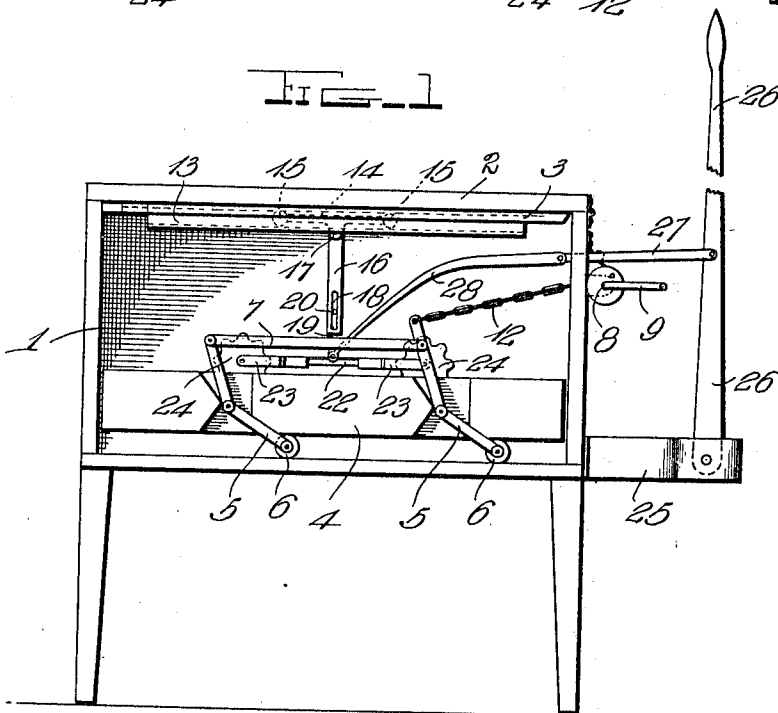


FIG. 1



Witnesses

E. J. Carroll

Inventor

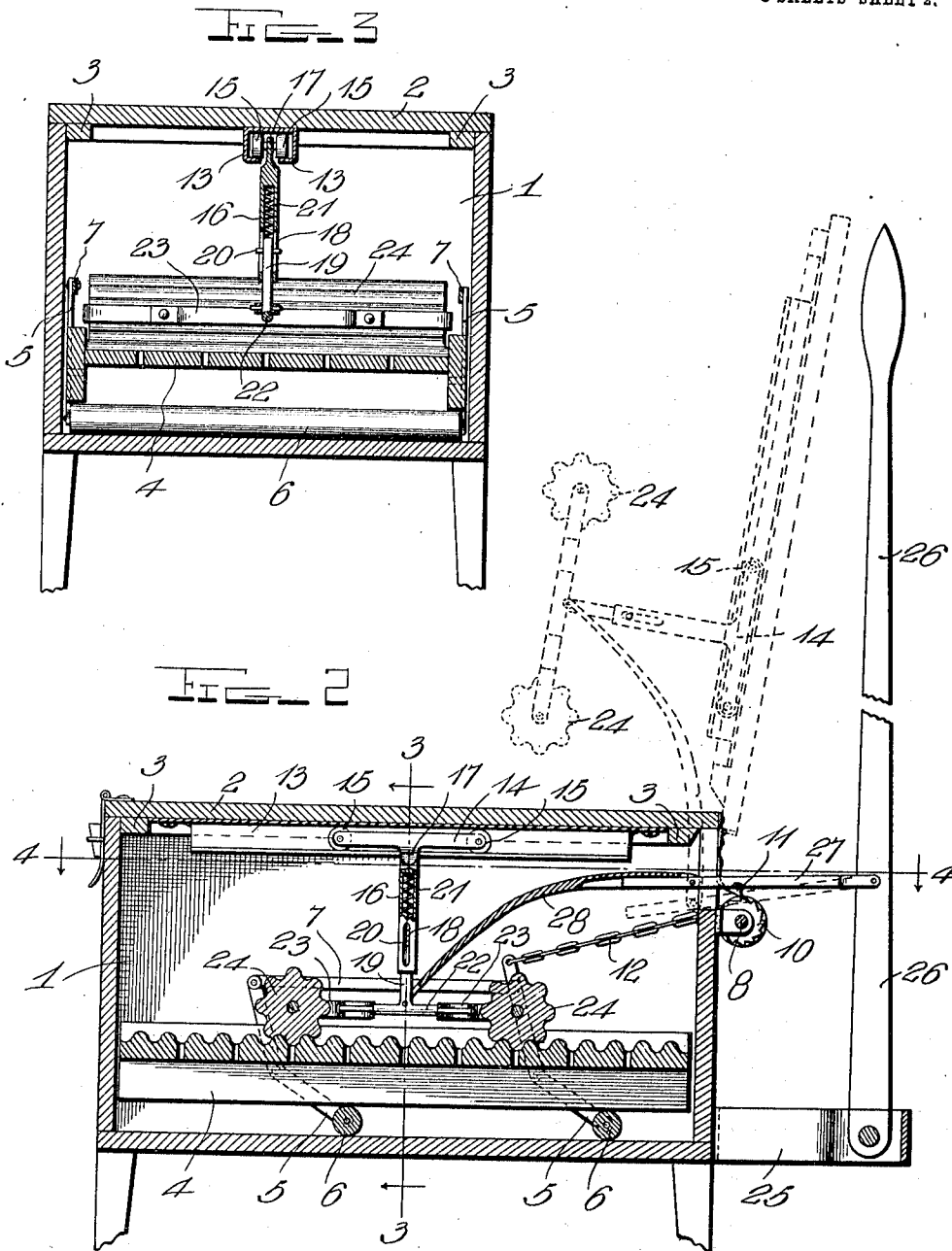
Albert T. Loftsgaarden.
 By *William W. Deane*
 his Attorney

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E. E. Carson
J. L. Carroll

Inventor
Albert T. Loftsgaarden,
By William O. Deane
his Attorney

UNITED STATES PATENT OFFICE.

ALBERT T. LOFTSGAARDEN, OF POWELL, WYOMING.

WASHING-MACHINE.

1,054,428.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALBERT T. LOFTSGAARDEN, citizen of the United States, residing at Powell, in the county of Park and State of Wyoming, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification.

This invention relates to washing machines, and has for its object to provide a machine of simple structure in which is employed a body having a tray located therein with means for raising and lowering the tray within the body. The tray is provided with a corrugated, perforated bottom. A set of rollers are connected with the top of the body which is hinged to the major portion thereof, and a lever mechanism is fulcrumed at one end of the body and is operatively connected with the supports of the rollers, whereby the said rollers may be moved back and forth over the corrugated tray, to accomplish the washing of the clothes.

For a full understanding of the invention reference is to be had to the following description and accompanying drawings in which:

Figure 1 is a side elevation of the washing machine with one side of the body thereof removed; Fig. 2 is a longitudinal sectional view of the washing machine; Fig. 3 is a transverse sectional view of the same cut on the line 3—3 of Fig. 2; Fig. 4 is a horizontal sectional view cut on the line 4—4 of Fig. 2.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

The machine includes a body 1 which is provided with a hinged top 2. The top 2 is provided upon its under side with cleats 3 which are adapted to fit snugly against the inner surfaces of the sides and one end of the body 1 when the said top is closed. A tray 4 is located in the body 1 and may move vertically therein. The said tray fits snugly between the inner surfaces of the sides and ends of the body. Bell crank levers 5 are pivoted to the sides of the tray 4 and are provided at their lower ends with rollers 6 which are adapted to bear against the bottom of the body 1. The levers 5 are arranged in pairs with the members of the pairs located at the opposite side edges of

the tray. The upper ends of the bell crank levers 5 at the same side of the tray are pivotally connected together by means of links 7. A shaft 8 is journaled at one end of the body 1 and is provided at one end with a handle 9. Ratchet disks 10 are fixed to the shaft 8 and pawls 11 are pivoted to the end of the body 1 and are adapted to engage the disks 10 and hold the shaft 8 against rotation. Flexible members or chains 12 are fixed at one end to the shaft 8 and pass through one end of the body 1. The inner ends of the chains 12 are connected to the upper ends of the nearest bell crank levers 5. Therefore it will be seen that by rotating the shaft 8 and winding the chains 12 thereon the bell crank levers 5 may be swung to upright positions, whereby their rollers 6 moving along the bottom of the body 1 will elevate the tray 4 within the said body 1.

Tracks 13 are fixed to the under side of the top 2 and a bar 14 is provided at its ends with wheels 15 which are adapted to run along the tracks 13. A sleeve 16 is attached at its upper end to the bar 14 at a point midway between the ends of the said bar and is provided with a shank 17 which extends through the groove between the tracks. The sleeve 16 is provided at its side and in the vicinity of its lower end with a slot 18. A rod 19 is slidably mounted in the sleeve 16 and is provided with a pin 20 which passes through the slot 18. A spring 21 is housed within the sleeve 16 and bears at its upper end against a fixed point and at its lower end against the upper end of the rod 19 and is under tension with a tendency to hold said rod in a lowermost position. An arm 22 is carried at the lower end of the rod 19 and extends approximately parallel with the track 13. Bails 23 are pivoted at the ends of the arm 22 and may rotate about the axis of the said arm. Rollers 24, preferably of wood and having corrugated surfaces, are journaled in the bails 23. An arm 25 is fixed to one end of the body 1 and a lever 26 is fulcrumed upon the said arm. A bar 27 is attached to the lever 26 at a point above its fulcrum point and extends through the end of the body 1. A curved rod 28 is pivoted at one end to the inner end of the bar 27 and at its other end is pivotally connected with the arm 22 at a point approximately midway between the ends of said arm. Therefore it

will be seen that when the top 2 is lowered over the body 1 the rollers 24 are in position over the corrugated bottom of the tray 4 and by oscillating the upper end of the lever 26 the arm 22 and its attachments will be reciprocated so that the rollers 24 will move over the upper surface of the tray 4 or over the articles of clothing which have been placed upon the upper surface of the tray. The spring 21 will hold the rollers down against the clothes. At the same time the said spring will afford sufficient give to permit the rollers to travel over uneven thicknesses of the clothes or knots therein. Also the rollers 24 may turn together with the bails in which they are journaled about the axis of the arm 22 and therefore if the clothes are thicker at one side of the body than the other the rollers will pass freely over the same, but at the same time the said clothes will be subjected to the pressure of the rollers. By raising the tray in the lower portion of the body the clothes may be subjected to any desired extent of pressure.

When it is desired to remove the clothes it is necessary only to swing the top 2 up and away from the body 1, when the tracks 13 will lift the bar 14 and its attachments and the arm 22 together with the bails 23 is swung in an upward direction and the said bails carry the rollers 24 up and away from the tray 4. At the same time the rod 28 swings upon the bar 27 and thus the clothes may be readily lifted from off of the tray 4. After this has been done other articles of clothing may be placed upon the tray and the parts closed by reversing the operation above described. Therefore it will be seen that a simple and inexpensive clothes washing machine is provided and that the parts may be easily and quickly manipulated to permit the body of the machine to be charged with a desired number of articles of clothing, and after the clothes have been

washed they may be easily and readily removed from the body of the machine.

Having thus described the invention, what is claimed as new is:

1. A washing machine comprising a body, a vertically movable tray located therein, levers pivoted to the sides of the tray and having upwardly extending arms and also having downwardly extending arms bearing at their lower ends on the bottom of the body, means located exteriorly of the body, at one end thereof and connected with the upper arms of the levers to raise or lower the tray, and means for adjustably fixing the means that is connected with the levers.

2. A washing machine comprising a body, a vertically-movable tray therein, means for raising the tray, means for adjustably fixing the tray against downward movement, a top hinged to the body, rollers carried by said top and movable above the tray, and means for yieldingly pressing said rollers downward.

3. In a washing machine, the combination of a body, a top hinged thereon, tracks carried at the underside of said top and separated by an intervening space, a bar movable in said space and in the direction of the length of the tracks, anti-friction means carried by said bar and movable on said tracks, a depending portion on the bar, an arm having an upwardly extending portion connected with and movable vertically with respect to the depending portion of the bar, a spring interposed between said portions, bails carried at the ends of said arm, and rollers mounted in said bails.

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

ALBERT T. LOFTSGAARDEN.

Witnesses:

JAMES R. BAIRD,
PERCY W. OVIATT.