M. J. FLEMING.

LAUNDRY APPARATUS.

APPLICATION FILED MAY 17, 1920.

1,394,159.

Patented Oct. 18, 1921.

2 SHEETS—SHEET 1.

Fig. 6.

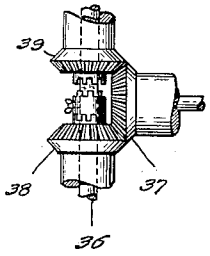


Fig. 1.

Fig. 2.

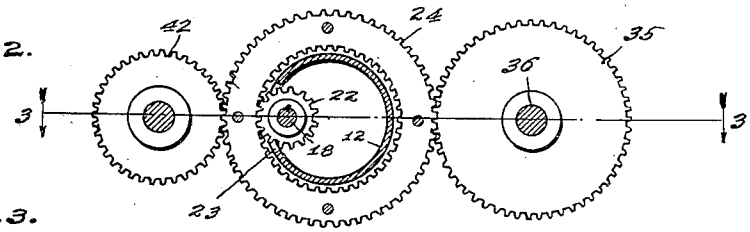
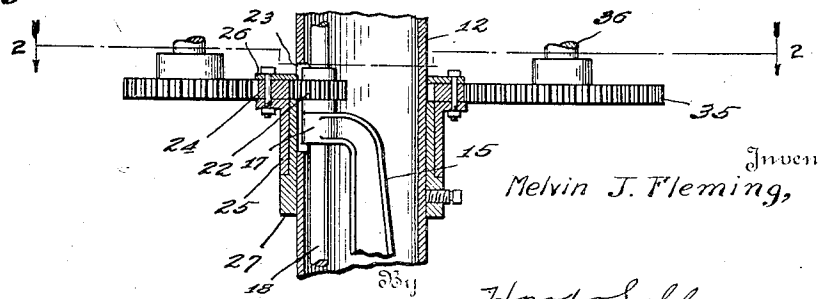


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

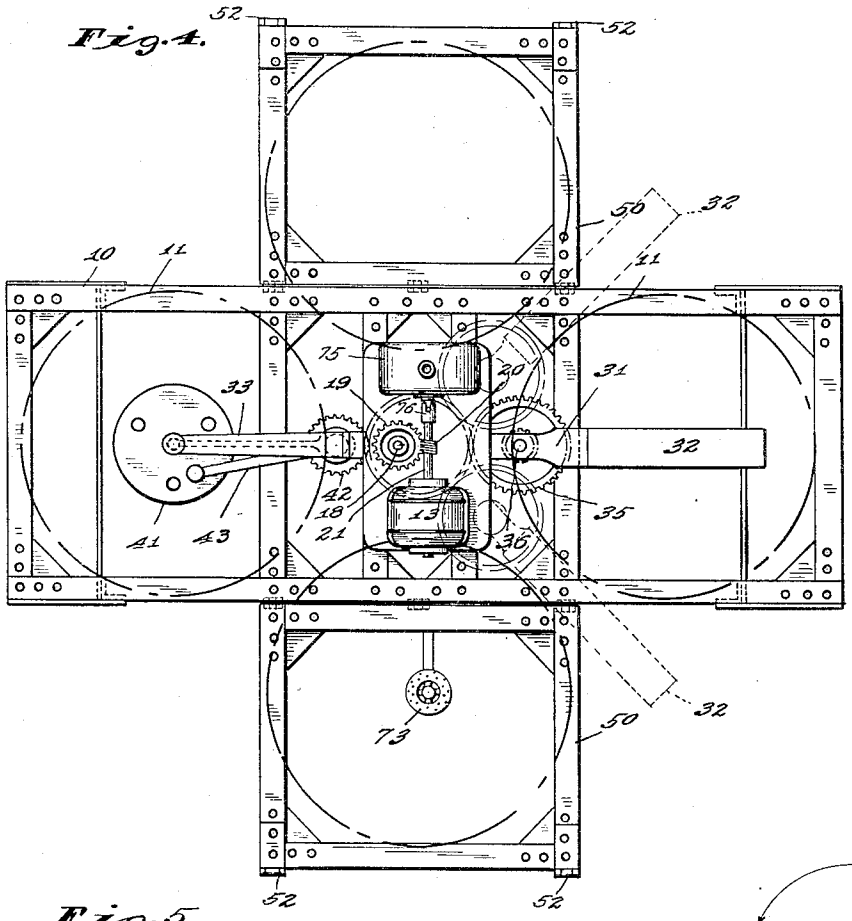
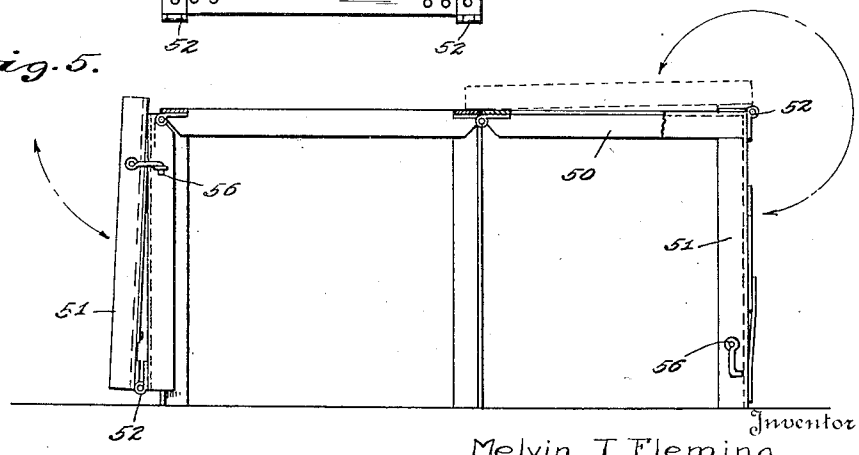


Fig. 5.



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UNITED STATES PATENT OFFICE.

MELVIN J. FLEMING, OF INDIANAPOLIS, INDIANA.

LAUNDRY APPARATUS.

1,394,159. Specification of Letters Patent. Patented Oct. 18, 1921.

Application filed May 17, 1920. Serial No. 381,972.

To all whom it may concern:

Be it known that I, MELVIN J. FLEMING, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Laundry Apparatus, of which the following is a specification.

The object of my invention is to produce a unitary laundry apparatus, of compact character, and such that it may be produced for such sum as to be within the range of permissible expenditures of the average household.

The accompanying drawings illustrate my invention. Figure 1 is a side elevation in partial vertical section, of an embodiment of my invention; Fig. 2 a horizontal section on line 2—2 of Fig. 3; Fig 3 is a vertical section on line 3—3 of Fig. 2; Fig. 4 a plan; Fig. 5 a fragmentary section of the main frame; and Fig. 6 a detail.

In the drawings, 10 indicates a main table-like frame, having a width somewhat less than the ordinary doorway, and a length somewhat greater than necessary to support two ordinary wash tubs, indicated by dotted lines 11. The table, or frame, 10, is conveniently of a skeleton metal construction, and at its middle supports a tubular column 12, which supports an electric motor 13 at its upper end. At the lower end of column 12 is a casting 14, having an arm 15 projected up into the column 12, said casting and arm carrying two shaft bearings 16 and 17, in which is journaled a main drive shaft 18, which extends through the column and is provided at its upper end with a gear 19, meshing with a worm 20, on the shaft 21 of motor 13. At an intermediate point, shaft 18 is provided with a pinion 22 which is projected through an opening 23 in the side of the column. Meshing with pinion 23 are the internal teeth of a gear ring 24, to which is secured a bearing sleeve 25 and a retainer ring 26, the bearing ring 25 being journaled upon a collar 27 vertically adjustable on column 12.

Swiveled upon vertically adjustable collars 30 mounted on column 12 is an implement carrier 31′ upon which is pivotally supported a washer supporting arm 33, pivoted at 34. Also swiveled upon column 12 is an implement carrier 31 which carries a wringer 32, the arrangement being such that the carriers 31 and 31′ may be independently swiveled about the column 12, so that when the washer supporting arm 33 is projected from one of the tubs, the wringer 32 may be swung to an intermediate position between two adjacent tubs, as indicated in dotted lines in Fig. 4.

The wringer 32 is to be driven from the gear ring 24 and, therefore, this ring is provided with external teeth which mesh with a gear 35, carried at the lower end of shaft 36, journaled in carrier 31. Any suitable connection between shaft 36 and one of the wringer shafts may be adopted. In the present form, the lower wringer shaft carries a bevel gear 37 which is constantly in mesh with two bevel gears 38 and 39, journaled on shaft 36, and each provided with common clutch teeth capable of co-acting with a clutch collar 40, splined upon shaft 36, and shiftable into engagement with one or the other of gears 38 and 39, or to an intermediate position.

Arm 33 carries, at its outer end, any suitable washing device, the reciprocatory stirrer 41 being shown merely as one form which may be adopted. Journaled on arm 33 is a gear 42 capable of meshing with the external teeth of ring 24, being thrown into and out of mesh by a swinging movement of arm 33, as indicated in Fig. 1. A suitable connection 43 connects gear 42 with the washer apparatus 41.

Ordinarily, two tubs are not sufficient for the proper and convenient handling of a wash, and, therefore, I hinge, at each side of table 10, mid-way of the length, a folding shelf or supplemental table 50, provided at its outer end with a leg 51, hinged at 52, so that the parts may be folded, as indicated in Fig. 5, being held in folded condition by a suitable catch mechanism 56, the construction being such that, when folded, the maximum transverse dimension will not exceed an ordinary door width, so that the device may be transported when desired.

The shaft 18 carries a pulley 60, at its lower end, and this pulley is connected by belt 61, with a pulley 62, connected to a centrifugal dryer 63 journaled in suitable bearings 64, in frame 10, beneath the work table surface.

It is desirable that the operator be able to apply heat to any one of the tubs which may be supported by table 10 and the supplemental shelves 50 and, therefore, casting 14 is provided with a depending finger 70, which is preferably arranged in the axis of column

12. Upon this finger 70, I swivel a gas pipe 71 and lead to this pipe a supply pipe 72. Pipe 71 is provided at its outer end with a burner 73 and is of sufficient length to bring the burner 73 beneath any one of the tubs 11.

In order to facilitate the removal of water from the tubs, I mount a small pump 75 in line with the shaft of motor 13 and provide a sliding clutch 76 by which the pump may be connected to said shaft when desired.

I claim as my invention:

1. A laundry apparatus comprising a main frame adapted to support a plurality of tubs, a central column supported by said frame, a laundry implement swiveled upon said column and movable into coöperative relationship with the tubs supported by the main frame, a gear ring journaled upon the column and provided with internal and external teeth, a transmission train between the external teeth of said gear ring and the laundry implement and a driving train connected to the internal teeth of the gear ring.

2. A laundry apparatus comprising a tub support, a hollow column supported thereby, a gear ring journaled on the column and provided with internal and external teeth, a driving shaft journaled within the column and provided with a gear meshing with the internal teeth of the gear ring, an implement carrier on the column, a laundry implement carried by said carrier, and driving connections between said implement and the external teeth of the gear ring.

In witness whereof I have hereunto set my hand at Indianapolis, Indiana, this fourteenth day of May, A. D. one thousand nine hundred and twenty.

MELVIN J. FLEMING.