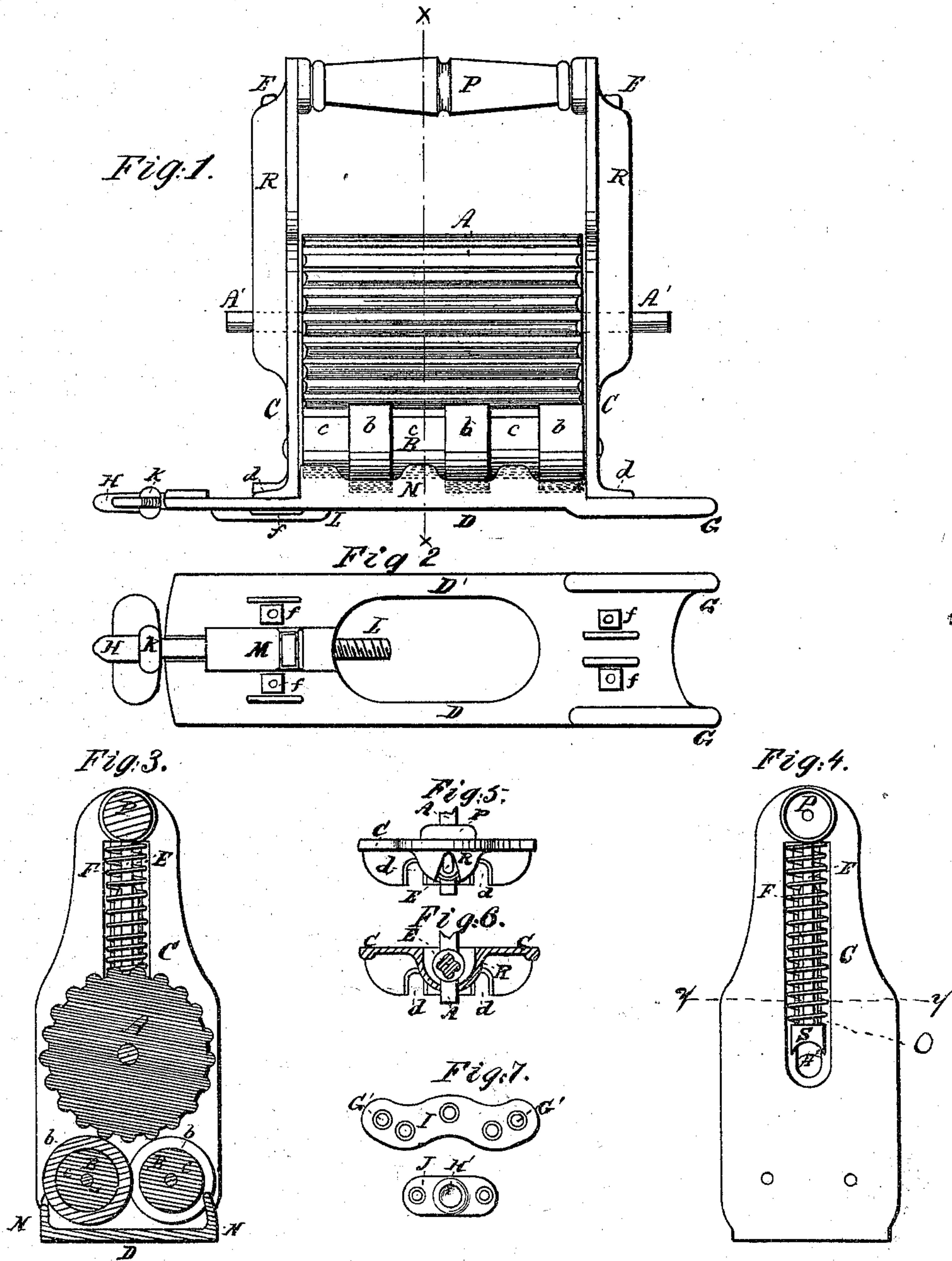


G. S. WALKER.
Washing-Machines.

No. 142,535.

Patented September 2, 1873.



Witnesses

Geo W Hallock
Edw H Kling

Inventor

George S Walker

UNITED STATES PATENT OFFICE.

GEORGE S. WALKER, OF ERIE, PENNSYLVANIA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **142,535**, dated September 2, 1873; application filed May 31, 1873.

To all whom it may concern:

Be it known that I, GEORGE S. WALKER, of Erie, in the county of Erie and State of Pennsylvania, have invented an Improved Washing-Machine, of which the following is a specification:

My invention consists, first, in the construction and arrangement of the rollers; and, second, in the manner of attaching the machine to the tub.

The first part of my invention consists of a large rubbing, or, rather, propelling, roller, operating in conjunction with two smaller rollers, which are provided with annular rings of india rubber or some like elastic substance.

The second part of my invention consists of an adjustable fastening device, whereby the machine may be attached to any size of tub with equal facility.

My machine is illustrated in the accompanying drawings as follows: Figure 1 is a side-elevation view of the same. Fig. 2 is a plan view of under side of the base-board. Fig. 3 is a section of the machine on the line *x x* in Fig. 1. Fig. 4 is an elevation view of the inside of one of the end pieces. Fig. 5 is a plan view of the foot of the same; and Fig. 6 is a transverse-section view of the same through the line *y y*, Fig. 4. Fig. 7 is a view of the bracket-irons, which are screwed to the tub.

My machine is constructed substantially as follows: The frame consists of the parts *C C*, which are the end pieces, and *D*, which is the base-board, and *P*, the top tie-piece, which forms the handle. The parts *C C* and *D* are of cast-iron, and are attached together by bolts *f f f f*, which pass through the slot *d d* in the foot of the side pieces, and through the base-board *D*. Through the side of the side pieces *C C* are slots, with a circular flange, *R*, forming a recess, in which are the adjustable journal-bearing *S*, guide-rod *E*, compressing-spring *F*, and through the slot passes the axle *A'* of the large action-roller *A*. These parts can be seen in Figs. 1, 3, 4, 5, and 6. The base-board *D* has a flange along each side, *N*, which reaches up by the side of the small rollers *B B*. Of the rollers which are hung within the frame, *A* is a large corrugated roller, its corrugations being longitudinal. By means of

the devices above spoken of—to wit, the parts *S*, *F*, and *E*—this roller is adjustable automatically. The small rollers *B B* are journaled in the side pieces *C*. They are of wood also, with annular rings *b b b b*, &c., placed at a distance from each other equal to the width of the rings, leaving spaces *c c*, so that the rings of one roller match in the spaces of the other. The object in having the rings thus arranged is to present an uneven surface to the clothes, and also so as to prevent the clothes from passing between the rollers. The rings are of india rubber or other fit elastic substance. The number of rollers may be increased; but I prefer the number shown. The flange *N* above mentioned prevents the clothes from lodging on the base-board. This, it will be seen, is notched, so as to fit the rings and spaces on the rollers. The base-board, it will be observed in Fig. 2, is provided with two points, *G G*, at one end, and with a screw-bolt, *L*, or rod, at the other end, which is brought to a point, *H*. The screw-bolt *L* has a nut, *M*, set in a slot in the base-board *D*, and is operated by a thumb-screw, *K*. Fig. 7 shows two castings or bracket-irons, *I* and *J*, which are screwed to the opposite sides of a tub on the inside of the same. One of these, *I*, is provided with two countersunk holes, *G' G'*, and the other, *J*, is provided with one such hole, *H'*.

To attach the machine to the tub the two points *G G* on the base-board are placed in the holes *G' G'* in the iron *I*, and the thumb-screw *K* is turned until the point *H* is thoroughly set in the hole *H'*. This thoroughly secures the machine to the tub; and the device permits the machine to fit any size of tub.

By the use of the annular rings of rubber or some similar elastic substance I am enabled to make a machine which will wash the clothes more thoroughly, for more pressure is secured; and there is less wear on the clothes, for the pressure is more yielding; and there is less danger of destroying buttons and the like.

What I claim as my invention is—

1. The rollers *B B*, of wood, with circumferential grooves, into which are placed projecting elastic rings *b b*, forming alternate elastic projections and wooden grooves, the elastic rings of one roller lying in the wooden grooves

of the other roller, in combination with the corrugated roller A, all substantially as set forth.

2. The metallic bed-piece D with notched flanges N N, as and for the purposes set forth.

3. The combination of the bed-piece D with points G G, the screw-bolt L with point H, nut M, and thumb-screw K, and the castings I J with countersunk holes, all substantially as and for the purposes set forth.

4. The within-described washing-machine, consisting of the metallic frame D C C, the corrugated roller A, springs F F, and the rollers B B with elastic rings *b b*, all the parts constructed, arranged, and operating substantially as herein set forth.

GEORGE S. WALKER.

Witnesses:

JNO. K. HALLOCK,
DANL. H. KLINE.