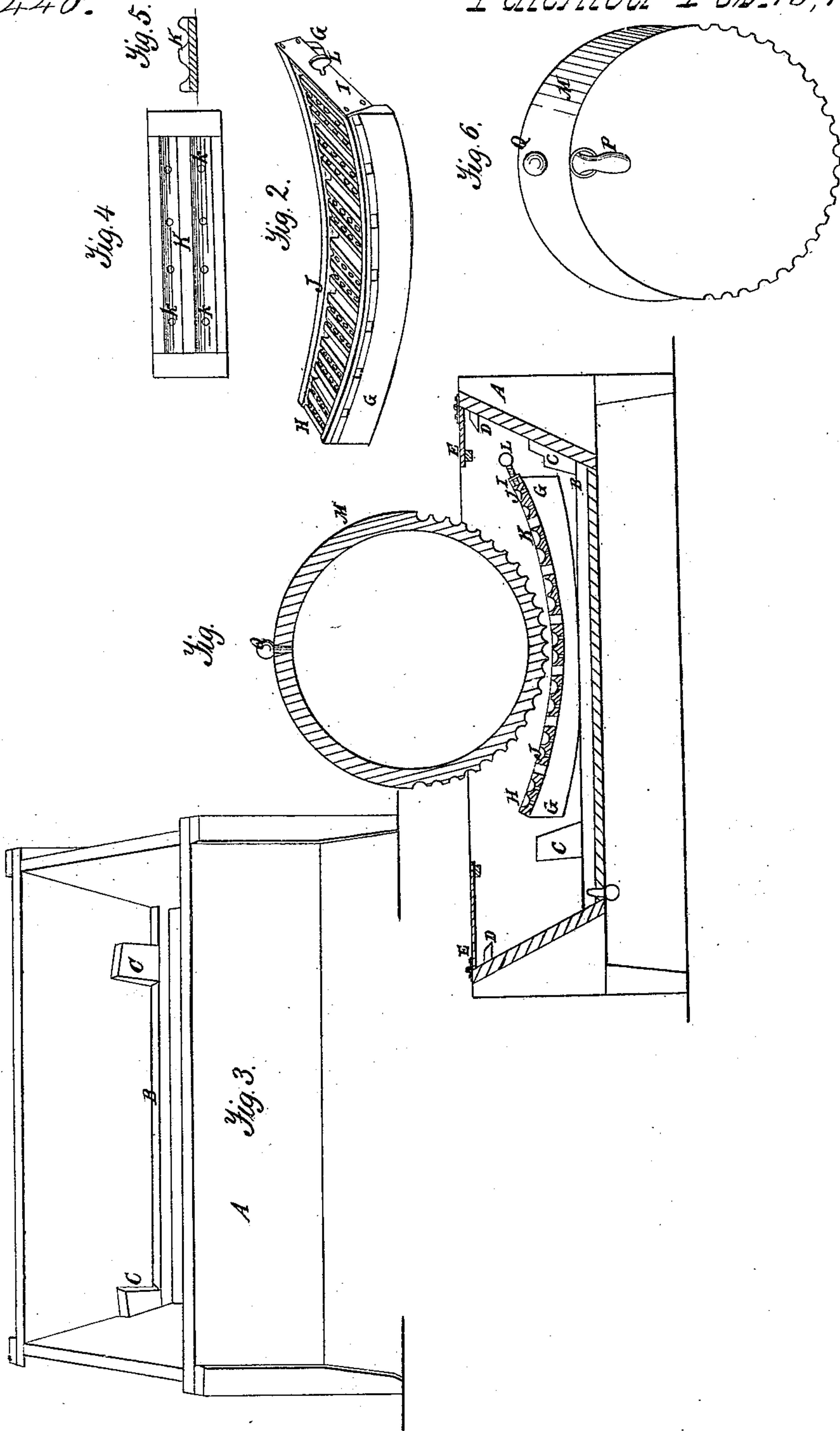


G. E. Roberts,

Washing Machine,

Patented Feb. 15, 1848.

N^o 5,448.



UNITED STATES PATENT OFFICE.

GEO. E. ROBERTS, OF BERKELEY SPRINGS, VIRGINIA.

MARKING-MACHINE.

Specification of Letters Patent No. 5,448, dated February 15, 1848.

To all whom it may concern:

Be it known that I, GEORGE E. ROBERTS, of Berkeley Springs, in the county of Morgan and State of Virginia, have made an

Improvement in Machines for Washing Clothes, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a vertical longitudinal section through the center of the machine. Fig. 2, is a perspective view of the movable fluted bars. Fig. 3, is a perspective view of the tube. Fig. 4, is a top view of the fluted bars detached from the rockers. Fig. 5, is a section of ditto. Fig. 6, is a perspective view of one of the fluted pressers.

Similar letters in the several figures refer to corresponding parts.

The nature of my improvement consists in combining with a common rectangular wash tub and fluted roller a rocking concave of movable perforated and fluted parallel bars sliding in grooves in the rockers between which the clothes are held in such manner that the portions of the clothes which require to be washed are brought between the fluted bars and the pressing roller, while the portions of the clothes that merely require a rinsing operation are suspended below the bars immersed in the water being agitated therein without any rubbing—at the same time that the fluted rocking bars and fluted rolling presser are performing their operation of extracting the dirt from the soiled portions, the hot water and soap being forced to rise through the perforations in the bars and to act on the clothes—the bars being held by a screw that passes through a fixed bar at one end of the concave that bears against the movable bar next to it, all the bars being movable and acted on by said screw except the one at the opposite end of the rockers from that at which the screw is placed.

The wash tub is made in the usual manner, of any required size provided with horizontal ways or ribs B, nailed to the inner sides, on which the rockers move, and stop C, to keep the rockers in place on the ways, and ledges D and lids E at the ends to confine the splashing water from escaping, and a plug F to draw off the dirty water.

G are the rockers for holding and confining the fluted and perforated bars. These

rockers are held together by the fixed bar H at one end and the immovable bar I at the other end, through which the screw L passes, said bars being nailed or otherwise secured to the rockers—other connecting ties being added if necessary. The segment grooves for the fluted bars to move in are formed by securing segment ribs J J the length of the rockers upon the upper surfaces of the aforesaid permanent cross bars H and I and upon blocks placed between their ends and securing them fast to the rockers.

The movable fluted bars K for holding the clothes are composed of rectangular boards concave and fluted on the upper side and convex on the under side and perforated with holes for allowing the water to pass through them having their ends rabbeted and placed in the aforesaid segment grooves, and their edges a few inches apart, or sufficiently asunder to admit the clothes between them.

When the clothes are to be adjusted and confined the screw L must be withdrawn and the clothes placed between the bars with the comparatively clean portions hanging below the bars and the soiled or dirty portions lying on the upper or fluted sides of the bars; the screw is then turned which crowds the bars toward the fixed bar H at the same time compressing the clothes between them which are thus held securely. The fluted roller M which is made hollow, for containing additional weight, if necessary, is then brought over upon the clothes and rolled back and forth over them by handles P inserted into their ends causing the ends of the concave to rise and fall alternately and the hot water and soap contained in the tub to pass to and fro through the apertures in the bars and through the clothes by which they are cleansed. The lid is then raised and the fluted roller rolled back against the ledge D—the screw L turned—the bars K loosened—and the clothes removed.

The roller need be fluted only on its lower segment. It should be bored and fitted with a plug Q for admitting and withdrawing the fluid which is to serve as the weight. When the fluid is to be withdrawn, its position of course must be reversed.

The operation of the machine is described as follows: The hot water and soap being placed in the box A, and the clothes being secured between the movable fluted bars k,

of the rockers G by the screw L, the rockers are placed upon the ways B. The fluted roller M is then placed upon the clothes and water poured into it until a sufficient weight is obtained. The plug Q is then inserted. Then with the handle P, the roller is moved back and forth over the clothes confined by the rocking concave of fluted perforated slats, the ribs on the surface of the roller squeezing or pressing the clothes against the ribs or projections of the concave while the weight of the roller being at one end of the rocker depresses this end and throws the opposite end upward carrying with it the clothes which are lifted above the water and into the air and then, when the roller is moved to the opposite end of the concave rocker, this end is in its turn depressed, while the other end is elevated in the same manner with the clothes thereon, which are dashed violently into the water as the end of the rocker descends by the change of position of the roller thus causing the clothes to be alternately lifted from, and dashed into, the water at the same time they are caused to receive a rinsing, squeezing, and rubbing operation in a manner that will effectually cleanse them without injuring them, and by the application of very little

power, and by means very simple, and easily provided and kept in order at a very trifling cost. The water and dirt are then drawn off by removing the plug F. The plug F is then replaced, and the plug Q withdrawn and the roller turned, and the water emptied into the tub. The roller is then removed and the clothes rinsed in the clean water in the tub either by means of the rocker or in the usual manner after detaching them from the slats and removing the rocker.

I do not claim as my invention a tub, a concave or a roller for washing clothes; but

What I do claim as my invention and desire to secure by Letters Patent is—

The employment of the rocking concave of fluted perforated slats made in the manner above described and moving upon horizontal parallel fixed ways, arranged in the bottom of the wash tub, in combination with a hollow weighted fluted roller charged with water and placed upon the clothes in the rocking concave, the whole being arranged and operated in the manner and for the purpose herein set forth.

G. E. ROBERTS.

Witnesses:

WM. T. ELLIOTT,
ALBERT E. H. JOHNSON.