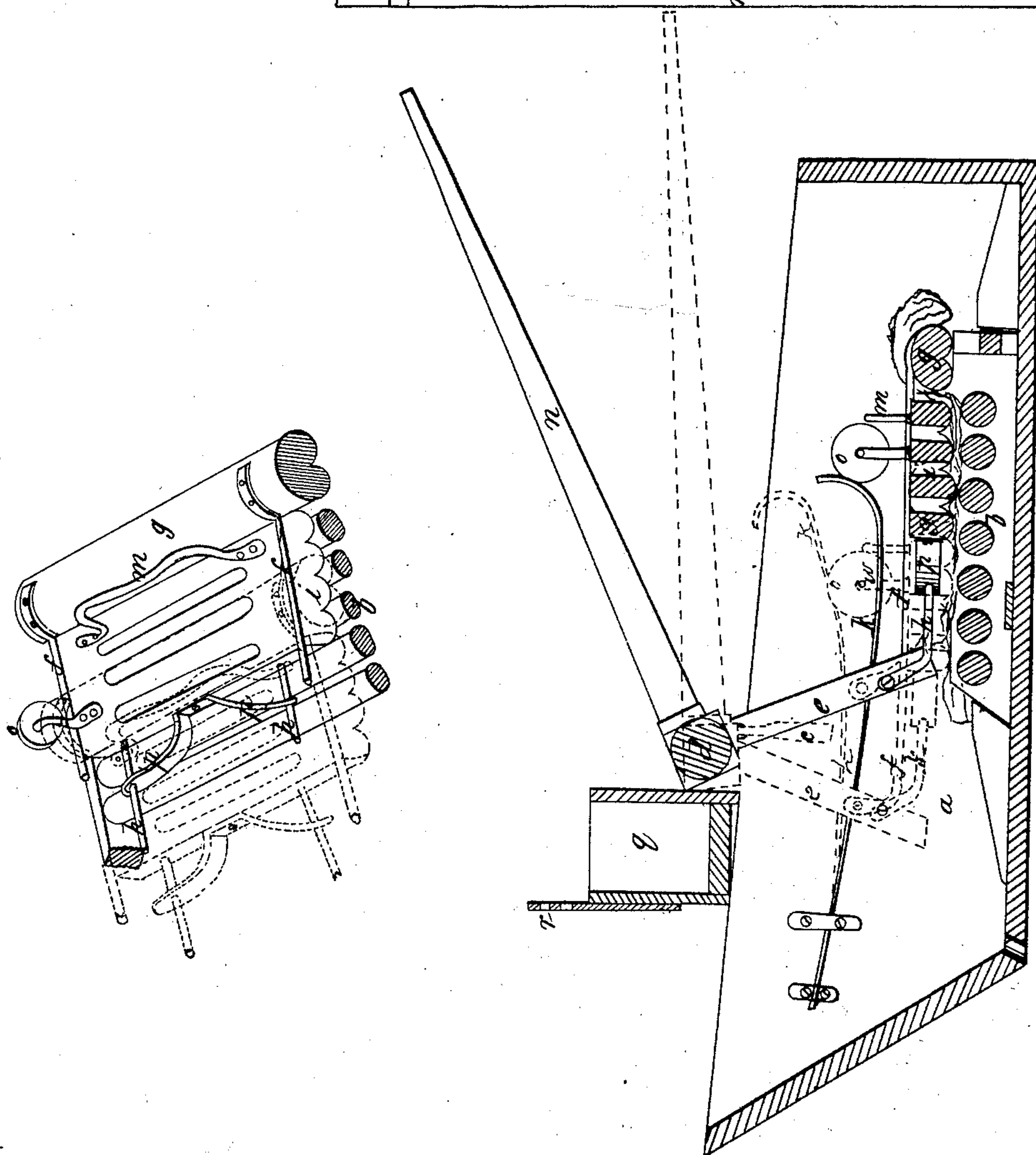


W. Biddle,
Washing Machine,

Patented Aug. 29, 1854.



UNITED STATES PATENT OFFICE.

WILLIAM BIDDLE, OF LA FAYETTE, INDIANA.

WASHING-MACHINE.

Specification of Letters Patent No. 11,594, dated August 29, 1854.

To all whom it may concern:

Be it known that I, WILLIAM BIDDLE, of La Fayette, in the county of Tippecanoe and State of Indiana, have invented a new and
5 useful Apparatus for Washing Clothes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, which illustrates the description.

10 My improvement consists in the mode of grasping and holding the clothes while rubbing out the dirt, which is an imitation, to some extent of the hand process, but much more perfect, causing the water to be made
15 to flow into and out of the dirty clothes, carrying the impurities along with it, with the least amount of injury to the articles.

The construction is as follows: I employ an oblong box, or reservoir (*a*), into which
20 the apparatus for washing is fitted, and the water is put; upon the bottom of this box (*a*) I attach a frame of rollers (*b*), the rollers having a free motion. Toward one end of the box I erect two standards (*c*), one on
25 each side, firmly affixed to the sides of the box. These standards (*c*) support a horizontal axis (*d*) from which two arms (*e*) project downward nearly to a level with the roller frame (*b*); to the lower ends of the
30 arms (*e*) on their outer side, are jointed two rods (*f*) that extend forward over the roller frame, and are connected by a narrow bar (*g*), ribbed on the under side like a portion of a washboard; two other rods (*h*) are
35 jointed to the arms (*e*), somewhat nearer the axis than the rods (*f*), and on the inside; these rods (*h*) bear upon their ends a washboard (*i*), ribbed on its under face in a very
40 common way, but having several openings through it, as shown in the top plan of the drawing; this board (*i*) has a small range of motion upon the rods (*h*), but is kept out to their ends by a spring (*k*), or springs on
45 said rods. This washboard, when down, shuts just within the bar (*g*) and in consequence of the position of the points of attachment of the two rods (*f* and *h*) as the
50 arms (*e*) are swung back, the forward end of the washboard is made to pinch against the bar (*g*); on the upper side of the washboard (*i*) there is a handle (*m*) by which it is raised up; while thus raised the clothes, first being soaped, are laid in upon the roll-

ers, with their front ends, just up over the bar (*g*); the washboard (*i*) is then brought
55 down upon them, and as the arms (*e*) are swung back the clothes are pinched and held between the washboard and bar (*g*), and while in that position, by giving to the arms (*e*) a short vibratory motion, the dirt is
60 rubbed out of the clothes. This motion is effected by means of two long handles (*n*) projecting forward horizontally from the axis (*d*). It will be obvious from the above, that when there are many clothes put be-
65 tween the bar (*g*) and washboard or the arms (*e*) carry it far back, the spring (*k*) will yield, keeping up the pressure only sufficient to properly grip the clothes. The washboard bears upon either side rollers
70 (*o, o,*) that project out to near the sides of the box. Two springs (*p, p,*) made of a straight piece of steel, wood, or other proper material, and turned up at their front ends, are affixed to the sides of the box at the near
75 end and project forward horizontally; under these springs the rollers (*o, o,*) work, which thus produces a proper downward pressure regulated by the strength of the spring and its position to properly cleanse the clothes. 80

To wring the clothes after washing, I attach an oblong box (*q*) above the reservoir (*a*) which box (*q*) is full of holes; into this
85 a follower is fitted, and on one side is a standard (*r*) with holes in it, which the end of a long lever is put into, to form a fulcrum; this lever passes over the follower, and thus forces it down, pressing the water from the clothes, as it is a common device it is not shown in the drawing. 90

I claim—

The combination of the vibrating bar (*g*) and vibrating washboard (*i*) with the lever (*e*) in the manner and for the purposes described, the vibrating wash board having its
95 jointed attachment nearer to the center of motion of lever (*e*) than the bar (*g*) so that in the motion of the lever back and forth the clothes shall be gripped and released between (*i*) and (*g*) in the manner 100 and for the purposes set forth.

WILLIAM BIDDLE.

Witnesses:

WM. GREENOUGH,
THOS. J. WILLIAMS.