

(No Model.)

L. D. SWAIM.
WASHING MACHINE.

No. 505,613.

Patented Sept. 26, 1893.

Fig. 1

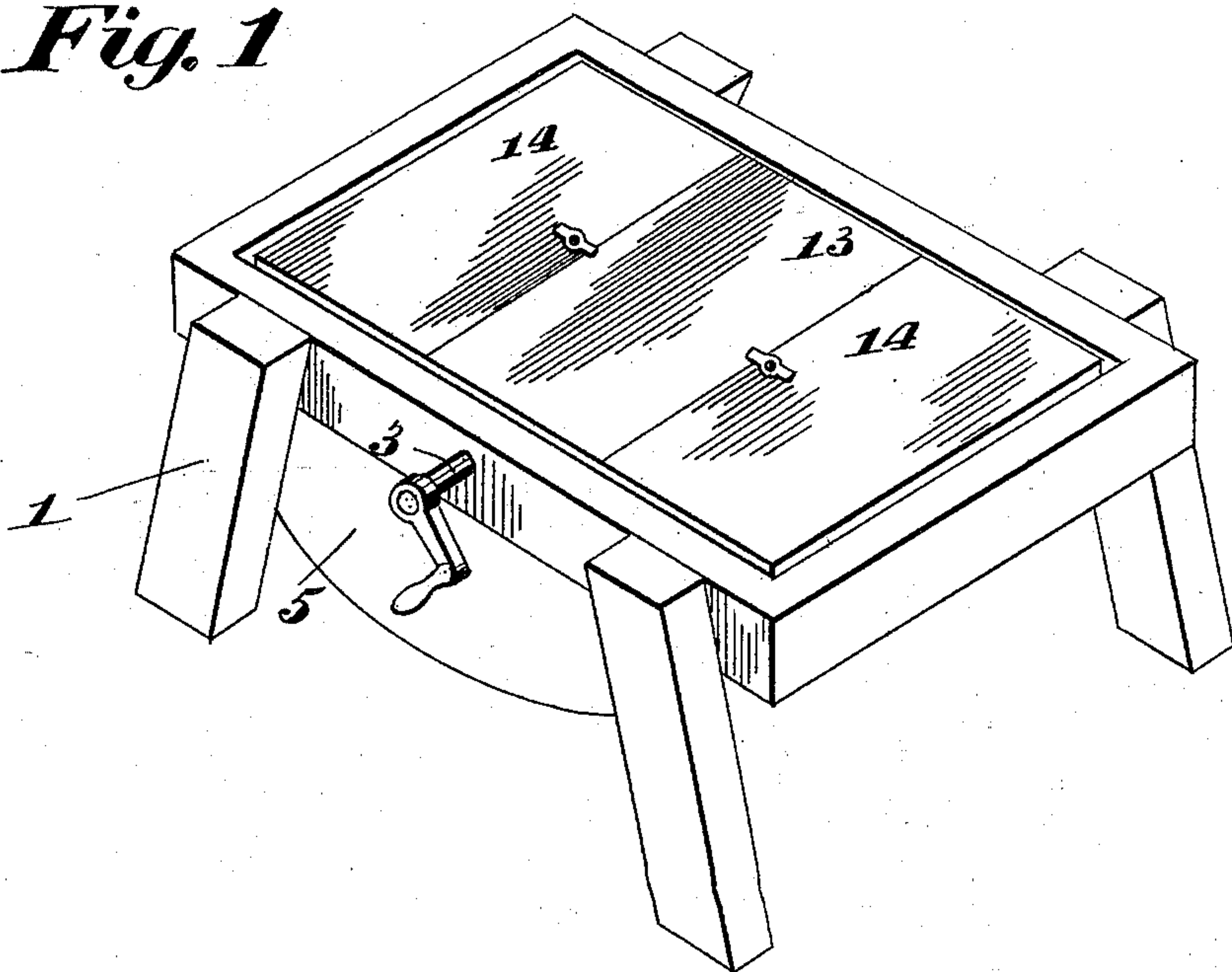


Fig. 2

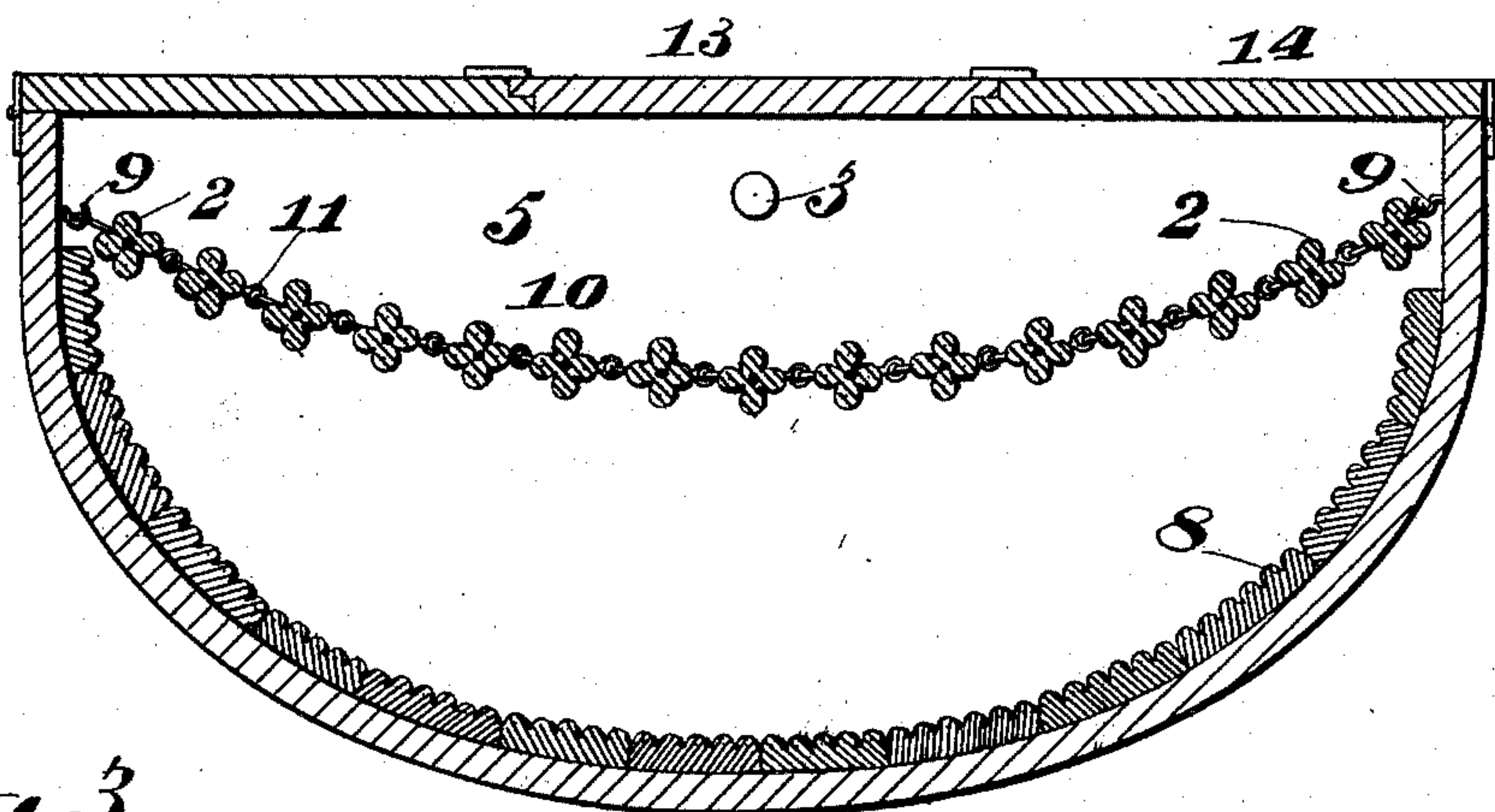


Fig. 3

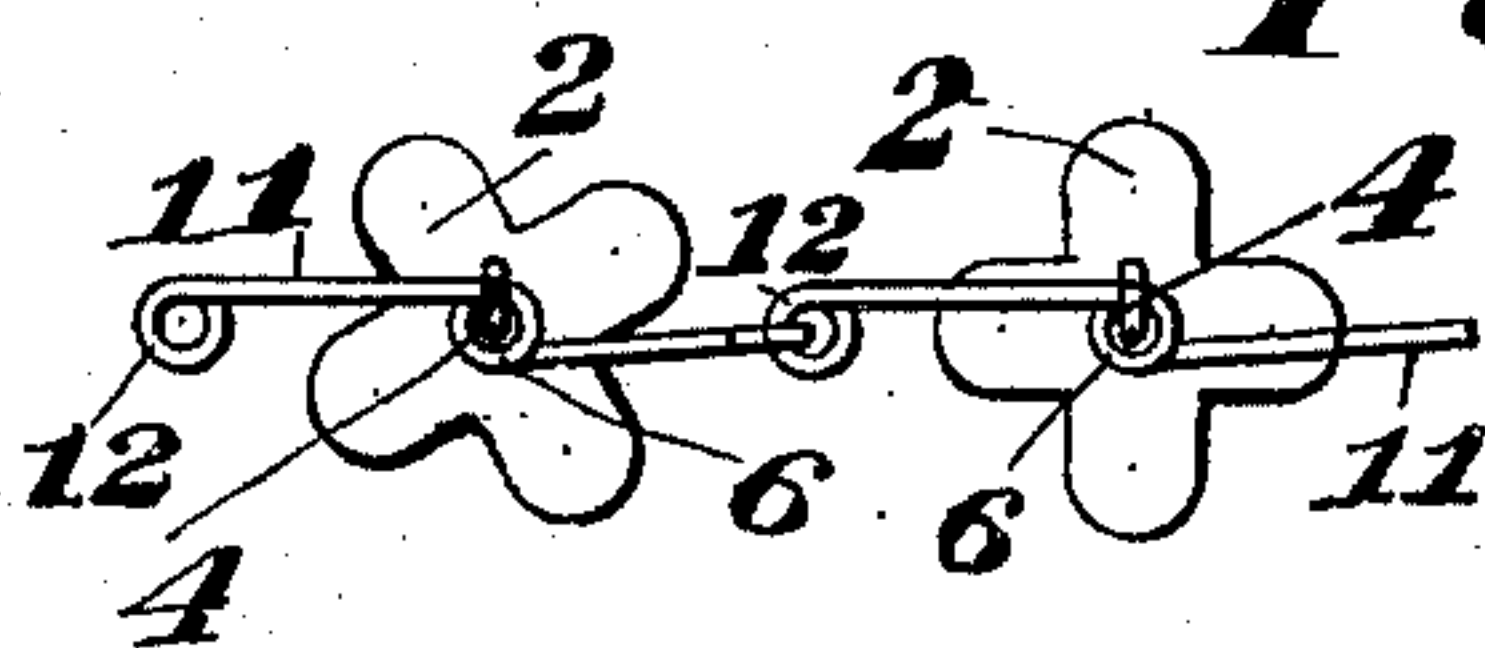
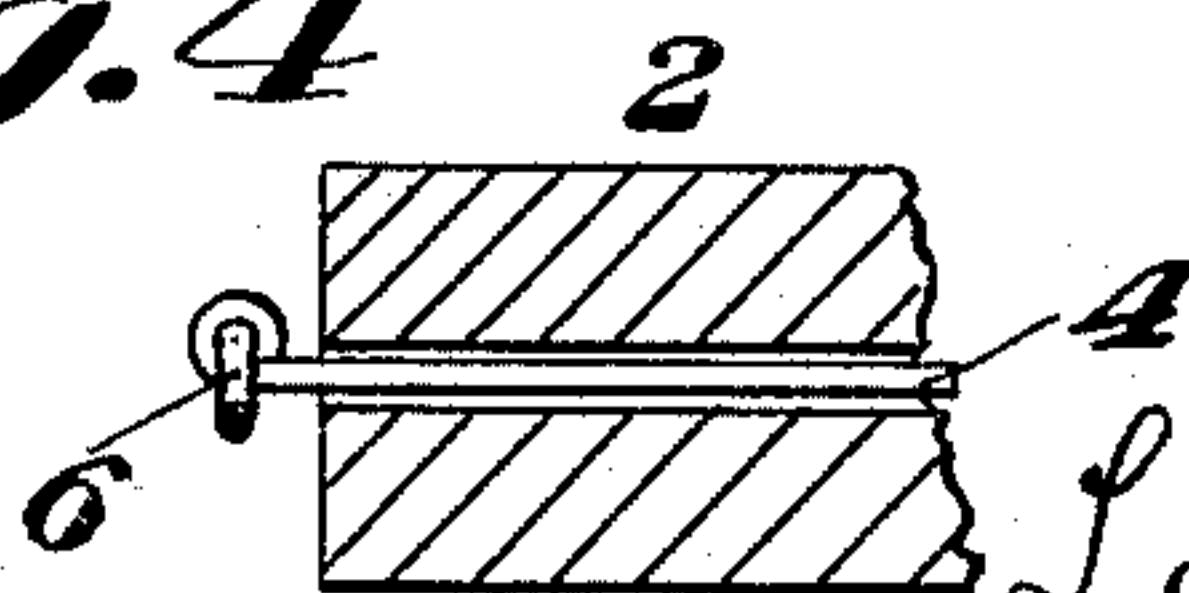


Fig. 4



WITNESSES:

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LEANDER DOVER SWAIM, OF FOXVILLE, ILLINOIS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 505,613, dated September 26, 1893.

Application filed July 3, 1893. Serial No. 479,443. (No model.)

To all whom it may concern:

Be it known that I, LEANDER DOVER SWAIM, a citizen of the United States, residing at Foxville, in the county of Marion, State of Illinois, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain improvements in washing machines and has for its object to provide a device of this character of a simple, inexpensive and durable construction which shall possess certain advantages of facility and efficiency of operation, all as will be hereinafter set forth. The novel features of my invention will be carefully defined in the claims.

In the accompanying drawings which serve to illustrate my invention—Figure 1 is a perspective view of my improved machine. Fig. 2 is an enlarged longitudinal section of the tub. Fig. 3 is an enlarged end view of one of the cross-rods. Fig. 4 is an enlarged detail view of one of the cross-rods, showing a central longitudinal section of the same.

In the drawings 1, represents a suitable frame provided at its sides with bearings in which are fixed short shafts 3, 3, which are fixed in the sides of the tub 5, which is provided with a removable cover 13. The tub moreover is provided on its bottom with a concave rubbing surface 8, and is adapted to receive water and the soiled clothes. In the ends of the tub are fixed hooks 9, on which are supported a floating rubber 10, composed of a series of narrow wooden cross bars or rods 2, each having a star shape as clearly seen in Figs. 2 and 3. These rods 2 have each an axial bore or opening extending through them in which is loosely arranged a rod, 4, of stout wire or the like having eyes at its opposite ends, which eyes engage eyes 6, formed midway of the length of the links 11, which are also composed of stout wire by preference, and are each provided at opposite ends with eyes 12, 12, whereby they are connected together to form a flexible chain, as clearly seen in Fig. 2.

In operation, the rubber 10 is first removed from the hooks 9, on the inside of the tub,

which is rendered possible by making the cover in three sections, a removable central section 13, provided with suitable fastenings and hinged end section 14, 14, as seen. The clothes and a proper quantity of water are then placed in the tub, and the floating rubber 10, is again secured to the hooks 9, after which, the cover is replaced and the crank turned back and forth so as to rock the tub in a well known manner, whereby the rods 2 are caused to turn on their wires or shafts 4, giving the necessary rubbing action.

It is obvious that my invention is susceptible of considerable alteration and I do not wish to be understood as limiting myself to the precise construction and arrangement herein shown. For instance, the rods 2 may be of other forms than the star shaped form herein shown, as semicircular for example.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with a frame, of a tub, journaled therein and provided with a cover and an internal rubbing surface, a rubber 10 consisting of a series of narrow rotatable rods, flexibly connected together, said rubber being secured at its ends to the opposite ends of the tub, substantially as described and for the purpose set forth.

2. The combination with a frame, of a tub journaled therein and provided with a cover and an internal rubbing surface, said tub being further provided with hooks 9 at its opposite ends, a rubber 10 composed of a series of wooden rods of star shaped cross section each having a central bore, wire rods 4, arranged in the bores of said wooden rods, and links, each provided with a central eye loosely coupled to one end of one of the said wire rods 4, said links having end loops coupled to one another, said rubber being connected at its opposite ends to the said hooks 9, in the tub, substantially as described and for the purpose set forth.

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

LEANDER DOVER SWAIM.

Witnesses:

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W. R. WOODWARD.