

W. M. KINCAID.
WASHING MACHINE.
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947,916.

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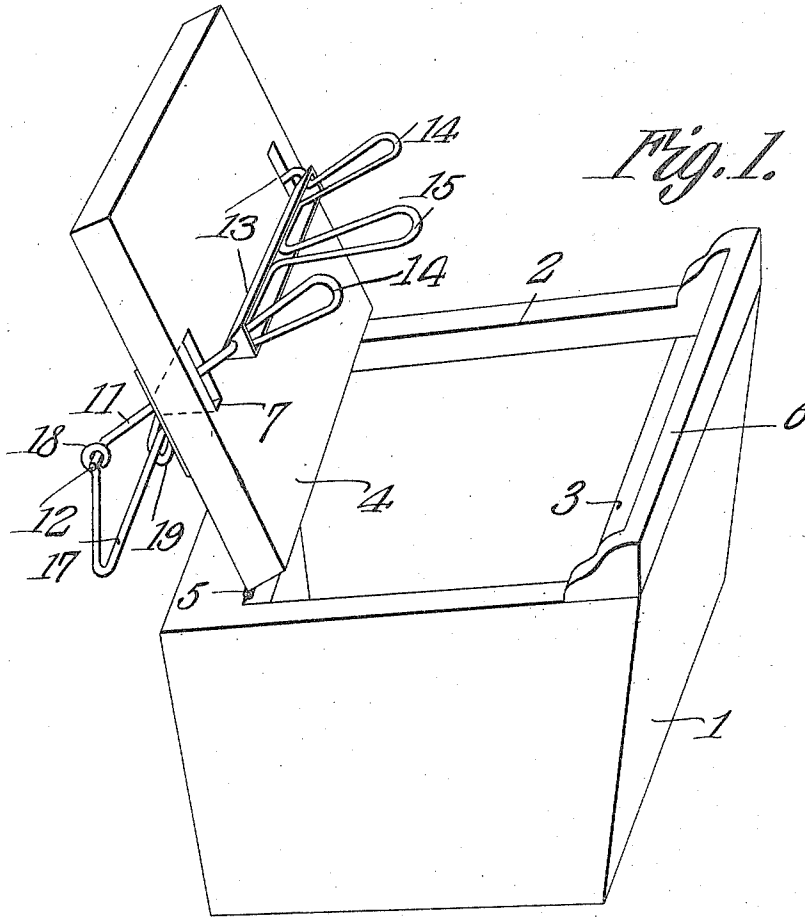
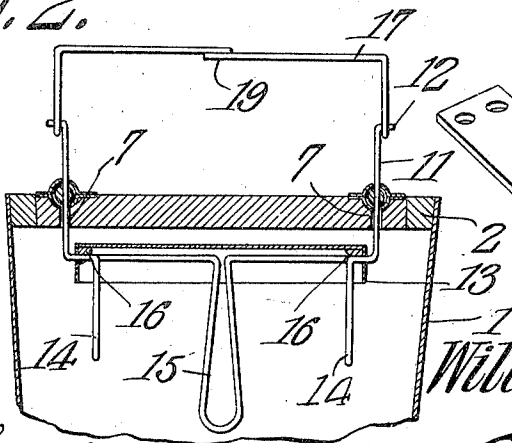


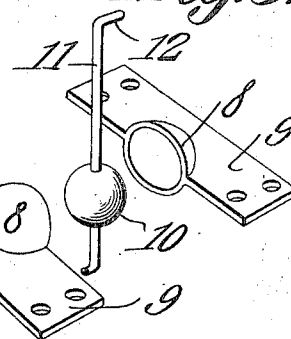
Fig. 2.



Witnesses

Herbert D. Lawson

Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIS M. KINCAID, OF HIAWATHA, KANSAS.

WASHING-MACHINE.

947,916.

Specification of Letters Patent.

Patented Feb. 1, 1910.

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To all whom it may concern:

Be it known that I, WILLIS M. KINCAID, a citizen of the United States, residing at Hiawatha, in the county of Brown and State of Kansas, have invented a new and useful Washing-Machine, of which the following is a specification.

This invention relates to washing machines, its object being to provide an inexpensive, durable and compact device of this character having a pounder or agitator of novel form mounted therein, said agitator being easy to manipulate and so constructed as to reduce wear upon the fabrics to the minimum.

With these and other objects in view the invention consists in certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a perspective view of the washing machine, with the top thereof raised. Fig. 2 is a transverse section through the machine, with the top in closed position. Fig. 3 is a detail view of one of the ball and socket joints.

Referring to the figures by characters of reference 1 designates the body or tub of the machine, the same being preferably rectangular in plan, but with its walls inclined outwardly, said walls being reinforced at their upper edges by an interior frame 2 of wood or the like, there being a ledge 3 extending inwardly from one side of the frame and constituting a support for a closure 4 which is hingedly connected to the frame as indicated at 5.

A strip 6 extends upwardly from the frame and the ledge 3, said strip being spaced from the closure 4 and being of sufficient size to permit a clothes-wringer to be readily fastened thereto. By having the strip spaced from the closure 4 it is possible for the water which is separated from the clothes passing through the wringer to flow downwardly between the strip 6 and the closure and thence into the body 1.

Formed within the cover 4 at the center of each side portion thereof is an opening 7 gradually increasing in length toward the inner end thereof and secured to the outer face of the closure at opposite sides of each

opening are socket members 8 each of which is provided with a base-plate 9 designed to be secured to the closure in any suitable manner. The two socket members at each side of the closure cooperate to engage and retain a ball 10 formed on or secured to an arm 11 which projects through the opening 7 and is designed to oscillate therein. The upper or outer end of the arm has a lateral extension 12, while the inner portion of said arm projects through one end of an inverted V-shaped or trough-like head 13, preferably formed of sheet metal and extending transversely below the cover or closure 4. The arms 11, which are preferably formed of a steel rod or stiff wire, merge into elongated loops 14 arranged in parallel planes, and between which is located a third elongated loop 15 disposed in a plane extending through the centers of the loops 14. Those portions of the rod or wire between the loops are seated within the head 13 and the inner portions of the arms 11 are preferably secured within the head by means of solder such as indicated at 16, or in any other preferred manner.

A yoke 17 is provided for transmitting motion simultaneously to the two arms 11, this yoke being also preferably formed of a stiff wire or rod, there being eyes 18 at the ends of the yoke and which pivotally engage the extensions 12, while another eye 19 is formed at the center of the yoke and constitutes either a grip, or a means for connecting an operating device thereto.

In using the herein described machine the fabrics to be washed are placed within the tub or body 1 with a suitable supply of soap and water and the closure 4 is then lowered to the ledge 3. By reciprocating the yoke 17 the arms 11 are caused to oscillate, the balls 10 and socket members 8 constituting the pivots thereof, and, therefore, the head 13 and the loops 14 and 15 will swing back and forth within the body and thoroughly agitate the fabrics, forcing them back and forth within the tub and thus causing the soapy water to circulate through them.

In view of the peculiar shape of the agitating members 14 and 15 it will be seen that wear and tear upon the fabrics will be reduced to the minimum, and the particular means for mounting the oscillating arms 11 results in an easy-running machine.

It is of course to be understood that various changes may be made in the construction and arrangement of the parts without departing from the spirit or sacrificing the advantages of the invention.

What is claimed is:—

1. A washing machine comprising a receptacle, a cover mounted thereon and having opposed parallel slots therein, plates secured upon the cover and at opposite sides of each slot, each plate including a socket member, said socket members of the adjoining plates being oppositely disposed, an arm extending through each of the slots, a spherical bearing member upon each arm and movably mounted within the opposed sockets, a loop at one end of each arm, said loops being parallel, an intermediate loop formed in one piece with the first mentioned loops and at right angles thereto, a head secured

to the arms and extending over the loops, and means for actuating the arms.

2. A washing machine including a receptacle, a cover mounted thereon, said cover having parallel slots, arms mounted for oscillation within the slots, parallel loops extending from one end of the arms, an intermediate loop formed in one piece with the first mentioned loops and disposed at right angles thereto, a trough like head mounted on and secured to the loops and the arms, and means for actuating the arms to oscillate the head and loops.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIS M. KINCAID.

Witnesses:

J. E. McKINNEY,

H. F. CAVIS.