H. D. PAYNE, A. W. DE CLERQUE AND S. T. SJOBERG.

WASHING MACHINE WITH FOLDING WRINGER.

APPLICATION FILED SEPT. 7, 1920.

1,375,170. **Patented Apr. 19, 1921.**

Fig. 1.

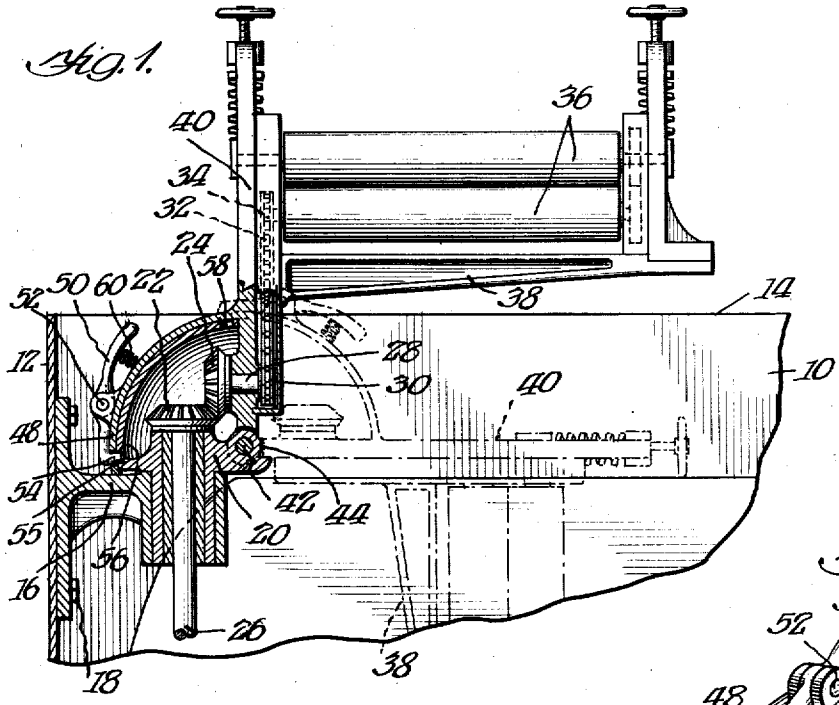


Fig. 4.

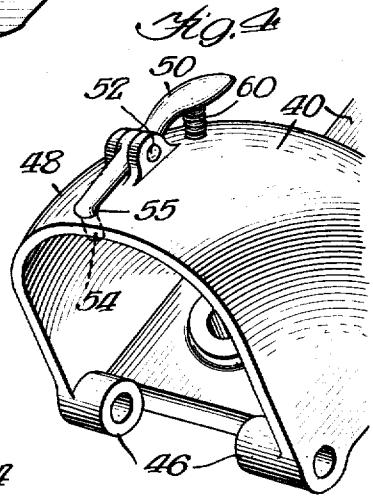


Fig. 3.

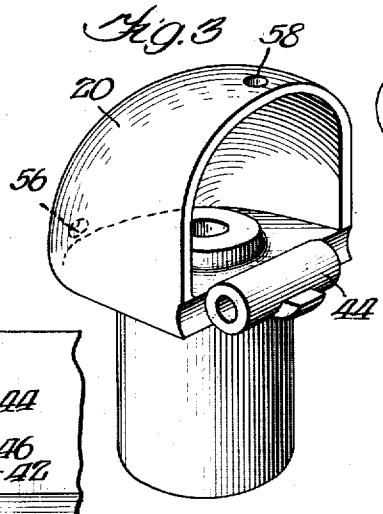
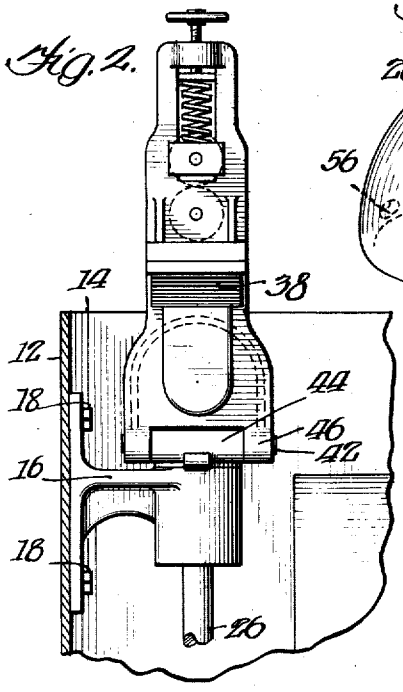


Fig. 2.



Inventors:
Halsey D. Payne,
Alvin W. DeClerque,
Sidney T. Sjoberg,

By Cheever Cox
Attys.

UNITED STATES PATENT OFFICE.

HALSEY D. PAYNE, ALVIN W. DE CLERQUE, AND SIDNEY T. SJOBERG, OF CHICAGO, ILLINOIS, ASSIGNORS TO CADILLAC WASHING MACHINE CO., OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

WASHING-MACHINE WITH FOLDING WRINGER.

1,375,170. Specification of Letters Patent. Patented Apr. 19, 1921.

Application filed September 7, 1920. Serial No. 408,705.

To all whom it may concern:

Be it known that we, HALSEY D. PAYNE, ALVIN W. DE CLERQUE, and SIDNEY T. SJOBERG, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Washing-Machines with Folding Wringers, of which the following is a specification.

This invention relates to laundry machinery of the type commonly used in homes. The object of the invention is to so equip the cabinet of a power driven washing machine with a wringer for use in wringing the clothes delivered from the tub that the wringer may be tilted between its normal working position standing up above the plane of the upper edge of the cabinet to a position where it is below such plane, and therefore capable of being concealed by any sort of cover which may be placed across the top of the cabinet.

It is well known that it is necessary to cover up wringers and other washing machinery between periods of use, in order to keep such devices from getting dirty and deteriorating by mere contact with ordinary air.

The invention consists in means for carrying out the foregoing and other objects which can be easily and comparatively cheaply made, which is satisfactory in use and is not readily liable to get out of order. It also consists in other details and features of construction hereafter more fully set forth in the specification and claims.

Referring to the drawings in which similar numerals represent the same parts throughout the several views,

Figure 1 is a side elevation of mechanism illustrating this invention in its preferred form.

Fig. 2 is an end view taken from the right hand side of Fig. 1.

Figs. 3 and 4 are respective detail views of parts constituting the pivot joint on which the wringer is mounted so it can swing downward from elevated position and vice versa.

Fig. 1 shows in conventional form the upper portions of side walls 10—12 of a washing cabinet in connection with which the mechanism of this invention is used, it being desired to cover the upper edge 14 of said cabinet.

Mounted in a bracket 16 attached to the cabinet by any suitable means, as for instance screws 18, is a hollow, semispherical case 20 containing intermeshing bevel gears 22 and 24. The bevel gear 22 is power driven through the agency of a vertical shaft 26 connected at its lower ends to the washing machine mechanism proper, forming no part of this invention, and therefore not shown. Gear 24 drives horizontal shaft 28, which carries sprocket gear 30, over which passes sprocket chains 32, to drive sprocket gear 34, on the lower roller 36 of a wringer carried by bracket 38. The wringer mechanism is supported on an upright support 40 through which shaft 28 passes, and in which it is journaled. The lower end of support 40 is pivotally connected to case member 20, on a hinge pin 42 passing through hinge bearing 44 in the case 20 and hinge bearing 46 on support 40.

The lower end of wringer support 40 also carries a semi-spherical case 48 which incloses semi-spherical case 20, heretofore described, the two cases 20 and 48 being so shaped and arranged that, in the absence of catch mechanism to be hereafter described, the wringer and attached parts freely rotate about shaft 42 from the full line position of Fig. 1, in which the wringer is above the cabinet edge 14 to the dotted line position of Fig. 1 where it is entirely below the edge 14 and out of the way so that the cabinet may be covered. It will be noted that in this form of device the bevel gears 22 and 24 are separated whenever the wringer is moved from the full line position of Fig. 1, toward the dotted line position. It will also be noted that the wringer swings in the plane of its body, *i. e.*, the plane of its rolls and consequently can move much deeper into the cabinet than is possible where the wringer swings about the axis of shaft 28, as in other constructions.

Any suitable means may be provided for detachably locking the wringer mechanism in each of these extreme positions. The particular form of locking mechanism here shown comprises a catch lever 50 suitably mounted at 52 on the outside of member 48, said lever carrying a locking tooth 54 adapt-

ed to pass through perforation 55 provided for it in the member 40 into a selected one of the holes 56, 58 in the wall of the case member 20. Perforation 56 is used when the wringer is in full line position of Fig. 1, and the perforation 58 is used when the wringer is in its opposite or dotted line position of Fig. 1. This lever 50 is normally urged to one or the other of said locking positions by compression spring 60.

It will be noticed that when the wringer is depressed and the cabinet is closed up by placing a cover over its upper edge, the entire mechanism is capable of very neat appearance even though it may be kept in a room normally used for other purposes than washing, a condition which could not exist if the wringer had to stand in upright position.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

1. In mechanism of the class described, a cabinet, a wringer mechanism mounted in a frame, means pivoting the wringer frame at a point inside the cabinet and below its upper edge in such manner that the wringer may be swung in the plane of the body of the wringer from an elevated position where it extends above the top of the cabinet to a lower position where it is below the top of the cabinet, means for selectively locking the wringer in each of said positions, and means in the cabinet adapted to deliver power to the wringer when the wringer is in its elevated position.

2. In mechanism of the class described, a cabinet, a wringer mechanism mounted in a frame, means pivoting the wringer frame at a point inside the cabinet and below its upper edge in such manner that the wringer may be swung in the plane of the body of the wringer from an elevated position where it extends above the top of the cabinet to a lower position where it is below the top of the cabinet, means for selectively locking the wringer in each of said positions, means in the cabinet adapted to deliver power to the wringer when the wringer is in its elevated position, and means automatically disconnected from the wringer as it moves from its elevated to its lowered position.

3. In mechanism of the class described, a cabinet, a vertical power shaft extending upward in the cabinet toward its top, a wringer frame normally extending vertically of the cabinet parallel to said power shaft, means pivoting said wringer frame on an axis at right angles to the power shaft so that the wringer can be swung from said vertical position to a position in which the frame is horizontal and the wringer is below the upper edge of the cabinet, a wringer mechanism carried by the wringer frame, means detachably locking the wringer frame in each of said positions, and means driven by said power shaft for driving the wringer mechanism when the wringer is in its upright position.

4. In mechanism of the class described, a cabinet, a vertical power shaft extending upward in the cabinet toward its top, a wringer frame normally extending vertically of the cabinet parallel to said power shaft, means pivoting said wringer frame on an axis at right angles to the power shaft so that the wringer can be swung from said vertical position to a position in which the frame is horizontal and the wringer is below the upper edge of the cabinet, a wringer mechanism carried by the wringer frame, means detachably locking the wringer frame in each of said positions, and means driven by said power shaft for driving the wringer mechanism when the wringer is in its upright position, said power shaft and wringer being automatically disconnected as the wringer moves from its upper to its lower position.

In witness whereof we have hereunto subscribed our names.

HALSEY D. PAYNE.
ALVIN W. DE CLERQUE.
SIDNEY T. SJOBERG.