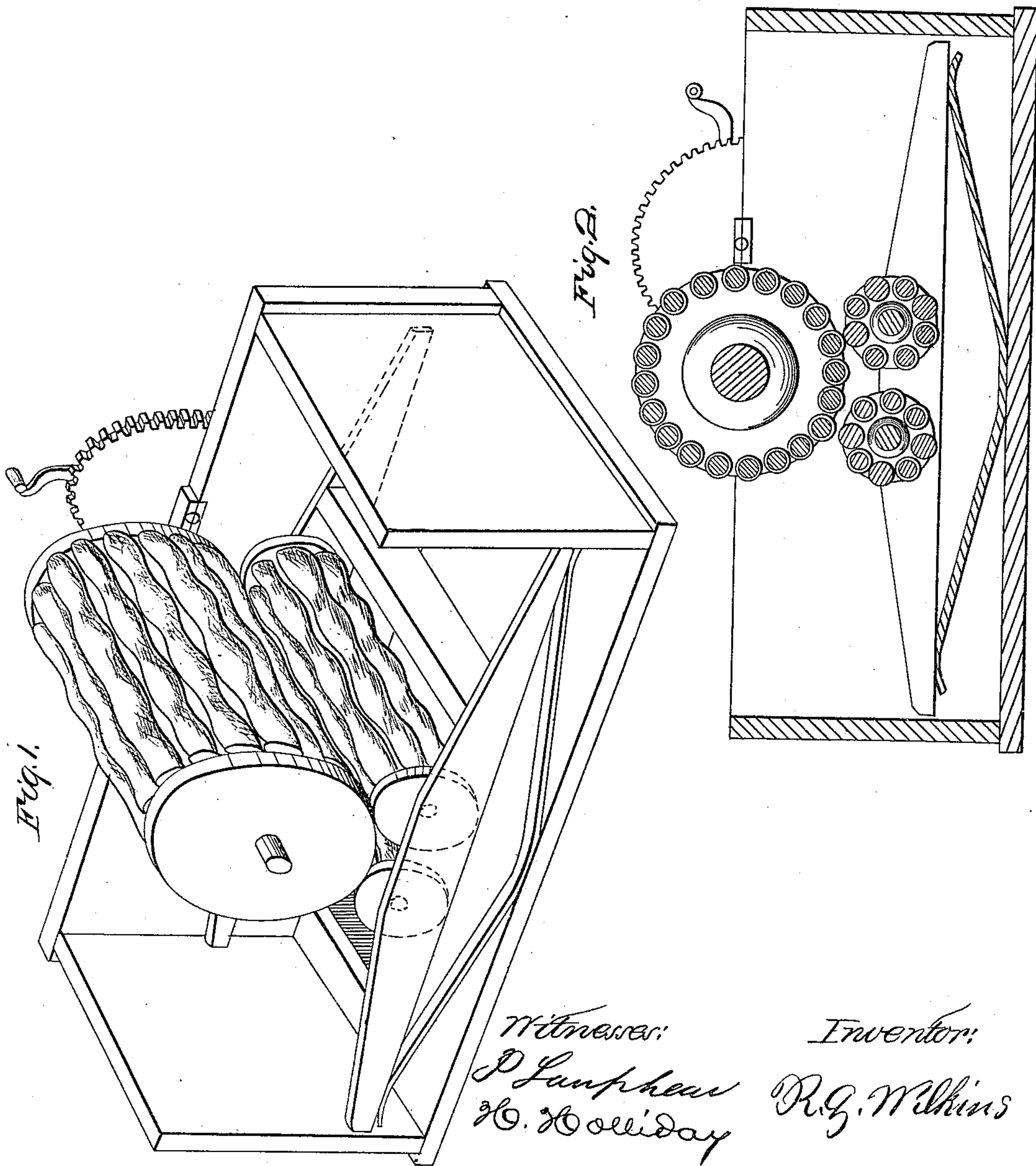


*R. G. Wilkins,*  
*Washing Machine,*  
*No. 26,217,* *Patented Nov. 22, 1859.*





# UNITED STATES PATENT OFFICE.

R. G. WILKINS, OF BURNS, NEW YORK.

## WASHING-MACHINE.

Specification of Letters Patent No. 26,217, dated November 22, 1859.

*To all whom it may concern:*

Be it known that I, R. G. WILKINS, of Burns, in the county of Allegany and State of New York, have invented certain new and useful Improvements in Washing-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a perspective view of a washing machine embracing my improvements, with one of the sides of the box removed in order to show the rubber and bed. Fig. 2, represents a longitudinal sectional elevation of the same.

My improvements in washing machines relate to that class in which a slatted rotary rubber is used in connection with a slatted yielding bed. These machines as heretofore constructed are objectionable in that the clothes are subjected to violent rubbing action by which they are rapidly worn out; and also from the liability of the clothes being caught and held by the slats, and thus strained or torn; and moreover from its being necessary that the operator should continually spread the clothes laterally, thus changing their position in order that all parts may be brought in direct contact with the rubbers.

My improvements for overcoming these defects consist in combining with an upper rotary rubber with revolving slats, a bed consisting of two or more rotary rubbers also with revolving slats, which impinge upon and derive their motion from the upper rubber. And it also consists in making the surface of the slats of the rubber, with alternate hollows and projections—the projections of the slats of the upper rubber being arranged opposite to each other, and the projections of the slats of the lower rubbers being arranged opposite the depressions in the adjacent slats; so that the projections of the slats of the upper rubber come alternately opposite the projections and depressions of the lower rubbers.

In the accompanying drawings is represented a washing machine embracing my improvements, which consists of a rectangular box (A) for holding the working parts of the machine and the clothes, and these parts consist of an upper rotary slatted rubber (B) and two lower rotary slatted rubbers (C C) arranged below and on

either side of the center of the upper rubber. The journals of the upper rubber (B) have their bearings in the sides of the box about midway from either end, and the lower rubbers (C C) are supported by longitudinal bars (a) which rest upon semi-elliptical springs (b) by which the lower rubbers are held in contact with the upper rubber and allowed to yield for the clothes to pass between them, and also so that the rotary motion given to the upper rubber, will be communicated to the lower rubbers. The slats (d and d') in both rubbers are arranged and supported between the heads which form the ends of the rubbers, so that they can turn on pivots or journals which form the ends of the slats. The surface of the slats in all the rubbers is constructed with alternate ridges and depressions; and in the upper rubber the ridges (e) of the slats are arranged opposite to each other throughout; while in the lower rubbers the ridges (f) of one slat are arranged opposite the depressions (g) in the adjacent slat on either side throughout; and the ridges and depressions of the slats in the upper and lower rubbers bear such relation to each other, that, in turning the rubbers, the ridges on the slats of the upper rubber, come alternately opposite the projections and depressions in the slats of the lower rubbers—as the lower rubbers are revolved by their impingement upon the upper rubber, or upon the clothes passing between the rubbers. By this construction and arrangement of the slats, the clothes, in passing between the rubbers, are drawn forward by the impingement of the projections of the slats of the upper rubber, upon the projections of the slats of the lower rubbers; and when the projections of the slats of the upper rubber fall into the depressions of the slats of the lower rubbers, the motion of the lower rubbers is retarded or slightly intermitted by which means the clothes are gently rubbed and pressed by the action of the upper rubber, without being strained; and at the same time extended and spread out laterally by the contact of the undulating surface formed by the conjunction of the two sets of rollers. Thus, by this arrangement of the slats, the clothes are subjected to a gentle rubbing action and to extension, while they are almost in a state of rest.

As the clothes are carried forward by the



impinging of the projections of the upper and lower slats on each other and as these slats turn in a direction opposite to the rubbers, (that is, backward, while the rubbers and clothes move forward) it will be seen that when the clothes are caught by the slats they will be released as they are carried forward by the rubbers as the slats turn backward as they rise from the clothes, and thus is the liability of the rubbers catching, and straining or tearing the clothes, greatly diminished.

Having thus described my improvements in washing machines, what I claim therein as new and desire to secure by Letters Patent of the United States, is—

1. The combination of an upper rotary rubber with revolving slats, with two or more lower rotating rubbers with revolving

slats, arranged substantially as described for the purpose set forth.

I also claim arranging the undulating surface of the slats in the upper rubber so the projections come opposite to each other throughout, when the same is combined with a lower rotating rubber in which the projections of one slat are arranged opposite the depressions in the adjacent slats; and also when the slats of the upper rubber are arranged in relation to the slats of the lower rubbers, as described for the purpose herein set forth.

In testimony whereof I have subscribed my name.

R. G. WILKINS.

Witnesses:

J. LANPHEAR,  
H. HALLIDAY.