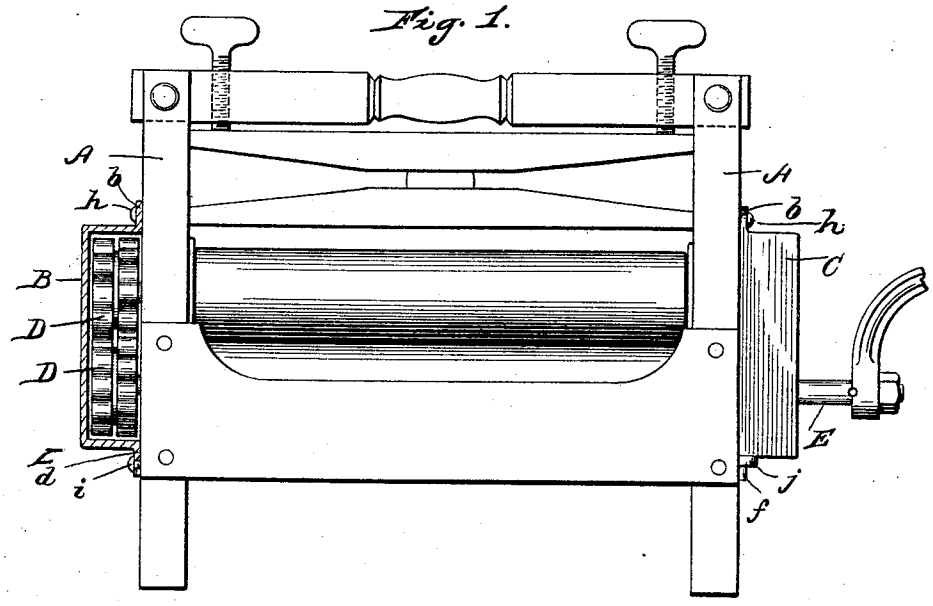
(No Model.)

# L. MOMBURG & W. F. DALLMANN.

## GEAR GUARD FOR WRINGERS.

No. 484,970. Patented Oct. 25, 1892.

Fig. 1.



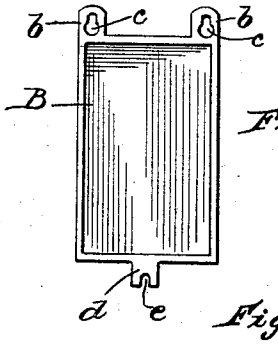




Fig. 2.

Fig. 3.

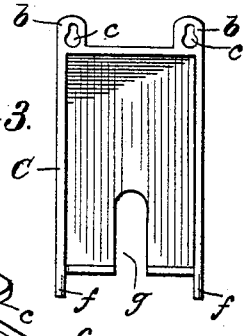
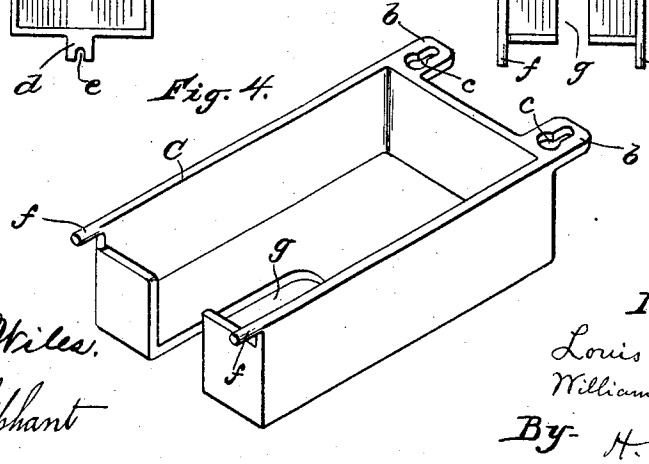



Fig. 4.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

LOUIS MOMBURG AND WILLIAM F. DALLMANN, OF MILWAUKEE, WISCONSIN.

## GEAR-GUARD FOR WRINGERS.

SPECIFICATION forming part of Letters Patent No. 484,970, dated October 25, 1892.

Application filed June 3, 1892. Serial No. 435,423. (No model.)

*To all whom it may concern:*

Be it known that we, LOUIS MOMBURG and WILLIAM F. DALLMANN, citizens of the United States, and residents of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Gear-Guards for Wringers; and we do hereby declare that the following is a full, clear, and exact description thereof.

Our invention has for its object to prevent wash-goods from being caught or soiled by the gear of clothes-wringers, as well as to protect operators and others, especially children and inexperienced persons, from having their fingers pinched or crushed in said gear.

To this end our invention consists in gear-guards for connection with any of the well-known styles of clothes-wringers now in use or on the market, as will be hereinafter more fully described with reference to the accompanying drawings, and subsequently claimed.

In the drawings, Figure 1 represents a side elevation of an ordinary clothes-wringer provided with our gear-guards, one of the latter being shown in section; Figs. 2 and 3, rear elevations of the gear-guards, and Fig. 4 a perspective view of one of said guards.

Referring by letter to the drawings, A represents an ordinary clothes-wringer, and B C our guards for the meshing gear-wheels D of the wringer, these guards being slightly different from each other in the matter of details of construction, inasmuch as one of them necessarily straddles the crank-shaft E of said wringer. Each guard is primarily a rectangular box, preferably cast from suitable metal and open at one side. As shown, each of the boxes has a pair of upwardly-extended vertical ears *b* at its inner upper edge, and each ear is provided with a slot *c*, preferably of keyhole form. The box B is shown as having its inner lower edge provided with a central vertically-depending ear *d*, in which a notch *e* is formed, and the box C is shown as having vertical pins *f* depending from its lower inner corners. The box C is designed for the crank side of the wringer, and therefore a slot *g* is cut in the outer side and bottom of said box, so that the latter may straddle the crank-shaft E of said wringer. The slotted ears *b* of the boxes detachably engage suitable pins or catches *h* on the ends of the wringer-frame, and the notched ear *d* on the box B also detachably engages a pin or catch *i* on the adjacent end of said wringer-frame, the opposite end of this frame being provided with eyes *j* for engagement with the pins *f*, that depend from the box C, as above described. Each of the boxes is so disposed as to completely surround and form a guard for the meshing gear-wheels D at the adjacent end of the wringer, and said box being removable, ready access may be had to the gear at any time it may be necessary to lubricate the same.

Having now fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

A detachable gear-guard for clothes-wringers, consisting of a box-like device open at one side and provided with keyhole-hangers for engagement with pins on a wringer-frame and a depending lug for loose engagement with a retaining device on said wringer-frame, substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

LOUIS MOMBURG.
WILLIAM F. DALLMANN.

Witnesses:
N. E. OLIPHANT,
H. G. UNDERWOOD.