(No Model.)

# S. H. SCHMUCK.

## WASHING MACHINE.

No. 477,578. Patented June 21, 1892.

Fig. 1.

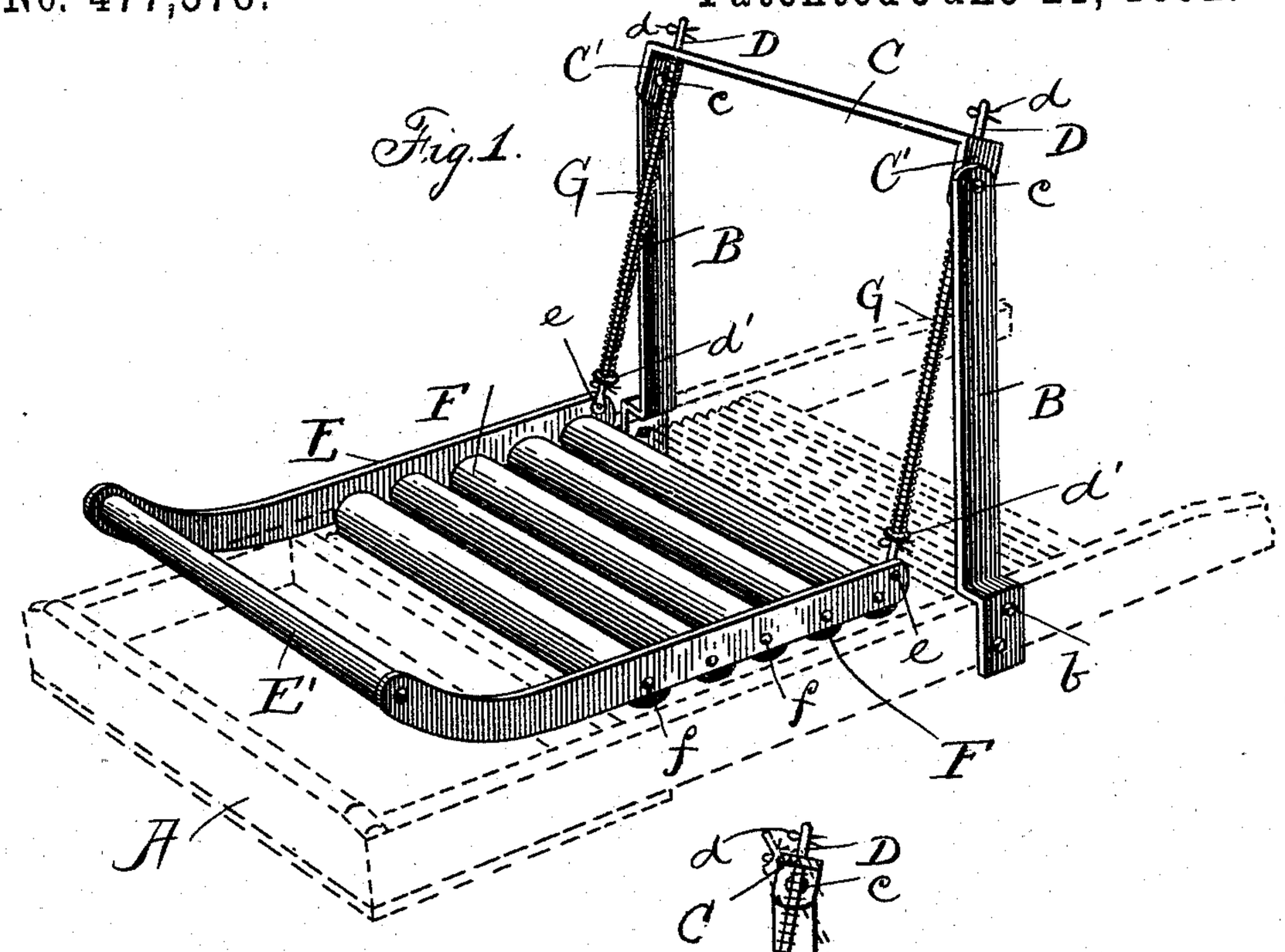



Fig. 2.

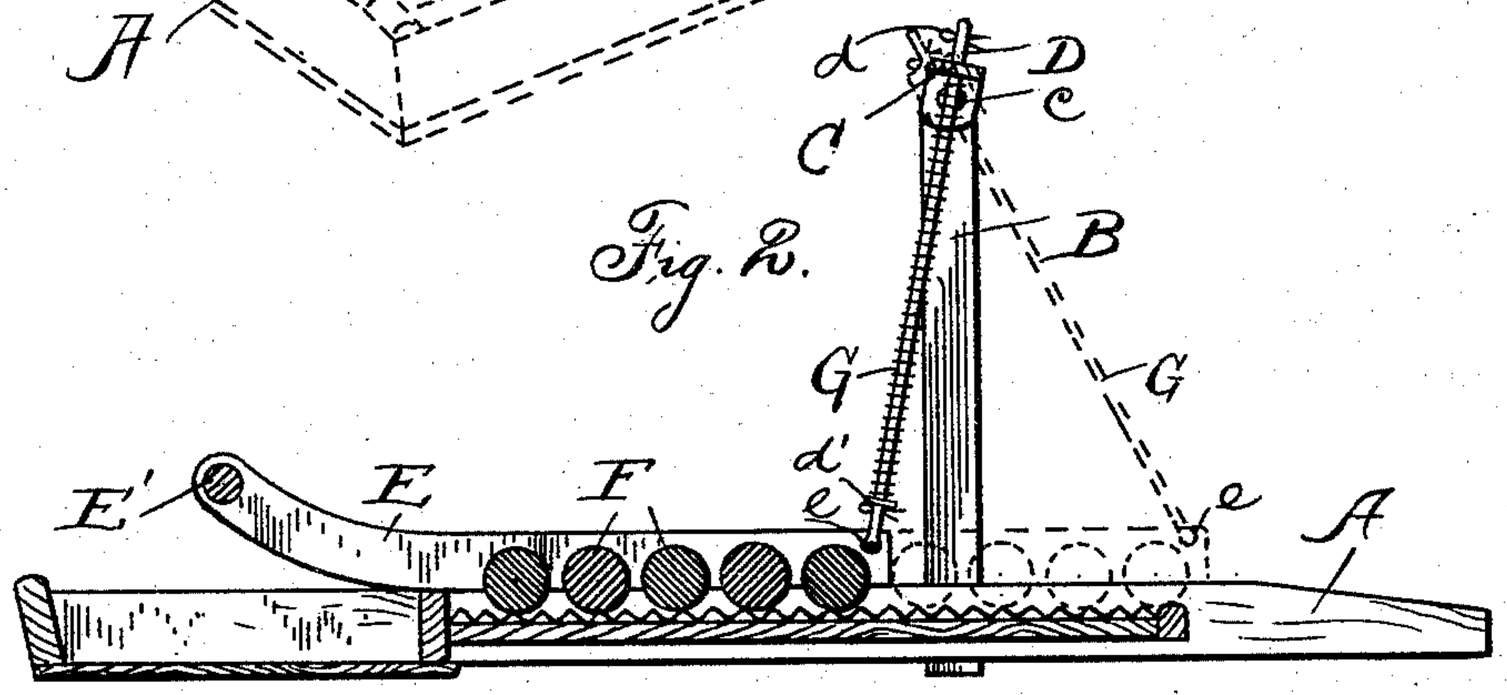



Fig. 3.

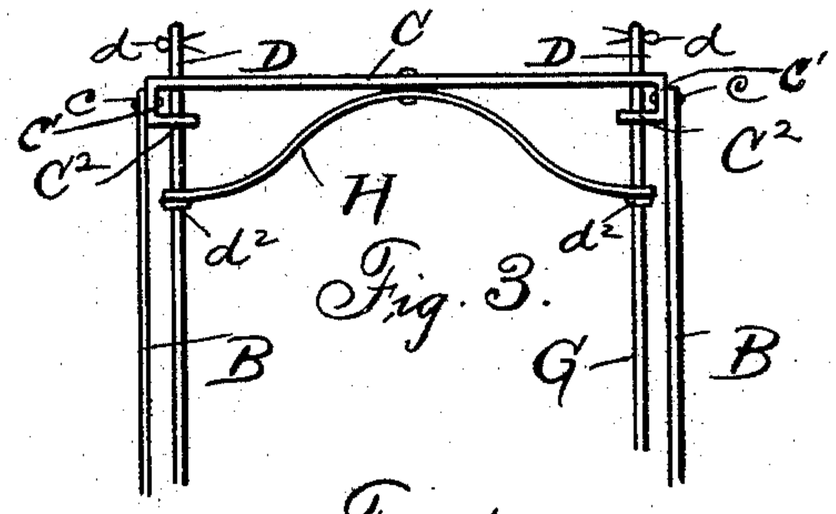
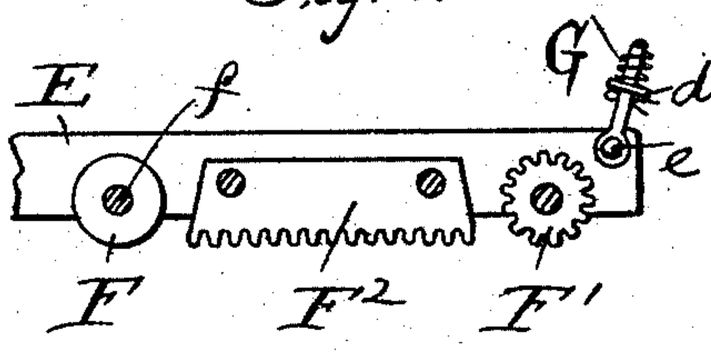



Fig. 4.

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# UNITED STATES PATENT OFFICE.

SOLOMON H. SCHMUCK, OF CLEVELAND, OHIO.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 477,578, dated June 21, 1892.

Application filed November 11, 1891. Serial No. 411,569. (No model.)

*To all whom it may concern:*

Be it known that I, SOLOMON H. SCHMUCK, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Clothes-Rubbing Attachments for Wash-Boards; 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 pertains to make and use the same.

My invention relates to improvements in clothes-rubbing attachments for wash-boards, the object being to provide an attachment that will be easy of manipulation, simple in construction, and unite inexpensive.

With this object in view my invention consists in certain features of construction and in combination of parts hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a view in perspective of a wash-board having my improved attachment, the wash-board being shown in dotted lines. Fig. 2 is a vertical longitudinal central section of the same. Figs. 3 and 4 show modifications hereinafter more fully described.

A represents an ordinary wash-board.

My improved attachment comprises uprights or standards B B, removably secured to the side pieces of the wash-board by means of screws—for instance, as at *b*. To standards B B at their upper ends are pivotally secured, as at *c*, the depending arms or members C′ of a yoke C. Yoke C at either end is perforated for embracing the free ends of rods D D, the latter being pivotally connected, as at *e*, with the side pieces of a reciprocating frame E, said side pieces being in turn connected by a cross-piece E′, that serves as a handle in operating my improved attachment. Frame E, as shown, carries a rubbing-surface suitable to rub the clothes to be washed upon the corrugated or uneven surface of the wash-board. This rubbing-surface may be either plain and smooth, as shown more clearly in Figs. 1 and 2, where a series of plane rollers F are provided, said rollers being trunnioned or gudgeoned in the side pieces of frame E, as at *f*, or may be corrugated, ribbed, or uneven, as shown at F′ F² in Fig. 4, F′ representing a corrugated or fluted roller and F² representing a block corrugated or ribbed on its rubbing-surface; or, if desired, the rubbing-surface may be partly plain and partly otherwise, as shown in Fig. 4. In any case the rubbing-surface should comprise one or more rollers to facilitate the work of reciprocating frame E. Rods D should of course be of sufficient length to accommodate the movement of reciprocating frame E, and of course in the position of parts with rods D parallel or approximately parallel with standards B rods D will protrude some little distance above yoke C. Suitable stops—such as a pin *d*, extending through and protruding at opposite sides of rods D—are provided to prevent the disconnection of rods D from yoke C, that might accidentally occur in case no such provision were had, by moving frame E too far. Springs G, acting in the direction to bear yieldingly the rubbing-surface of the reciprocating frame upon the opposing corrugated or ribbed surface of the wash-board, are provided. A suitable construction is shown in Figs. 1 and 2, wherein coil-springs are mounted on rods D, the latter being provided with shoulders or stops, as at *d′*, between which and yoke C springs G are confined.

Another suitable construction is shown in Fig. 3, where a semi-elliptic or leaf spring H is secured at its longitudinal center to yoke C, with the ends of the spring embracing rods D and bearing upon shoulders $d^2$ of said rods. This construction is not only very effective but quite inexpensive. Members C′ of yoke C should, however, have inwardly-projecting guides $C^2$, that embrace rods D and prevent the latter from lateral deflection.

What I claim is—

In a clothes-rubbing attachment for a wash-board, the combination, with standards adapted to be rigidly secured to the side pieces of the wash-board and a yoke having depending arms at its opposite ends pivotally connected with the upper ends of the respective standards, of spring-actuated rods and a reciprocating frame having a suitable rubbing-surface, the yoke aforesaid being perforated for embracing the free ends of said spring-actuated rods, the latter at their opposite ends being pivotally connected with the respective side pieces of the reciprocating

frame and having shoulders or stops between which and the yoke aforesaid the spring-mechanism is confined, the latter comprising a semi-elliptical or leaf spring secured at its longitudinal center to said yoke, with the ends of the spring embracing the respective spring-actuated rods, the depending arms of the yoke aforesaid terminating at their lower ends in inwardly-projecting members that constitute guides for said spring-actuated rods, substantially as and for the purpose set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 9th day of October, 1891.

SOLOMON H. SCHMUCK.

Witnesses:

C. H. DORER,

WARD HOOVER.