J. R. GRUMMAN.

SELF SOAPING WASHBOARD.

APPLICATION FILED JAN. 28, 1911.

1,005,704. **Patented Oct. 10, 1911.**

Fig. 1.

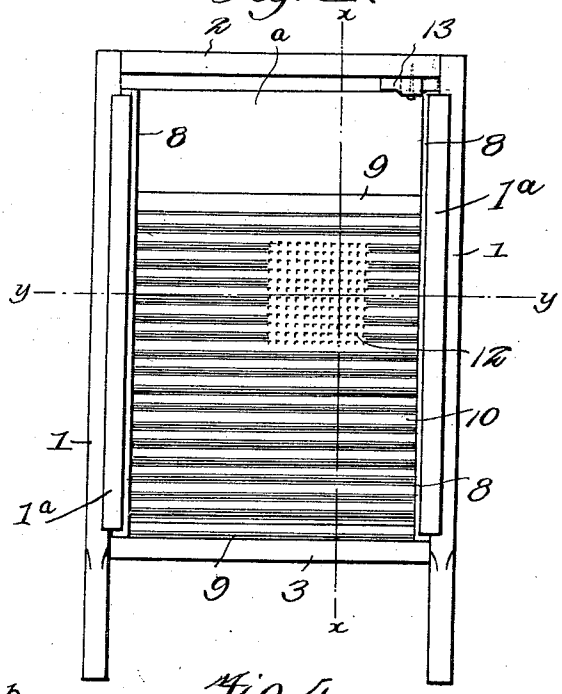


Fig. 3.

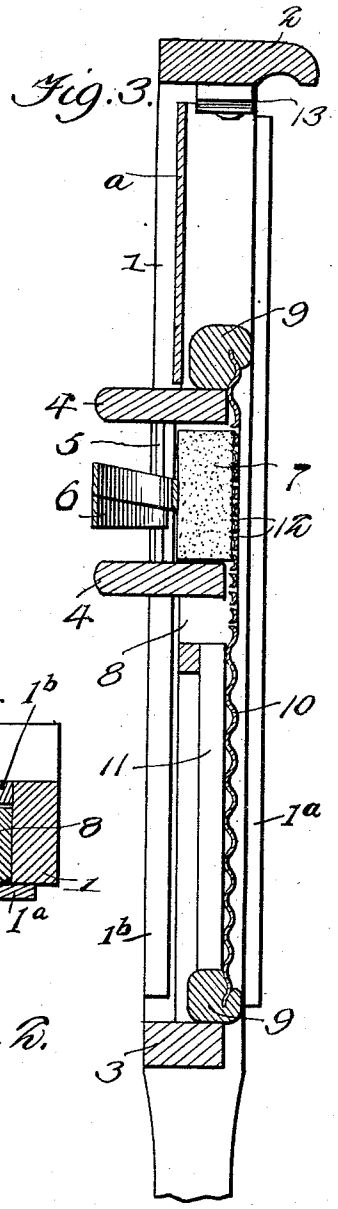


Fig. 4.

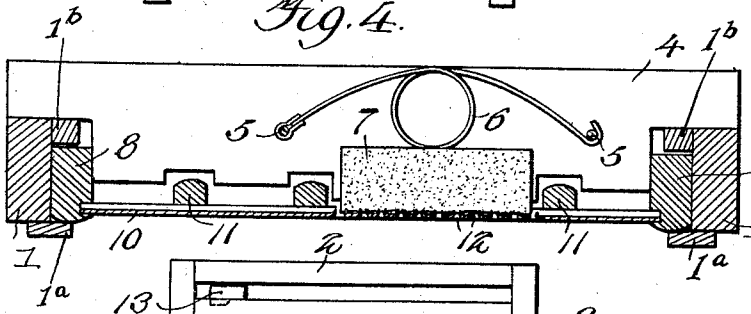
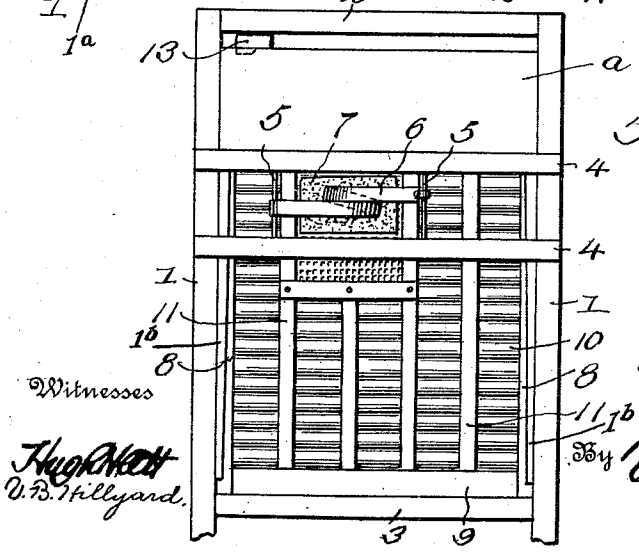


Fig. 2.



Witnesses

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SELF-SOAPING WASHBOARD.

1,005,704. Specification of Letters Patent. Patented Oct. 10, 1911.

Application filed January 28, 1911. Serial No. 605,230.

To all whom it may concern:

Be it known that I, JAMES R. GRUMMAN, a citizen of the United States, residing at Cambridge, in the county of Guernsey and State of Ohio, have invented new and useful Improvements in Self-Soaping Washboards, of which the following is a specification.

The present invention provides a washboard which will supply soap during the process of rubbing the clothes upon the roughened or wash surface, the invention providing a novel structure whereby a cake of soap placed in position is automatically advanced and shaved or reduced to small particles for convenience of readily producing a lather, whereby soil may be quickly removed from the clothing during the rubbing of the same over the surface of the board.

The invention consists of the novel features, details of construction and combination of parts, which hereinafter will be more particularly set forth, illustrated in the accompanying drawing, and pointed out in the appended claims.

Referring to the drawing, forming a part of the specification, Figure 1 is a front view of a washboard embodying the invention. Fig. 2 is a view of the washboard as seen from the rear. Fig. 3 is a vertical section on the line *x*—*x* of Fig. 1. Fig. 4 is a horizontal section on the line *y*—*y* of Fig. 1.

Corresponding and like parts are referred to in the following description, and indicated in all the views of the drawing, by the same reference characters.

The device comprises a frame, a washboard slidingly mounted in the frame, a soap holder, and means for advancing the soap to admit of portions being shaved therefrom as the washing progresses.

The main frame in which the washboard is mounted to have a limited movement and which is provided with the soap holder and the soap feeder comprises side pieces 1, an upper cross piece 2 and a lower cross piece 3. Strips 1^a and 1^b attached to opposite edge portions of the side pieces 1 form guideways which receive and direct the washboard in its movements. Intermediate cross pieces 4 are located one above the other in spaced relation and are secured at their ends to the side pieces 1 and serve to brace the frame and to form a soap holder. Rods 5 extend across the space formed between the cross pieces 4 and have their ends let into said cross pieces. A spring 6 has one end secured to one of the rods 5 and its opposite end detachably connected with the other rod 5, said spring having a coil intermediate of its ends which bears against a cake of soap 7 to press the same forwardly. The spring 6 constitutes a feeder for the soap and constantly exerts a pressure to advance the soap toward the rubbing surface.

The washboard proper comprises a frame and a rubbing plate secured to the frame. The frame consists of side strips 8 a head piece *a* and upper and lower cross strips 9. The rubbing plate 10 is secured to the frame and its surface is corrugated, or otherwise roughened. Rods or bars 11 reinforce the rubbing plate and are secured at their upper and lower ends to the cross strips 9. A portion of the rubbing plate has a series of openings 12 through which the soap is fed to be taken up by the clothes during the process of washing. The openings 12 are formed by pressing or punching the rubbing plate so that the edges projecting rearwardly will serve to scrape or shave the soap during the reciprocating movements of the washboard after the manner of a grater. The sharp edges or projecting parts formed by punching the openings 12 constitute teeth or points which operate in the manner stated. A space is formed in the rear of the portion of the rubbing plate formed with the series of openings 12 and this space is adapted to receive the cake of soap, the latter being prevented from vertical movement by means of the cross pieces 4 and lateral movement being guarded against by two of the rods or bars 11 which extend along opposite ends of the space to engage with the ends of the cake of soap 7, as shown most clearly in Fig. 4.

In practice a cake of soap is placed in the space formed between the cross pieces 4 and the rods or bars 11 adjacent the ends of the perforated portion of the rubbing plate, after which the end of the spring 6, previously disengaged from one of the rods 5, is brought into position and engaged with the rod, thereby bringing the coil in contact with the cake of soap so as to press the same toward the rubbing plate. In the process of washing upward movement of the clothes upon the washboard causes the latter to move upward and downward movement of the clothes causes the washboard to move downward. The up and down movement of the washboard causes the teeth or points

projecting rearwardly from the perforations or openings 12 to shave or grate the soap, the particles removed passing through the openings 12 to the surface of the rubbing plate to be taken up by the clothes. When it is not required to shave or grate the soap a button 13 forming a stop pivoted to the upper cross piece 2 of the main frame is turned so as to come between said cross piece 2 and the head piece *a* of the frame of the washboard and thereby prevent movement of said washboard. The washboard has a limited vertical movement corresponding approximately to the thickness of the button 13 so that when said button is turned to bring a part thereof between the cross piece 2 and the head piece *a* the washboard is held stationary. The limited movement is ample to insure a positive feed of the soap by the cutting action of the scraping edges formed by punching the openings 12. The soap holder is located near the top of the rubbing plate and in the rear of the part thereof having the plurality of openings 12 and is below the upper cross strip 9. The soap holder is fixed, thereby retaining the cake of soap in position to be shaved or grated when the washboard is free to move up and down.

From the foregoing description, taken in connection with the accompanying drawing, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the device which I now consider to be the embodiment thereof, I desire to have it understood that the device shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

Having thus described the invention what is claimed as new, is:—

1. In a washboard, the combination of a rubbing plate having a plurality of openings and rearwardly extending soap scraping edges in line with the openings, said rubbing plate being mounted to have a reciprocating movement imparted thereto, a soap holder, and means for pressing the soap against the rear side of the rubbing plate to be shaved by the said soap scraping edges as the rubbing plate moves up and down.

2. In combination a frame, a washboard mounted upon the frame and adapted to have a reciprocating movement imparted thereto, said washboard comprising a rubbing plate having a portion formed with a plurality of openings and having teeth in line with the openings, a soap receptacle mounted upon the frame, and a spring having an intermediate portion formed into a coil, said spring being supported at one end and adapted to make detachable connection with a support at its opposite end, the coil being adapted to engage with a cake of soap to advance the same to the perforated portion of the rubbing plate.

3. In combination a main frame, spaced cross pieces strengthening the frame and forming a soap receptacle, a washboard mounted upon the frame and adapted to receive a reciprocating movement and comprising a rubbing plate having a portion formed with a plurality of openings and having edges or teeth in line with the openings, rods extending across the space formed between the cross pieces attached to the main frame, and a spring having one end attached to one of the rods and having an intermediate portion formed into a coil and having a hook at its opposite end to make detachable connection with the other one of said rods.

4. In combination a main frame, a washboard mounted upon the frame and adapted to have a reciprocating movement imparted thereto and embodying a rubbing plate having a portion formed with openings and having edges in line with the openings, a soap holder and feeder mounted upon the main frame, and a stop adapted to be interposed between the washboard and main frame to prevent movement of the washboard.

5. In combination a main frame, spaced cross pieces secured to the main frame and forming a soap receptacle and serving to strengthen the main frame, a washboard mounted upon the main frame and adapted to have a reciprocating movement imparted thereto, said washboard comprising a frame, a rubbing plate and vertically arranged rods, the latter bracing the rubbing plate and supported by the frame of the washboard, two of said rods serving to engage with a cake of soap to prevent lateral movement thereof, the rubbing plate having a portion formed with a series of openings and having edges or teeth in line with the openings, and a feeder mounted upon the cross pieces of the main frame and adapted to press a cake of soap toward the rubbing plate.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES R. GRUMMAN.

Witnesses:
DALL SONNERS,
W. W. STEUART.