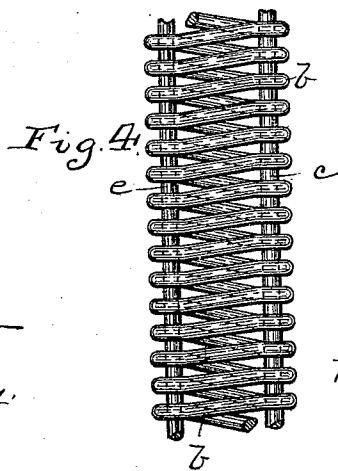
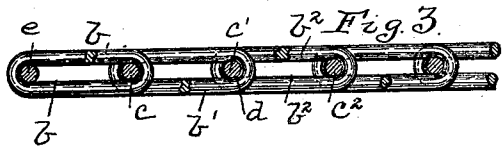
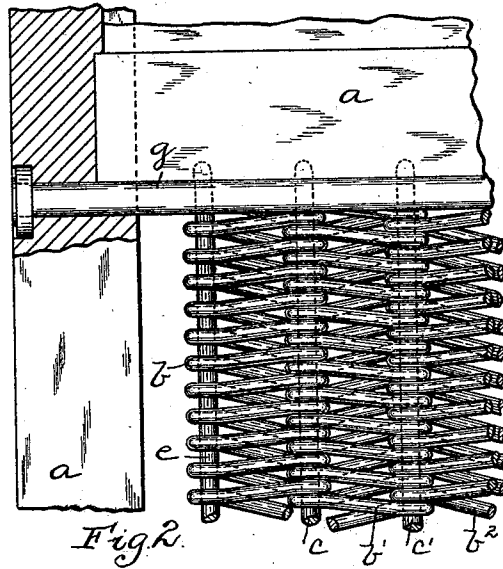
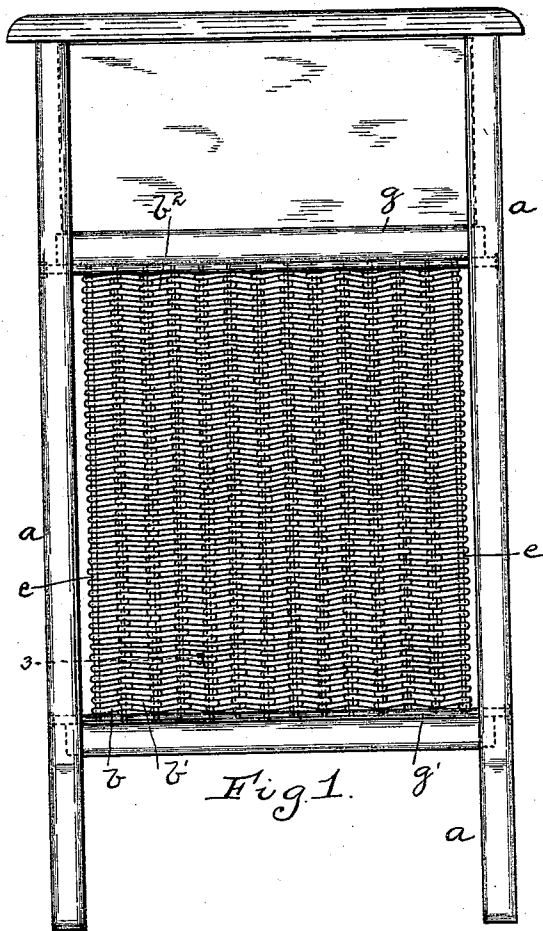


(No Model.)

G. B. LUTOMSKI.
WASHBOARD.

No. 517,187.

Patented Mar. 27, 1894.



Witnesses:

Wm. J. Martin.
W. L. Dorsey.

Inventor.

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UNITED STATES PATENT OFFICE.

GEORGE B. LUTOMSKI, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO AGNES LUTOMSKI, OF SAME PLACE.

WASHBOARD.

SPECIFICATION forming part of Letters Patent No. 517,187, dated March 27, 1894.

Application filed May 20, 1893. Serial No. 474,860. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. LUTOMSKI, a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Washboards; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to wash-boards for laundry purposes, its object being to provide a wash-board which permits of the passage of the water through the same, and yet which provides a close rubbing surface, the exposed edges of which are rounded so that there is no liability of the catching or tearing of the clothes, which at the same time retains the soap so that the full effect thereof upon the clothes is obtained and a rigid, durable surface produced.

To these ends my invention consists, generally stated, in a wash-board formed of a frame and a rubbing surface composed of a series of flat spiral coils and vertical rods connecting such flat spiral coils.

It also consists in a wash-board formed of a frame and a rubbing surface composed of flat spiral coils and vertical rods connecting such spiral coils, and cross bars secured to the frame at the ends of such rubbing surface and supporting such vertical rods.

To enable others skilled in the art to make and use my invention, I will describe the same more fully, referring to the accompanying drawings in which—

Figure 1 is a front view of my improved washing-board. Fig. 2 is an enlarged view of a portion of the wash-board proper partly broken away to illustrate the manner of connecting the wires. Fig. 3 is a view on the line 3—3, Fig. 1. Fig. 4 is a view of one of the spiral coils of wire employed in one form of my invention. Fig. 5 is a top view of the wash-board proper showing the manner of securing the vertical rods in place which connect the spiral coils of wire.

Like letters indicate like parts in each of the figures.

The frame *a* of my improved wash-board may be of the ordinary construction, and a detailed description thereof is not necessary.

The flat spiral coils *b b' b²*, &c., of which my

improved wash-board is preferably composed, are constructed from wire or rods of suitable thickness and rigidity, and of any desired form in cross section, and said coils may be formed in any convenient manner. The spiral coils *b b' b²*, &c., may be formed by making a spiral coil of great length and then cutting into lengths of the required size.

To connect the several flat coils *b b' b²*, &c., I employ the vertical rods *c c' c²*, &c. The coils *b b' b²*, &c., are first interlocked by inserting the wires of one coil into the spaces between the wires of the adjacent coil, and when in this position the vertical rods *c c' c²*, &c., are passed down through the space also formed, as shown in Fig. 3. In this manner any number of the coils *b b' b²*, &c., may be joined together to make up the required area of the rubbing surface of the board. The outer coils have the vertical rods *e* passing through them to add to the rigidity of the coils thus connected. After the spiral coils *b b' b²*, &c., have been connected together in the manner described, the ends of the vertical rods *c c' c²* and *e* above and below are inserted in openings *f f' f²*, &c., formed for them in the cross-bars *g g'*. These cross-bars *g g'* are preferably formed of metal and have the openings *f f' f²*, &c., formed at such intervals that the ends of the vertical rods *c c' c²*, &c., and *e* will enter said openings when the spiral coils have been stretched laterally to present a rigid surface. The ends of the rods *c c' c²*, &c., and outside rods *e* are then forced or sprung into the openings *f f' f²*, &c. When the rods *c c' c²*, &c., and outside rods *e* have been inserted within the openings *f f' f²*, &c., in the cross bars *g g'* they may be upset at their ends, as shown in Fig. 5, to secure them in position. Other means may be employed for securing said wires in place. The cross-bars *g g'* may be supported in the side bars or supports of the frame *a* in any suitable manner which will retain them securely in place.

As shown in the drawings, the flat spiral coils are preferably arranged so that one vertical coil is a right spiral coil and the coils on each side of it are left spiral coils, and so on throughout the series of coils composing the rubbing surface. The advantage obtained from this alternation of the right and left

hand flat coils is that a smoother and more compact surface of the coils is obtained and that the surface is practically horizontal in the direction of the wires instead of extending at a slight downward incline across the rubbing surface, as would be the case where all the coils were right hand or left hand, a more even rubbing surface being obtained for this reason. In the wash-board as so produced the rubbing surface is rigid and strong, as the flat wire coils are brought close to each other and the flattening of the coils imparts much greater rigidity thereto, forms a more even rubbing surface, and enables me to obtain a very close surface which, while permitting the passage of the soiled water through the same, provides a fine, close surface to hold the soap in contact with the clothes, so that the full effect of the soap in the rubbing action is obtained and waste of the soap is prevented.

With a wash-board constructed as above described, having the open frame and the close, flat spirals secured and supported by means of the vertical rods, which are in turn firmly secured in the cross rods or bars, a

rigid and exceedingly durable wash-board is obtained.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A wash-board formed of a frame and a rubbing surface composed of flat spiral coils connected by vertical rods, substantially as set forth.

2. A wash-board formed of a frame, and having a rubbing surface composed of flat spiral right and left hand coils alternating with each other, and vertical rods connecting said spiral coils, substantially as set forth.

3. A wash-board formed of a frame and a rubbing surface composed of a series of flat spiral coils, vertical rods connecting said coils, and cross bars connected to the frame and supporting said vertical rods at the ends thereof, substantially as set forth.

In testimony whereof I, the said GEORGE B. LUTOMSKI, have hereunto set my hand.

GEORGE B. LUTOMSKI.

Witnesses:

J. N. COOKE,

ROBT. D. TOTTEN.