Aug. 7, 1923. 1,464.045

C. W. PIERSON

COMBINED WASHER AND WRINGER

Filed May 26, 1919

Fig. 1.

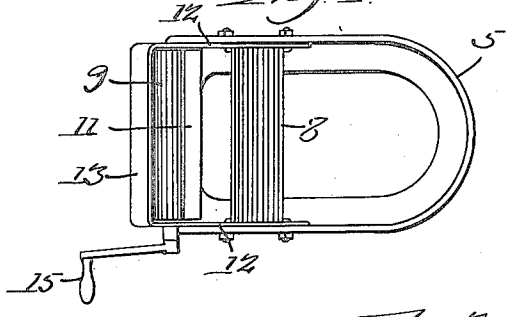


Fig. 2.

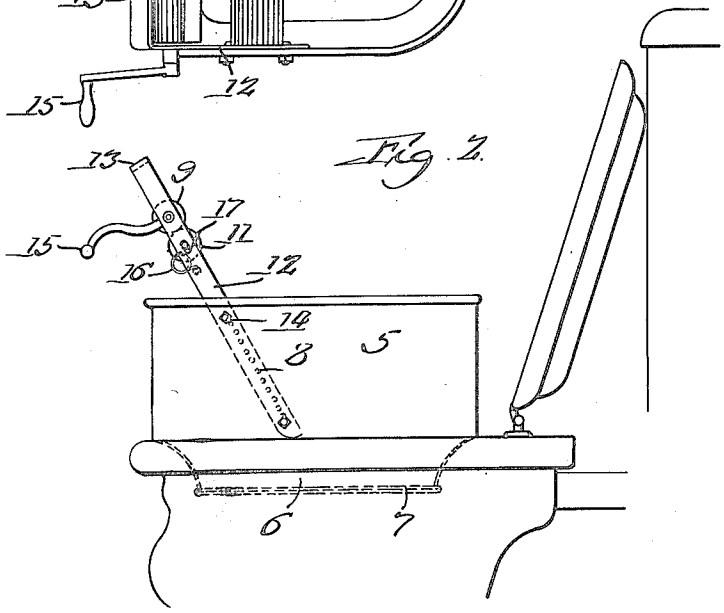


Fig. 3.

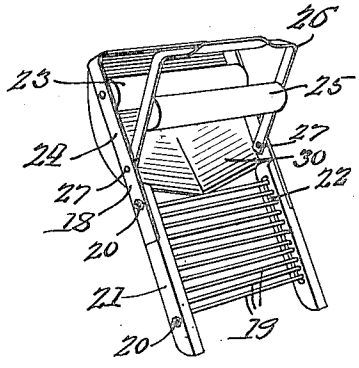


Fig. 4.

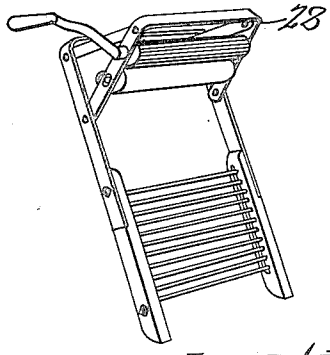
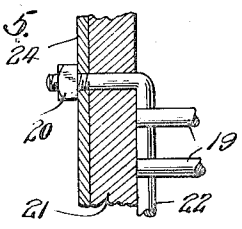


Fig. 5.



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UNITED STATES PATENT OFFICE.

CARL W. PIERSON, OF ROCKFORD, ILLINOIS.

COMBINED WASHER AND WRINGER.

Application filed May 26, 1919. Serial No. 299,713.

To all whom it may concern:

Be it known that I, CARL W. PIERSON, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Combined Washers and Wringers, of which the following is a specification.

This invention, relating to laundry apparatus, has more particular reference to the cleansing and wringing of certain articles of apparel, generally known as babies' napkins or diapers.

So far as I am aware, there has never been produced or marketed prior to this invention, an article especially designed and suited for the cleansing of soiled babies' napkins or diapers. That the washing of these soiled diapers by hand is an unsanitary and disagreeable task is manifest; and the primary object of the present invention is to meet a longfelt want by the provision of a simple and economical device especially designed and adapted for the cleansing of diapers and other clothes. And in furtherance of this object, I have provided a new article constructed to enable convenient and thorough preliminary cleansing of diapers, thereby promoting sanitary and healthful conditions in a home. This device embodied in a unitary structure constitutes a new article of manufacture and as such, my invention contemplates the design and construction of the article in such simple and effective manner that it is capable of production and sale at a comparatively low cost.

These and other objects and advantages will be appreciated as the invention becomes better understood by reference to the following description when considered in connection with the accompanying drawings, in which:

Figure 1 is a plan view of a rubbing and wringing article embodying my improvements;

Fig. 2, a side elevation of the article as used with an ordinary toilet bowl; and

Figs. 3 and 4, perspective views of modified forms of my improvements; and

Fig. 5 is a fragmentary sectional view through one of the legs of the rubbing board, shown in Fig. 3, illustrating the attachment of the grid to the leg.

My invention contemplates, as suggested above, the provision of a new article of manufacture in the form of a unitary means of simple and economical construction designed especially for the convenient and sanitary cleansing of babies' napkins or diapers. This article is designed to be used in connection with any toilet bowl, ordinary pail or other receptacle and includes a rubbing board and a wringer in co-operative relation. The first illustrated embodiment of my invention is of the type especially adapted for use in connection with a toilet bowl. In this instance, the article includes a splash pan designated generally by character 5. This pan or casing may be of suitable size, shape and configuration, although it is essential that it shall be open at the top and bottom so that when placed on a bowl it allows free access to the interior thereof, and shall provide sides of suitable depth to prevent splashing. In this case, the splash pan is provided with depending portions 6 joined by a wire rim 7, which extend into the bowl and prevent lateral displacement of the article. Mounted upon and within the sides of the splash pan is a rubbing board designated generally by character 8, and above the rubbing board a wringer comprising rolls 9 and 11. The rubbing board is preferably in the form of a grid, comprising spaced horizontal bars, which because of their open relation, are especially effective for the purpose contemplated. In the form shown in Figs. 1 and 2, the rolls 9 and 11 are mounted upon a U-shaped frame including side members 12 and a cross portion 13. Said side members serve as the body or frame upon which the rubbing board 8 is mounted. The frame in turn is suitably attached in an inclined position to the splash pan, in the present instance, by means of nuts 14 threaded onto parts of the grid which are turned outwardly through the splash pan or rim, which will be described more particularly hereinafter with reference to the grid and rubbing board construction. The rolls 9 and 11 are interposed between and directly mounted upon the sides 12 of said frame, and to secure the proper wringer action, a crank 15 is provided for revolving the roller 9, the pressure roller 11 being yieldingly urged against the roller 9 by suitable spring means, such as a coiled spring 16 at each end of the roller. It will be observed from Fig. 2 that the shaft ends 17 of the roller 11 are slidable in elongated openings

in the frame members 12 to permit of the desired relative movement between the rolls.

In use the article is placed over any suitable receptacle containing water, and it is found that a most convenient, practical and satisfactory receptacle is that of an ordinary toilet bowl, illustrated in Fig. 2. The soiled diaper is picked up with suitable swabbing tongs, and swabbed up and down in the water. By rubbing the diaper on the board 8 and flushing the toilet several times, always holding the diaper with the tongs, it will be cleaned quickly and thoroughly and in a sanitary manner. Having cleaned the diaper, the operator with the tongs inserts a corner of the diaper between the rolls and performs the wringing operation. By reason of the co-operative relation of the rubbing board and wringer and by use of the tongs the operator's hands need not touch the article being washed, and the operation may be quickly and conveniently performed without the inconvenience and disagreeable effects attendant upon this task as heretofore. It will be understood that the diaper will then be boiled and prepared for use again in the usual way.

I have also embodied my improvements in a somewhat more simple form than that just described, by omitting the splash pan. I have also illustrated several ways by which the rolls of the wringer may be arranged without departing from the spirit and scope of my invention. In Fig. 3, a frame having spaced side members or legs designated by character 18 are joined together at one end by the grid or rubbing board, it being noted that the lower portions or legs 21 of these frame members are of wood and the upper portion is in the form of a U-shaped piece of strap iron secured to the legs 21. To permit of easy assembling and reducing the cost of manufacture the rods 19 of the rubbing board are welded at each end to longitudinal rods 22, which in turn are secured at their ends by nuts 20 to the legs 21, as shown in Fig. 5. This exemplification of my improvement embodies a pressure wringer including a stationary roll 23 mounted upon the sides 24 of the metal part of the frame and a movable roller 25 carried by a bail or cradle 26 pivotally attached at 27 to the frame part 24. In this case, the diaper would be pulled through the rollers by the tongs and the proper pressure applied by bearing down on the end of the cradle 26. My invention also contemplates the use of the drain 30 suitably attached to the frame and underlying the rolls and extending downwardly beneath the plane of the rubbing board. A drain of this character may be used with any embodiment of my improvements and serves effectually to convey the water into the receptacle in which the washing device is used.

Fig. 4 shows another embodiment of my improvements, the frame and rubbing board being substantially the same as shown in Fig. 3, but the wringer being of the type shown in Fig. 1, except that the rolls are mounted on a frame extension 28, which obviously positions the wringer more directly over the receptacle in which the article is set. It will be noted that the article in the form shown either in Fig. 3 or 4 is adapted for use in the same manner as that first described, with the exception that the frame and rubbing board would set down into the toilet bowl or other receptacle as distinguished from being supported above the same through the agency of a splash pan or suitable supporting frame.

Attention is directed to the embodiment of the rubbing board and rolls in a unitary structure and of the co-operative relation of the board and rolls giving an article peculiarly adapted to the particular purpose described. The article is characterized by its small size and dimensions, making it especially adapted for the purposes desired; and by its simple construction and few parts, which enable it to be produced and sold at a comparatively low cost, an inexpensive article well within reach of those requiring its use, is obtained. Attention is also called to the cooperative relation of the rubbing board and the wringer both of which occupy a small and substantially common space over a receptacle, thereby permitting use of the article with receptacles such as every household is provided with. In further regard to the co-operative relation of the board and rolls the diaper or other article being cleansed is passed from the board directly to the rolls and is passed from and guided by the board to the rolls. It will also be noted that the article is small, and adapted to be easily and conveniently handled and cleaned.

It is believed that the foregoing conveys a clear understanding of my improvements, and of the objects prefaced above, and while I have illustrated several embodiments it should be understood that various changes might be made in the construction and arrangement without departing from the spirit and scope of the invention expressed in the appended claims, in which:

I claim:

1. An article of the character described comprising a splash pan adapted to rest on a bowl or other container, and a rubbing board disposed within the sides of said splash pan, and comprising spaced legs joined at one end by a top bar and at their opposite ends by a grid, said grid being formed of spaced rods integrally connected at their ends to rods extending longitudinally of the legs and turned outwardly at their ends through said legs and splash pan, and

nuts threaded on said out-turned ends at the outer side of the splash pan for securing the parts together.

2. An article of manufacture comprising a rubbing board having spaced legs joined at one end by a top portion and at the opposite end by a grid, said grid consisting of cross rods integrally connected at their ends to longitudinal rods, the ends of which are turned outwardly through adjacent legs and are secured to the latter by nuts on said outwardly turned ends.

CARL W. PIERSON.