

Sept. 27, 1927.

W. A. SCHNEDLER

CLOTHES WRINGER

Filed May 24, 1923

1643,643

2 Sheets-Sheet 1

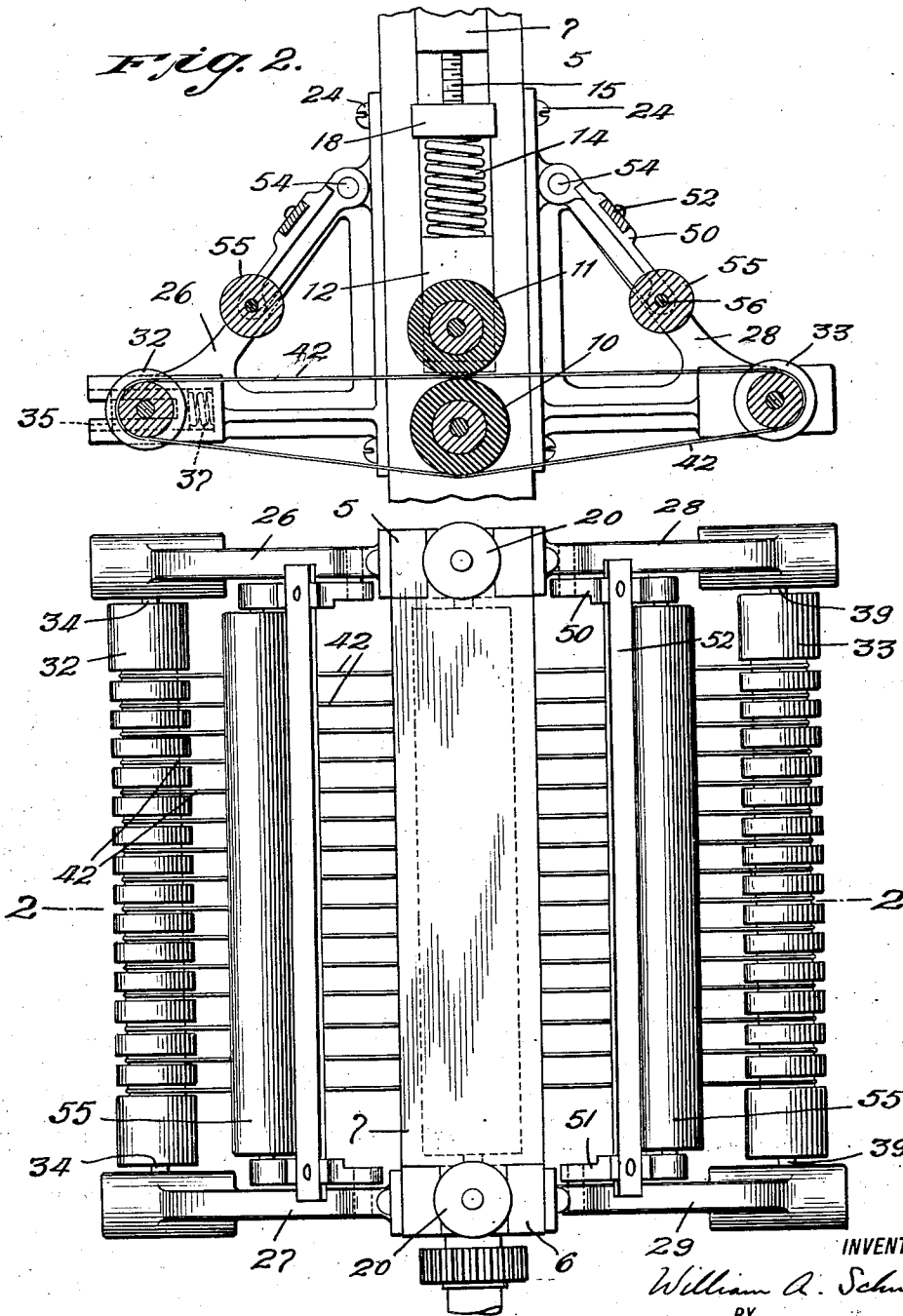


Fig. 1.

29 INVENTOR
William A. Schneider
BY
Howard E. Tracy
ATTORNEY

Sept. 27, 1927.

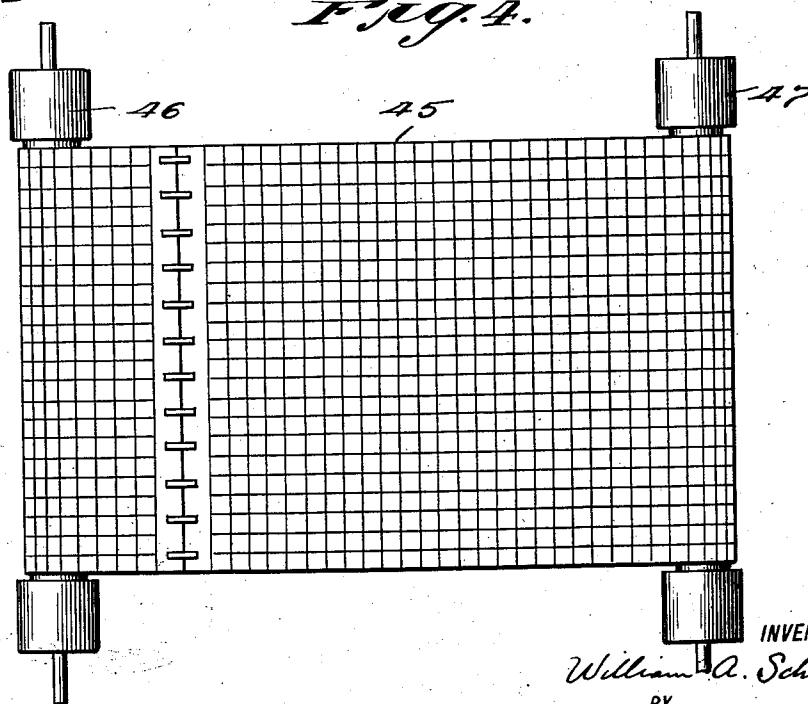
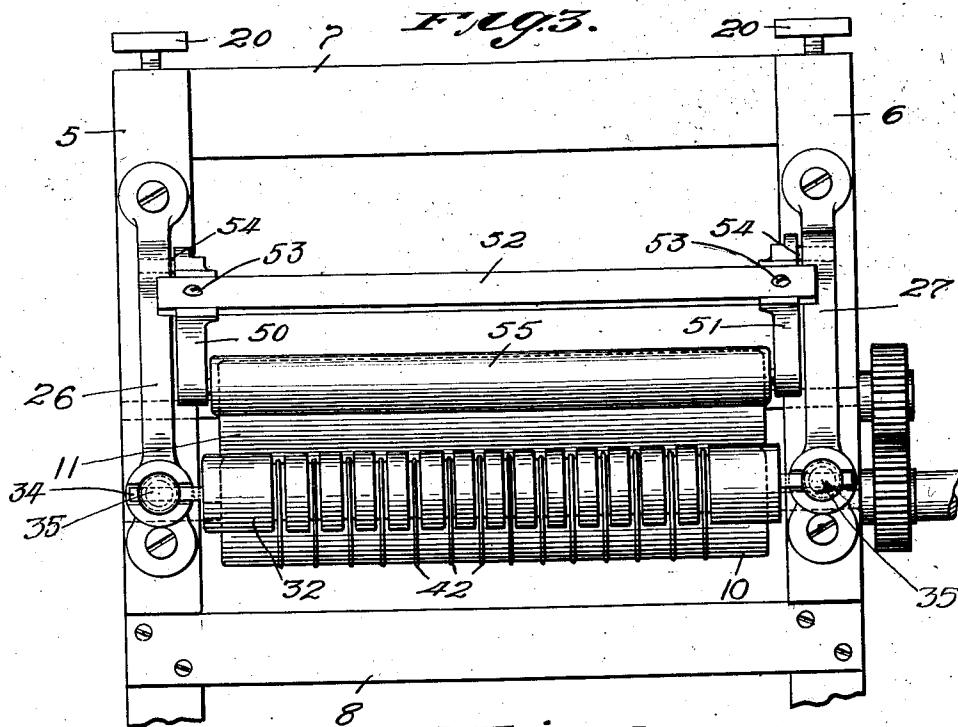
1643,643

W. A. SCHNEDLER

CLOTHES WRINGER

Filed May 24, 1923

2 Sheets-Sheet 2



INVENTOR
William A. Schnedler
BY
Howard E. Ensey
ATTORNEY

UNITED STATES PATENT OFFICE.

WILLIAM A. SCHNEDLER, OF GLEN RIDGE, NEW JERSEY.

CLOTHES WRINGER.

Application filed May 24, 1923. Serial No. 641,055.

This invention relates to clothes wringers and particularly to an improved feeding and safety device adapted to be either embodied in or attached thereto.

5 The invention hereinafter described may be considered as improvements upon devices of the kind described in my Patent No. 1,394,360, dated October 18, 1921. In devices of this kind, the clothes from which
10 water is to be extracted are fed to the wringing rollers by means of a belt of canvas or other similar tough fabric, the upper reach or stretch of which passes between the wringer rollers. While such a belt per-
15 forms its function satisfactorily under some conditions, I have found that said belt is often open to the objection that a portion of the water extracted from the clothes flows off the edge of said belt and down
20 the frames of the wringer on to the floor, and is not caught by the drain-board located beneath the wringing rollers for the purpose of carrying the extracted water back to the tub from which the wet clothes are
25 being taken. Moreover, a canvas belt absorbs and carries through the wringer rollers a certain amount of water some of which is afterward absorbed by the clothes before they leave the belt, with the result that the
30 clothes are not delivered in as dry a condition as they would be if no belt were used.

The general object of the present invention is to overcome the objections above maintained, and to this end I provide instead of a belt which is substantially im-
35 pervious to water, an openwork apron through which water may freely flow and I support this apron so that it cannot creep longitudinally of the wringing rollers. In
40 carrying out the invention, the openwork clothes-carrying apron which I prefer to employ is in the form of cords or mesh fabric, which are supported by grooved
45 rolls, the upper stretch of said apron being arranged to pass between the wringing rollers. By the term "openwork apron" clothes-carrying as herein employed, I intend to include both cords and a mesh or
50 openwork fabric of any kind, and any equivalent material.

The invention will be understood from the following description taken in connection with the accompanying drawings in

which Fig. 1 is a plan view of a wringer having my invention embodied therein; 55 Fig. 2 is a fragmentary sectional elevation of said wringer, substantially on the line 2-2 of Fig. 1; Fig. 3 is a side elevation of said wringer; and Fig. 4 is a plan view of an apron made of mesh or openwork fabric, 60 and rolls by which said apron is supported. In all of the figures, the drain board usually provided below the wringer rollers is not illustrated, since it forms no part of the present invention and may be of any well- 65 known form. Like parts are referred to throughout the drawings and this specification by the same reference characters.

Referring to the drawings, the various parts of the wringer are shown as supported 70 by frames 5 and 6 which are connected to one another by a top cross-frame member 7, and lower cross-frame members 8 and are secured to a support in any suitable manner. As is customary, the lower wring- 75 ing roller 10 is journaled in stationary bearings in the frames 5 and 6; and the upper wringing roller 11 is journaled in bearings 12 which are slidingly arranged in the frames 5 and 6. Cooperating with the top 80 of the sliding bearings 12, are springs 14 which are put under compression by screws 15 threading through the top cross-frame 7, and cooperating at their bottom ends with blocks 18, slidingly arranged in the 85 frames 5 and 6 and cooperating with the top ends of the springs 14. The screws 15 are provided at their upper ends with suitable handles 20 by means of which the screws can be turned in either direction and 90 the compression of the springs 14 varied. In this way, the upper wringing roller 11 is yieldingly forced against the lower wringing roller 10. The parts so far de- 95 scribed may be of any suitable and well-known form.

The wringer frames 5 and 6 are provided on each side with auxiliary frames which may be either integral with said wringer frames or separate therefrom. As shown 100 in the drawings, these auxiliary frames are each in the form of a triangle, one side of which cooperates with the vertical side of the wringer frame to which the auxiliary frame is secured by the screws 24. These 105 auxiliary frames 26, 27, 28 and 29, serve to

support rolls which carry an openwork clothes-carrying feed apron, the upper stretch of which passes between the wringing rollers; and said frames also carry guards which are located above the apron on each side of the wringer. As shown in Figs. 1, 2 and 3, the apron rolls 32 and 33 are grooved. The roll 32 is provided at its ends with projecting pins 34 which are journaled in bearings 35, slidably arranged in sockets in the outer ends of the auxiliary frames 26 and 27. Located between the bearings 35 and the inner ends of the sockets are coiled springs 37 which tend to force the bearings 35 outwardly in the sockets, so as to tend to increase the distance between the rolls 32 and 33 and thereby keep the stretches of the apron tight. The roll 33 may also be journaled in the auxiliary frames 28 and 29 in the same manner as the roll 32 is journaled in the frames 26 and 27, but inasmuch as it is unnecessary to provide movable bearings for both the rolls 32 and 33, the pins 39 in the ends of the roller 33 are preferably journaled in fixed bearings in the outer ends of the frames 28 and 29.

In the form of the invention shown in Figs. 1, 2 and 3 the openwork clothes-carrying feed apron is formed of cords 42 which run in the grooves in the rolls 32 and 33 the upper stretches of said cords being arranged to pass between the wringing rollers 10 and 11 and the lower stretches below the bottom wringing roller 10. The rolls 32 and 33 are preferably so arranged that the upper stretches of the cords 42 will be substantially straight and horizontal as this makes the feeding of the clothes by the apron more positive than it would be if the upper stretches of the cords on each side of the wringing rollers were inclined downwardly.

Fig. 4 shows an openwork clothes-carrying feed apron in the form of a mesh fabric 45, of any suitable kind. When this form of apron is employed, it is preferably supported by rollers 47 and 46 of the grooved form shown, although ungrooved rollers may be employed if desired. This apron 45 of mesh fabric is preferably supported in the same relation to the wringing rollers as is the apron formed of cords 42, as above described.

In order to adequately protect the hands of the operator from being caught and pinched, on each side of the wringer I provide a pivoted guard which is located above the apron. As shown in Figs. 1, 2 and 3, each of these guards comprises frames in the form of side members 50 and 51, connected together by a cross-frame member 52, secured to the side members 50 and 51, by screws 53 or in any other suitable manner. The side members 50 and 51 are provided at their upper ends with laterally extending pins 54 which are loosely journaled in holes provided in the auxiliary frames 26, 27, 28 and 29. At its bottom end, each guard frame is provided with a guard roller 55 supported by pins 56 which extend from its ends and are journaled in holes in the lower ends of the frame members 50 and 51. It will be noted that the guard rollers 55 are so mounted in the guard frames that the surfaces of said rollers extend beyond the ends of the side members 50 and 51 of the guard frames, thereby insuring that clothes, which are bunched up sufficiently to engage and lift the guards, will cooperate with the surface of the guard rollers 55 and will not engage with or become caught upon the lower ends of the guard frame members 50 and 51. It will also be noted that the downward movement of the pivoted guards is limited by the engagement of the ends of the cross frame members 52, with the tops of the inclined portions of the auxiliary frames 26, 27, 28 and 29.

From the foregoing description, it will be apparent that with either form of openwork clothes-carrying apron the water squeezed out of clothes by the wringing rollers 10 and 11 will freely flow through the apron and down on to the usual drain board (not shown) which will carry the water back to the receptacle from which the wet clothes are being taken. It will also be apparent that the openwork apron serves to feed the clothes to and from the wringing rollers 10 and 11; and that because of this feeding action and also because of the guards located above the apron, the hands of the operator never get dangerously near the wringing rollers. It will be apparent, therefore, that my invention provides not only a wringer which may be operated safely and efficiently, but also provides means for feeding the clothes to and from the wringing rollers without interfering with the usual manner of disposing of the water which is extracted from the clothes by the wringing operation.

While I have shown certain forms in which my invention may be embodied, it is to be understood that these may be modified in many respects without departing from the spirit of the invention as defined in the appended claim.

What I claim is:

A clothes wringer comprising a frame, co-operating wringing rollers journaled in said frame, auxiliary frames extending from each side of said wringer frame, each auxiliary frame being substantially in the form of a triangle one side of which cooperates with the vertical side of the wringer frame and another side of which is inclined downwardly therefrom, rolls journaled in said auxiliary frame with their axes substantially parallel to the axes of said wringing rollers,

a feed apron supported by said rolls and arranged with its upper stretch passing between said wringing rollers, and a pivoted guard located above the apron on each side of said wringer comprising guard frames pivotally mounted in said auxiliary frames and limited in their downward movement by engagement with the inclined sides of the latter, and a guard roller carried by and extending beyond the lower ends of each guard frame. 10

In witness whereof I have hereunto set my hand this 21st day of May 1923.

WILLIAM A. SCHNEDLER.