Jan. 2, 1923. 1,440,604.

W. H. HUENERGARDT.

TROUGH OR DRAIN TABLE FOR WRINGERS.

FILED OCT. 22, 1919.

3 SHEETS—SHEET 1.

Fig. 1.

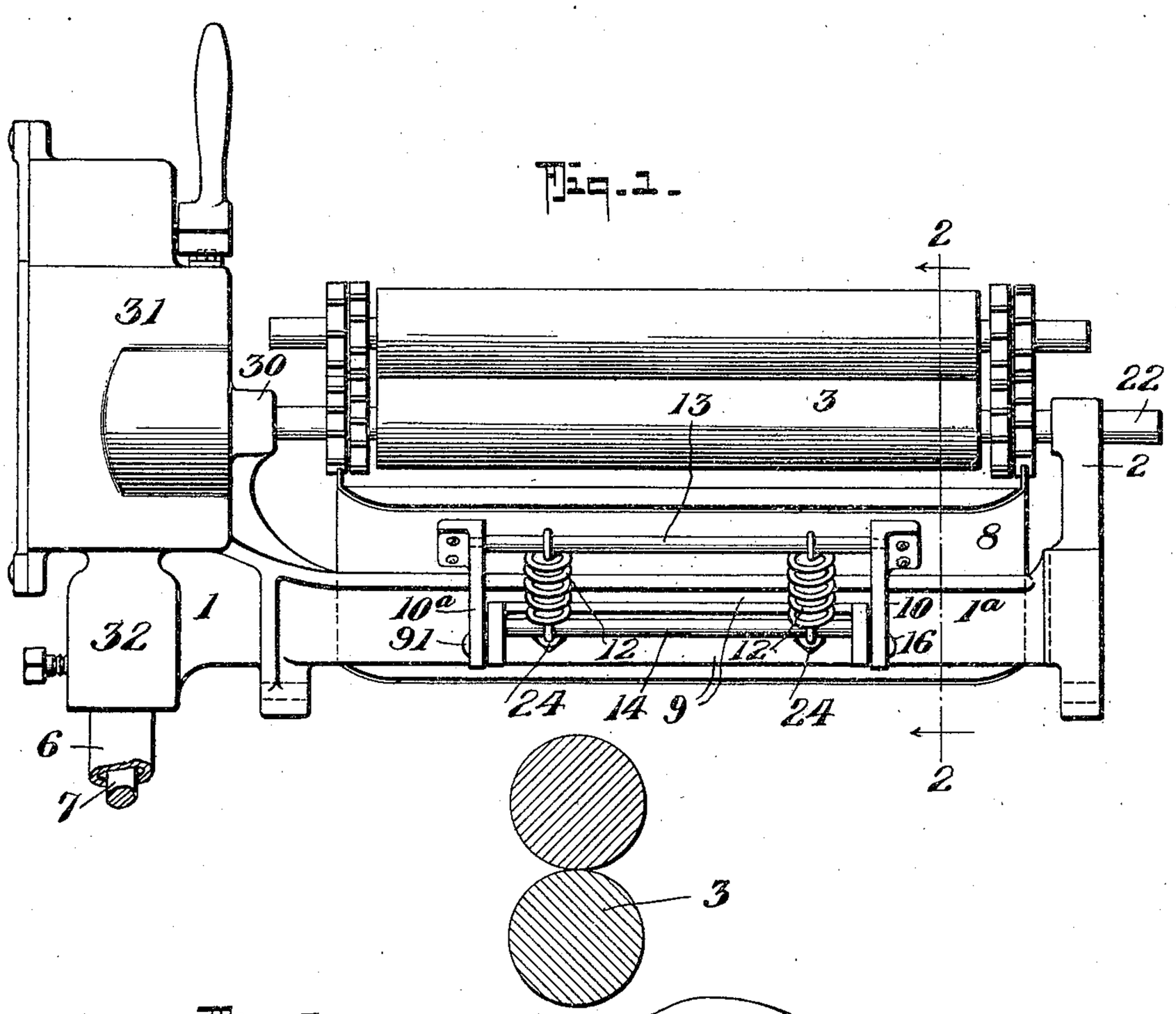

Fig. 2.

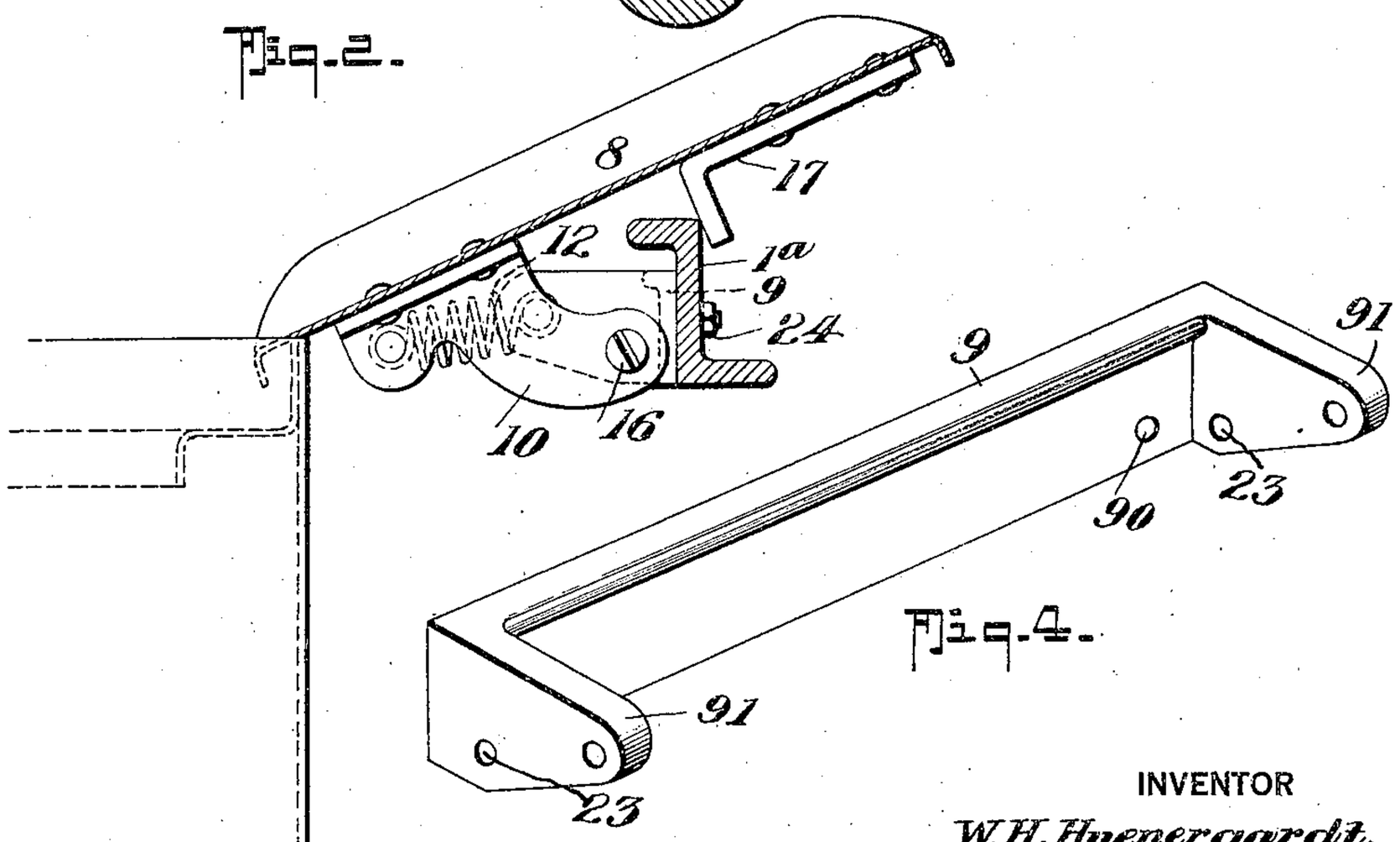

Fig. 4.

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Fig. 3.

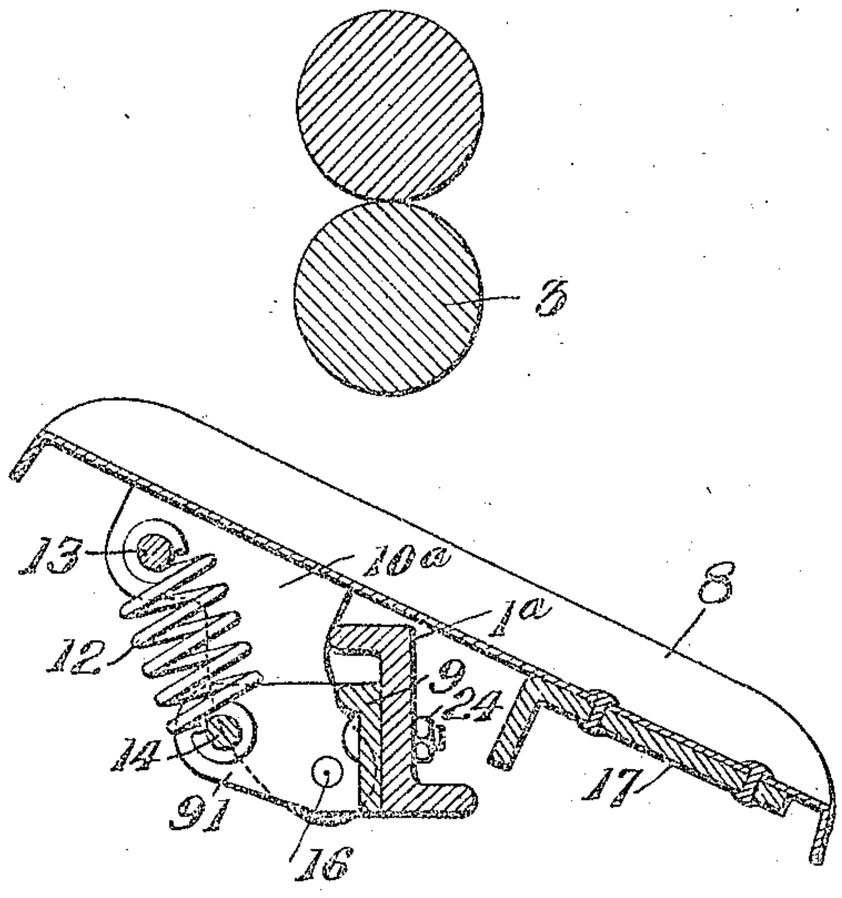
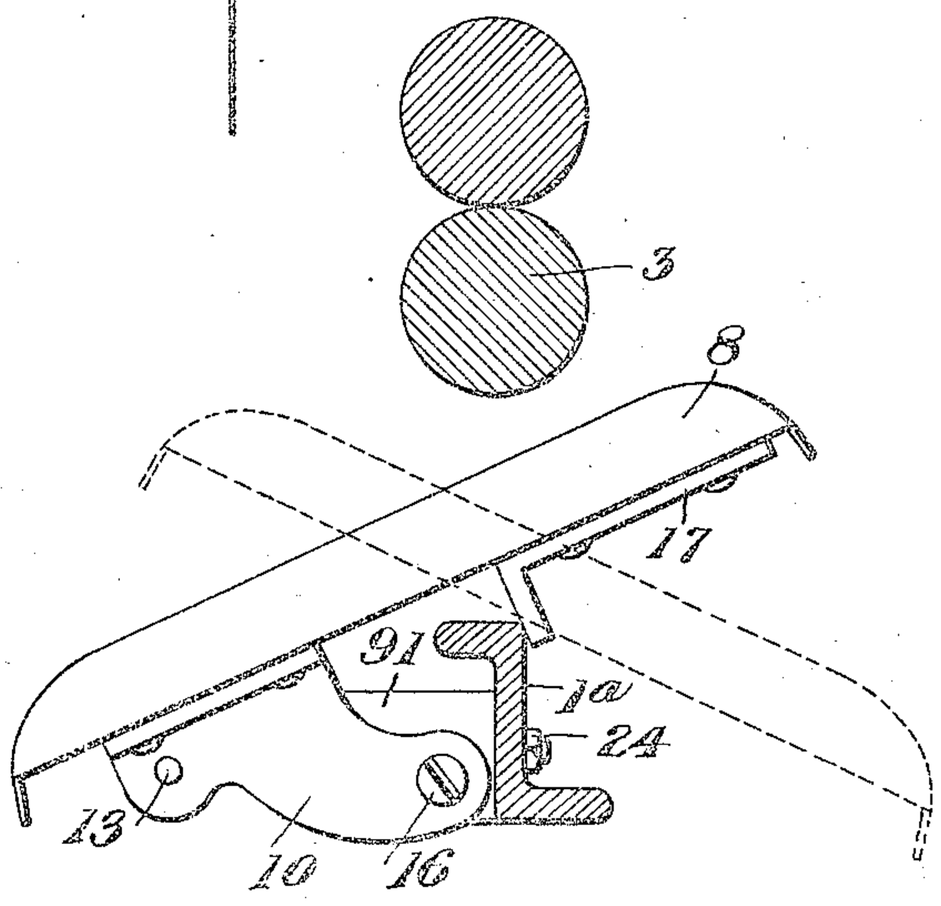


Fig. 5.



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TROUGH OR DRAIN TABLE FOR WRINGERS.

FILED OCT. 22, 1919. 3 SHEETS—SHEET 3.

Fig. 7.

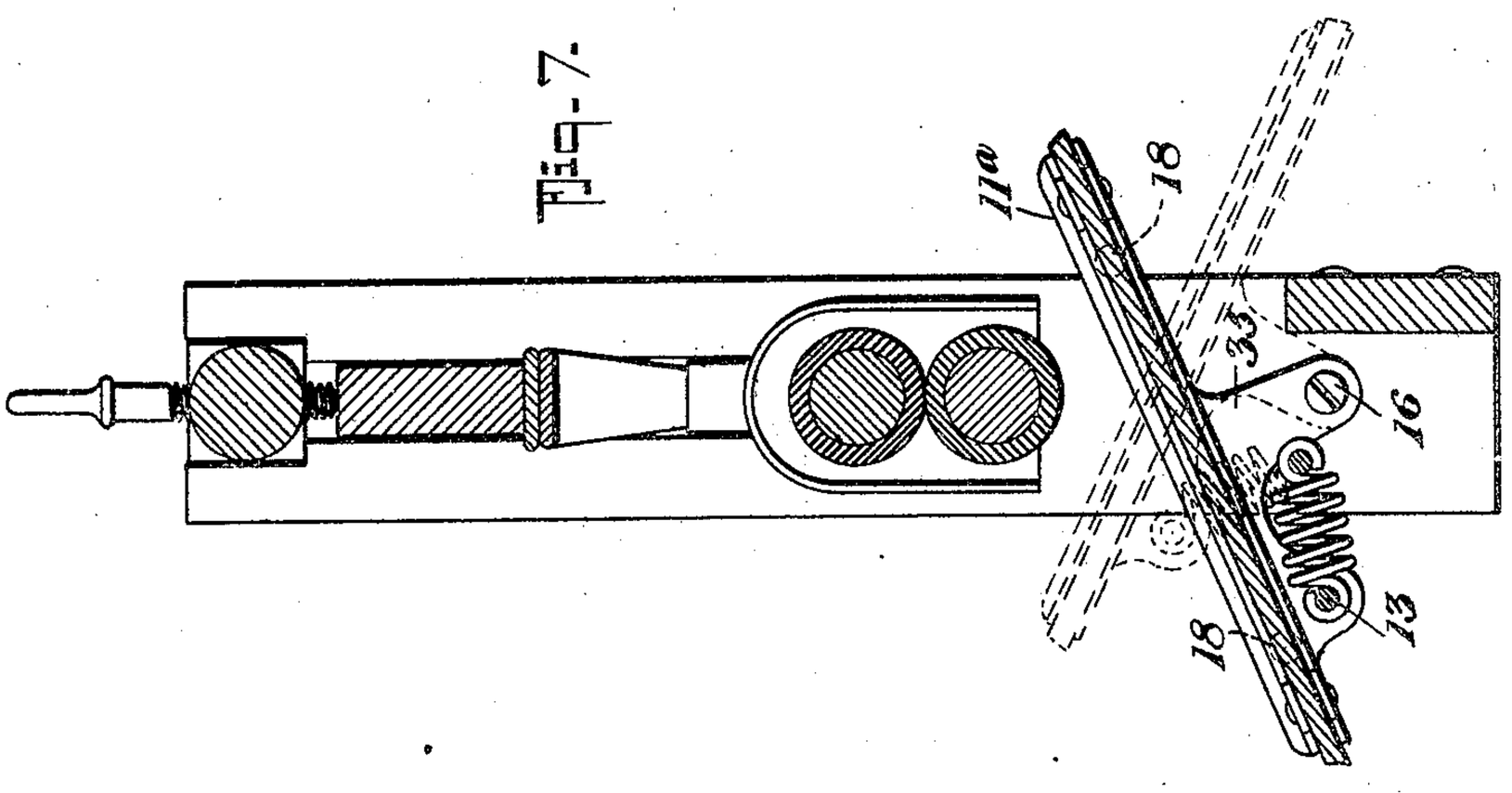
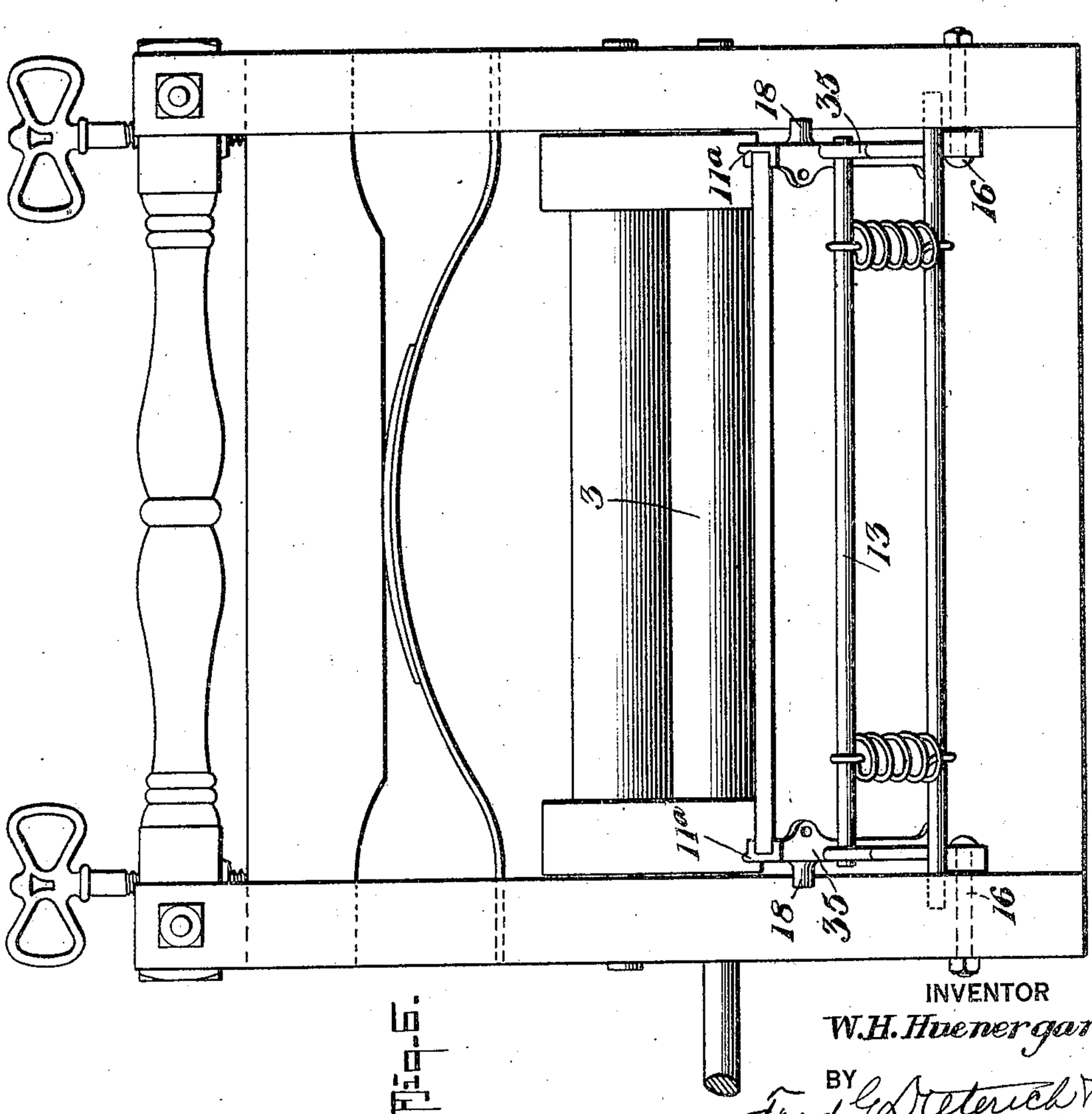


Fig. 6.



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Patented Jan. 2, 1923. 1,440,604

UNITED STATES PATENT OFFICE.

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TROUGH OR DRAIN TABLE FOR WRINGERS.

Application filed October 22, 1919. Serial No. 332,534.

To all whom it may concern:

Be it known that I, WILLIAM HAROLD HUENERGARDT, a citizen of the United States, residing at Lincoln, in the county of Lancaster and State of Nebraska, have invented a new and Improved Trough or Drain Table for Wringers, of which the following is a specification.

The object of my invention is to provide a new and improved drain trough for clothes wringers, of a simple and economical construction, in which the parts are so designed that the trough will act instantly to the touch and remain in the several adjustments for which it is adapted and not give way or tip out of such adjustments or positions, when the clothes are pulled over the same, during operation.

Another object of my invention is to provide a new construction of drain trough for the purposes stated in which the use of triggers, hooks or other like troublesome devices for holding the trough in one position or the other, are done away with.

My present invention further has for its purpose to provide a draining means for clothes wringers adapted for draining the water into the suds tub of an oscillating washing machine and which is arranged for being easily and quickly tipped over and out of the path of motion of the oscillating tub.

Furthermore, my invention has for its purpose the provision of the trough of the character mentioned that can drain water from one wringer into either tub, when the wringer is placed directly above and between two tubs and which can be automatically projected into the receptacle from which clothes are being wrung, either from one side of the wringer or the other.

With the above and other objects in view, that will hereinafter appear, my present invention generically embodies, in a drain trough structure, means hingedly connecting the trough to the wringer or any support below the wringer rolls and placing the pivot or point about which the trough rotates, a small distance below and in a central position relatively to the said trough.

In its more subordinate features, my invention consists of the peculiar combination and arrangement of parts, as stated in the following detailed description, specifically pointed out in the appended claims, and illustrated in the accompanying drawings, in which:

Figure 1 is a front elevation of my improved construction of drain trough, so much of a standard type of power driven wringer being shown necessary to illustrate an operative application of my invention, the trough being shown at the tipped back position.

Figure 2 is a cross section of the trough taken substantially on the line 2—2 on Figure 1, the wringer, excepting the rolls, being omitted.

Figure 3 is a view similar to Figure 2, the trough being shown tipped forward to the draining position.

Figure 4 is a perspective view of the hinged support casting hereinafter referred to.

Figure 5 is a diagrammatic cross section that illustrates the manner in which the trough is used for draining into either of two adjacent tubs, when the wringer is positioned above and between the said tub.

Figure 6 is a front elevation of a conventional type of wooden frame wringer with my improved drain trough operatively applied, a somewhat modified construction of the trough being illustrated.

Figure 7 is a cross section of the wringer and the trough construction shown in Figure 6.

Referring now to the construction and arrangement of parts shown in Figures 1 to 5, 1 designates the main casting of the wringer frame, 2 the bearing for one end of the shaft 22 of the lower wringer roll 3 whose other end journals in a hub bearing 30 on the transmission housing 31 that constitutes a part of the wringer frame and which includes a pendent hub 32 that clamps upon a revolving pipe support 6 in which is located the power shaft 7.

8 designates the wringer drain trough, the construction of which and the manner of mounting it, with relation to the wringer rolls, constitutes the essential feature of my present invention.

When my improved drain trough is adapted for power driven wringers of the type indicated in Figure 1 and as illustrated in my copending application, Serial No. 332,533, for an improved power driven clothes laundry or washing machine, filed on even

date with this application, the drain trough is formed of a piece of sheet steel with the opposite ends bent up and the opposite sides turned down to constitute drain flanges for extending over and into the tub, when tipped down, as clearly shown in Figure 2.

To the under side of the trough, near one end thereof, are riveted a pair of brackets and they serve as the right and left hinged connections 10 and 10ª and each of the said brackets has an aperture 23 for receiving the trough pivots 16 that connect the hinge brackets 10 and 10ª to a hinged supporting casting 9 shown in detail Figure 4, and which has apertures 90—90 for receiving bolts 24—24 that clamp the casting to one side of the cross member 1ª of the wringer frame, as best shown in Figures 2 and 3.

12—12 denote a pair of springs whose inner ends connect with an inner rod 14 that projects across and has its end supported in the angled ends 91—91 of the hinged casting 9.

The outer ends of the springs 12—12 connect with an outer rod 13 that extends across and has its ends mounted on the opposite hinged castings 10—10ª, as is best shown in Figure 1.

An angled member 17 is riveted to the under face of the trough, at that end opposite the spring connection, and the said member constitutes a stop which limits the tipping of the trough by engaging the casting member 1ª, see Figure 2.

The hinged castings 10 and 10ª also constitute stops for limiting the tipping of the trough in the other direction by engaging the sides of the casting member 1ª, as is clearly shown in Figure 3.

Mounting the trough over the wringer frame member 1ª, pivoting it a small distance below and in the central line of the trough, and arranging the springs 12—12, as shown, it follows that, when a limited pressure or touch is applied to the hinged end of the trough, the positions of the line of spring tension change or act instantly to change the position of the trough, it being apparent that, when the trough is tipped to a changed position, it is positively held to such position and from giving way or tipping out of its adjustment, by the applied spring tension.

Utility of my construction of trough will be further appreciated by referring to the diagram Figure 5, which illustrates how the trough operates, when the wringer is swung or located directly above and between two wash tubs.

When used as last mentioned, the tipped end of the trough projects some distance into the wash tub, from which clothes are being wrung.

The dotted lines in Figure 5 show the position of the trough, when wringing from the opposite tub. Attention is also called to the dotted lines in said Figure 5, since they indicate how the inner part of the trough moves inwardly and toward the wringer and out of the way so the clothes can easily pass over and not catch on this upper part of the trough.

In Figures 6 and 7, I have illustrated how my arrangement of drain trough can be applied to any of the conventional types of wooden wringers and how the trough may itself be of wood.

In the construction shown in the said Figures 6 and 7, the same general arrangement of the parts shown in Figures 1 to 5 are embodied and the method of operation is the same.

The trough proper, in this latter form, is of wood and has its opposite end edges secured in the grooved faces of the metal hinged brackets 35 that include the end flanges 11ª.

The hinged rod 13 is connected to the hinged brackets, the same as in Figures 2 and 3 and the lower spring rod connects at the opposite ends with the wooden ends of the wringer.

The trough pivot bolts 16 are secured in the wringer frame ends, as shown.

In lieu of the stops 17, shown in Figures 2 and 3, the hinged castings have lateral stops 18, at one end, that engage with the frame end, the hinged brackets in this last stated form operating as stops for limiting the tilt of the trough to the dotted position shown in Figure 7.

From the foregoing description taken in connection with the accompanying drawings, it is believed that the complete construction, the manner of its use and the advantages of my invention will be readily understood, by those familiar with the use of machines or appliances of the character stated.

What I claim is:

1. In clothes apparatus in which is provided a wringer including a cross member beneath the wringer rolls; a drain trough mounted between said cross member and the wringer rolls, brackets carried by said trough member and extending below the same, means pivotally connecting said brackets with said cross member, and a spring connected at one end with said brackets and at the other end with said cross member for moving said trough to either of two tilted positions beneath the wringer rolls and stops for limiting the movement of said trough to two oppositely inclined positions.

2. In a laundry apparatus in which is provided a wringer including rolls and a cross member beneath the wringer rolls; a drain trough mounted between said cross member and the wringer rolls, brackets carried by said trough and extending below the same, means pivotally connecting said brack-

ets with said cross member, said brackets and said cross member being shaped to engage one another to stop said trough in one inclined position, and a stop member on said trough to engage said cross member and stop said trough in the opposite inclined position, and a spring member connected with said trough and with said cross member for holding said trough in either of its two tilted positions beneath the wringer rolls.

3. In apparatus of the class described, the combination with the supporting cross member, brackets carried by said cross member, a drain trough located above said cross member, brackets carried by said drain trough and projecting into cooperative relation with said first mentioned brackets, spring connections between the brackets carried by said trough and those carried by said cross member, means pivotally connecting the respective sets of brackets together along an axis out of alignment with the lines of connection between the springs and the several brackets when the trough is in either of two inclined positions, whereby said springs will tend to hold said trough in either of said two inclined positions, and means for limiting the extent of inclination of said trough.

WILLIAM HAROLD HUENERGARDT.