N. B. LE DUC.

STOPPER FOR LAUNDRY TRAYS AND THE LIKE.

APPLICATION FILED OCT. 11, 1920.

1,403,423. Patented Jan. 10, 1922.

Fig. 1

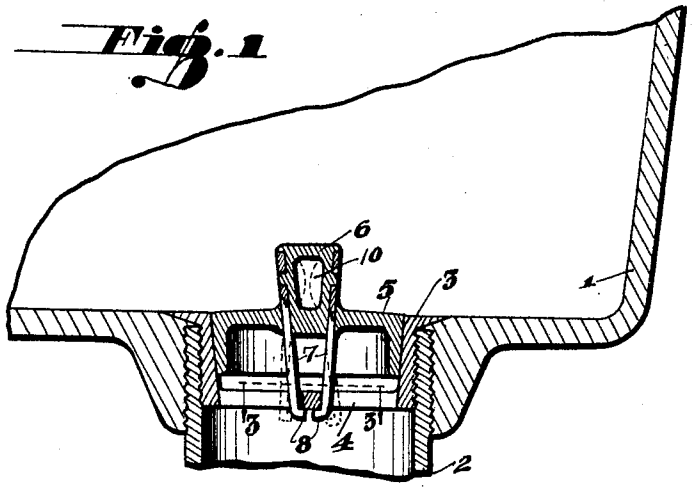
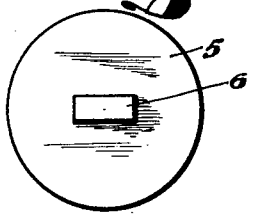


Fig. 2



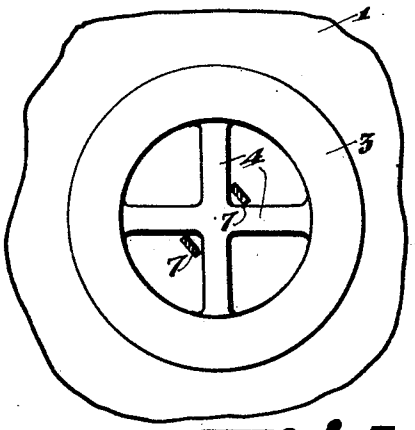
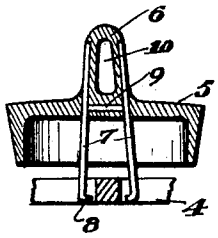


Fig. 3

Fig. 4



INVENTOR

Nancy B. Le Duc

by Hazard & Miller

ATTYS

UNITED STATES PATENT OFFICE.

NANCY B. LE DUC, OF PASADENA, CALIFORNIA.

STOPPER FOR LAUNDRY TRAYS AND THE LIKE.

1,403,423. Specification of Letters Patent. **Patented Jan. 10, 1922.**

Application filed October 11, 1920. Serial No. 416,010.

To all whom it may concern:

Be it known that I, NANCY B. LE DUC, a citizen of the United States, residing at Pasadena, in the county of Los Angeles and State of California, have invented new and useful Improvements in Stoppers for Laundry Trays and the like, of which the following is a specification.

It is the object of this invention to provide a stopper for outlet ports which is provided with means for detachably retaining the stopper in position relative to the outlet port so as to prevent the accidental displacement of the stopper.

The invention will be readily understood from the following description of the accompanying drawings, in which—

Figure 1 is a longitudinal section through a stopper constructed in accordance with the invention and shown in inoperative position within the trap of the laundry tub.

Fig. 2 is a plan view of the stopper.

Fig. 3 is a transverse section on the line 3—3 of Fig. 1.

Fig. 4 is a longitudinal section through the stopper showing its retaining arms in disengaging position and showing a somewhat modified form of the invention.

In the drawings a laundry tub is shown at 1 having the discharge pipe 2 communicating with the tub by means of a drain 3 which includes the usual cross arms 4 below the top surface of the drain.

The stopper employed in connection with the drain may be the usual rubber stopper 5 having the upwardly projecting rubber lug 6 for taking hold of the stopper. This invention contemplates the provision of retaining arms depending from the stopper and arranged to engage the cross arms 4. As an instance of this arrangement arms 7 may extend through the stopper with their upper ends embedded in the sides of the lug 6. The lower ends of the arms project below the stopper and are turned inwardly as shown at 8 so as to engage beneath the cross arms 4. The portion of lug 6 between the upper ends of arms 7 embedded therein is preferably cut away as shown at 10.

The resiliency of the rubber forming the stopper will normally spread the upper ends of the retaining arms apart, as shown in Fig. 1, so that the hook ends 8 of the arms will be brought together for engagement beneath cross arms 4. When it is desired to disengage the stopper from the trap the sides of lug 6 are compressed so as to move the upper ends of the retaining arms toward one another as shown in Fig. 4, and as a consequence the lower engaging ends of the retaining arms will be swung apart so that the stopper may be readily removed from the trap.

In the form of the invention illustrated in Fig. 4 a positive abutment element shown as a bar 9 is embedded in the stopper between the arms 7 so that the latter will be fulcrumed by their abutment against said element. The arms are thus arranged to be swung upon their fulcrum from engaging to disengaging position when the upper end of the lug is compressed, as previously described.

Various changes may be made without departing from the spirit of the invention as claimed.

What is claimed is:

1. A stopper having a resilient lug, and engaging arms embedded therein so as to depend from said stopper in normal engaging position, the parts being so arranged that compression of said lug will move said arms into disengaging position.

2. A stopper of resilient material having an upwardly projecting lug, and engaging arms embedded in said stopper and lug so as to depend from said stopper in normal engaging position, the parts being so arranged that compression of said lug will swing apart the depending ends of said arms into disengaging position.

3. A stopper having a resilient lug and engaging arms embedded therein so as to depend from said stopper in normal engaging position, and a non-yieldable abutment element between said arms intermediate of their ends, the parts being so arranged that compression of said lugs will fulcrum said arms upon said abutment element so as to move the depending ends thereof into disengaging position.

In testimony whereof I have signed my name to this specification.

NANCY B. LE DUC.