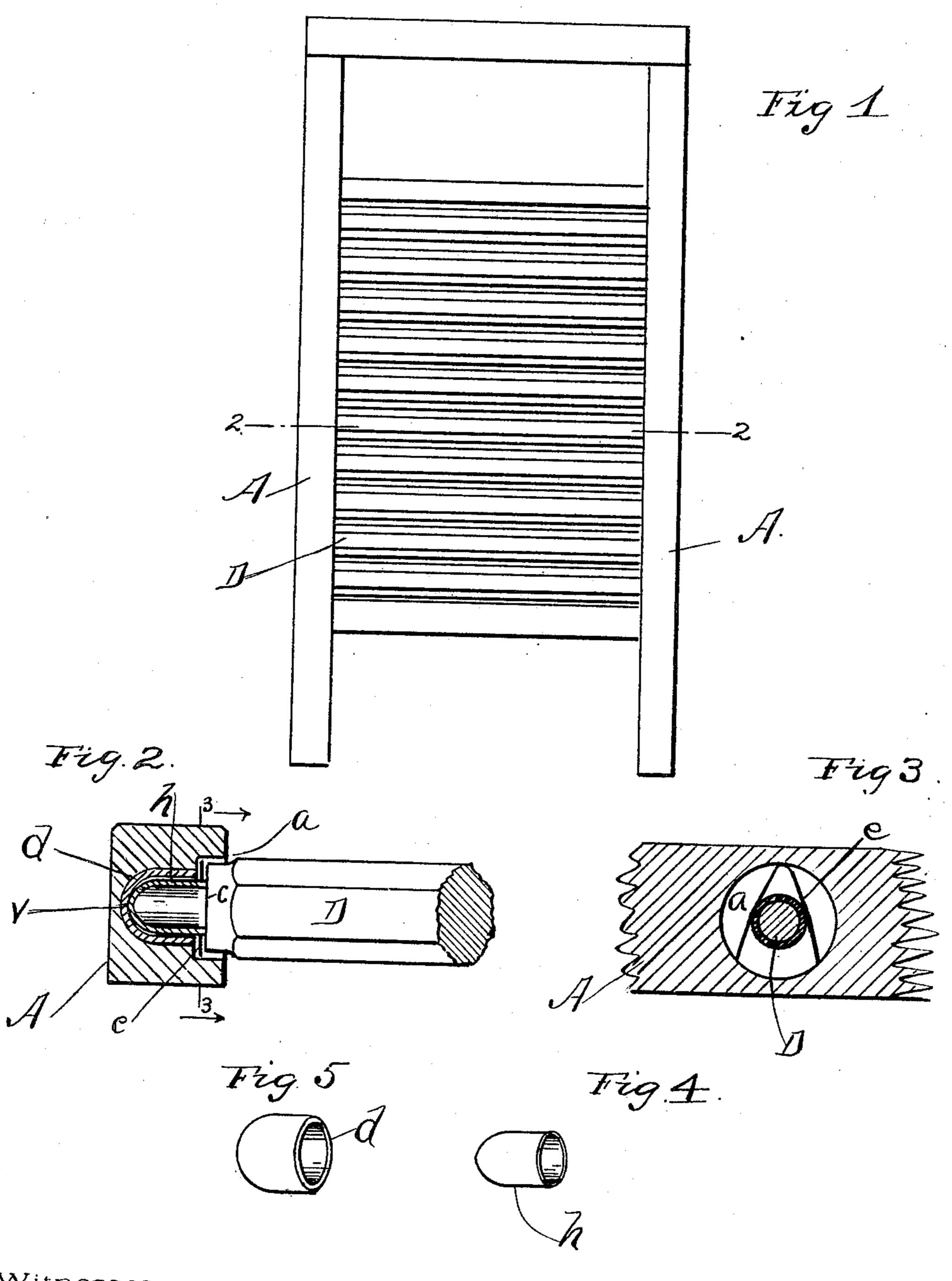
## W. WALLENTHIN. WASHBOARD.

(Application filed Aug. 22, 1898.)

No Model.)



Witnesses

M. Eleveland. Ghaincola Inventor. Waltred Wallenthin.

By and Barbon Attorneys

## United States Patent Office.

WALERED WALLENTHIN, OF PROVIDENCE, RHODE ISLAND.

## WASHBOARD.

SPECIFICATION forming part of Letters Patent No. 630,143, dated August 1, 1899.

Application filed August 22, 1898. Serial No. 689,229. (No model.)

To all whom it may concern:

Beit known that I, Walfred Wallenthin, of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Washboards; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention refers to the washboard used in washing clothes. It is fully explained and illustrated by this specification and the ac-

15 companying drawings.

Figure 1 is a front elevation of a wash-board. Fig. 2 shows a section of one of the side bars on line 2 2 in Fig. 1 with the roll in elevation. Fig. 3 is a section view of one of the rolls and a part of the side frame taken on line 3 3, Fig. 2, between the spring and the open end of the bushing, looking toward the roll. Fig. 4 is a perspective view of the thimble that goes on the end of the roll. Fig. 5 is a perspective view of the cup-bushing that goes in the hole in the side bar.

The object of this invention is to make a bearing for the rolls of a washboard that shall run freely and at the same time avoid making the disagreeable rattling noise when the clothes are rubbed back and forward over

them.

The construction is as follows: A A are the side bars, in which the rolls D D have their 35 bearings. The holes a in the side bars A, in which the rolls D turn, are made for a short distance in large enough to receive the full size of a roll with the corners turned off and leave a small clearance all around the roll, 40 and a smaller hole is made in the bottom of the larger one to form the bearing that keeps the large part of the roll from touching the sides of the larger hole. The thimble h and the cup-bushing d, Figs. 4 and 5, are made 45 of metal. The thimble h is made to drive tight on the end of the roll D, which is turned down to about one-half the size of roll, and the bushing d is made large enough to allow |

the thimble h to turn freely in it, and its closed end is made nearly hemispherical; but 50 the closed end of the thimble h is made a little pointed, so that its end contact with the bushing d at v shall be as small as possible to allow it to turn very freely in it. The bushing d is made shorter than the thimble 55 h, so as to hold the end of the roll at c from ever touching the shoulder in the hole. This confines the contact of the parts of the bearing to the metal thimble and bushing, which are unaffected by the hot water and soap. 60 To prevent the rattling noise of the rolls in use, which because of their number is very annoying, a V-shaped piece of light wire e is sprung into the space between the shoulder on the roll and the shoulder on the bearings, 65 (see Fig. 3,) with the ends of the wire bearing against the sides of the hole a and the middle of the wire on each side pressing lightly on each side of the roll, which will prevent the roll from rattling.

The object in having the roll D project into the hole its full size for a short distance in the side bar is to prevent the clothes or threads from them catching, as they do when there is a shoulder on the roll outside of the bar between the shoulder and the side bar, and

clogging the roll so it will not turn.

Having thus described my improvements, I claim as my invention and desire to secure

by Letters Patent—

In a washboard a bearing consisting of a roll having its end turned down, a side bar having a hole made in it to receive the roll, a little larger than roll, and a smaller hole made in the bottom of the larger hole to receive the smaller part of the roll, a V-shaped piece of wire inserted between the shoulder on the roll and the shoulder in the hole and pressing lightly against the side of the roll, substantially as described.

In testimony whereof I have hereunto set my hand this 18th day of August, A. D. 1898. WALFRED WALLENTHIN.

In presence of—
BENJ. ARNOLD,
M. E. CLEVELAND.