

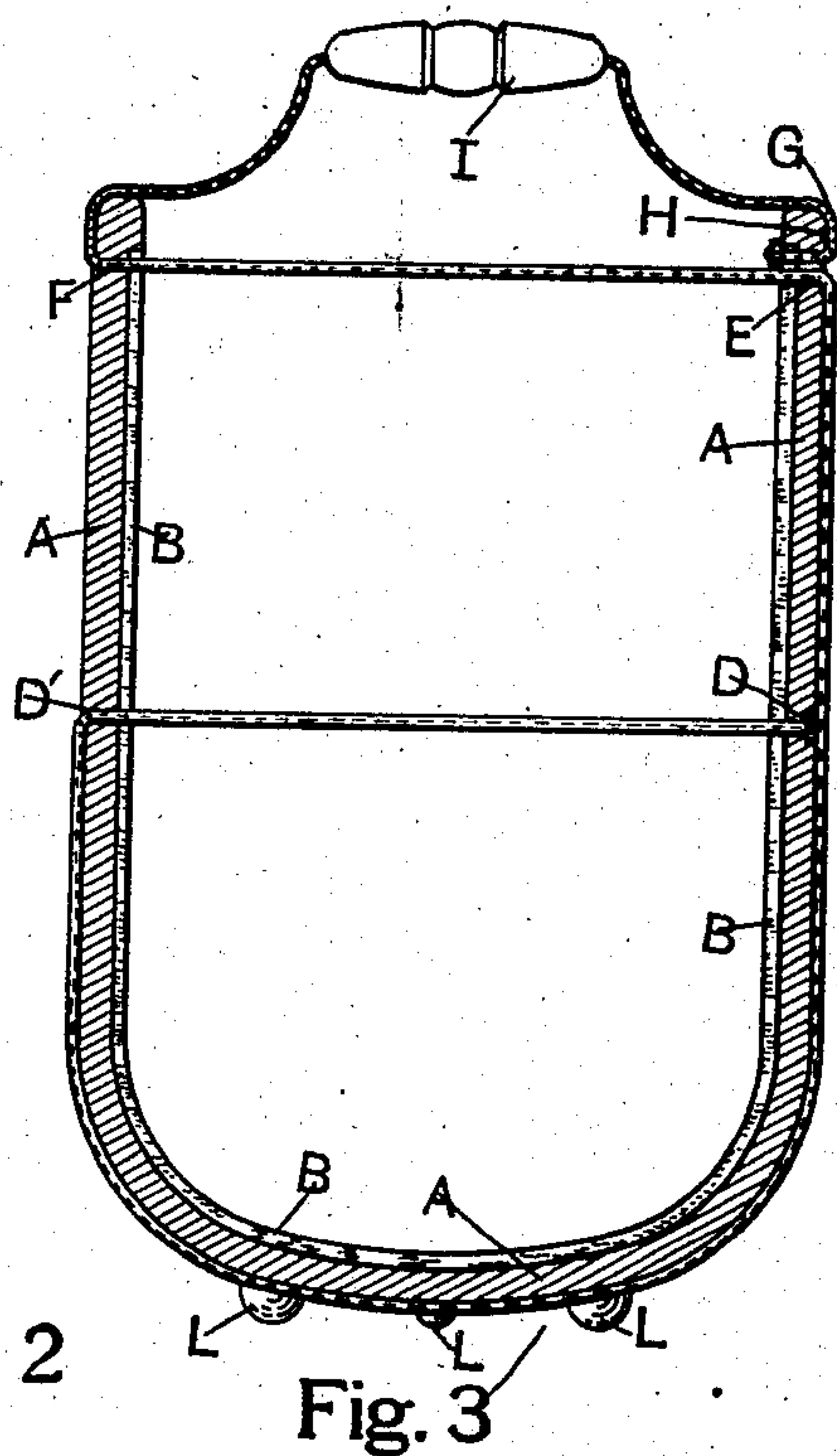
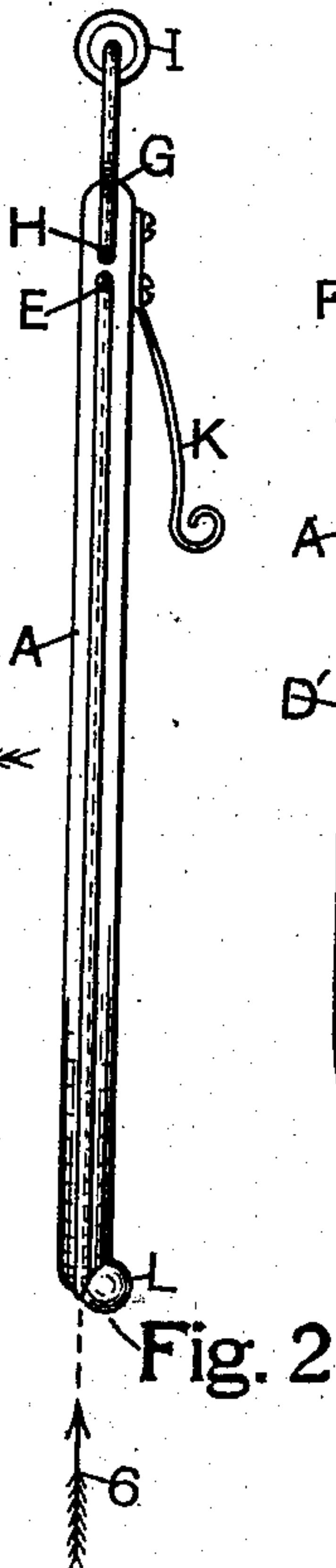
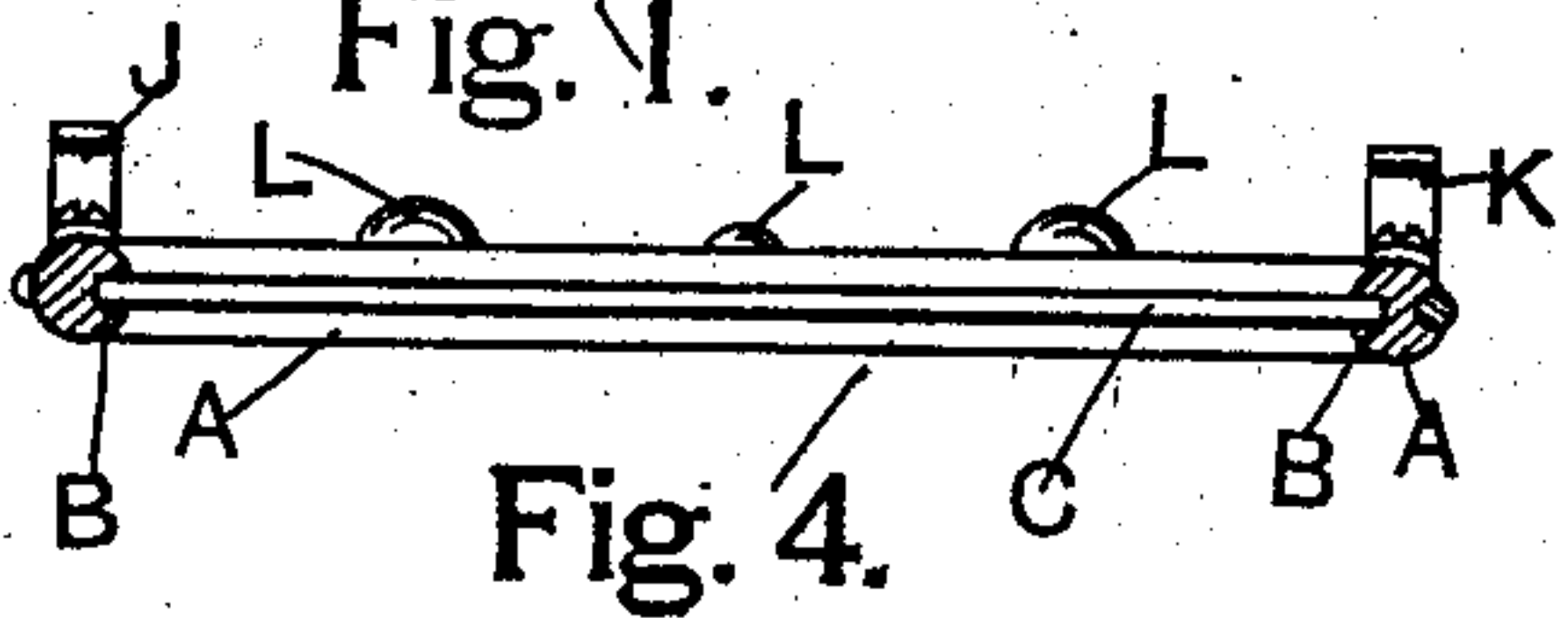
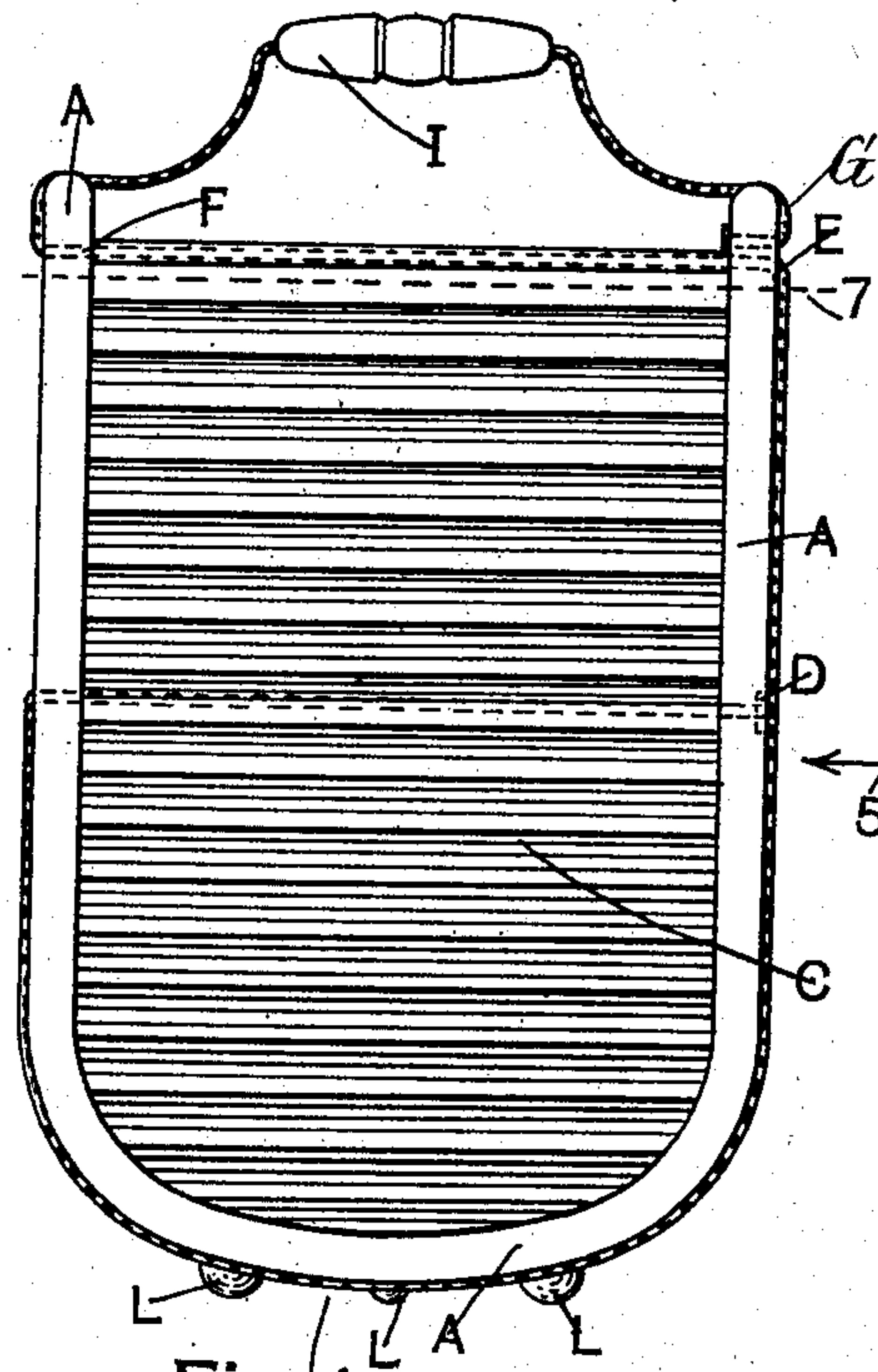
No. 693,364.

M. E. BINGAMAN.  
WASHBOARD.

Patented Feb. 18, 1902.

(Application filed Nov. 6, 1899; Renewed July 27, 1901.)

(No Model.)



WITNESSES:

*H. H. Hale,*  
*J. J. Fields.*

INVENTOR:

*Mary E. Bingaman*  
*By her atty*  
*Oscar Snell*



# UNITED STATES PATENT OFFICE.

MARY E. BINGAMAN, OF NEW YORK, N. Y.

## WASHBOARD.

SPECIFICATION forming part of Letters Patent No. 693,364, dated February 18, 1902.

Application filed November 6, 1899. Renewed July 27, 1901. Serial No. 69,869. (No model.)

*To all whom it may concern:*

Be it known that I, MARY E. BINGAMAN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a new and useful Washboard, of which the following is a specification.

My invention relates to one of the means used in ordinary hand laundry operations; and it consists of a new kind of frame for washboards.

My object is to provide a construction which may be produced at a low cost and is well adapted to withstand the rough usage incident to the usual practice, the same being described hereinafter and illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation showing all the essential parts in position ready for service. Fig. 2 is a side edge elevation looking in the direction indicated by arrow 5, Fig. 1. Fig. 3 is a vertical section of the main portion of the bent frame on a line indicated by arrow 6, Fig. 2, and also shows a binding-wire which serves to hold the bent frame in position around the corrugated metal panel upon which the washing or rubbing is done. Fig. 4 is a cross-section on broken line 7, Fig. 1, looking downwardly to illustrate the usual cross-section of the sides of the frame and the groove therein for receiving and effectually retaining the corrugated metal panel.

Similar letters indicate like parts throughout the several views.

The frame A is preferably made of a material having a circular cross-section and should be bent into a substantially U shape, as indicated in the drawings. The inside of the frame A is grooved, as shown at B in Figs. 3 and 4, to hold the sides and bottom edges of the corrugated metal panel C, Figs. 1 and 2. The binding-wire for holding the U-shaped frame in close contact around the corrugated panel C in this instance is so disposed that one end terminates in a washer, into which it is riveted at the side of the frame at D. Thence the wire is disposed across the rear of the corrugated panel in one of the corrugations thereof and through the opposite side of the frame at D', then after a right-angle bend passes downwardly in a shallow groove in the outside of the

frame (indicated in Fig. 4) and around the convex end of the frame, and then upwardly over the riveted end thereof at D to near the top end portion of the side of the frame, where the wire is bent at a right angle at E. Thence it passes across to the opposite side of the frame and through the same at F, where it is bent at a right angle, and then passes upwardly and over the top of the side of the frame and across to the opposite side, where it is disposed in a groove in the top of the side of the frame and bent over and around the same and then downwardly at G to H, where the wire is again bent at a right angle and passes inwardly through the side of the frame and terminates in a washer, into which the end is riveted. The portion of the binding-wire at the extreme top between F and G is bent upwardly and into two short curves, one at each end of the handle I, so as to prevent undue longitudinal movement thereof. The top portion of the corrugated panel C is turned over the portion of the binding-wire between E and F into a hook, whose free end is bent down close around the wire and may be soldered in place, if necessary, to form a certain hold and support for the upper end of the panel.

At J and K, at the rear side of the washboard, Fig. 4, are shown spring-catches, attached to the frame near the top ends thereof, and which are adapted to engage the top margin of a tub or other washing-receptacle to prevent the washboard from slipping from the usual inclined position it is placed in when in use.

At L L L are shown several buttons, usually of rubber, which are secured to the bottom of the frame and serve to additionally support the same against slipping from position and to form a straight-line support against any lateral inclination on account of the rounded lower end of the frame.

I claim as my invention—

1. In a washboard, a frame having the lower end curved and forming a U shape, a panel serving as a rubbing-plate and secured within the frame, and projections at the lower curved end adapted to prevent lateral inclination, substantially as stated.

2. In a washboard, a frame having the lower end curved and forming a U shape and hav-



ing a groove in the inner side of the frame,  
and a rubbing-plate within the frame in en-  
gagement with the groove, a wire having one  
end secured in one side of the frame about  
5 the middle of length portion of the rubbing-  
plate, and is disposed through the frame and  
across and in contact with the rear surface  
of the rubbing-plate, and through the oppo-  
site side of the frame, thence downwardly on  
10 the outside of the frame and around the con-  
vex bottom portion and upwardly on the op-  
posite side to the top portion thereof where  
the wire passes through the side of the frame,

and again across to and through the opposite  
side of the frame at the top of the rubbing- 15  
plate, which is attached thereto, thence up-  
wardly and again across to the opposite side  
of the frame where the end is secured, the  
wire serving to support, and to hold the rub-  
bing-plate in position in the groove, and as 20  
a handle for the washboard, substantially as  
stated.

MARY E. BINGAMAN.

Witnesses:

WM. M. SMITH,  
E. H. VAN SCHAICK.