B. D. KNICKERBOCKER.

FOLDABLE BATH HOPPER.

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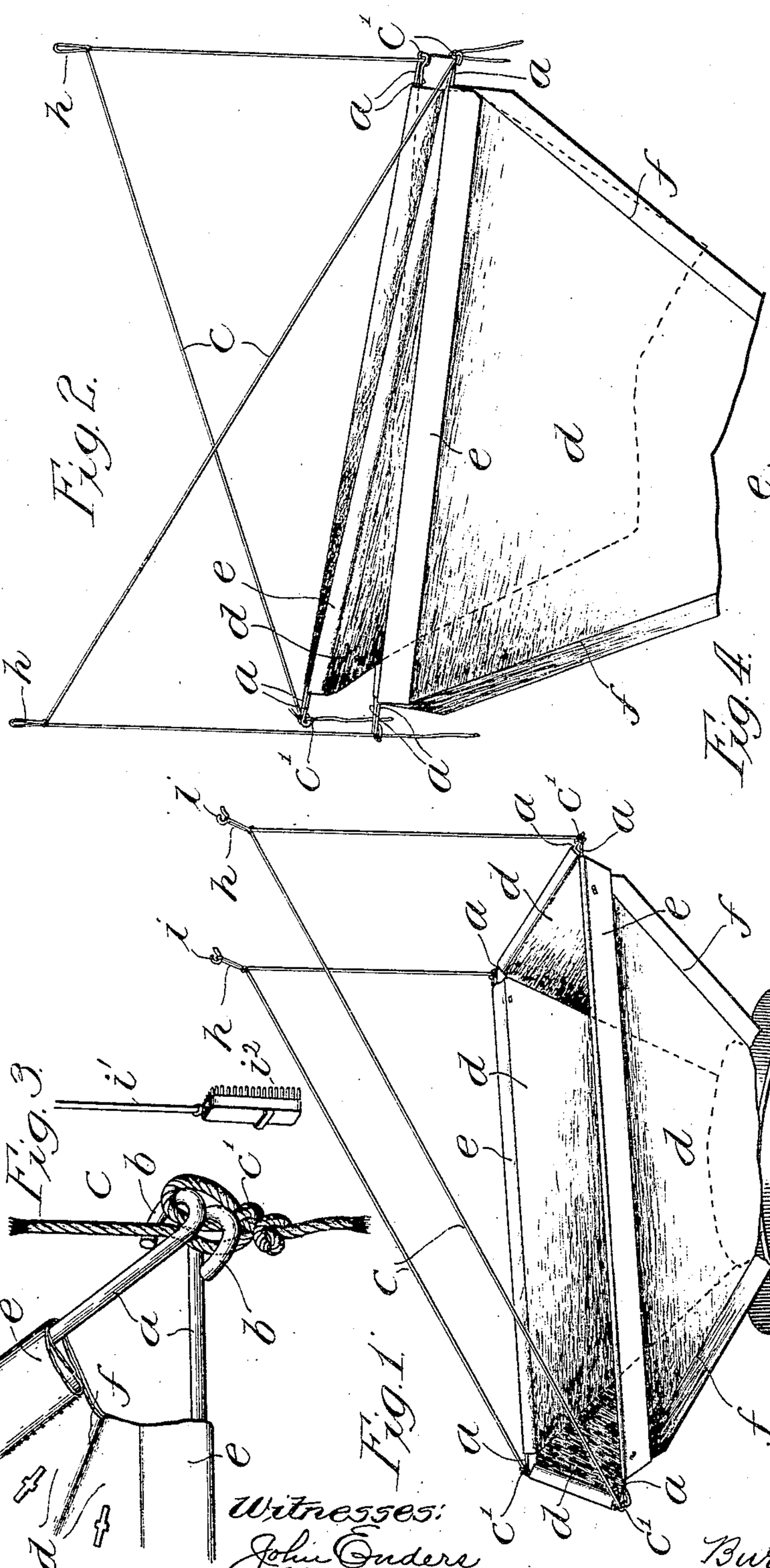
954,972.

Patented Apr. 12, 1910.



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UNITED STATES PATENT OFFICE.

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FOLDABLE BATH-HOPPER.

954,972. Specification of Letters Patent. Patented Apr. 12, 1910.

Application filed May 22, 1909. Serial No. 497,678.

To all whom it may concern:

Be it known that I, BURTON D. KNICKERBOCKER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Foldable Bath-Hoppers, of which the following is a description, reference being had to the accompanying drawings, forming a part of this specification, in which corresponding letters of reference in the different figures indicate like parts.

The object of my invention is to provide a folding bath-panel, screen or hopper for use in connection with an ordinary tub or other vessel of relatively small size, so that a shower or other bath may be taken by the user without permitting the water to run or spatter outside of the vessel, the device being intended more especially for use in country districts or places where the usual water privileges of cities are unavailable,—all of which is hereinafter more particularly described and definitely pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a device embodying the invention, the same being suspended over an ordinary tub in position for use therewith; Fig. 2, is a view of the device as it would appear when partially folded; Fig. 3 is an enlarged detail view showing the manner of forming the joints for connecting the frame-rods, and Fig. 4 is a side elevation of a modified construction showing means for supporting the shield directly upon the edge of the tub or vessel into which the falling water is to be deflected.

Referring to the drawings, *a*, Figs. 1, 2 and 3, indicates a series of bars or rods preferably formed from metal and provided with openings or loops *b* at the respective ends, which are connected with each other by means of a cord *c*, so knotted or tied as to form loose joints between the rods in the manner indicated at *c'* and better shown in Fig. 3. Mounted upon each of the rods *a* is a panel *d*, of oil-cloth, rubber or other impervious material, each of which is provided with a hem *e* at the top, through which the rod *a*, by which it is supported, is projected. The several panels are mitered, as shown, and joined to each other by means of seams *f*, so that when the frame members are expanded in rectangular form, as shown in Fig. 1, the combined panels may constitute a hopper with slanting walls and open at the bottom, so as to stand above, but having its lower edge within the margin of the walls of an ordinary tub or other water holding receptacle *g*, as shown in Fig. 1;—it being understood that said opening should be of ample size to permit the user to stand therein while allowing sufficient space for movement in bathing.

The suspending cords *c* are provided with loops *h*, by means of which the frame may be suspended from hooks *i i*, Fig. 1, attached to the wall. The loops *h* are so positioned upon the cords that the shorter portion of each cord will be vertical or parallel to the wall, while the longer portions will be inclined at an angle to said wall so as to sustain the hopper in a horizontal position with one edge resting against the wall as shown. When in this position a bather may utilize the tub with water already supplied thereto and any water which may be caused to spatter will fall upon the panels or shields and be deflected into the receptacle. Should a shower-bath be desired a tube or hose i^1 may be used and connected with any source of water supply, as, for example, an elevated tank or bucket, not shown, the tube having upon its free end any well known form of fountain-brush or spray nozzle, as indicated at i^2, Fig. 1.

When the device is not in use it may be folded so as to permit the several panels to be brought together as shown in Fig. 2, in which view the frame members are represented as being partially separated in order to indicate more clearly the manner of folding which may be readily accomplished by moving the connected ends at one corner toward the diagonally opposite corner and then bringing the separated ends of the remaining corners together, when the several rods will be parallel and the panels will be completely folded. The collapsed structure may then be suspended flatly against the wall by means of the loops *h*, or the panels may be rolled around the assembled rods in a compact mass and disposed of as desired.

While I prefer to employ the cord suspending means as described, I do not wish to be confined thereto inasmuch as the hopper may be supported directly upon the water receiving vessel. In Fig. 4, I have shown at *l*, to enable them to fit over and panels or screens *j*, forming the hopper, are secured at their upper edges to rods in the

same manner as in the above described construction, but the panel supporting rods instead of being suspended from above are jointedly connected to obliquely disposed rods *k*, which are bent at their lower ends as shown at *l*, to enable them to fit over and engage the top of the tub *g*. The several elements may be so jointed as to enable them to fold flatly in a compact mass.

Having thus described my invention, I claim:—

1. A device of the class described, in which is combined a flexible impervious shield consisting of a series of connected mitered panels mounted upon jointedly connected frame members, and suspending elements attached to said frame members to permit said shield to be suspended above a vessel in the form of a hopper.

2. As an improved article of manufacture, a foldable bath-hopper for directing water into a vessel when sprayed from above, consisting of a series of connected flexible mitered panels mounted upon a knock-down polygonal frame and cord elements for supporting said frame and suspending it in a horizontal position above a water vessel.

3. As an improved article of manufacture, a foldable bath hopper for directing water into a vessel when falling upon it, consisting of a series of mitered panels formed from flexible impervious material, a series of jointedly connected rods forming a foldable frame to which the upper edges of said panels are connected, and cord suspending elements attached to the respective ends of said rods for holding said hopper in a horizontal position with one edge against a wall.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses, this 20th day of May, 1909.

BURTON D. KNICKERBOCKER.

Witnesses:

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