

E.H. Kirkham's Impt in Clothes Sprinklers.

75168

Witnesses.

C. W. Davenport
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E. H. Kirkham.

by his Attorney,
Frederick Curtis.

PATENTED
MAR - 3 1868

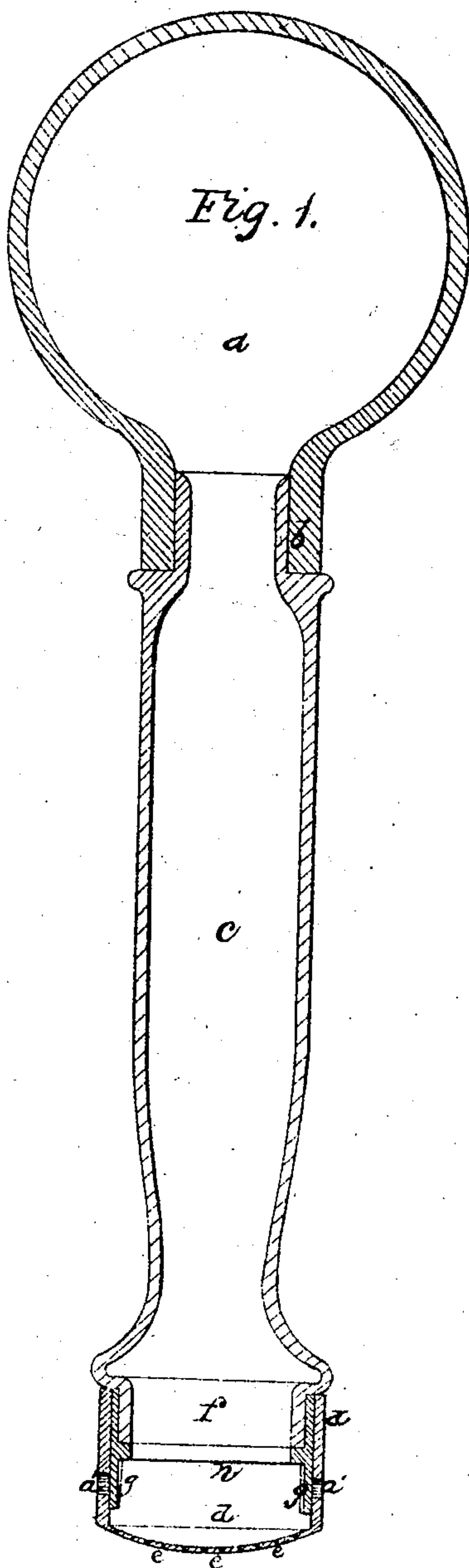


Fig. 2.

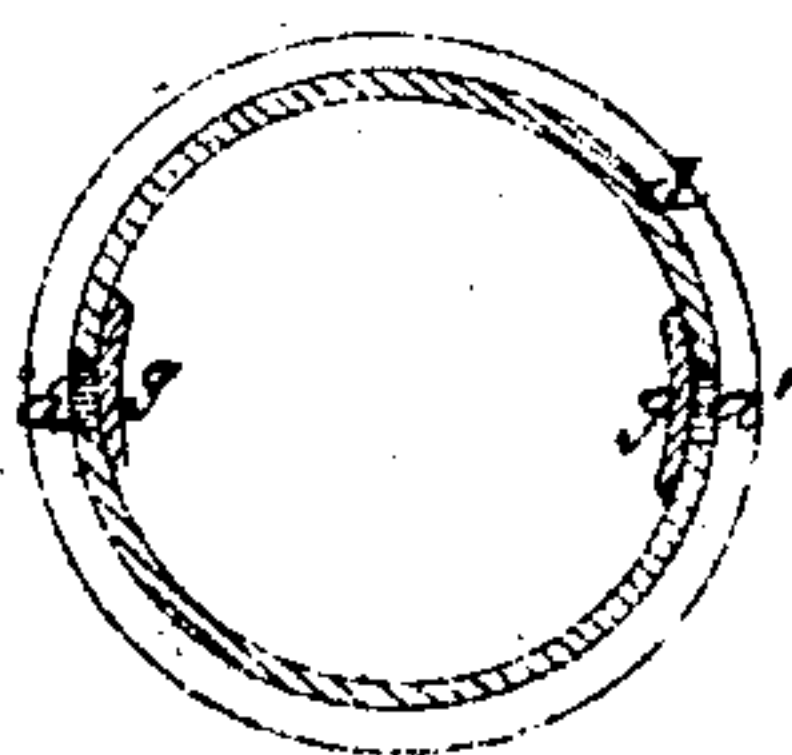
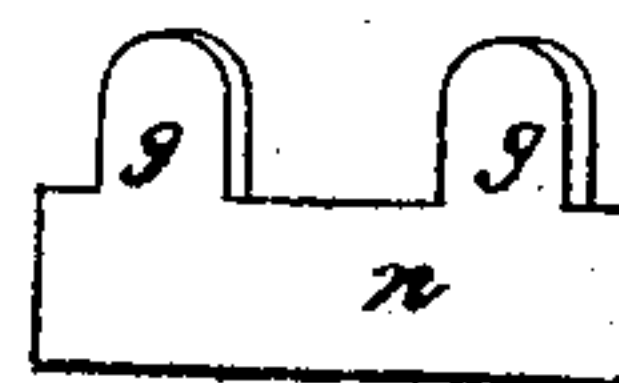


Fig. 3.



United States Patent Office.

E. H. KIRKHAM, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 75,168, dated March 3, 1868.

IMPROVED CLOTHES-SPRINKLER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Be it known that I, E. H. KIRKHAM, of Boston, in the county of Suffolk, and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Implements for Sprinkling Clothes for laundry purposes; and do hereby declare the following to be a full, clear, and exact description thereof, due reference being had to the accompanying drawings, making part of this specification, and in which—

Figure 1 is a vertical central and longitudinal section, and

Figure 2 a horizontal section of a clothes-sprinkler constructed in accordance with my invention.

Figure 3 is a representation of the series of elastic valves to be hereinafter described.

This invention is of that class of "clothes-sprinklers" in which an elastic bulb, provided with a foraminous nozzle, is employed, the object of the invention being to facilitate or expedite the filling of the bulb with water.

The invention consists in making one or more apertures or ports through the side of the spray-distributing nozzle or cap, and combining with each of such ports a valve, in such manner as to allow of entrance of water through these ports to the bulb, but to prevent escape of water outwardly through them, when such water is ejected from the bulb, the ports being sufficient in number or size to allow the quantity of water, necessary for filling the bulb, to pass through them very quickly.

By referring to the accompanying drawings, above mentioned as illustrating my invention, the implement is shown as composed of a bulb, *a*, made of vulcanized India rubber, and of the form, substantially, of an ordinary enema-syringe bulb, the neck *b* of the bulb being attached to one end of a tubular stem, *c*, of glass or other material, the opposite end of this tube being provided with a foraminous spray-disseminating cap or nozzle, *d*, which is composed of a short cylinder of Britannia or other proper material, with its outer end closed, and convex in form, and perforated with a series of very small holes, *eee*, &c. *a' a'* represent two of a series of ports made through the side of the cap *d*, and communicating with its interior, the inner opening of these ports being covered by valves *gg*, which consist of spurs projecting from an annulus, *n*, of India rubber which encircles the neck *f* of the tube *c*, and is confined between such neck and the cap *d*.

The above description will enable any person conversant with the manufacture of analogous implements or devices to make my invention.

In operating with it, it is to be held in a person's hand, with the first and second finger clasping the neck of the bulb, and with the thumb resting upon its outer end. Thus held, the bulb is to be compressed, and the air expelled from it by pressure applied to it by the thumb, and the foraminous nozzle dipped into a bowl or other vessel containing water, the pressure of the thumb upon the bulb being subsequently removed. By the distension of the bulb, consequent upon its contraction, the valves *gg* are drawn inward, and recede from and open the ports *a' a'* to the entrance of water, which readily and expeditiously flows through them as well as the perforations *eee*, &c., and the stem *c*, and fills the vacuum of the bulb. Upon applying pressure a second time to the bulb *a*, the water contained therein will be ejected from it through the perforations *eee* in a fine spray, the valves *gg*, by the pressure and current of the water, being forced tightly in contact with the edges of the ports *a' a'*, and effectually closing them.

The spray disseminated through the foraminous nozzle *d* is highly favorable for the purpose sought, the clothes or articles being dampened by it in an even and uniform manner.

Were it not for the ports *a' a'*, much time, comparatively, would be required to effect the filling of the bulb, and the person using the implement would lose time in waiting.

My object in making the tubular stem *c* of the length shown in the accompanying drawings, is to allow the implement to be readily grasped, without wetting a person's hand when such neck is immersed within a vessel containing sufficient water to cover it. If a very short tube were employed, the entire implement would be immersed in water if left standing therein.

Another advantage resulting from the use of a long stem is, that the implement may be inserted within a vessel of contracted diameter and considerable height.

Having thus described the nature of my invention, and its advantages, what I claim to be novel and original with myself, and desire to secure by Letters Patent of the United States, is—

A clothes-sprinkler, made essentially as herein shown and described, that is to say, as composed of the elastic bulb *a*, tubular stem *c*, and foraminous cap *d*, the latter being provided with ports and valves, substantially in manner and for the purpose as hereinbefore explained.

I also claim the before-described mode of forming and applying the valves *g g*, that is, as consisting of the annulus *n* and spurs *g g* applied to the neck of the stem *c*, and so as to cover the ports *a' a'*, the whole being arranged and operating as set forth and explained.

E. H. KIRKHAM.

Witnesses:

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