

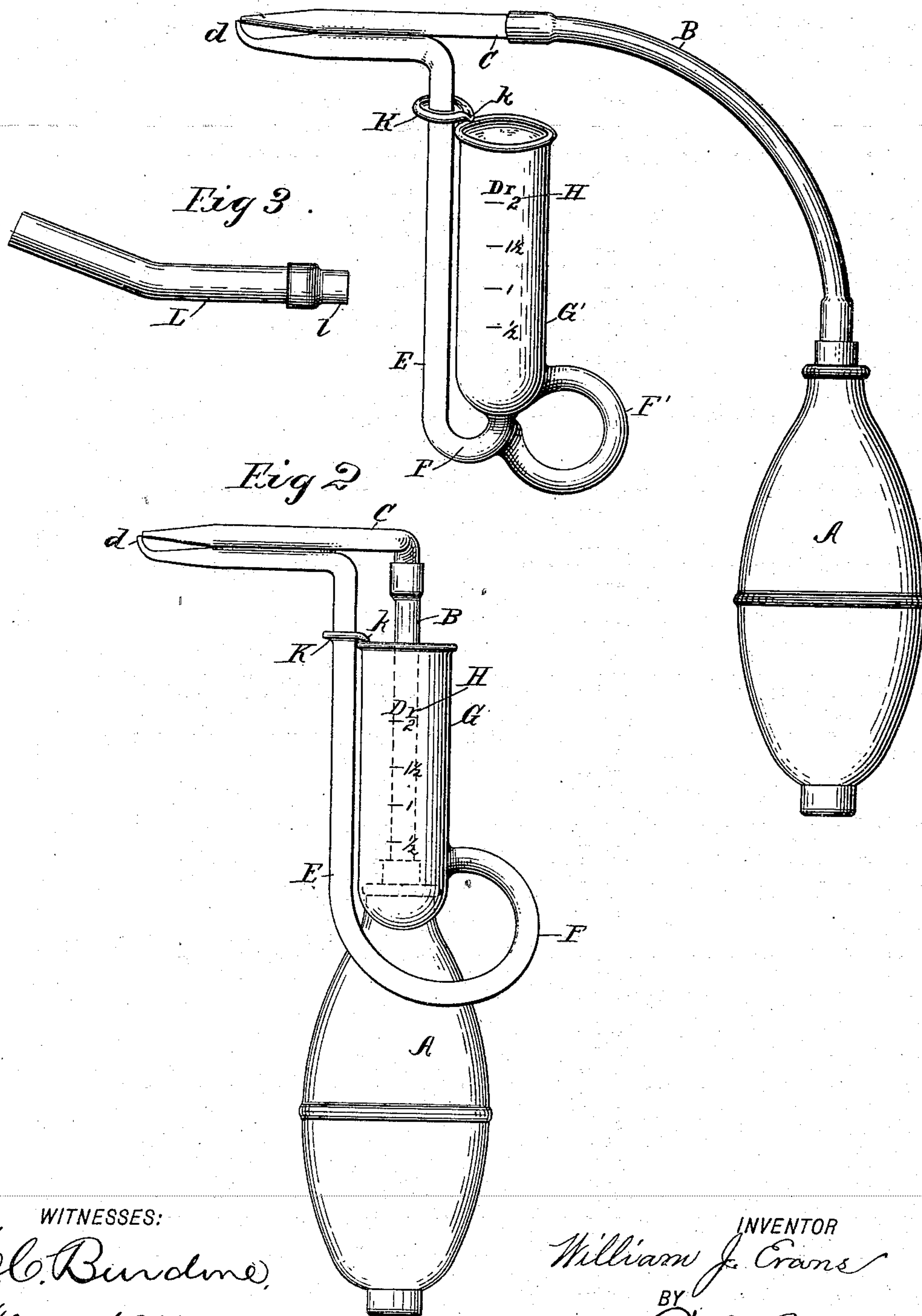
(No Model.)

W. J. EVANS.
ATOMIZER.

No. 503,837.

Patented Aug. 22, 1893.

Fig 1



WITNESSES:

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WILLIAM J. EVANS, OF NEW YORK, N. Y., ASSIGNOR TO McKESSON & ROBBINS,
OF SAME PLACE.

ATOMIZER.

SPECIFICATION forming part of Letters Patent No. 503,837, dated August 22, 1893.

Application filed February 21, 1893. Serial No. 463,156. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. EVANS, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Atomizers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in atomizers and it consists in the construction and arrangement of the parts hereinafter described and definitely pointed out in the claims.

The aim and purpose of the invention is the provision of an improved atomizer which will be advantageously arranged relative to perfect operation and result easily handled and manufactured and inexpensive. This object is attained by the construction illustrated in the accompanying drawings wherein like letters of reference indicate like parts in the several views and in which—

Figure 1 is a perspective view of the device. Fig. 2 is an elevation of a modified form, and Fig. 3 is an elevation of the spray conductor.

In the drawings A represents the air bulb, B the flexible piping connected therewith and C the air pipe over which the end of the piping fits and formed with the usual contracted discharge. This air pipe is arranged horizontal and extends forward beyond the piping so that its discharge end may be readily arranged in proximity to the seat of disease and inserted in the mouth or nose when desired. On the under side of the air pipe and parallel therewith is the suction pipe, rigidly connected with the section throughout a portion of its length and having the usual discharge nozzle *d* at the discharge end of the air pipe. The inner end of the suction pipe is carried downward and formed with a vertical section E, the lower end of which is curved rearwardly into substantially a U-shaped neck F. On the upper end of the inner branch of the neck and into which the same opens is a transparent, liquid holding cup G' forming an integral extension of the tube. The cup G' extends up parallel with the section E, and has an open upper end. On the side of the cup

is engraved a scale H, by which the quantity of liquid to be administered may be quickly and accurately measured.

K is a drip collecting flange formed on the section E, at a point adjacent to the upper edge of the cup. This flange has concaved upper face and a grooved lip *k* projecting over the edge of the cup, so that all drippings from the nozzles will be conducted into the cup.

In the construction above described it will be seen that the cup is directly below the inner end of the air pipe and the rubber piping extends down in the rear of the cup, the bulb being slightly below the neck F. By this arrangement the operator may grasp the neck with his thumb and fore-finger, and with the remaining fingers compress the bulb against the palm of the hand, thereby operating and holding the device with one hand, which is often necessary. To permit a better hold being had on the neck F, I extend out rearwardly therefrom the curved handle F'.

In treating certain diseases it is often necessary to insert the nozzle beyond swollen or inflamed parts, which obstruct or interfere with the exit of the spray. To overcome this objection I arrange over the nozzles a removable spray conductor L, consisting of a glass tube of uniform size and having an unobstructed outer end. The rear end of the conductor is incased in a rubber jacket *l* which tightly fits over the tube and pipe forming an airtight joint. This conductor may be curved as shown or straight as may be found expedient.

In Fig. 2 I have shown a modified form in which the section E is arranged at one side allowing the piping to pass down at the side of the cup. This form may be convenient in some cases. I have also shown in this form a modification of the neck F, in which case the neck is carried back and forward thus forming an extended handle.

In operation the liquid is placed in the cup and the nozzle adjusted to deliver the spray to the proper point. The bulb is then pressed forcing the air through the nozzle section drawing the liquid from the cup and spraying it at the discharge end of the suction pipe.

The advantages derived by carrying the

discharge tube up at the side and above the top of the vessel and horizontally beyond the same, is that the operator may readily adjust the nozzles without the vessel interfering, as
5 would be the case were the vessel extended above or in front of the discharge tube.

In constructing the device I preferably form the same of glass throughout, excepting the bulb and rubber piping. By this means acids
10 may be used without bad results as would be the case if metal were used and the device is more readily produced.

I am aware that many minor changes in the construction and arrangement of the parts of
15 the device can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

Having thus described my invention, what
20 I claim as new, and desire to secure by Letters Patent, is—

1. An atomizer consisting of an air and suction tube, a liquid holding cup, an integral

connection between the base of the cup and suction tube having a rearward bend thereon
25 constituting a hand piece and an air bulb on the air tube, substantially as described.

2. In an atomizer, the combination with a liquid holding cup, of a suction tube leading
30 out from the base and forming a part thereof, a drip flange on the suction tube having a lip projecting over the edge of the cup, an air pipe and an air forcing device connected to the air pipe, substantially as described.

3. In an atomizer the combination with an
35 open mouth cup, a rearwardly extending handle at the base of the cup, a suction tube leading out from and below the base of the cup and an air tube on the suction tube, substantially as described.
40

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM J. EVANS.

Witnesses:

S. RUSSELL TOWNSEND,
FRANK L. ZABRISKIE.