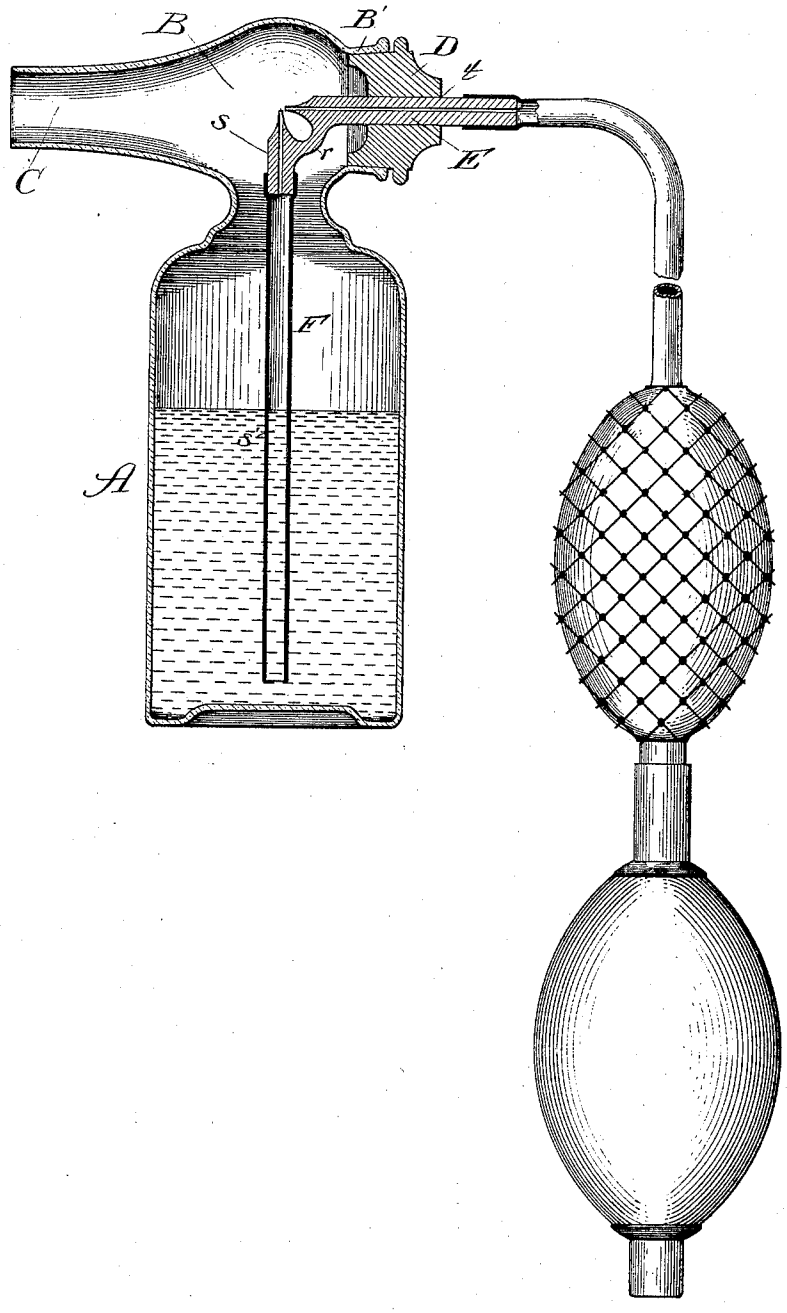
(No Model.)

O. E. O. HOELL.

ATOMIZER.

No. 436,580. Patented Sept. 16, 1890.



Witnesses:
Carl Gaylord,
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UNITED STATES PATENT OFFICE.

OLE E. O. HOELL, OF CHICAGO, ILLINOIS.

ATOMIZER.

SPECIFICATION forming part of Letters Patent No. 436,580, dated September 16, 1890.

Application filed July 25, 1890. Serial No. 359,900. (No model.)

To all whom it may concern:

Be it known that I, OLE E. O. HOELL, a subject of the King of Norway, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Atomizers, of which the following is a specification.

My invention relates to an improvement in atomizers of the class used more especially in applying liquid medicament in a vaporized state; and my object is to provide an atomizer of the above class of an improved construction, which shall render it peculiarly economical to manufacture and at the same time particularly durable and effective in its operation.

The drawing illustrates my improved atomizer in sectional elevation.

The liquid-receptacle A, atomizing-chamber B, and spout C are formed integral and may be of glass or other suitable material. Directly opposite the spout C, and in line with the latter, is an opening in the chamber B, formed with a neck B′, into which fits a stopper D, having an opening *t* through it. The blast-tube E and upper part *s* of the liquid-tube F are held together in fixed relation by an arm *r*, the parts being, by preference, formed in one piece, as shown, and of glass, hard rubber, or the like. The lower part *s′* of the liquid-tube may be of flexible material, as soft rubber. The blast-tube fits snugly through the opening *t* in the stopper, and is held in adjusted position by friction. The spout C reduces gradually in diameter toward the mouth, so that in the use of the device any portion of the vapor which condenses in the spout will run back into the receptacle.

In the use of the device it becomes necessary frequently, and especially when it is employed for spraying medicament, to clean the receptacle and the liquid-tube, which renders it necessary to take out the latter. This is accomplished in my device by simply removing the stopper D, which, as it is withdrawn, carries with it both the blast and liquid tubes.

As the blast-tube may readily be separated from the stopper in the case of breakage of the tubes, they may be easily replaced with new ones, and in the same way tubes with larger or smaller bores may be interchanged and employed, as desired, in the same device, which permits the latter to be used with equal effectiveness in spraying liquids of greater or less density.

What I claim as new, and desire to secure by Letters Patent, is—

In an atomizer, the combination of the receptacle A, atomizing-chamber B, and spout C, all formed integral, an opening in the side of the chamber B, formed with a neck B′, and provided with a removable stopper D, having an opening *t* through it, the blast-tube E, extending through the opening *t*, and a liquid-tube F, connected with the blast-tube and extending downward into the receptacle, substantially as described.

OLE E. O. HOELL.

In presence of—
J. W. DYRENFORTH,
M. J. FROST.