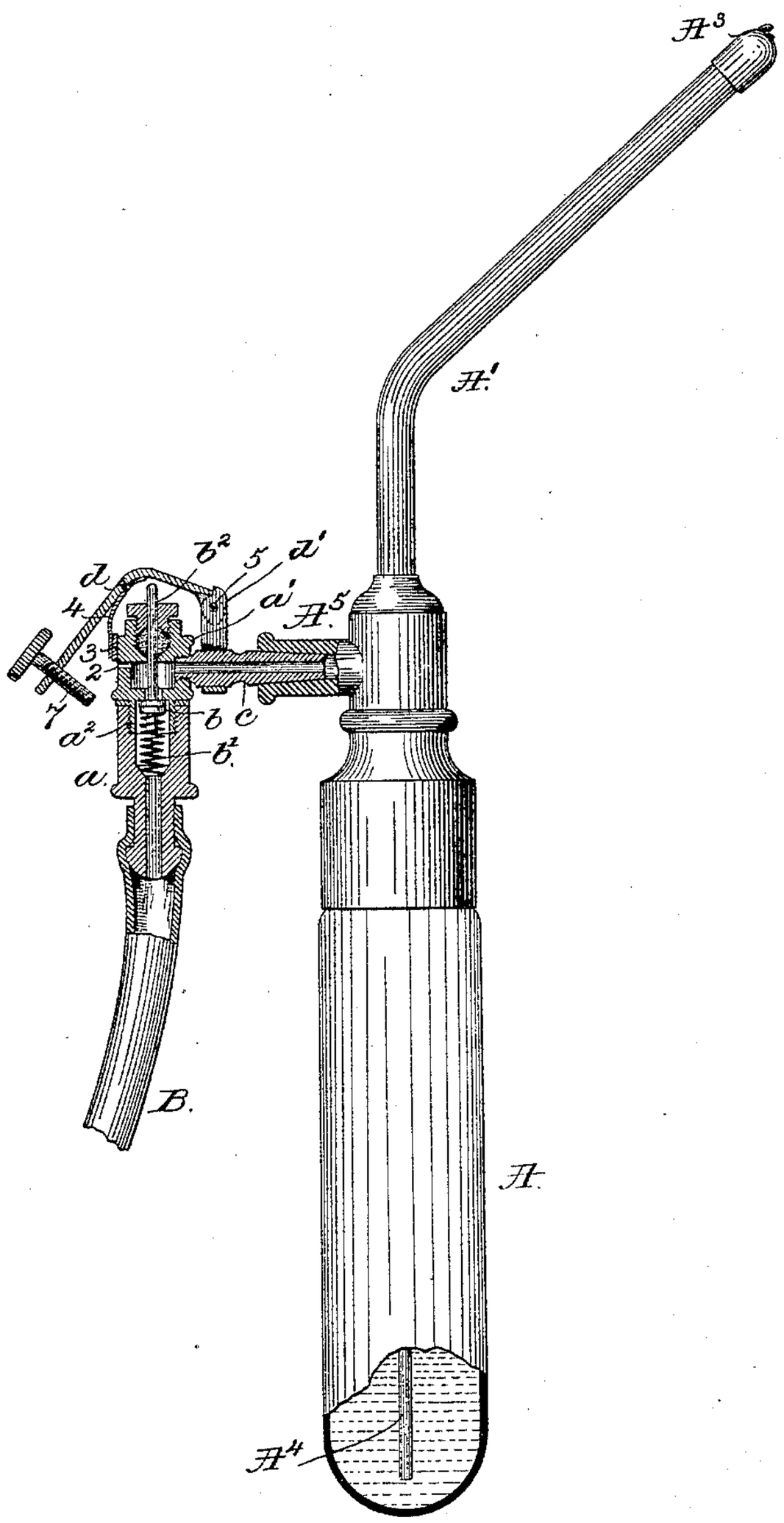
(No Model.)

R. LOCKWOOD.

ATOMIZER.

No. 453,650. Patented June 9, 1891.



Witnesses.
John F. C. Printz Clark
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by Lemby & Gregory Attys.

UNITED STATES PATENT OFFICE.

RHODES LOCKWOOD, OF BOSTON, MASSACHUSETTS.

ATOMIZER.

SPECIFICATION forming part of Letters Patent No. 453,650, dated June 9, 1891.

Application filed August 7, 1889. Serial No. 320,017. (No model.)

To all whom it may concern:

Be it known that I, RHODES LOCKWOOD, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Atomizers, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like parts.

In the use of atomizers in which the air employed is held in a reservoir under pressure, to enable the discharge to be stopped instantly, as desired, I have provided the pipe connected with the reservoir with a valve, the valve-casing having an air-escape passage, which is opened and closed by or through the movement of the lever employed to open the valve, a spring sealing the valve as soon as the lever referred to, which opens the valve, is disengaged by the operator.

The figure shows an atomizer, sometimes called a "spray," with my improvements added, the bottle being partially broken out, the valve, its casing, and co-operating parts being in section.

The atomizer or spray, composed of a liquid-holding bottle A, pipe A' A^4, and spray-nozzle A^3, are and may be all as common in atomizers using a bulb for forcing air through a pipe to atomize the liquid drawn into the pipe A^4.

Each atomizer or spray has a socket A^5, and in practice there may be several such atomizers or sprays sitting side by side in a suitable rack or holder, each containing a different liquid, so that any one may be used, as desired. The pipe B, supposed to be of india-rubber, is supposed to be connected with a reservoir (not shown) containing compressed air. The pipe B has at its end a valve-casing composed preferably of two parts $a\,a'$, screwed together at a^2, the part a' having a seat for the valve b, kept normally seated by the spring b', the valve-stem being inserted through a stuffing-box b^2 of usual construction. The part a' of the casing has a stem c, which may be inserted readily into the socket A^5 of any one of the several atomizers which it is desired to use. The part a' of the casing also has a vent-passage or air escape or exit 2, with which co-operates a cover 3, (shown as a piece of leather or other suitable material attached to a spring 4,) secured to a thumb-lever d, pivoted at 5 on an ear d', secured to the stem c, the said lever normally standing in the position shown in the drawing, due chiefly to the pressure of the spring 4 on the side of the part a'. The lever d has a stop 7, (shown as a screw,) which controls the extent of movement of the said lever.

The parts having been assembled as in the figure, and it being desired to discharge more or less of the liquid contents of the bottle A through the nozzle, the operator will put his thumb on the lever d, depress it, open the valve b, so that the air compressed in the reservoir referred to will rush through the pipe B into the pipe A', and as the lever is depressed the pad 3 closes the vent-passage 2 to prevent the escape of air. A sufficient quantity of liquid having been discharged or sprayed at the point desired, the operator will remove his thumb from the lever d, when it will instantly rise and the valve b will be seated, the pad 3 at the same time uncovering the vent or escape-passage 2, so that all forcing pressure tending to spray or discharge the liquid ceases as instantly as the valve is seated.

I do not desire to limit my invention to the exact shape of pad and lever shown, as they may be modified without departing from my invention.

I claim—

1. The combination, with an atomizer, a valve-casing having an air-escape passage 2 and a valve therein, of an actuating-lever therefor and a pad to open the said air-passage upon the closing of the said valve, substantially as described.

2. The combination, with an atomizer and a valve-casing having an air-escape passage 2, an inlet-opening, a valve normally seated therein and a spring to actuate it, and a valve-stem extended through said casing, of a lever and a pad to close and open the said passage 2, the lever co-operating with the stem to unseat the valve, as and for the purposes set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

RHODES LOCKWOOD.

Witnesses:

BERNICE J. NOYES,

FREDERICK L. EMERY.