

G. Couper,

Syringe.

No. 108111.

Patented Oct. 11. 1870.

Fig. 1.

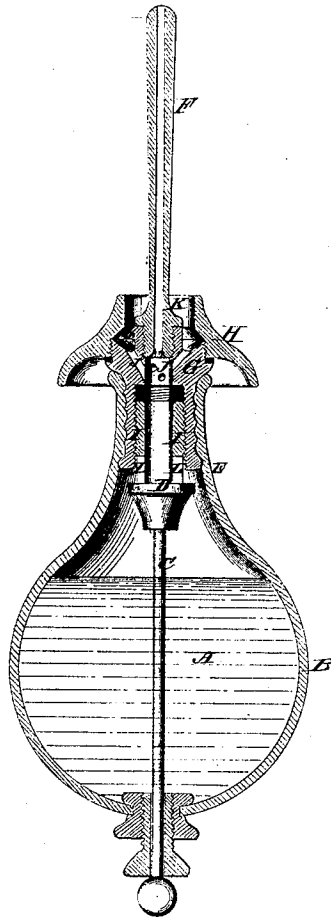
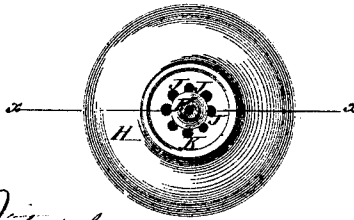


Fig. 2.



Witnesses:
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GEORGE CONOVER, OF MOTT HAVEN, NEW YORK.

Letters Patent No. 108,111, dated October 11, 1870.

IMPROVEMENT IN SYRINGES.

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

To all whom it may concern:

Be it known that I, GEORGE CONOVER, of Mott Haven, in the county of Westchester and State of New York, have invented a new and useful Improvement in Syringes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

The purpose of my improvement in syringes is to introduce to the public a stop-plate chamber and tube, combined with the valve in a peculiar manner, as hereinafter described.

In the accompanying drawing—

Figure 1 represents a longitudinal section of my improved syringe on the line *x x* of fig. 2.

Figure 2 is an end view, looking from the discharge-tube.

Similar letters of reference indicate corresponding parts.

- A is the vacuum-chamber.
- B is the elastic rubber bag or casing.
- C is the valve-stem.
- D is the valve.
- E is the valve-seat.
- F is the discharge-tube.

The elastic bag B is attached to the tubular piece G.

H is a conical stop-plate at the base of the discharge-tube, which is secured onto the tubular piece G.

I is a tube on the valve, which screws into the piece G.

There is an orifice, L, in this tube, next the valve, through which the liquid is discharged from the chamber A, when the bag is compressed, and through

which the injected liquid may be withdrawn back into the chamber A when the bag expands.

At the base of the discharge-tube F, within the stop-plate H, there is a series of holes, J, in the end of the piece G, which communicates with the tube I.

K is a recess in the stop-plate H, which allows the liquid to flow back through the holes J into the chamber A, when the valve is open.

The valve is operated by turning the stem, thereby securing the tube I into the piece G.

The chamber A is filled by allowing the elastic bag to expand after compression.

When a sufficient quantity of liquid has been drawn into the chamber, the valve is closed, so that the liquid may be retained, without leakage, as long as may be desired.

When the bag is compressed, the liquid will be forced through the holes J, as well as from the discharge-tube F, and be drawn back through the same orifices when the bag is allowed to expand. The valve is closed after such withdrawal, when the syringe may be removed.

By this instrument, injections may be given for leeching, disease, or simply washing internal organs, without danger of soiling the bed or clothing.

Having thus described my invention,

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

The removable stop-plate H, tube I, chamber K, and orifices J J, combined, as described, with the valve D, for the purpose set forth.

The above specification of my invention signed by me this 23d day of August, 1870.

Witnesses:

GEORGE CONOVER.

L. S. MABEE,
GEO. W. MABEE.