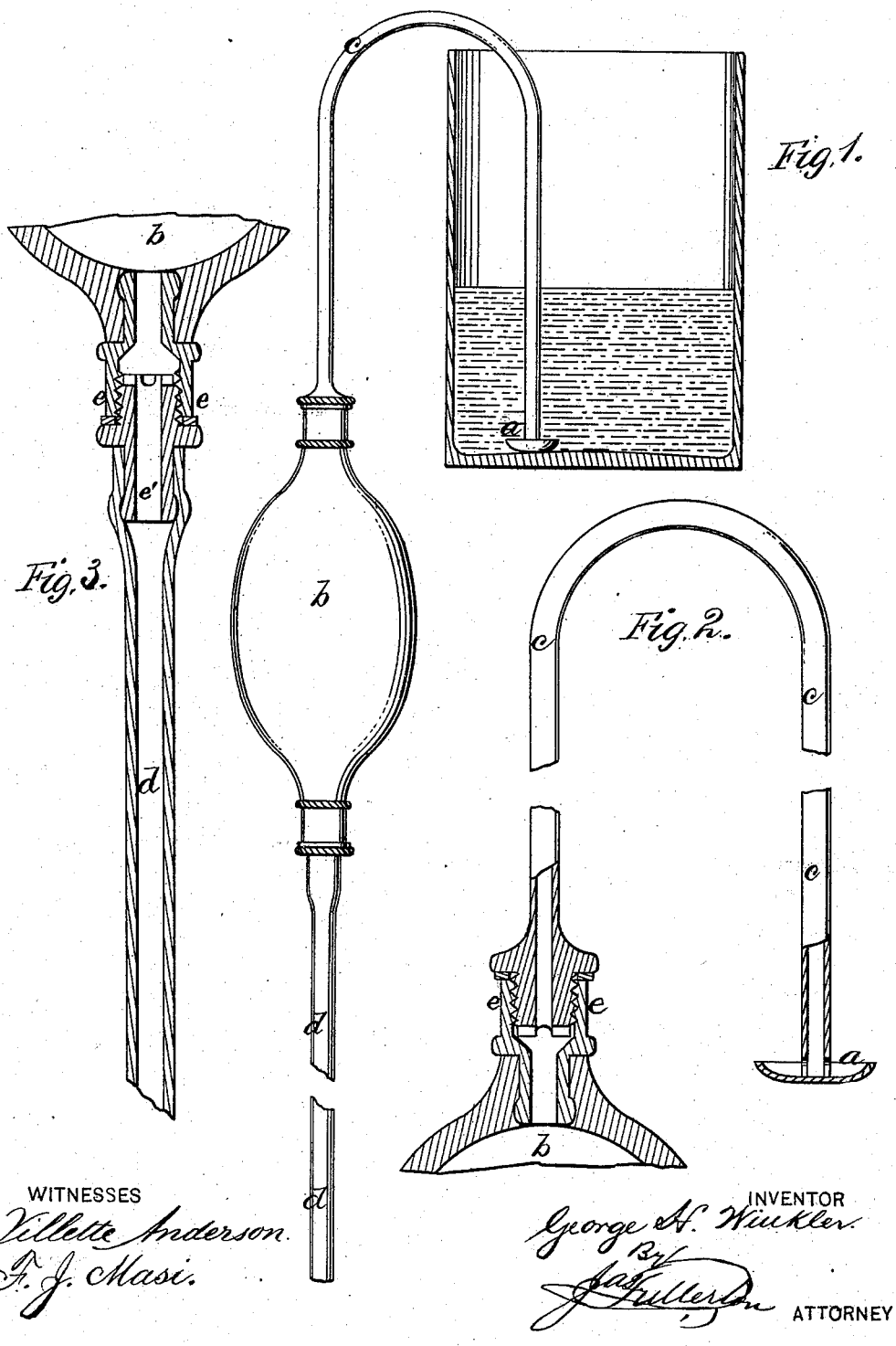
G. H. WINKLER.
Siphon.

No. 205,163. Patented June 18. 1878.



WITNESSES
Villette Anderson.
F. J. Masi.

INVENTOR
George H. Winkler.
By
Jas Fuller Jr
ATTORNEY

UNITED STATES PATENT OFFICE.

GEORGE H. WINKLER, OF AUGUSTA, GEORGIA.

IMPROVEMENT IN SIPHONS.

Specification forming part of Letters Patent No. **205,163**, dated June 18, 1878; application filed February 18, 1878.

To all whom it may concern:

Be it known that I, GEORGE H. WINKLER, of Augusta, in the county of Richmond and State of Georgia, have invented certain new and useful Improvement in Siphons; 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 which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to siphons for the drawing of liquids from one receptacle to another.

It consists of a novel application of an elastic air-bulb to the arms of the siphon without the use of valves or stop-cocks.

In the drawings, Figure 1 shows the short arm of the siphon, the air-bulb, and part of the long arm. Fig. 2 is a sectional view of the short arm and part of the bulb. Fig. 3 is a section of part of the bulb and long arm or tube.

I construct the short arm *c* of metal, and guard the mouth with a shield to prevent the influx of sediment, or when used for the purpose of relieving the mouth of saliva, in dental operations, for the purpose of protecting the gums and soft parts of the mouth. This shield is shown at *a*. The elastic bulb may be round or ellipsoidal, as shown in the drawings, *b*, and attached by screws *e* to the arms. For the long arm I use an india-rubber tube, *d*, of any convenient length, provided with a short metal tube and screw, *e'*, for attachment to the lower part of the air-bulb. I use no valves in the bulb or tubes, nor is any stop-cock necessary or pinching of the rubber tube *d*.

In operation, it is only necessary to insert the nozzle of the short arm in the vessel of liquid, and by a single compression and release of the bulb the flow will be established and continue as long as the nozzle is submerged.

When I use my siphon for the extraction of saliva from the mouth, I make the bend much shorter than shown in the drawing.

I do not confine myself to the use of metal for the short arm and a rubber tube for the long one. Both arms may be made of glass or any other suitable material.

I claim as of my invention and desire to secure by Letters Patent—

In a siphon, an elastic bulb without valves, in combination with the arms, for the purpose of exhausting the air and establishing the flow of the liquid, substantially as described and shown.

In testimony whereof I have hereunto subscribed my name in presence of two witnesses.

GEO. H. WINKLER.

Witnesses:

J. W. CHAFEE,

J. B. PATRICK, Jr.