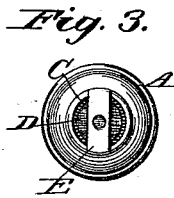
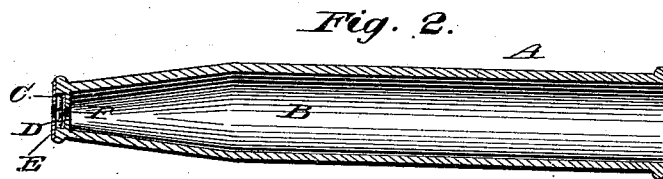
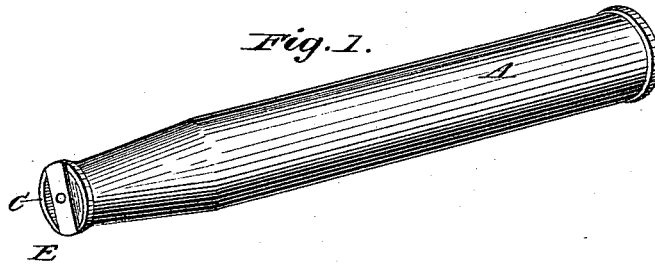


A. BERGER.  
Artificial Leech.

No. 212,176.

Patented Feb. 11, 1879.



Witnesses.

*Ad. G. Dieterich*  
*George. Pinkenburg*

Inventor.

*August Berger*  
*Per Charles Leo*  
*Atty.*

# UNITED STATES PATENT OFFICE.

AUGUST BERGER, OF HARTFORD, CONNECTICUT.

## IMPROVEMENT IN ARTIFICIAL LEECHES.

Specification forming part of Letters Patent No. 212,176, dated February 11, 1879; application filed October 23, 1878.

*To all whom it may concern:*

Be it known that I, AUGUST BERGER, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Artificial Leeches; and I do hereby declare that the following is a full, clear, and exact description of the invention, 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, which form a part of this specification.

Figure 1 is a view, in perspective, of an artificial leech embodying the improvements of my invention. Fig. 2 is a sectional view through it lengthwise, showing the perforated diaphragm rubber valve and perforated plate for retaining the rubber valve in its chamber; and Fig. 3 is an end view of the end of the leech containing the valve.

This invention has relation to artificial leeches; and consists of a tube of metal, glass, or any other suitable material, provided near one end with a perforated diaphragm, upon which rests a valve of rubber skin, which is retained in its chamber by a perforated plate secured to the end of the tube, as will be hereinafter fully described, and particularly pointed out in the claim.

In the accompanying drawings similar letters of reference indicate like parts in the invention.

The tube A may be of brass, glass, or other suitable material, and should be divided by the perforated diaphragm F into the fluid-chamber B, for receiving the blood or other fluid which it is desired to remove by the apparatus, and the valve-chamber C, in which the rubber-skin valve D rests and is retained

by the perforated bar E, secured to the smaller end of the tube A.

When suction is applied to the smaller end of the tube A, either by the human lips and mouth or other means, and the base of the tube rests upon a portion of the surface of the body, the air within the chamber B will be exhausted and a vacuum will be produced therein, into which the blood, &c., will flow when the surface to which the tube is applied has been previously scarified either designedly or by the accidental wounding resulting from a dog-bite, snake-bite, or an incision from a poisoned arrow.

Leeches thus constructed may be nested or combined, so as to have six or more in one tube, making them convenient for carriage in the pocket ready for instant use in case of accidental biting from a dog or snake, so that the poisoned blood may be drawn from the wound, thereby doubtlessly preventing hydrophobia, &c.

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

An artificial leech, consisting of the open-mouthed tapering tube A, having the perforated retaining-plate E, rubber-skin valve D, and perforated diaphragm C, substantially as and for the purpose herein shown and specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

AUGUST BERGER.

Witnesses:

WM. BAGGER,  
GEO. F. GRAHAM.