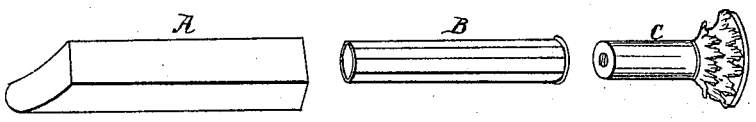
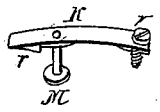
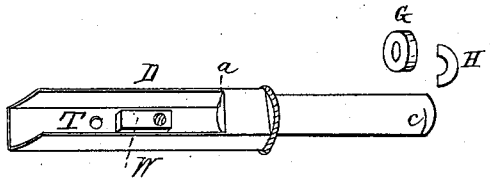
J. H. Gemrig,

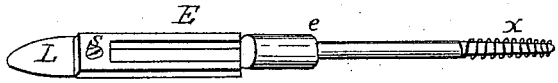
Lancet.

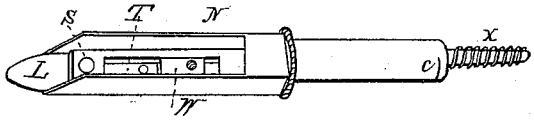
No. 4,450. Patented Apr. 11, 1846.

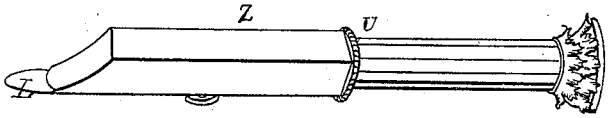












UNITED STATES PATENT OFFICE.

JACOB H. GEMRIG, OF PHILADELPHIA, PENNSYLVANIA.

SPRING-LANCET.

Specification of Letters Patent No. 4,450, dated April 11, 1846.

To all whom it may concern:

Be it known that I, JACOB H. GEMRIG, of the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Spring-Lancet for the Surgical Use of Phlebotomy, which I call "Gemrig's Spring-Lancet"; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

The first figure, marked A, represents the outside case; B, a hollow tube; C, the head, into which runs from the lower end a screw hole; D, the inner case:—(*w*) a block fast to the bottom of the inner case, a screw hole in the top of the block to which is to be attached the catch spring (*k*); E, the shaft, to the lower end of which is attached the regulating screw (*x*). F, the spiral spring; G, a washer; H, the key for the washer; K, the catch spring;—*v*, a screw—*r* the catch; M, the button or trigger.

Materials: The lancet and springs should be made of steel, all the other parts be made of brass, silver, or any other convenient metal or composition of metals; the case A, the tube B, and the crown of the head C, may also be made of tortoise shell, mother of pearl, horn or other convenient materials.

Construction: To put the parts of the instrument together the regulating screw (*x*), must be put through the upper part of the inner case (D), entering at the opening (*a*), the shaft will then be at the bottom of the inner case, as represented in the drawing N. The catch spring K, (without the button) is then laid upon the shaft, and attached to the inner case, by the screw *v*, entering the block *w*. The spiral spring F, is then put into the upper end of the inner case D, over the regulating screw (*x*), until it rests upon the top of the shaft E, at (*e*)—the washer G, is then put into the upper end of the case (forcing down the spiral spring until the washer is below the slit (*e*) behind the washer; keeping the washer and spiral spring down to their places. The tube B, is then put on the upper part of the inner case: the head C, is then put on by turning it down upon the regulating screw, until the shoulder on the head comes in contact with the top of the tube B. The outside case A, is then put on over the inner case. The button is then inserted into the hole in the back of the outside case, opposite to the hole marked T, in the inner case, and screwed fast to the catch spring.

To regulate: To regulate the range of the lancet, or depth of cut, continue to screw the head as in the act of putting it on,—this causes the regulating screw to advance into the head, thus withdrawing the lancet within the case, and shortening the range: reverse the motion of the head to lengthen the lancet.

To set: The instrument complete is represented by the drawing Z, by taking hold of which at (*v*,) and then pulling out the top,—the lancet is drawn back until the end of the shaft is locked by the catch spring.

To cut: Then by pressing upon the button, the catch is detached from the shaft, and the lancet flies out, being driven forward by the spiral spring.

Claim: What I claim as my invention and desire to secure by Letters Patent, is—

The manner in which I have combined and arranged the several parts of the instrument viz. the blade and the sliding frame, the spring catch and spiral spring, and in combination therewith the mode herein set forth of regulating the length of the stroke of the blade.

J. H. GEMRIG.

Witnesses present at signing:

C. BRAZER,

BENJAMIN C. EVERETT.