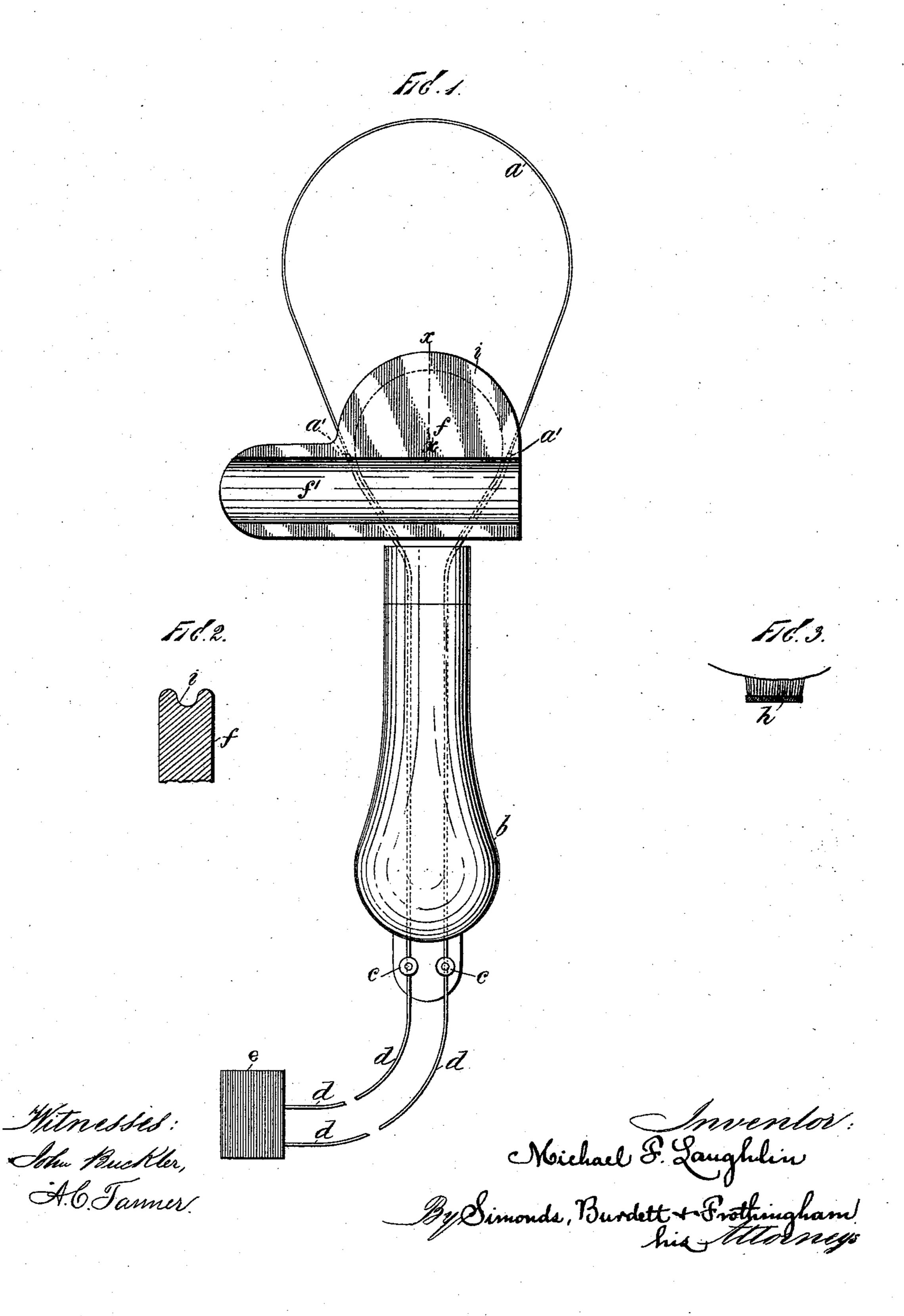
(No Model.)

## M. F. LAUGHLIN. CAUTERY ELECTRODE.

No. 538,971.

Patented May 7, 1895.



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## United States Patent Office

MICHAEL F. LAUGHLIN, OF NEW YORK, N. Y.

## CAUTERY-ELECTRODE.

SPECIFICATION forming part of Letters Patent No. 538,971, dated May 7, 1895.

Application filed March 7, 1894. Serial No. 502,613. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL F. LAUGHLIN, of the city, county, and State of New York, have invented a certain new and useful Im-5 provement in Means and Methods for the Castration of Animals, of which the following is a description, reference being had to the accompanying drawings, wherein-

Figure 1 is a plan or flatwise view of the ro instrument made use of. Fig. 2 is a view in cross-section of the resisting-bar on the plane denoted by the dotted line x x. Fig. 3 is a diagram illustrating my use of an elastic

compressor.

The letter  $\alpha$  denotes a loop of platinum wire, held and supported by the handle b, which may be of hard rubber, wood or other | suitable material. At about the points a' the platinum wire is joined to wires that are 20 made of some material that is a good conductor of electricity, as copper or iron. These copper wires traverse the length of the handle, properly insulated, and by means of the binding-screws c c are attached to conductors 25 dd, leading from the voltaic cell (or other)

electrical generator), e.

The letter f denotes what may be properly termed a resisting-bar, made of hard rubber or the like. The wires of the loop a run through 30 it on their way to the handle b. On one side or on both it, preferably, has a groove f' to furnish ready grasp for the thumb and fingers of the hand that holds it. An edge of this resisting-bar (the upper edge according to 35 the position of the drawings), has a groove ifor the reception of the loop a at the proper time, its purpose being to insure the perfection of the severing and cauterizing operations which are performed by the aid of this 40 instrument. By sending a sufficient electric current from the electrical generator through

the loop a, it is intensely heated. Preparatory to its use for castration purposes, a rubber band or compress h is put upon the fleshy part of the testicle pouch, so as to draw the 45 fleshy parts into a compact mass, and so as to, in some degree, benumb the parts. This having been done, the highly heated loop is made to encircle the fleshy parts just below the rubber compress. Then with one hand, the 50 operator holds the resisting-bar f firmly, and grasping the handle b with the other hand he draws that handle and the loop backward, until the loop sits squarely in the groove i. The effect of this operation is to perform the cas- 55 tration, and also to sear the fleshy stump.

I have spoken of the loop as being made of platinum wire. Any other material will answer that has sufficient strength, and which, like platinum, is heated to a very high degree 60 by the passage of an electric current forced through the same; and where I use the expression "platinum" in the claims of this application, I mean to be understood as embrac-

ing all such equivalents.

I claim as my improvement—

1. In combination, the platinum-wire loop, the loop handle, the resisting-bar sliding on the loop, and the electric circuit wires, all substantially as described and for the purpose 70 set forth.

2. In combination, the platinum-wire loop, the loop handle, the movable resisting-bar, provided with the peripheral groove, to take in the cauterizing-wire, and the electric cir- 75 cuit wires all substantially as described and for the purpose set forth.

MICHAEL F. LAUGHLIN.

Witnesses:

A. C. TANNER,

N. L. Frothingham.