

J. W. W. Gordon,
Vaccinating Instrument,
Nº 16,478, Patented Jan. 27, 1857.

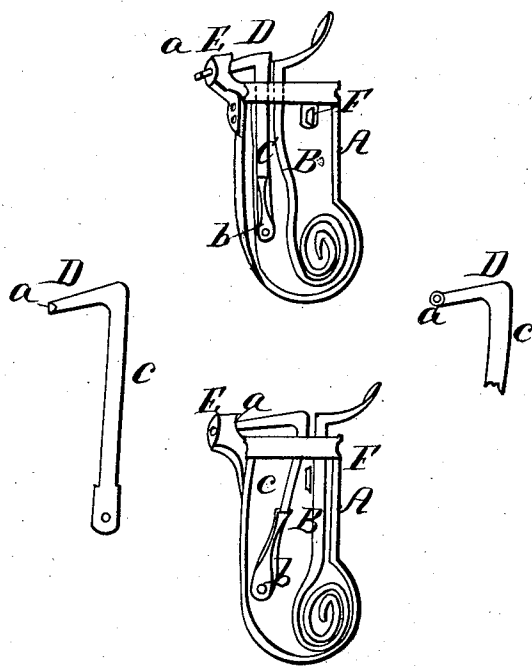
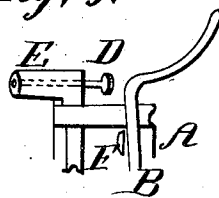


Fig: 5.



UNITED STATES PATENT OFFICE.

JAMES W. W. GORDON, OF CATONSVILLE, MARYLAND.

VACCINATING INSTRUMENT.

Specification of Letters Patent No. 16,478, dated January 27, 1857.

To all whom it may concern:

Be it known that I, JAS. W. W. GORDON, of Catonsville, in the county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Vaccinating Instruments; 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 accompanying drawings, making a part of this specification.

The nature of my improvement consists in so constructing an instrument for vaccinating that by the employment of a cupped end rod or perforator, the virus deposited in said cup may be transferred and deposited, at one operation in the cuticle or true skin at a depth that shall insure its "taking," and without the risk of failure from bleeding at the puncture consequent to the use of other instruments.

The vaccinator may be described as follows: A represents the case of the instrument: B a strong spring: C a driving arm carrying on its upper end the vaccinator-rod D; whose end (a) is recessed or cupped for the purpose of holding the virus to be deposited, the edges of said cup, also greatly facilitate the perforation of the epidermis by their sharpness.

E is the tensor, or compressor of the skin, for producing the necessary tightness thereof and also serving as a guide for the depth of deposit of the virus; (it being requisite that a sufficient depth in the cuticle may be obtained, yet without an excess).

b, is a small holding spring moving on the pivot of the arm C, whose office is to keep the arm steady and in place, in its movement.

F is the trigger or catch, similar in its office to that of the ordinary spring lancet.

The term "vaccinator" this instrument truly deserves, as the operation of perforat-

ing the skin and introducing the virus is but one operation.

The manner of using it is as follows. Having charged the small cup on the perforator rod with semi-fluid virus or liquid matter, or that rendered so, the arm and rod D are drawn back a slight distance from the face of the tensor E; the tensor is then pressed with its face in contact with the flesh of the subject, and while so held the spring is liberated by pressing on the trigger; the arm c, being forced forward, the perforator rod, D, is driven into the cuticle and the virus deposited. The tensor also serves as a guide to the perforator.

The character of the incision is such by the minuteness of the puncture, that the constriction of the cuticle completely prevents any flow of blood, and consequently all liability of washing out the virus is obviated, thus rendering any further attention, such as applying court plaster, &c., over the puncture unnecessary.

Fig. 5 exhibits a modification of the instrument.

In the employment of my vaccinator I have found that by giving a slight obliquity to the entrance of the charged cupped perforator as it passes into the cuticle, that a flap is formed of the epidermis which effectually closes the orifice of the puncture and thus prevents bleeding.

Having thus described by improvement what I claim as my invention and desire to secure by Letters Patent is,

The application of the cup shaped perforator rod D to the ordinary spring lancet in the manner and for the purpose set forth.

In testimony whereof I have signed my name before two witnesses.

J. W. W. GORDON.

Witnesses:

JOHN F. CLARK,
JOHN S. HOLLINGSHEAD.