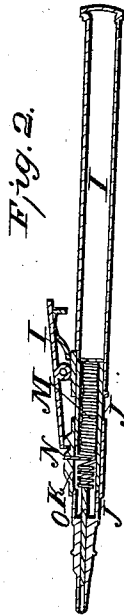
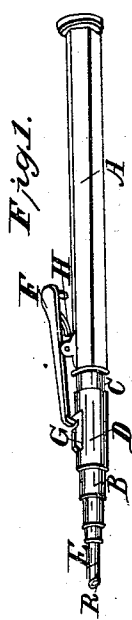


*J. F. Tower,*

*Vaccinator.*

*N<sup>o</sup> 7,560.*

*Patented Aug. 13, 1850.*



# UNITED STATES PATENT OFFICE.

J. F. TOZER, OF ROCHESTER, NEW YORK.

## IMPROVEMENT IN INSTRUMENTS FOR VACCINATING.

Specification forming part of Letters Patent No. 7,560, dated August 13, 1850.

*To all whom it may concern:*

Be it known that I, JUNIUS F. TOZER, of Rochester, in the county of Monroe and State of New York, have invented a new and useful instrument for the use of surgeons in performing the operation of vaccination, called a "Vaccinator;" 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—

Figure 1 is a perspective view of my vaccinator complete, ready for use. Fig. 2 is a longitudinal section through Fig. 1. Fig. 3 is a perspective view of the inserting-point, enlarged.

A, Fig. 1, represents the handle.

B C, Fig. 1, represent a stationary cylinder, which is fastened into the handle A, Fig. 1.

D, Fig. 1, is a sliding cylinder, which moves on the stationary cylinder B C, Fig. 1.

E, Fig. 1, is the inserting-point.

F, Fig. 1, is a thumb-key.

G, Fig. 1, is a catch, which is fastened to the sliding cylinder D.

H, Fig. 1, is a spring fastened to the under side of the thumb-key F, Fig. 1, by means of which the point of the thumb-key is kept down into the catch G, Fig. 1. Within the cylinder B C, Fig. 1, there is a spiral spring, which acts against a pin, which passes down through the catch G, Fig. 1. This pin, which passes down through the catch G, works in a slot in the stationary cylinder B C. By means of the spiral spring acting against the pin, the sliding cylinder D is driven forward in the direction of B, when the end of the thumb-key, at F, is borne down, so as to raise the point of the thumb-key and of the catch G.

I, Fig. 2, is a section of the handle.

J J, Fig. 2, is a section of the stationary cylinder, (represented B C, Fig. 1.)

K, Fig. 2, represents a section of the catch G, Fig. 1, which is connected with the sliding cylinder D, Fig. 1.

L, Fig. 2, represents a section of the thumb-key, (represented F, Fig. 1.)

M, Fig. 2, represents a spring within the cylinder.

N, Fig. 2, represents the pin which passes down through the catch into the spring M, and compresses the spring M when the catch connected with the sliding cylinder is held back by the key, as represented in Figs. 1 and 2.

O, Fig. 2, represents a section of the injection-piston, which is connected with the spring M, and works in the tube or inserting-point, (represented E, Fig. 1.)

P, Fig. 3, represents the inserting-point (represented E, Fig. 1) enlarged.

I, Fig. 3, represents the end of the inserting-piston when it is driven forward by means of the spring M, Fig. 2.

Having described the parts of my instrument, I will now describe its operation or manner of using it.

With the point of a lancet I make an incision in the arm of the person to be vaccinated. I then place a small particle of the infection-scab into the end of the inserting-point at R. I then place the inserting-point R, which is cut off obliquely, into the incision made in the arm, which keeps the incision open, and by pressing down the thumb-key at F, Fig. 1, the opposite end of the key is raised out of the catch G, and, by means of the spring within the cylinder B C, the infection-piston is driven forward, and the piece of scab or infection is driven forward into the incision. When the infection-piston is driven forward by means of the spring, it comes out of the inserting-point E at R, as represented I, Fig. 3. After the scab or infection is inserted into the incision, I place over it a piece of court-plaster, or something of a similar nature, and the operation is completed.

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

The sliding cylinder D, in combination with the thumb-key F, spring M, and piston O, for the purposes herein described and set forth.

JUNIUS F. TOZER.

Witnesses:

E. H. HURD,  
C. M. MATHERS.