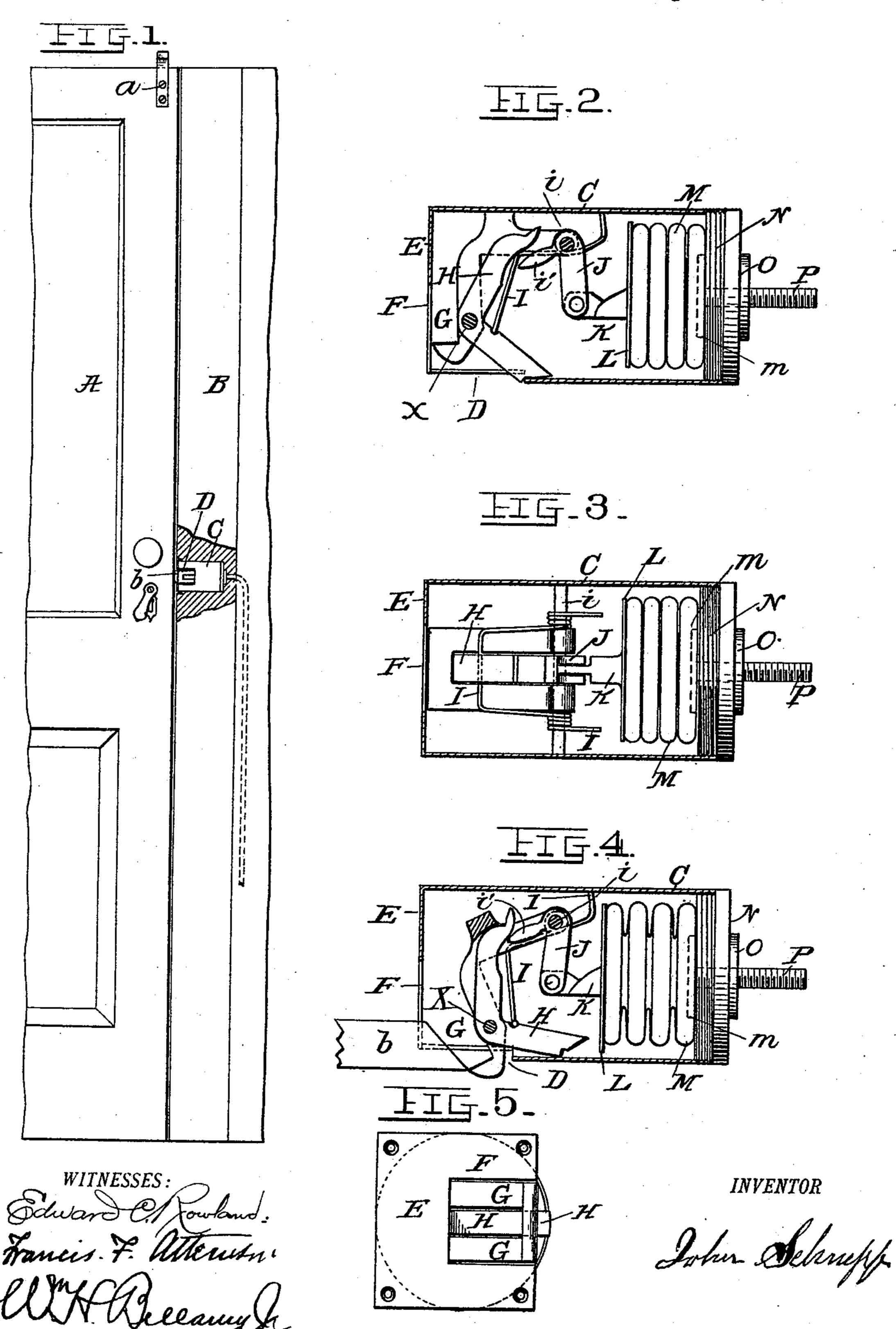
J. SCHNEPF. PNEUMATIC DOOR LOCK OPENER.

No. 518,119.

Patented Apr. 10, 1894.



United States Patent Office.

JOHN SCHNEPF, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO WILLIAM H. BELLAMY, OF SAME PLACE.

PNEUMATIC DOOR-LOCK OPENER.

SPECIFICATION forming part of Letters Patent No. 518,119, dated April 10, 1894.

Application filed March 15, 1893. Serial No. 466, 132. (No model.)

To all whom it may concern: .

Be it known that I, John Schneff, a citizen of the United States, and a resident of the city, county, and State of New York, have invented a new and useful Improvement in a Pneumatic Door-Lock Opener, of which the following is a specification.

My invention relates to a new and useful improvement in pneumatic door and lock openers, the object of which is to provide simplicity of construction with simplicity of operation; of which the following, taken in connection with the accompanying drawings is a

full and accurate description.

Figure 1 is part of a door showing the latch when the striking plate is forced back or withdrawn. Fig. 2 is a general front view with a part of the circular case removed showing the mechanism of the door opener locked.

Fig. 3 shows the spring in one of its positions acting on the trip-lever and resting on the inside of the casing. Fig. 4 shows the door-opener in action or unlocked. Fig. 5 is the face-plate of the door-opener whereby it is fastened to the door jamb.

Similar letters are used upon like parts

throughout the different figures.

My apparatus consists in a main cylinder C provided with a bottom or end piece N on which is fastened the bellows M held in position by a plate m and having a tube through its center P, fastened in position by washer or nut O.

L is a face plate that rests against the bel-

35 lows.

K is an arm which projects from the face plate L and it is pivoted to a bell-crank J, which is pivoted upon a pin i, upon which pin also, the striking plate lever G is pivoted.

40 The bell-crank J has a small projecting arm at substantially right angles to it, marked i', which engages at the proper time with a trip lever H, which is pivoted to the striking plate lever, as shown at X in Figs. 2 and 4.

G is the striking plate lever, which, as before stated, is pivoted in combination with the bell-crank J upon the pin *i*, which passing through the casing C, holds these parts in

proper position.

I is a spring which encircles the pin i, pref-

erably at both ends (see Fig. 3), the rear ends of which have a bearing against the case, C, and the front or free end of which engages with the trip lever H, as shown. The action of the spring upon the lever H is to throw it 55 outwardly and into engagement with an opening D in the against C as shown.

ing D in the casing C as shown.

The operation of the device is as follows: When air is forced into the tube P, it expands the bellows M forcing the plate L forwardly, 60 thus moving the bell-crank J and causing its short arm i' to engage with the trip lever H which is adjacent to it, thus the other end of the lever H is lifted from the opening D in the casing (see Figs. 2 and 4) and then the 65 striking plate lever G will easily yield to the pressure of the door latch, the door being pressed outwardly by a spring placed either above the door or in the door jamb, as usual in such constructions; consequently, when it 70 is desired to unlock the door, air may be blown or otherwise forced through any suitable tube, which connects with the tube P and thereupon the apparatus automatically acts and releases the striking plate lever G, 75 whereupon the pressure of the spring behind the door causes the door to open sufficiently at least to disengage the lever G from the latch on the door, then it may be pulled open by the person seeking admission. Thereupon 80 the air pressure within the bellows being released, the spring I returns the levers G and H to their normal locked position.

Having described the invention and its op

eration, I claim—

In a pneumatic door lock or opener, the combination of a bellows, a bell-crank actuated by the bellows, a striking plate lever and a tripping lever pivoted to the striking plate lever, and adapted to be engaged by the bell-oc crank, and a spring which engages with the tripping lever, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 14th day of March, 95

1893.

JOHN SCHNEPF.

Witnesses:

FRANCIS F. ATKINSON, WM. H. BELLAMY, Jr.