

F. NEUHOFF.  
Lock.

No. 218,054.

Patented July 29, 1879.

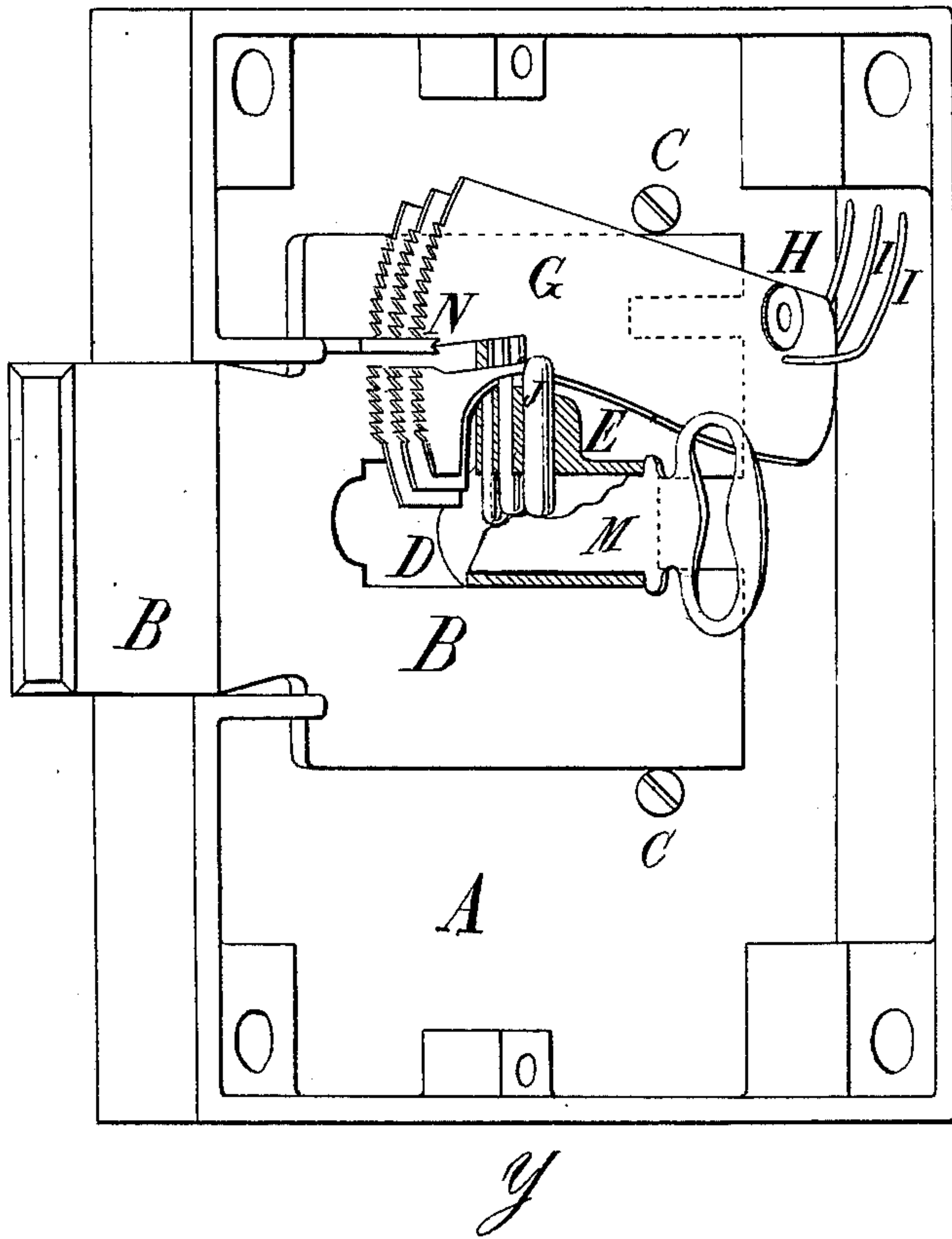


Fig. 1.

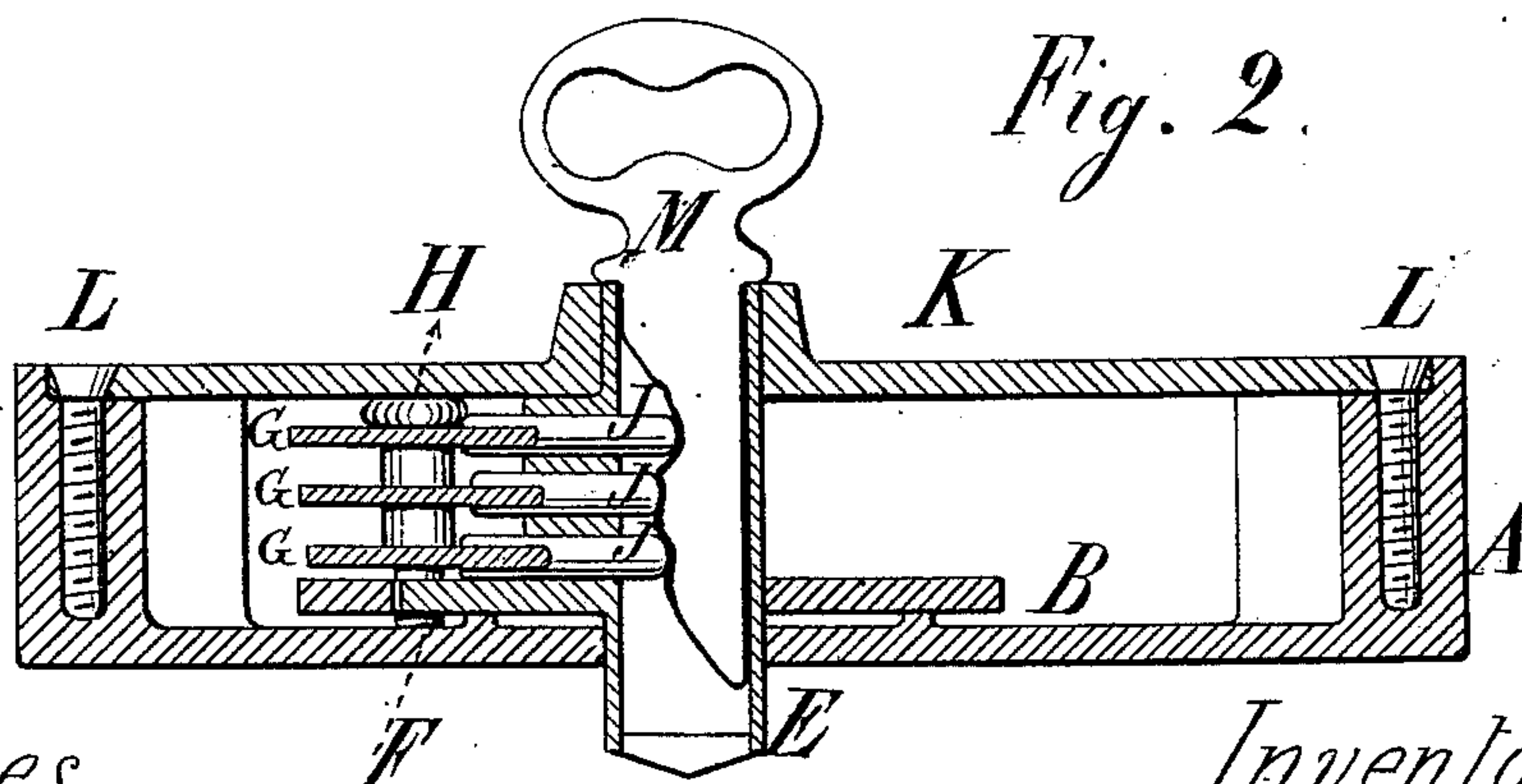


Fig. 2.

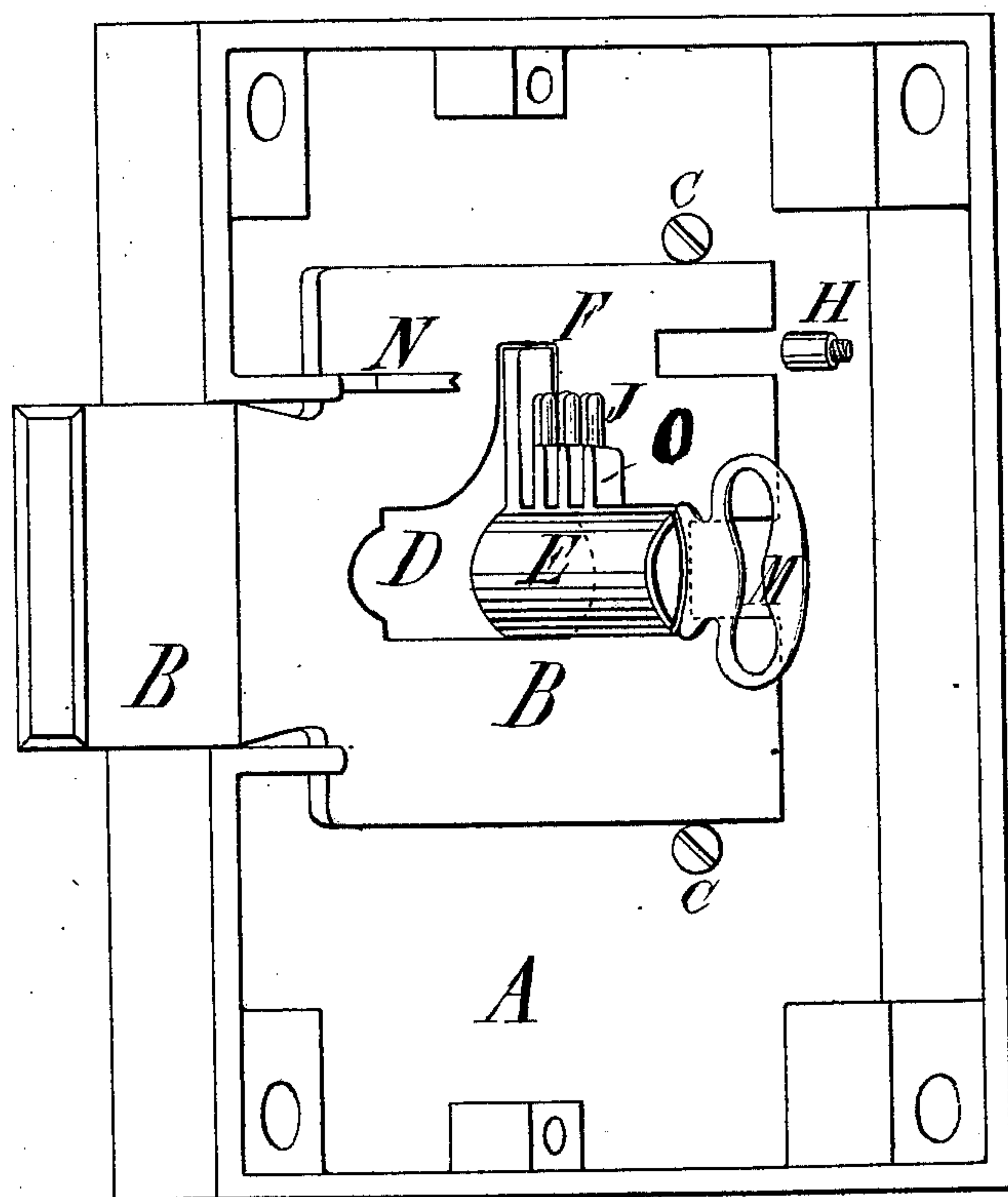
Witnesses:  
*Eug. Lorrain*  
*E. Moreau*

Inventor:  
*Franz Neuhoff*

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*Fig. 3*

*Witnesses:*

*Eug. Porron*

*E. Moreau*

*Inventor:*

*Frank Neuhoff*

# UNITED STATES PATENT OFFICE.

FRANK NEUHOFF, OF SAN FRANCISCO, CALIFORNIA.

## IMPROVEMENT IN LOCKS.

Specification forming part of Letters Patent No. **218,054**, dated July 29, 1879; application filed August 22, 1878.

*To all whom it may concern:*

Be it known that I, FRANK NEUHOFF, of the city and county of San Francisco, State of California, have invented a new and useful Improvement in Tumbler-Locks; and that the following is a clear and exact description of the same, reference being had to the annexed drawings, in which—

Figure 1 shows an oblique view of the lock with the cover taken off. Fig. 2 is a transverse section on the line *x y* of Fig. 1; and Fig. 3 is the same view of the invention as in Fig. 1, but without the tumblers, so as to better show the action of the key on the bolt.

A is the frame of the lock, and B is the bolt, sliding through an opening in the side of the frame, and guided in its motion by the said opening and the two studs C C. The bolt B is provided in the center with an opening, D, made to receive the barrel E, with its projecting lever F.

The tumblers G are pivoted at H, and are kept in contact with the pins J by the action of the springs I. On the side of the barrel E are three projections, O, in which holes have been drilled at right angles with the axis of the barrel, as shown in Fig. 2. In these holes are fitted the pins J, which are slotted at their outer ends in order to receive and guide the tumblers. The cylinder E is held in its place by the bottom of the lock-frame A on one side and by the cover K on the other, as shown in Fig. 2.

The key M is flat, and made with one edge

straight and the other edge with indentations, each indentation corresponding with one of the pins J when the key is inserted in the barrel E.

Thus the pins J, being made to move outward, push the tumblers G, and hold them in the proper place, so that the projection N of bolt B can pass freely through the corresponding slots in the tumblers, when, by means of the rotation of key M, barrel E, and lever F, the bolt B is made to slide back and forth in the lock.

The key can be withdrawn at either end of the stroke, when the tumblers will fall down and stop any motion of the bolt, as in ordinary tumbler-locks.

The slot in the center of the barrel E, for the purpose of receiving the key, is cut from one end to the other, thus allowing the key to be inserted from either side of the lock.

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

The combination of the rotating barrel E, provided with lever F and slotted projections O, tumblers G, slotted pins J, operating directly upon said tumblers, bolt B, and key M, substantially as and for the purposes described.

FRANK NEUHOFF.

Witnesses:

EUG. POIRON,  
E. MOREAU.