

Read & Clapp,

Lock.

No. 100,556.

Patented Mar. 8. 1870.

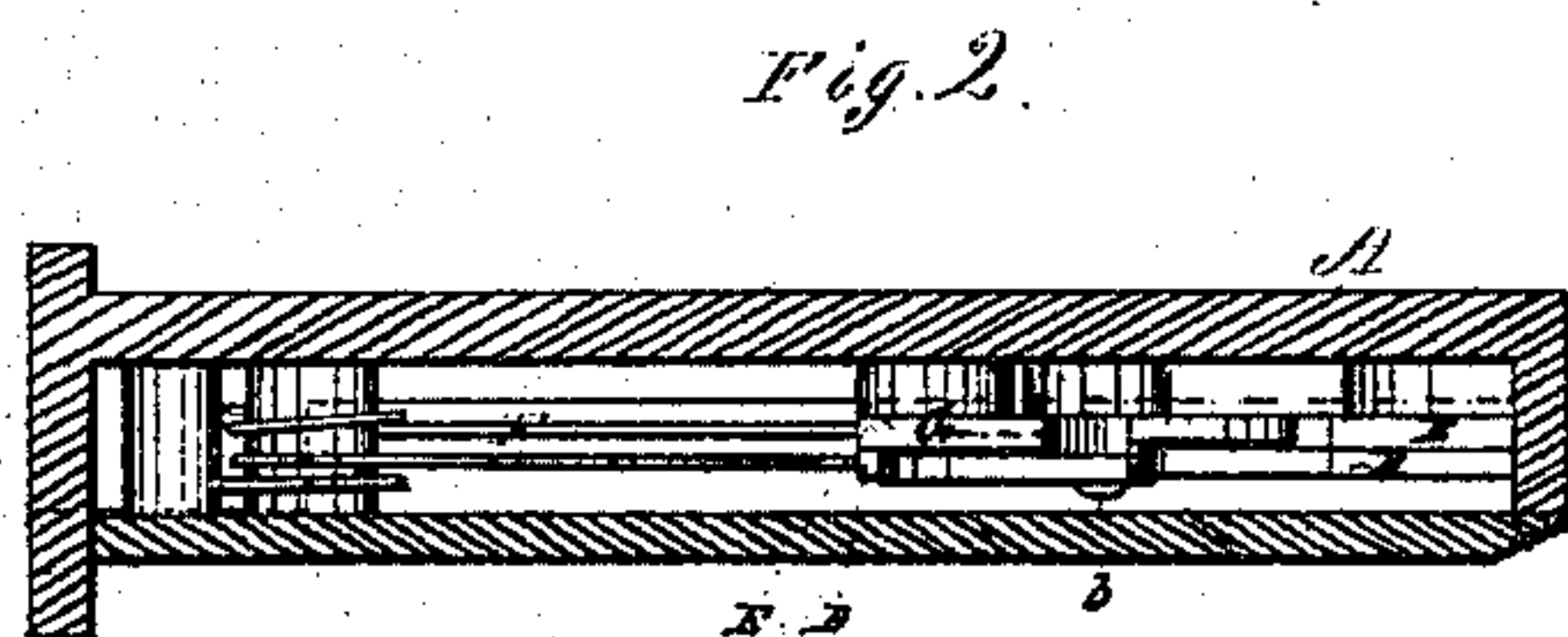
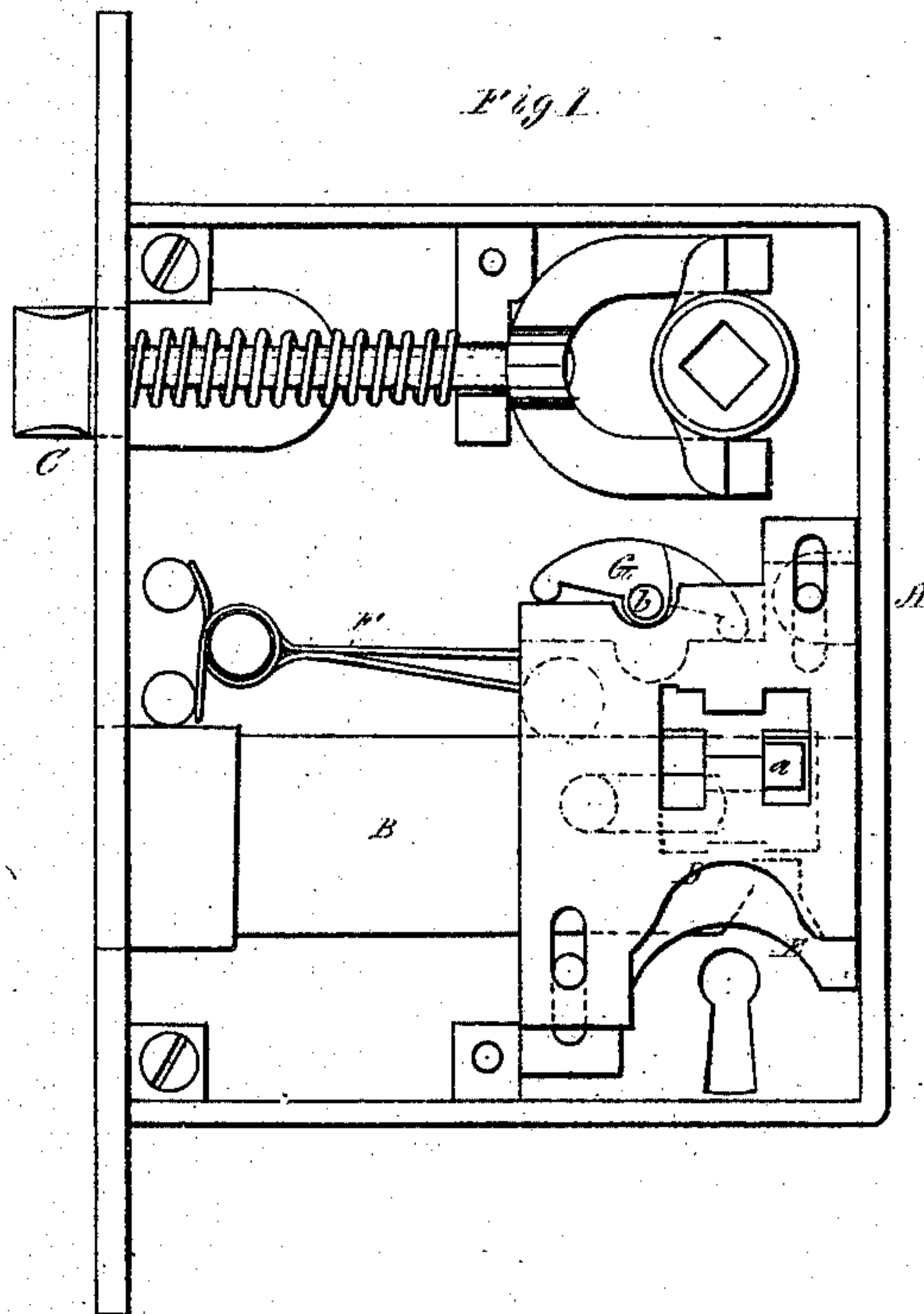
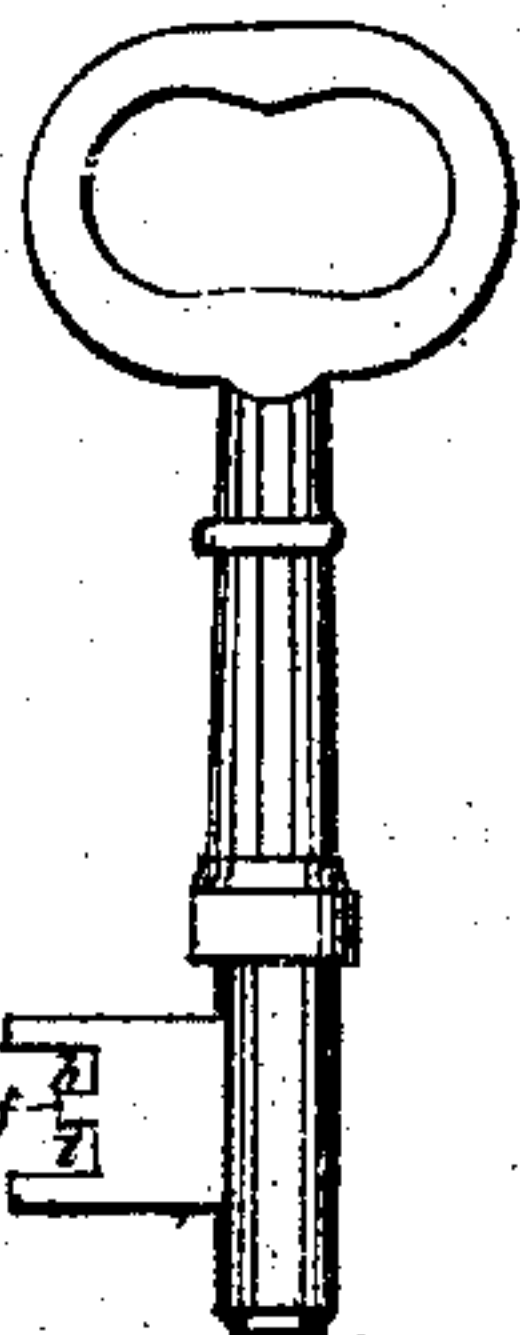


Fig. 3.



Witnesses

J. N. Piper.

L. N. Miller.

D. B. Read and J. H. Clapp.

by their attorney.

H. H. Soley

United States Patent Office.

DANIEL B. READ AND JAMES H. CLAPP, OF PROVIDENCE, RHODE ISLAND, ASSIGNORS,
BY MESNE ASSIGNMENTS, TO C. C. DICKERMAN, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 100,556, dated March 8, 1870.

IMPROVEMENT IN LOCKS.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that we, DANIEL B. READ and JAMES H. CLAPP, of Providence, of the county of Providence, and State of Rhode Island, have invented a new and useful Improvement in Locks for Doors; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 denotes a view of a lock-case with its cap-plate removed, and with our improvement as connected with the tumblers applied to the main bolt of such case.

Figure 2 is a horizontal section of the lock, taken just above and so as to exhibit the tumblers.

Figure 3 is a side view of the key.

The nature of our invention consists in so combining a lever and a double spring or counter-springs with each pair of tumblers that when one of such tumblers is being moved upward by the key the said tumbler, through such lever, shall cause the other tumbler to be simultaneously moved in an opposite direction, the double spring or counter-spring operating to restore the tumblers to their normal positions after such action of the key.

In the drawings—

A denotes the case of the lock;

B, the main bolt;

C, the latch-bolt; and

D E, the pair of tumblers or slide plates applied to the case so as to operate with the main bolt and its stud *a*, in the usual manner.

A double-armed spring, F, or counter-springs, are so applied to both tumblers as to press one of them downward and the other of them upward.

Over the two tumblers is a lever, G, which is supported by and so as to turn freely on a stud or fulcrum, *b*. One arm of the said lever rests against the top of one tumbler and the other arm rests against the top of the other tumbler.

The key has three bits, *e f g*, separated by equal spaces, *h i*.

The middle bit is to operate one of the tumblers, viz: that one which is to be elevated. The other bits *e g* serve to actuate the main bolt.

When the key is inserted in the lock from one side of it, one of the bits *e g* will actuate the main bolt while the key is being turned in the right direction in the lock, but when the key is introduced from the opposite side of the lock the other of the two bits *e g* will operate the main bolt while the key is being so revolved.

The principle of our invention may be carried out with a greater number of pairs of tumblers, in which case one-half the number of tumblers will be moved in one and the other half will be moved in the opposite direction at one and the same time.

This improvement is advantageous as a means of preventing the lock from being readily picked.

What we claim as our invention is—

The combination and arrangement of the lever G and the counter or double spring F with the pair of tumblers, substantially as hereinbefore explained.

DANIEL B. READ.

J. H. CLAPP.

Witnesses:

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