

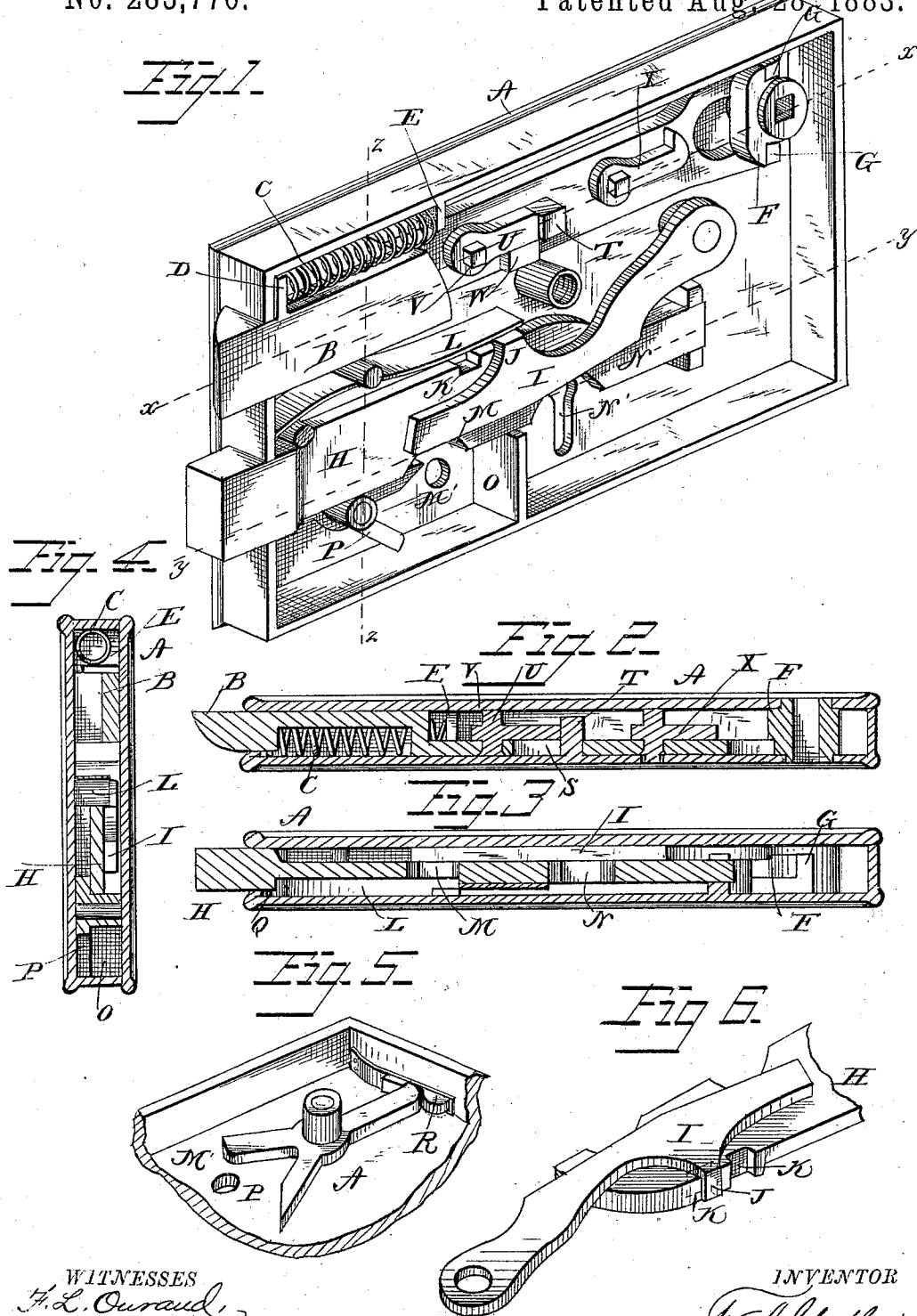
(No Model.)

F. A. GUTHRIE.

LOCK.

No. 283,776.

Patented Aug. 28, 1883.



WITNESSES
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UNITED STATES PATENT OFFICE.

FRANK AUGUSTUS GUTHRIE, OF GALLIPOLIS, OHIO.

LOCK.

SPECIFICATION forming part of Letters Patent No. 283,776, dated August 28, 1883.

Application filed August 15, 1882. (No model.)

To all whom it may concern:

Be it known that I, F. A. GUTHRIE, of Gallipolis, in the county of Gallia and State of Ohio, have invented certain new and useful Improvements in Locks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view of my improved lock with the face-plate removed. Fig. 2 is a sectional view on the line *x x*. Fig. 3 is a sectional view on the line *y y*. Fig. 4 is a sectional view on the line *z z*, and Figs. 5 and 6 are detail views.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to locks for doors, &c.; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A represents the box or casing of my improved lock.

B is the latch-bolt, which is forced outwardly, in the usual manner, by a spring, C, arranged between a projection, D, upon said bolt and a lug, E, projecting downwardly from the upper side of the casing.

The latch-bolt may be operated in the usual manner by means of a double cam, F, journaled in the front and rear sides of the casing, and having a square opening to receive the stem of the knob or handle. Said cam or cams engage the lugs G upon the inner forked end of the latch-bolt, which may thus be operated, as is customary, by turning the handle in either direction.

H is the shot-bolt, which slides between suitable guides provided for it in the box or casing.

I is the tumbler, the arm J of which engages recesses K in the upper side of the shot-bolt, and is held in contact therewith by a suitably-arranged spring, L. The under side of the shot-bolt has two recesses placed or formed a short distance apart, one of which, M, receives the bit of the key when inserted from the inside of the door to which the lock

is applied, while the other, N, receives the bit of the key when inserted from the outside. Separate key-holes M' N' are provided, which are separated by a partition or wall, O, formed in the box or casing.

P is a lever, pivoted in the box or casing near the front end of the shot-bolt. The rear or inner end of said lever is forked, so as to be capable of being operated by the bit of the key when inserted from the inside. In the act of locking the bolt the key bears downward upon the forked end of the lever, thus raising its front end and placing it in contact with a shoulder, Q, formed upon the shot-bolt. When in this position the lock can be opened from the inside only, as a key inserted from the outside fails to operate the lever P. The wall O prevents access to said lever from the outside by means of skeleton keys or other tools. From the inside the lock may be readily opened, as the bit of the key then raises the rear end of lever P, thus disengaging its front end from the shoulder Q upon the shot-bolt.

R is a suitable spring-catch, adapted to engage the front end of lever P and hold the same in position when not in engagement with the shoulder Q. The latch-bolt B has a slot, S, sliding over a stud, T, in the casing. Pivoted to said latch-bolt is a lever-latch, U, having a square post, V, so that it may be turned by means of a key from the inside of the door. When said latch U is turned down in contact with stud T, it prevents the latch-bolt from being opened. In this position the lever U is retained by a flange, W, upon the latch-bolt. An additional hooked catch, X, adapted to be operated from the outside of the door, may be pivoted to the latch-bolt for the same purpose as the lever-latch U.

My improved lock is simple in construction, durable, and cannot, when locked from the inside, be tampered with from the outside.

I am aware that a latch-bolt having a pivoted latch-lever is not new, broadly, such being shown in the patent to Keil of November 12, 1878.

I claim and desire to secure by Letters Patent of the United States—

1. The combination of the casing having stud T, the latch-bolt having slot S and flange

100

W, and the pivoted latch-lever U, having post V, as set forth.

2. The combination of the casing, the shot-bolt having shoulder Q, the tumbler I, and the guard-lever P, pivoted in the casing, near the front end of the latter, so as to be capable of engaging the shoulder Q of the shot-bolt, and having forked rear end adapted to be engaged and operated by the bit of the key, substantially as herein set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

FRANK AUGUSTUS GUTHRIE.

Witnesses:

WILLIAM A. DENNIS,

JNO. G. WILLIS.