

No. 811,511.

PATENTED JAN. 30, 1906.

E. H. F. KROHN.
LOCK.

APPLICATION FILED OCT. 28, 1902.

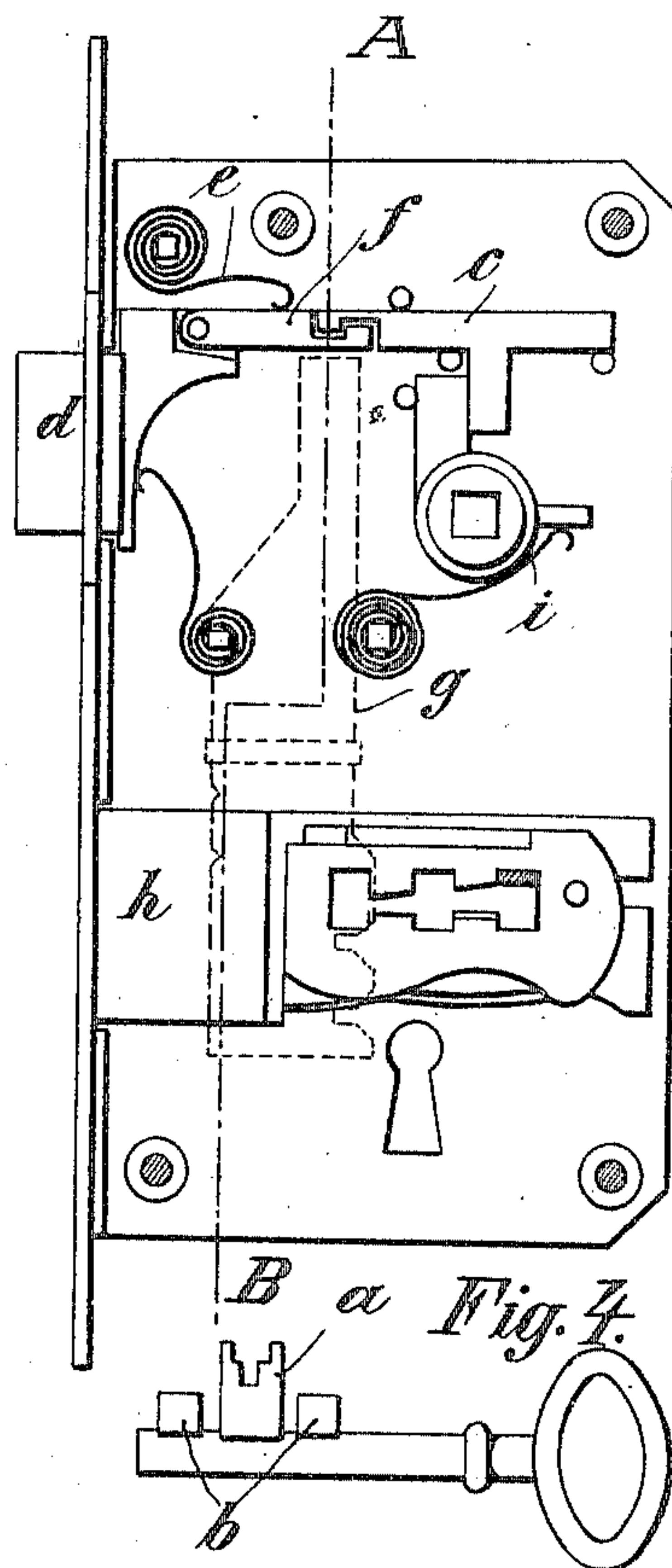


Fig. 1.

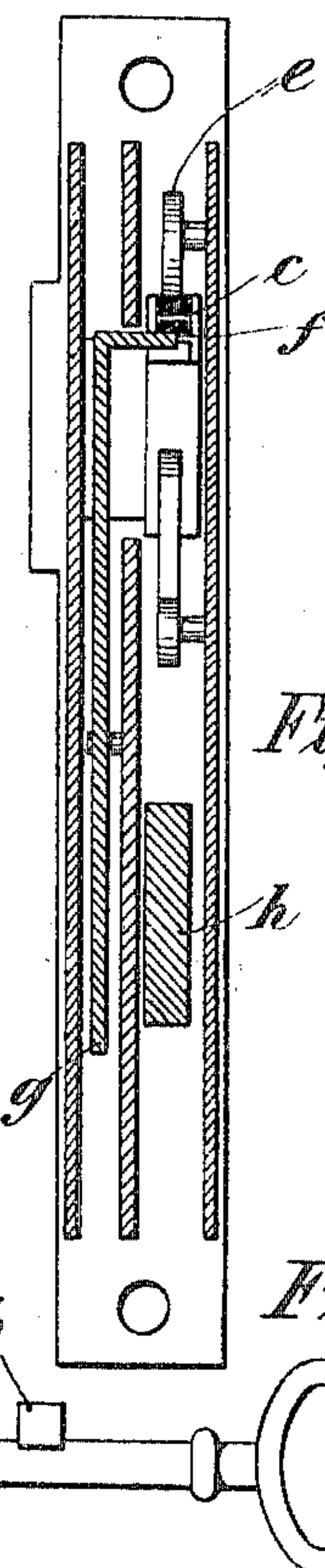


Fig. 3.

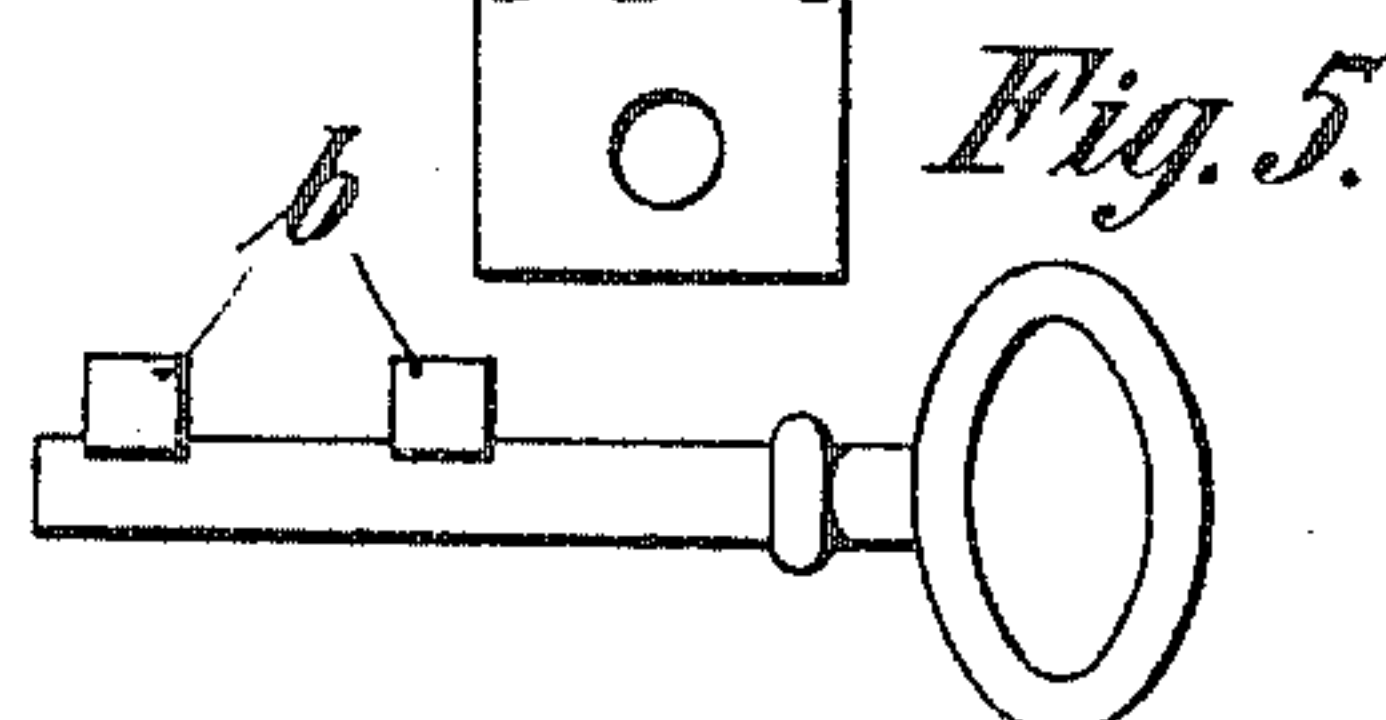


Fig. 5.

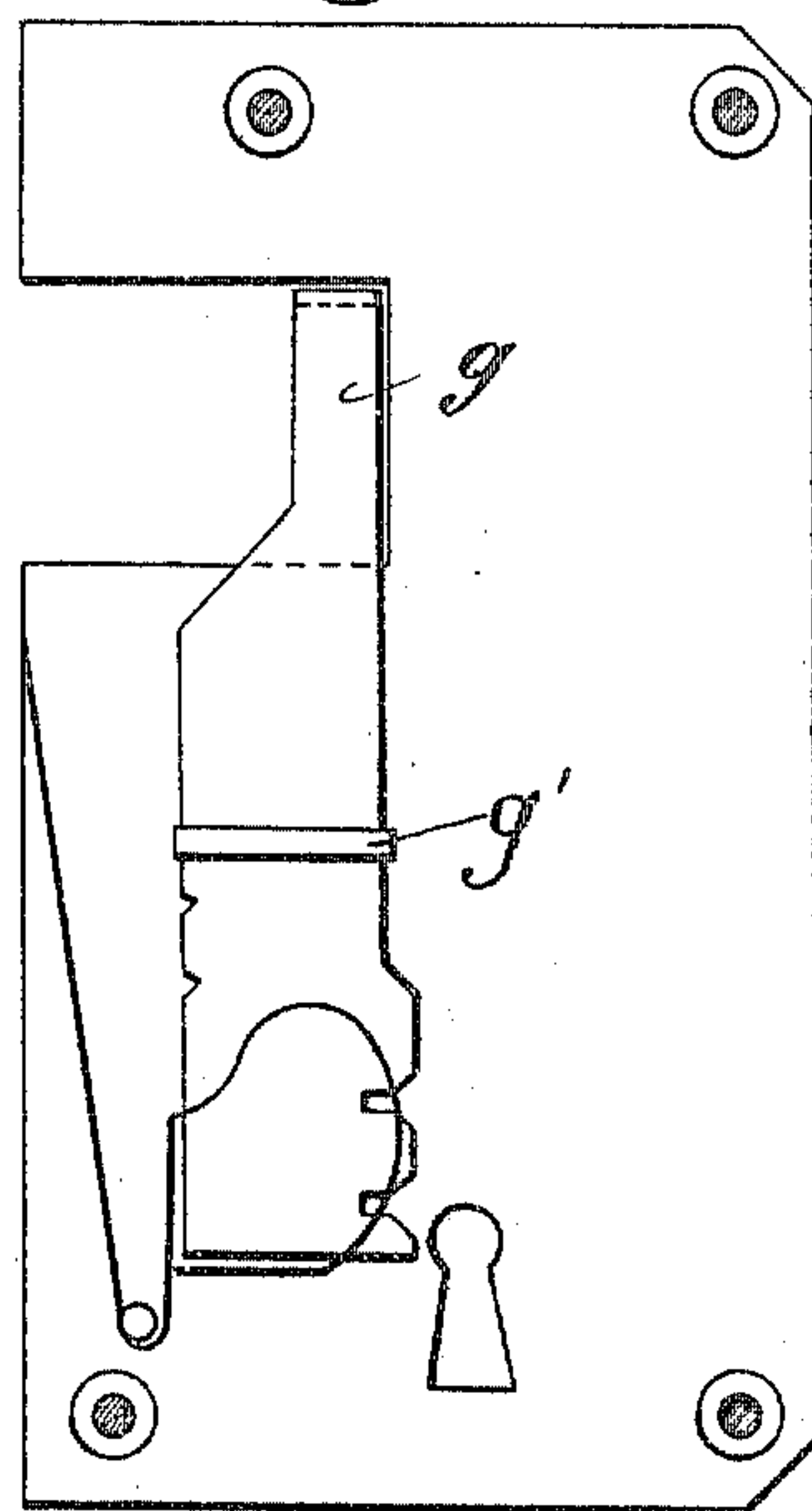


Fig. 2.

Witnesses:-
O. P. Smith.
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UNITED STATES PATENT OFFICE.

EMIL HERMANN FRITZ KROHN, OF HAMBURG, GERMANY.

LOCK.

No. 811,511.

Specification of Letters Patent.

Patented Jan. 30, 1906.

Application filed October 28, 1902. Serial No. 129,159.

To all whom it may concern:

Be it known that I, EMIL HERMANN FRITZ KROHN, technologist, a subject of the German Emperor, residing at the free town of Hamburg, Osterstrasse 159, in the State of Hamburg and Empire of Germany, have invented certain new and useful Improvements in or Connected with Locks, of which the following is a full, clear, and exact description.

The present improvement in door and similar locks consists in the combination therewith of a supplementary lock operated by means of a specially-constructed key and serving to disconnect the latch with its handle in the act of shooting the lock-bolt, so that thereafter if the lock-bolt be withdrawn by means of another key or by picking the latch will remain locked and cannot be retracted by means of its handle or until the connection between the latch and its handle has been restored by means of the proper key or a special key.

In the accompanying drawings, Figure 1 is a front view of the main lock, the supplementary lock being shown in dotted lines. Fig. 2 is a front view of the supplementary lock. Fig. 3 is a longitudinal section through both locks on the line A B, Fig. 1. Fig. 4 shows a key adapted to operate both locks simultaneously; and Fig. 5 a key for operating the supplementary lock alone, as hereinafter described.

Referring first to the key shown in Fig. 4, it will be seen that in addition to the bit *a* for the main lock-bolt *h* there is an extra bit *b*, disposed on each side of same. In operation only one of these bits *b* is used at a time for locking or unlocking, the one which comes into action depending upon which side the lock is actuated from.

The T-shaped bar *c*, which is acted on by the ordinary spindle-sleeve in customary manner, is under my improvement connected with the latch *d*, not directly, but through the intervention of a section *f*, pivoted to the latch *d* and interlocking with the bar *c*, as clearly shown in Fig. 1, in order that the latch may be disconnected from the spindle-sleeve of the handle. Above the bar-section *f*, which is hinged to the latch *d*, a spring *e* is provided, which presses the bar-section *f* downward on the top of a supplementary

lock-bolt *g*, which is movably secured to the lock-casing by means of a guiding-band *g'* and which is adapted to be moved down or up vertically by means of one of the extra bits *b* of the key, Fig. 4, in shooting or retracting the lock-bolt *h* or independently by the special key, Fig. 5. If now the door is to be locked and the key is turned, the supplementary bolt *g* will be moved downward in the act of shooting the lock-bolt *h*, and consequently will release the bar *f*, which is pressed downward by the spring *e* bearing on it, and thereby disconnected from the bar *c*. Then if an attempt be made by an unauthorized person to open the lock, though the main bolt *h* may be retracted, yet the catch *d* remains bolted and cannot be withdrawn by turning the handle and spindle-sleeve nor can the person attempting to open the door observe that the latch is bolted, because the handle is always returned to its old position by the spring *i*, as in ordinary locks.

The key represented in Fig. 5 is used solely for connecting and disconnecting the supplementary lock.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. In a lock of door-lock type, the combination with the ordinary lock-bolt *h*, spring-latch *d* and bar *c* for retracting said latch; of a detachable connection *f* between said bar *c* and spring-latch *d*; and a supplementary lock-bolt *g* adapted to be operated by a special key and controlling the connection of the spring-latch with the means for retracting the same, substantially as described.

2. A door-lock comprising a main locking mechanism, a spring-latch, disconnectible means for operating said latch - operating mechanism, and a supplementary locking mechanism, disposed between, and operating in conjunction with said lock and latch operating mechanisms, substantially as and for the purpose specified.

In witness whereof I subscribe my signature in presence of two witnesses.

EMIL HERMANN FRITZ KROHN.

Witnesses:

E. H. L. MUMMENHOFF,
C. R. EDUARD STOPF.