No. 777,271. PATENTED DEC. 13, 1904.

H. ALRUTZ & R. WERNER.

LOCK.

APPLICATION FILED APR. 25, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

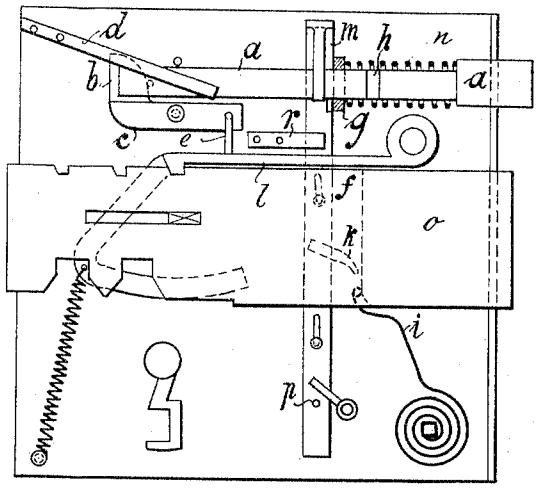
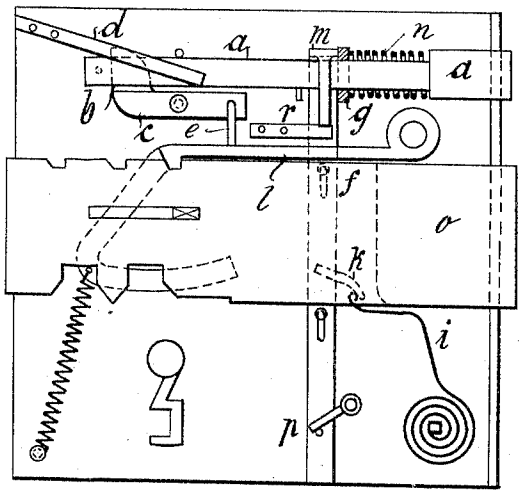


Fig. 2.



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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 3.

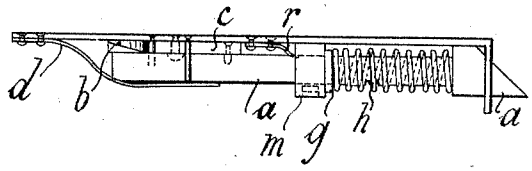
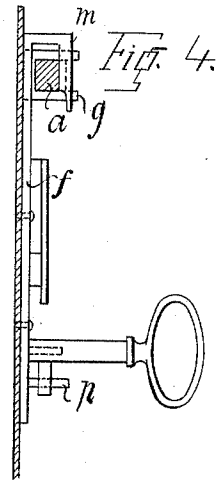


Fig. 4.



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No. 777,271. Patented December 13, 1904.

UNITED STATES PATENT OFFICE.

HEINRICH ALRUTZ AND RICHARD WERNER, OF CHARLOTTENBURG, GERMANY.

LOCK.

SPECIFICATION forming part of Letters Patent No. 777,271, dated December 13, 1904.

Application filed April 25, 1903. Serial No. 154,355. (No model.)

To all whom it may concern:

Be it known that we, HEINRICH ALRUTZ and RICHARD WERNER, subjects of the King of Prussia, Emperor of Germany, residing at Charlottenburg, Germany, have invented certain new and useful Improvements in Locks, of which the following is a specification.

This invention relates to a lock the bolt of which automatically snaps into its locking position when the door is closed, means being provided, however, to prevent the automatic action of the lock when desired.

In the annexed drawings, Figure 1 is an elevation of the lock with projecting latch, and Fig. 2 an elevation of the lock with the latch pulled back and the closing device "off." Fig. 3 is a plan view of the upper parts of the lock. Fig. 4 is a view from the left of Fig. 2 with bar *a* in section and certain parts omitted.

The latch is guided in a bearing *g*, and consists of a bar *a*, with a slightly-beveled extension at its rear end, adapted to engage and depress the beveled shoulder *b* of the pivoted bell-crank lever *c* during the closing of the door, and thus to move upward the lower end of the said lever. By this movement the tumbler *l*, connected to the lever *c* by a small rod *e*, is also lifted, and the bolt *o*, released from the tumbler *l*, is thrown forward by the spring *i*, so as to double-lock the door. On unlocking the door the spring *i* is tensioned, and as soon as the door is opened the latch *a* is thrown forward again by the spring *n*, the rearward extension sliding past the beveled shoulder *b* of the lever *c* and moved into its operative position by a suitably-arranged plate-spring *d*, bearing on the side of the bar *a*.

In order to prevent the accidental or unintentional locking of the door during the daytime or the like, the device can be rendered inoperative. For this purpose the bar *f*, which is retained in the position given to it by the spring *r*, is moved down by means of a key acting on a pin *p*. The hooked end *m* of said bar *f* is thus pulled over the latch-bar *a*, and a hook *k*, also on said bar *f*, bears on the spring *i*, Fig. 2, so that the latter ceases to act on the bolt *o*. The hook *m* of the bar *f* is beveled on the inside and is therefore slightly lifted away from the plane of the lock-plate when it is pulled downward and abuts with its beveled part with spring-pressure against the side of the latch *a*, so that if said latch *a* is now pressed by hand into the lock-case the hook *m* of the bar *f* enters the recess *h* in the latch, which will then come opposite to it. The latch *a* is thus held fast and cannot snap forward when the door is opened and closed. To render the latch operative again the bar *f* is moved upward by means of the key, so that the hook *m* is disengaged from the recess *h* and allows the catch to snap forward into its operative position when the door is opened.

What we claim is—

1. An automatic lock comprising in combination a lock-case, a main bolt, a spring for protruding said bolt, a key-operatable tumbler adapted to hold the main bolt in locked and unlocked positions respectively, an auxiliary bolt or latch having a beveled end, and a bell-crank lever connected to said tumbler and having a beveled nose adapted to be tripped by the beveled end of the latch when the latter is forced into the case so that said tumbler is actuated to temporarily release the main bolt substantially as described.

2. An automatic lock comprising in combination a lock-case, a main bolt, a spring for protruding said bolt, a key-operatable tumbler adapted to hold the main bolt in locked and unlocked positions respectively, an auxiliary bolt or latch having a beveled end, a bell-crank lever connected to said tumbler and having a beveled nose adapted to be tripped by the beveled end of the latch when the latter is forced into the case so that said tumbler is actuated to temporarily release the main bolt and means comprising a detent for the auxiliary bolt and a relief for rendering the lock inoperative substantially as described.

3. An automatic lock comprising in combination a lock-case, a main bolt a spring operating said bolt, a tumbler adapted to hold the main bolt in unlocked position, an auxiliary bolt or latch having a beveled end, a bell-crank

lever connected to said tumbler and having a beveled nose adapted to be acted on by the beveled end of the latch when the latter is forced into the case so that said tumbler is actuated to release the main bolt, and means for rendering the lock inoperative, consisting of a bar adapted to be operated by a key, a projection on said bar adapted to engage the bolt-spring and put it out of action, and a hook on said bar adapted to engage the latch and hold it in inoperative position substantially as described.

In witness whereof we have signed this specification in the presence of two witnesses.

HEINRICH ALRUTZ.
RICHARD WERNER.

Witnesses:
FRITZ V. KELLER,
HENRY HASPER.