April 15, 1924. 1,490,578

W. BACHMANN

MORTISE LOCK

Filed Dec. 30, 1922

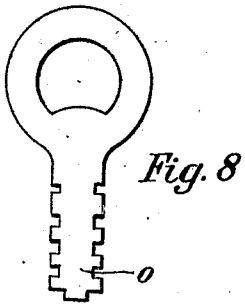
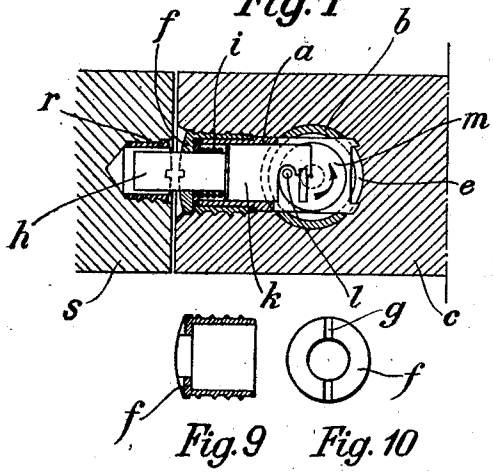


Fig. 8

Fig. 1



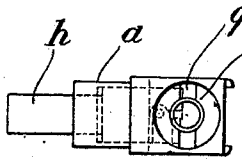


Fig. 3

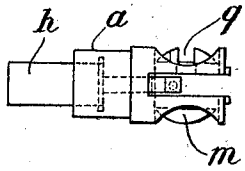


Fig. 4

Fig. 9 Fig. 10

Fig. 2

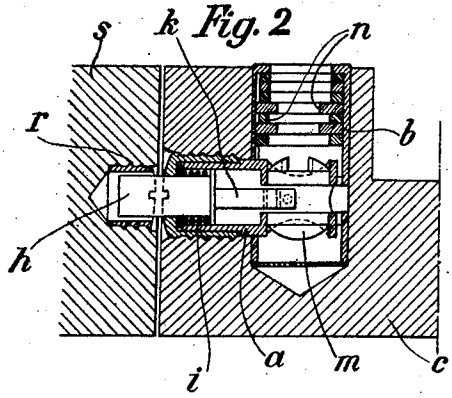
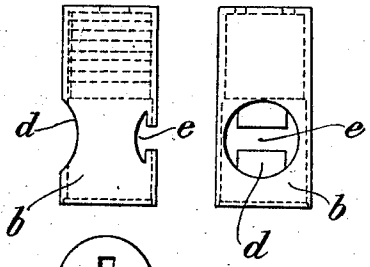


Fig. 5 Fig. 6



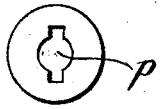


Fig. 7

Inventor:

Wilhelm Bachmann

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UNITED STATES PATENT OFFICE.

WILHELM BACHMANN, OF ZURICH, SWITZERLAND.

MORTISE LOCK.

Application filed December 30, 1922. Serial No. 610,008.

To all whom it may concern:

Be it known that I, WILHELM BACHMANN, a citizen of the Swiss Republic, residing at Zurich, Switzerland, have invented certain new and useful Improvements in Mortise Locks, of which the following is a specification.

This invention relates to a mortise lock for furniture and the like and consists in the combination with a spring-actuated bolt, of a key-operated barrel adapted to control such bolt by means of an eccentrically disposed pin. The mechanism is enclosed in two cylindrical casings, one containing the bolt and the barrel and the other the guide elements for the key, the casings being fitted in separate mortises made at right angles to one another. The lock casing proper enters into the key casing and holds it in position, it being itself secured by means of a cap which screws into the mortise.

By this arrangement a very simple lock is obtained which is easily fitted into doors and drawers and the like and which, when thus fitted, contains no projecting elements.

Figs. 1 and 2 of the accompanying drawings represent sections at right angles of the lock in use,

Figs. 3 and 4, views at right angles of the lock casing proper, and

Figs. 5 and 6, similar views of the key casing.

Fig. 7 is a front view of the key casing,

Fig. 8, a view of the key,

Fig. 9, a section of the closing cap, and

Fig. 10, a front view of the same.

The lock is composed of two cylindrical casings *a* and *b* of which the former contains the lock mechanism proper and the latter the guide elements for the key. The casings are fitted in mortises made at right angles to one another in the wood-work *c*, and the key casing *b* is formed with a lateral, circular aperture *d* through which it receives the inner end of the casing *a* when the lock is fitted. There is another, angular aperture *e* in the casing *b* opposite the aperture *d* which engages with lugs formed on the casing *a* so as to prevent rotary displacement of the latter. The front of the key casing has an aperture *p* for the admission of a key *o*, and it contains a plurality of ward plates *n* for cooperation with which there are corresponding notches made in the key. The casing *a* contains a bolt *h*, which is urged inwards by a spring *i*, and also a barrel *m*, the latter being rotatably guided in the inner end of the casing and held, when the lock is in use, in a central position relative to the casing *b*, so that it can be engaged and rotated by means of the key. The barrel is composed of two coaxial parts which are connected and distanced by an eccentric pin *l*. A flat tail piece *k* on the bolt *h is* accommodated between the two parts of the barrel and bears against the pin *l* so that the bolt can be retracted and shot by half a revolution of the barrel.

When the lock is in use, the casing *b* is held in position by the casing *a* and is itself secured by means of a cap *f* which screws into the wood over the front end of the casing. The cap *f* has an aperture to admit the bolt *h*, and it has a slit *g* for engagement with a screw-driver or a similar tool. The spring *i* bears against two washers one of which rests against the shoulders of the tail-piece *k* and the other against the end wall of the cap *f*. A similar cap *r* is screwed into the opposing part *s* of the wood-work to receive the end of the shot bolt. This cap can be replaced by an ordinary striking plate.

I claim:—

A mortise lock for furniture and the like, comprising a cylindrical key casing, a cylindrical lock casing fitting loosely into and at right angles to the key casing so as to hold it in position, a spring-pressed lock bolt arranged in the lock casing, a revoluble barrel arranged within the path of the lock casing which projects into the key casing, a pin mounted eccentrically on said barrel, the lock bolt being arranged so as to bear against said pin and allow of being shot and retracted by the rotation of the barrel, and a cap adapted to be screwed into the mortised element over the bolt and the lock casing so as to close the lock and secure the different parts in position.

WILHELM BACHMANN.