E. SCHROEDER.

LOCK.

APPLICATION FILED APR. 10, 1912.

1,061,571. Patented May 13, 1913.

Fig. 1.

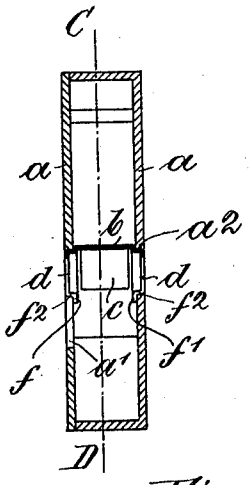

Fig. 2.

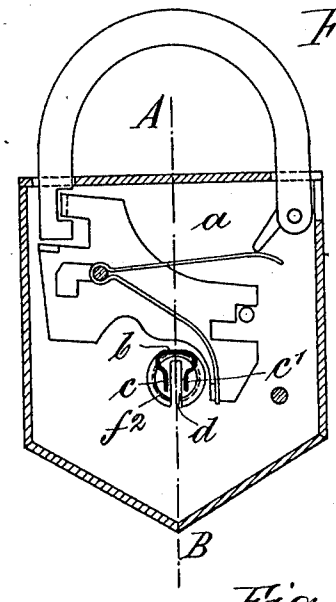

Fig. 3.

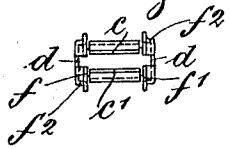

Fig. 4.

Fig. 5.

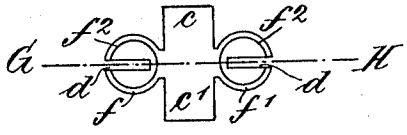

Fig. 6.

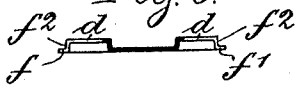

Fig. 7.

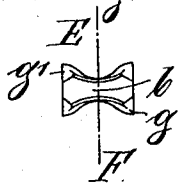

Fig. 8.

Fig. 9.

Witnesses:
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UNITED STATES PATENT OFFICE.

EBERHARD SCHROEDER, OF VOLMARSTEIN, GERMANY.

LOCK.

1,061,571. Specification of Letters Patent. Patented May 13, 1913.

Application filed April 10, 1912. Serial No. 689,837.

To all whom it may concern:

Be it known that I, EBERHARD SCHROEDER, a subject of the King of Prussia, and resident of Volmarstein, district of Hagen, in the Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in Locks, of which the following is a specification.

This invention relates to key locks of the type in which a flat key is used and in which the key is inserted into and rotates in unison with a cylindrical barrel rotatably mounted at its ends in the casing of the lock. Hitherto it has been usual to cut such cylindrical barrels from a solid body by special machinery.

My present invention has for its object to simplify the construction of such rotatable barrels and to lessen the cost thereof.

According to my invention the rotatable barrel is stamped from a strip of sheet metal in such a manner as to form a substantially flat constricted central part for the reception of the key and cylindrical end parts adapted to be rotatable in corresponding openings in the casing of the lock.

The flat central part for the reception of the key is obtained by means of side lugs which are pressed close together while the end bearings of the barrel are formed either by bending the metal strip at right angles to the central part and stamping the same in such a manner as to form cylindrical end parts and slotted disks or by forming the ends of the strip of simple cylindrical form as will be hereinafter more clearly set forth.

In order that the invention may be more clearly understood reference is made to the accompanying drawings, whereon I have shown the invention by way of example as applied to a padlock.

Figure 1 is a vertical section on the line A—B of Fig. 2, which is a side view of the padlock in section on the line C—D of Fig. 1. Figs. 3 and 4 are detail side and end views of the rotatable barrel. Fig. 5 is a plan of the partly formed blank from which the rotatable barrel is made, and Fig. 6 is a section on the line G—H of Fig. 5. Fig. 7 is a side view and Fig. 8 an end view of a slightly modified form of cylindrical barrel and Fig. 9 is a section on the line E—F of Fig. 7.

a designates the casing of the lock which is provided in the usual manner with a keyhole slot *a'* at one side, and a cylindrical opening a^2 on the other side within which is rotatably mounted the barrel *b*.

The rotatable barrel *b* according to the present invention is stamped from a strip of sheet metal in such a manner as to form side lugs *c* and *c'* pressed together so as to form a slot for the reception of the key. The ends of the rotatable barrel *b* are bent at right angles to the lugs *c* and *c'* to form end disks *f* and *f'* slotted at *d* for the reception of the key, the strip of material being formed slightly cylindrical at f^2 as shown in the drawings so as to form bearings rotatable in the keyhole slot *a'* and opening a^2 in the lock casing *a*.

Instead of the disks *f* and *f'* being provided with cylindrical bearing surfaces f^2 as illustrated in Figs. 1–6, the rotatable barrel may be stamped in such a manner as to form cylindrical end parts *g* and *g'* as illustrated in Figs. 7–9, which are rotatable in the keyhole slot *a'* and opening a^2 in the lock casing while the inner part of the barrel is inwardly pressed to form the side lugs *c* and *c'*.

I claim:—

1. A rotatable barrel for flat key locks comprising a piece of thin sheet metal having a central substantially flat constriction constituting a narrow passage for the key, and enlarged cylindrical end parts rotatable in corresponding openings in the lock casing.

2. A rotatable barrel for flat key locks comprising a piece of thin sheet metal having a central substantially flat constriction constituting a narrow passage for the key, enlarged cylindrical end parts rotatable in corresponding openings in the lock casing, and end disks integral with said cylindrical end parts at right angles thereto and having slots for the passage of the key.

3. The method of manufacturing rotatable barrels for flat key locks which consists in bending each of the two end parts of a thin piece of sheet metal into cylindrical shape to form two cylindrical ends rotatable in corresponding openings in the lock casing, and in bending the part between the two cylindrical ends into a channel-shaped constriction to receive the key.

4. The method of manufacturing rotatable barrels for flat key locks which consists in bending a piece of thin sheet metal intermediate its ends to form this intermediate part into U-shape to receive the key, and in forming the end parts into cylindrical shape and

forming slots therein and in bending thereupon the end parts at right angles to the intermediate part so as to form cylindrical end parts rotatable in corresponding openings in the lock casing and end disks integral with said cylindrical end parts and having slots for the passage of the key.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

EBERHARD SCHROEDER. [L. S.]

Witnesses:
ALBERT NUFER,
HELEN NUFER.