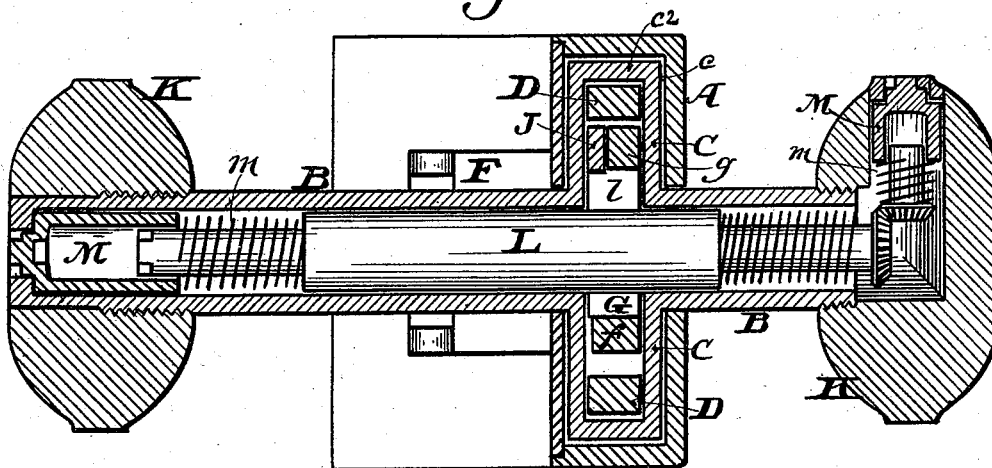
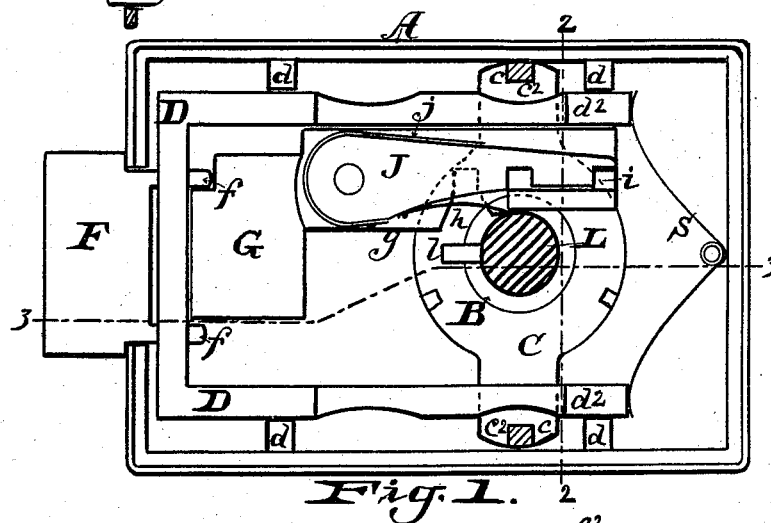
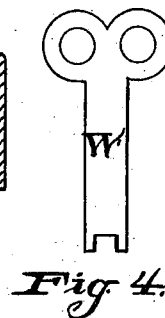
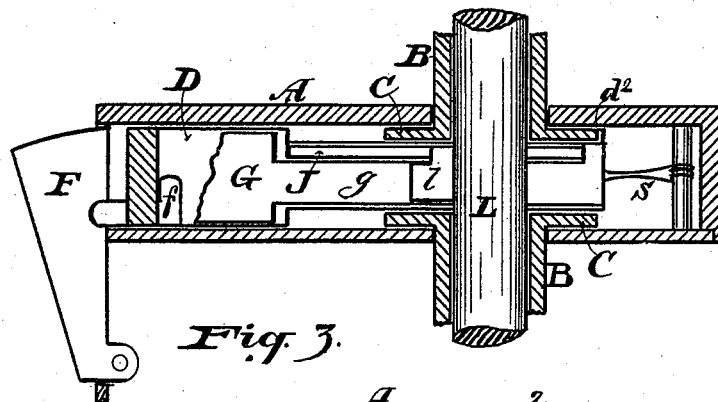


W. DREYER.
LOCK.

Patented Feb. 21, 1893.



Witnesses
C. M. Buettner
M. M. Barnes

Fig. 2.

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UNITED STATES PATENT OFFICE.

WILLIAM DREYER, OF CLEVELAND, OHIO.

LOCK.

SPECIFICATION forming part of Letters Patent No. 491,991, dated February 21, 1893.

Application filed December 30, 1891. Serial No. 416,613. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM DREYER, a citizen of the United States, residing at Cleveland, Cuyahoga county, State of Ohio, have invented certain new and useful Improvements in Door-Locks, of which the following is a specification.

This invention relates to locks and it consists in the novel constructions and combinations substantially as hereinafter described and pointed out in the claims.

In the accompanying drawings Figure 1 is a plan view of the lock, on line 1, 1, of Fig. 2. Fig. 2 is a sectional view through the knobs and spindle, on line 2, 2, of Fig. 1. Fig. 3 is a longitudinal section through the lock on 3, 3, of Fig. 1. Fig. 4 is a key for unlocking and locking the latch.

A represents the lock case, which may be applied on the side of a door or in a mortise.

B is a tubular spindle to which knobs K, K, are attached.

C, C, are disks fastened to the tubular spindle inside of the lock case, having arms c, c, extending to the sides of the case and are there joined by cross bars c², c².

D is a frame or yoke, lying in the case, its sides bearing against lugs d, d, on the side walls of the case A. A portion of the side bars of said yoke are narrowed down so that they may pass in between the arms c, c, of the disks, said arms bearing against shoulders d², on the bars, by means of which the turning of the disks will push the frame or yoke backward, a double armed spring S, fixed on a post s, bearing against the ends of the yoke forces the yoke forward.

F is a latch dog pivotally attached in an opening in the end plate of the lock case, and is provided with hooks f, f, into which the front cross-bar of the yoke D rests, the movements of the yoke withdraw the latch dog.

G is a stop block having an arm, g, lying along by the side of one of the bars of the yoke and in between the arms c, c, of the disks, C, and having its end bifurcated to span a stop lug or post i in the case A. It also has a notch or recess, h, in the side by means of which it is pushed by the arm l on the key operated spindle L, described later on.

The stop block G, is employed for prevent-

ing the movement of the yoke when the latch is locked.

J is a pawl lever pivoted on the arm g, having in its moving end a notch engaging with the lug or post i, for the purpose of locking the stop block G. On the pawl is provided a spring j, which holds the pawl down against said post i. In the side of the pawl is also made a second notch x, which catches onto the said post i, when the stop block is thrown back for unlocking the latch, and may be retained there until it is again desired to lock the latch, in the mean time the latch may be operated by turning the knobs, and thus used as an ordinary knob latch. The means for operating the stop block and arm and pawl are contained within the tubular spindle as before stated, and are described as follows:

L is a spindle loosely placed in the tubular spindle B having an arm, l, located between the disks C, C, and may be turned between them for throwing the stop block back and forth. The ends of the spindle, L, are reduced in size, and are somewhat shorter than the tubular spindle.

M is a sleeve or thimble which will slide down over the reduced part of spindle L, which is held outward by a spring m, on the reduced part. The outer end of the thimble has a stud with two or more notches in its sides and rests in a small opening in the face of the knob. A suitable key, as W, is used for turning the spindle L, which is inserted in the hole in the knob, pushing the thimble inward and engaging with the end of the spindle, and by turning the key the spindle is turned, and thereby the pawl J is lifted and the stop block thrown back by the arm l. In the knob at the right hand end of Fig. 2, the thimble is seen fixed in the knob at a right angle to the spindle, there being a short spindle connected with the main spindle by bevel gear. This shows a method of arranging the key hole in the side of the knob instead of in the face.

The key may be made in a variety of forms, with barbs or notches, for providing different keys to different locks.

Having described my invention, I claim—
1. In a latch and lock, the combination of

a latch mechanism consisting substantially of a yoke D, spring S, latch dog F having hooks *ff* engaging with the yoke; stop block G, having bifurcated arm *g*, pawl J pivoted onto the
5 arm *g*; disks C, C, having arm, *c, c*, engaging with the yoke, and attached to tubular spindle adapted to operate substantially as described.

2. In a lock and latch the combination of
10 tubular spindle B having knobs K K attached; inner spindle L, having lever *l* for operating

the bolt and tumbler mechanism; and the sleeves M and springs *m*, located within the knobs and adapted to be operated by key W, for turning the inner spindle L for actuating
the tumbler J and throwing the locking block
15 G, substantially as described.

WILLIAM DREYER.

Witnesses:

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