

(No Model.)

G. A. BECKWITH.
LOCK.

No. 506,461.

Patented Oct. 10, 1893.

FIG. 1.

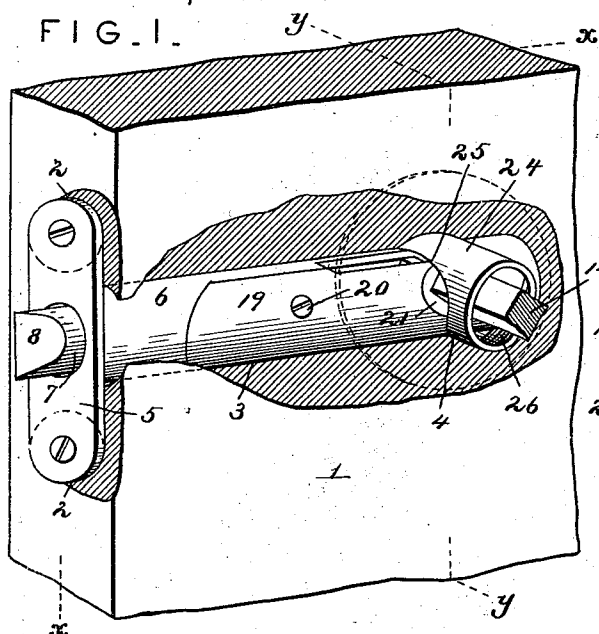


FIG. 3.

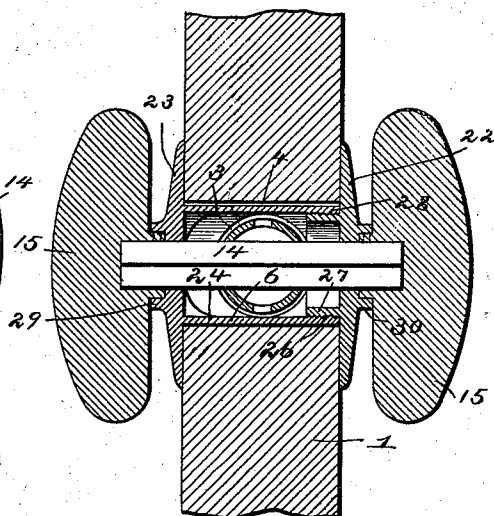


FIG. 2.

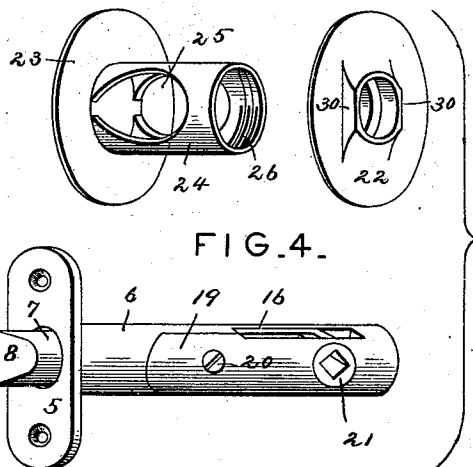
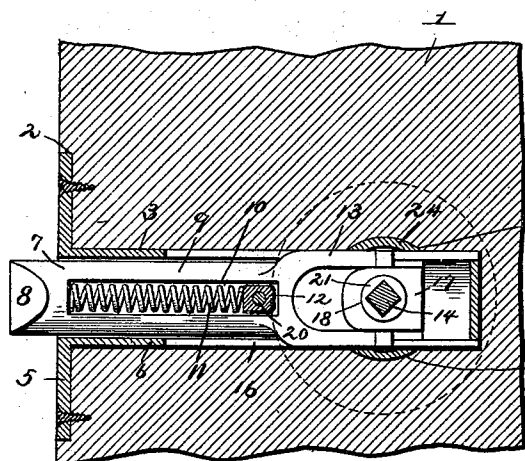
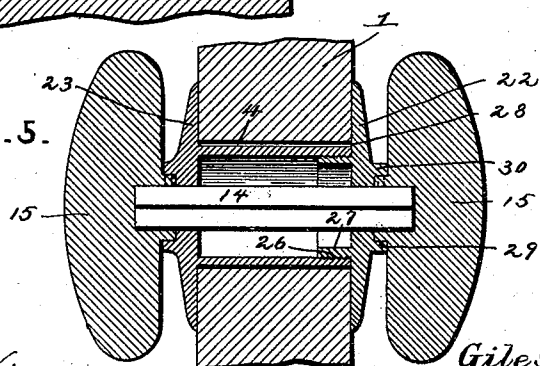


FIG. 4.

FIG. 5.



Witnesses

Harry L. Amer.

Chas. S. Hyer.

Inventor

Giles A. Beckwith.

By his Attorneys,

Chas. Snow & Co.

UNITED STATES PATENT OFFICE.

GILES A. BECKWITH, OF WATERFORD, CONNECTICUT.

LOCK.

SPECIFICATION forming part of Letters Patent No. 506,461, dated October 10, 1893.

Application filed April 8, 1893. Serial No. 469,576. (No model.)

To all whom it may concern:

Be it known that I, GILES A. BECKWITH, a citizen of the United States, residing at Waterford, in the county of New London and State of Connecticut, have invented a new and useful Mortise Lock and Rose, of which the following is a specification.

This invention relates to that class of mortise locks which have cylindrical cases adapted to be inserted in a hole bored with a bit or auger, and also of a special form of rose or escutcheon that dispenses with the use of screws being adjustably interlocked in connection with a companion member of a substantially similar nature and that can be adjusted without removing the knob from the spindle that passes therethrough.

The object of the present invention is to economize space in the construction of the lock and at the same time to provide for an easy application of the same to a door and requiring a simple formation of mortise; and also to provide for a simple mode of adjustment of the roses or escutcheons to compensate for the shrinkage of the door to which it may be applied.

With these and other objects in view the invention consists of the construction and arrangement of the parts thereof as will be hereinafter more fully described and claimed.

In the drawings: Figure 1 is a sectional perspective view of a part of a door, showing the improved lock and roses or escutcheons applied thereto. Fig. 2 is a longitudinal vertical section on the line $x-x$, Fig. 1. Fig. 3 is a transverse vertical section on the line $y-y$, Fig. 1. Fig. 4 is a detail perspective view of the parts of the lock disconnected from the door. Fig. 5 is a transverse vertical section of an ordinary form of a knob and knob-spindle, showing the improved roses or escutcheons in connection therewith.

Similar numerals of reference indicate corresponding parts in the several figures of the drawings.

Referring to the drawings, the numeral 1 designates the door, in the edge of which is formed an elongated mortise 2, that is constructed by boring a short distance into the door two round holes, spaced apart, and the intermediate wood removed, and centrally in the said mortise is formed a circular mortise

3 that extends considerable distance into the door and slightly in advance of the rear end of the said mortise 3 is formed a transverse circular opening 4 that extends entirely through the door. The mortise 2 receives a face-plate 5, that is integrally constructed with the outer end of a sectional lock-barrel 6, that is inserted in the mortise 3, and incloses a spring-latch 7, that is arranged to be operated by a knob and spindle, or, if desired, can be controlled by a key, but it is preferable that a knob and spindle be used.

The latch 7 consists of an engaging end 8 that is arranged to coact with a keeper of suitable form, and has an elongated body 9, with a slot 10 extending therethrough, and within the said slot, and bearing against one termination thereof is a spring 11, whose rear end bears against a lug 12, integrally formed with the barrel 6, and by means of the said spring the engaging end 8 is normally held distended beyond the face plate 5. The rear end of the body 9 is reduced and formed with a yoke 13, having lugs at the terminating ends of the said yoke that are arranged to be engaged by an operating arm or cam carried by the spindle 14, which is supplied with knobs 15 on opposite sides thereof. Opposite side portions of the barrel 6 are slotted, as at 16, to permit the play of the said yoke of the latch therein, and intermediate of the rear parts of the slots 16 is located another lug 17, having an opening 18 therethrough through which the spindle 14 transversely passes. The arms of the yoke 13 move against opposite sides of the lug 18 when the latch is drawn backwardly in the barrel 6. A removable section 19 is fitted over the body 9 and yoke 13 and held in fixed position by a screw 20 that is removably mounted in the lug 12, and this section is formed with an opening that aligns with the opening 18 in the lug 17 to permit the passage of the spindle entirely through the barrel 6. Thus it will be seen that the latch is arranged in compact form within the barrel 6, and by inserting the latter in the mortise 3 the entire latch is placed in operative position in the door without forming other slots or recesses, and held in position by two screws, one of which is located at the upper part of the face-plate 5 and the other at the lower

part of the same, and when the said barrel is in position in the mortise 3 the opening 18 in the lug 17, as well as the opening in the section 19, aligns with the circular opening 4 and 5 located in the center of the latter. The spindle 14 is then passed through the said opening 18 and the opening in the section 19, and with the knobs 15 thereon is secured in positive connection with the door when the latch 10 will be arranged for operation. In the opening in the section 19, and resting against the lug 17, is a collar 21 that projects into the said opening in the said section and serves as a bearing for the spindle to hold the latter in 15 proper relation to the remaining parts of the latch, and for operating the latter.

To hold the spindle in place, and for other well-known purposes, two roses or escutcheons 22 and 23 are employed of a novel form with 20 an important advantage. Integrally formed with the escutcheon 23 is a sleeve 24, having an opening 25 extending transversely there-through through which the barrel 6 extends, and provided at the inner surface of its terminating end with screw-threads 26. The 25 said sleeve 24 fits snugly in the opening 5, and integrally formed with the rose or escutcheon 22 is a collar 27, having exterior screw-threads 28, and said collar is less in diameter than the sleeve 24 and is so arranged 30 that the screw-threads 28 thereof properly engage the screw-threads 26 of the said sleeve. The outer exposed surfaces of the roses or escutcheons may be suitably ornamented or embellished with designs, and each of the same at 35 the center is formed with a socket 29 that surrounds the central spindle-opening to receive the inner opposing central collars of the knobs 15. The central part of each rose or escutcheon, around the socket 29 therein, is projected 40 outwardly or slightly flanged circularly, and on the rose or escutcheon 22, in connection with said central flange thereof, are formed two oppositely-disposed parallel shoulders 30 that are adapted to be engaged by a wrench 45 or other bifurcated tool to turn the said rose or escutcheon 22 either to properly fit the collar 27 thereof into the sleeve 24 when applying the same to the door, or to adjust the said 50 rose while the knob and spindle are in posi-

tion to compensate for shrinkage of the door. By means of the construction just set forth, it will be observed that no screws or other fastenings are necessary to hold the roses or escutcheons in place; and further, that the 55 said escutcheons may be readily adjusted without removing either of the knobs of the spindle for the purpose stated.

It will be understood that the roses or escutcheons herein set forth may be equally 50 well employed with any form of knobs, irrespective of the construction of the latch or lock, and owing to the simplicity and cheapness of construction, as well as the small amount of labor required to apply the sev- 65 eral parts to a door, a very novel and valuable acquisition to the art is produced.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or 70 sacrificing any of the advantages of this invention.

Having described the invention, what is claimed as new is—

The combination with a cylindrical lock-casing, of a transversely-disposed sleeve adapted 75 to extend from one surface of a door to the other and terminate flush with such surfaces, having a circular diametrical opening to receive the rear end of said lock-casing, and provided at one end with a fixed rose or escutcheon to bear against one surface of the door 80 and at the other end with an interior screw-thread, a second rose or escutcheon removably attached to the other end of the sleeve and 85 having an exteriorly-threaded collar to fit in the interiorly-threaded end of said sleeve, and a spindle extending axially through the sleeve and transversely through the lock and operatively connected to the lock mechanism, 90 said spindle being provided with terminal knobs, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GILES A. BECKWITH.

Witnesses:

CHAS. CROCKER,
REUBEN LORD, Jr.