

No. 666,800.

Patented Jan. 29, 1901.

J. CHASE, Dec'd.
M. A. CHASE, Administratrix.
DOOR KNOB FASTENER.
(Application filed Jan. 9, 1900.)

(No Model.)

Fig. 1.

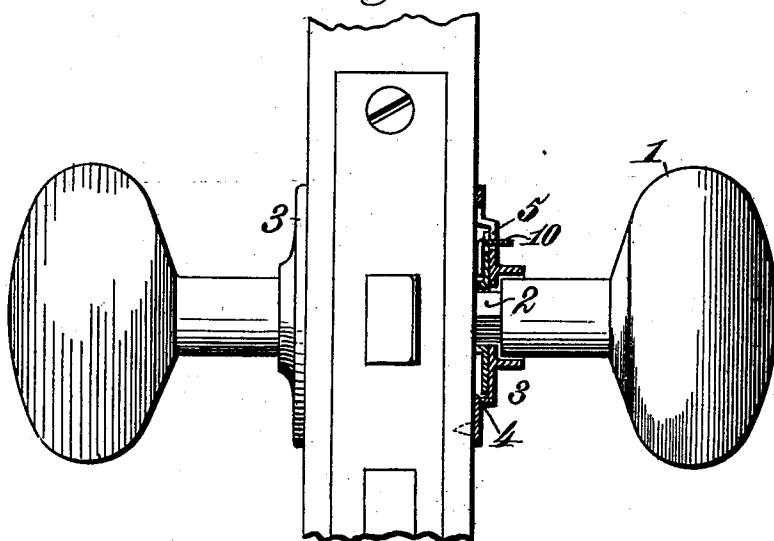


Fig. 2.

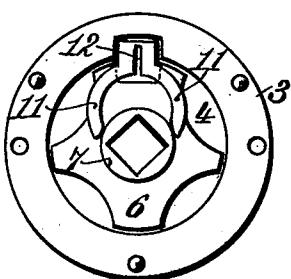


Fig. 3.

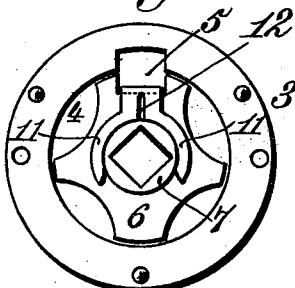


Fig. 4.

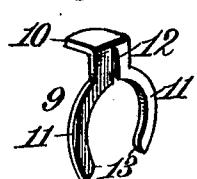
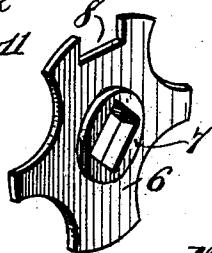


Fig. 5.



Witnesses.

Robert Everett,
Secretary

Inventor
James Chase,
deceased.

Minerva A. Chase,
Administratrix
By James L. Norris
Atty.

UNITED STATES PATENT OFFICE.

MINERVA A. CHASE, OF ROCHESTER, NEW YORK, ADMINISTRATRIX OF
JAMES CHASE, DECEASED.

DOOR-KNOB FASTENER.

SPECIFICATION forming part of Letters Patent No. 666,800, dated January 29, 1901.

Application filed January 9, 1900. Serial No. 849. (No model.)

To all whom it may concern:

Be it known that JAMES CHASE, who was a citizen of the United States, and a resident of Philadelphia, in the State of Pennsylvania, 5 but is now deceased, did invent certain new and useful Improvements in Door-Knob Fasteners, of which the following is a specification.

This invention relates to locks for the knob-spindles of doors, the object of the same being to provide simple contrivances by means of which the ordinary door-latch may be utilized for locking the door by preventing the rotation of the knob-spindle which actuates said 15 latch.

The invention consists of a disk secured to the knob-spindle and located within a recess in the rosette or escutcheon-plate, having a notch in its periphery and a central hub or 20 boss, and a detent having a flange on one end, which projects through a slot or opening in said escutcheon-plate and is adapted to fit within the recess in said disk and a yoked inner end, the branches of the yoke being adapted 25 to embrace said hub and engage the same with a spring-pressure to prevent the accidental movement of the detent when it has been set in one of its positions or the other.

The invention also consists in certain features and details of construction and combinations of parts, which will be hereinafter more fully described and claimed.

In the drawings forming part of this specification, Figure 1 is a longitudinal section 35 through the knob-spindle with the invention applied thereto. Fig. 2 is a rear elevation of the escutcheon-plate and the parts located therein, showing the detent in one of its positions. Fig. 3 is a similar view showing the 40 detent in the other of its positions. Fig. 4 is a detail view of the detent, and Fig. 5 is a similar view of the disk on the knob-spindle coöperating therewith.

Like reference-numerals indicate like parts 45 in the different views.

The door-knobs 1 are secured to the outer ends of the spindle 2, which, as usual, is rectangular in cross-section. The same extends through the door in the usual manner and 50 also through the rosette or escutcheon-plates 3, secured to the opposite sides of the door.

One of these escutcheon-plates is formed with a central circular recess 4 in its inner surface, into which leads at one side a lateral slot or opening 5. Fitting within the recess 4 and 55 secured to the spindle 2 is a disk 6, having a central circular hub or boss 7 and a notch 8 in one edge, the said notch registering normally with the slot 5, heretofore referred to. Coöperating with these parts is a detent 9, 60 the same being preferably formed from sheet metal and having an outwardly-extending flange 10 on one end, which projects through the slot 5 and is adapted to be grasped by the fingers on the outside of the escutcheon-plate. 65 The inner end of said detent 9 is formed with a yoke, the branches 11 of which are adapted to embrace the central boss or hub 7 on the disk 6. Between the branches 11 of the yoke a slit 12 is formed, which extends in the direction of the length of the detent and provides for the spreading of said branches. The latter therefore may be termed "spring-arms," which are adapted to yield for the purpose of enabling the same to pass on and off 70 of the hub 7. The inner walls of the branches 11 of the yoke are formed upon the arc of a circle somewhat greater than a semicircle, so that the engaging portions 13 are somewhat nearer to each other than the diameter of the 75 boss 7. The ends of said branches 11 are beveled from the engaging portions 13 outwardly, as shown.

From the foregoing description it is thought that the operation of the invention will be 80 readily understood. Briefly stated, however, it is as follows: The normal position of the detent 9 is as shown in Fig. 2 of the drawings—that is, with the flange 10 thereof at or near the extreme outer end of the slot 5. 85 When in this position, the disk 6 is free to turn in the recess 4 upon the rotation of the spindle 2. The said spindle is of course connected in the usual manner with the latch-bolt of the door, and the latter is normally 90 held in locking position by spring-pressure. When in this position, the notch 8 in the disk 6 is in line with the slot 5 in the plate 3. It is impossible for the detent 9 to be accidentally forced inwardly, as the engaging portions 13 of the branches 11 of the yoke on 95 the inner ends of said detent bear against the

outer side walls of the boss 7. If, however, it be desired to lock the spindle against rotation, and consequently retain the latch-bolt operated thereby in locking position, power 5 is applied to the projecting flange 10 on the detent 9 and the latter forced inwardly until said flange lies at or near the extreme inner end of the slot 5. When in this position, it also lies within the notch 8 in the edge of the 10 disk 6, and said disk and consequently the spindle 2 and the parts operated thereby are prevented from rotation. In forcing the detent inwardly to effect the locking action 15 above described it is necessary to apply power enough to cause the branches 11 of the yoke on the inner end of said detent to spread in order to enable the engaging portions 13 thereof to pass by the widest part of the boss 6. When 20 said detent is in its inner position, however, it cannot be accidentally removed therefrom, as the engaging portions 13 on the branches 11 bear against the opposite sides of the boss 6, and the same amount of power is necessary 25 to remove the detent from its locking position as was necessary to place the same in its locking position. One of the important features of the invention, therefore, is the specific means whereby the detent is retained in either one of its two positions.

30 The invention described is extremely simple in construction, effective in operation, and may be produced at a minimum expense.

Having now described the invention, what is claimed is—

3. 1. The combination with a plate having a recess therein and a lateral slot leading into said recess, of a disk in said recess secured to the knob-spindle and provided with a hub or boss and with a peripheral notch in line

with said slot, and a detent having a flange 40 at one end projecting through said slot and adapted to fit within said notch, and having means at its other end engaging said boss for retaining said detent in one or the other of its positions.

2. The combination with a plate having a recess therein and a lateral slot leading into said recess, of a disk in said recess secured to the knob-spindle and provided with a hub or boss and with a peripheral notch in line 50 with said slot, and a detent having a flange at one end projecting through said slot and adapted to fit within said notch, and having spring-arms at its other end adapted to embrace and frictionally engage said boss for 55 retaining said detent in one or the other of its positions.

3. The combination with a plate having a recess therein and a lateral slot leading into said recess, of a disk in said recess secured to the knob-spindle and provided with a hub or boss and with a peripheral notch in line 60 with said slot, and a detent having a flange at one end projecting through said slot and adapted to fit within said notch, and having 65 a yoke at its inner end, the inner walls of the branches of which are cut upon an arc slightly greater than a semicircle forming engaging portions slightly nearer together than the diameter of said boss, the said branches coöperating with said boss for retaining said detent in one or the other of its positions.

MINERVA A. CHASE,
*Administratrix of the estate of James Chase,
deceased.*

Witnesses:

P. DE W. OVIATT,
R. J. STANTON.