

(No Model.)

J. H. BARNES & J. H. WOOLASTON.

NIGHT LATCH.

No. 346,704.

Patented Aug. 3, 1886.

Fig. 1

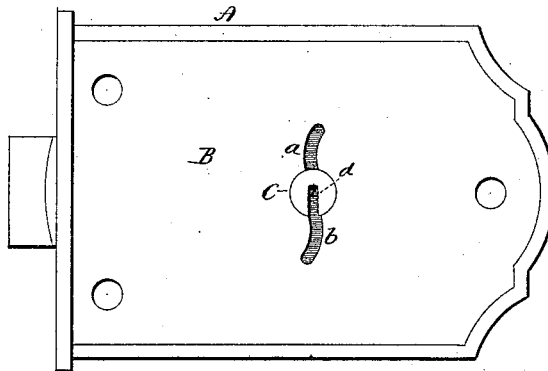


Fig. 2

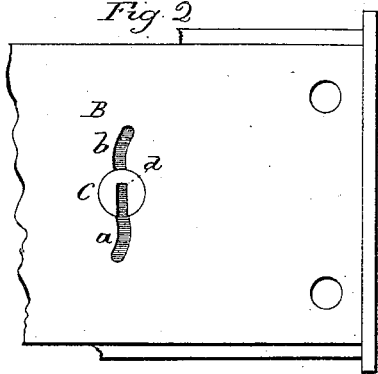


Fig. 3

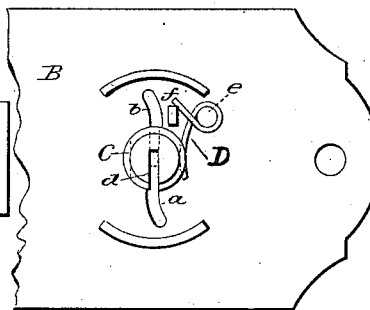
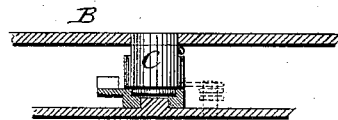


Fig. 4



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# UNITED STATES PATENT OFFICE.

JOHN H. BARNES AND JOSEPH H. WOOLASTON, OF NEW HAVEN, CONNECTICUT, ASSIGNORS TO THE BARNES MANUFACTURING COMPANY, OF SAME PLACE.

## NIGHT-LATCH.

SPECIFICATION forming part of Letters Patent No. 346,704, dated August 3, 1886.

Application filed June 1, 1886. Serial No. 203,745. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN H. BARNES and JOSEPH H. WOOLASTON, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Night-Latches; and we do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a key-hole side view of the latch, with the cylinder set for one hand; Fig. 2, same view as Fig. 1, inverted, and the cylinder set for the reverse hand; Fig. 3, an inside view of the covering-plate; Fig. 4, a transverse view showing side view of the cylinder.

This invention relates to an improvement in that class of latches known as "night-latches"—that is, latches which are arranged to be operated by a knob on one side of the door and by a key from the opposite side, or in latches which are operated by a key from one side only, and particularly for latches to be operated by a flat spindle-key, which requires a cylinder to support the key, the said cylinder having a radial slot corresponding in position to the hole in the case for the bit of the key, the two forming the complete key-hole. In the usual construction of this class of latches, if the bolt is arranged for a right-hand door, and it is desired to apply the latch to a left-hand door, or the reverse, the key-hole must necessarily be inverted.

The object of this invention is to construct a latch of this character so that the same latch is adapted for either a right or left hand door; and it consists in constructing the case with two slots substantially in line with each other, and each corresponding to the bit of the same key, and distant from each other the diameter of the cylinder, and arranging the cylinder having a slot in one side for the spindle of the key between the two key-holes, and so that it may be revolved to bring the slot in the cylinder to open into either of the key-holes in the plate, and form a complete key-hole in either position.

The drawings show only so much of a latch as is necessary to illustrate the invention.

A represents the case, which may be of any desired form.

B is the removable plate, constructed with an opening for the cylinder, from which slots *a b* extend, the one above and the other below the cylinder-opening, each of said slots corresponding to and forming the hole for the bit of the key.

C is the cylinder, of substantially the usual shape, one end corresponding in size to the size of the opening in the plate, so as to take a bearing and be freely rotated therein, and is constructed with the usual radial slot, *d*, to receive the spindle of the key and form the center upon which the key may be turned. The sides of the cylinder inside the plate are cut away, forming two opposite parallel sides, as shown in broken lines, Fig. 3.

D is a spring, arranged upon a post, *e*, on the inside of the plate, one arm taking a bearing upon a stud, *f*, on the plate, and the other arm extending across one side of the cylinder, so as to hold the cylinder in such position that the slot *d* will open into one of the holes *b* in the plate, as seen in Fig. 1, adapting the latch for doors of one hand, but yield to allow the cylinder to be turned by the key in drawing the bolt, and also that the cylinder may be turned to bring the slot *d* to the other hole, *a*, in the plate, as seen in Fig. 2, for the other hand, and so that the latch may be used for doors of either right or left hand, and operated by placing the key into the latch bit downward.

If desired, the spring may be arranged in the case to bear against the inner end of the cylinder, as shown in broken lines, Fig. 4; but it is preferable to arrange it upon the plate, as hereinbefore described, as the spring forms a frictional connection between the cylinder and the plate, so that in assembling the parts or in removing the plate the cylinder is held in position in relation to the plate, and is not liable to be accidentally displaced.

The arrangement of the spring on the covering-plate to support the cylinder may be employed in this class of locks with a single

key-hole, or non-reversible. We therefore do not wish to be understood as limiting this part of our invention to the presence of the two key-holes. It will also be understood that the cylinder with the single slot and the two key-holes 5 extending radially from the cylinder-opening is substantially as well adapted to other mechanism within the case as to that which we have illustrated.

10 We claim—

1. In a latch substantially such as described, the combination of the case A, provided with a removable plate, B, said plate constructed with an opening, from the upper and lower 15 sides of which a hole, *a b*, extends, each hole corresponding to the bit of the key, a cylinder, C, arranged in said opening between said key-holes, and constructed with a radial slot, *d*, upon one side, said cylinder adapted to be rotated so as to present the said slot to either of 20 the said holes in the plate, thereby forming a

complete key-hole in either position, substantially as described.

2. In a latch substantially such as described, the combination of the case provided with the 25 removable plate B, said plate constructed with an opening, and with a hole extending from said opening corresponding to the bit of the key, a cylinder, C, arranged in said opening and constructed with a radial slot upon one 30 side, the said slot adapted to receive the bit of the key, and the cylinder adapted to be rotated so as to present the said slot to the said key-hole to receive the key, and a spring fixed upon the removable plate and arranged to bear 35 upon and yieldingly hold the cylinder to the plate, substantially as described.

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