

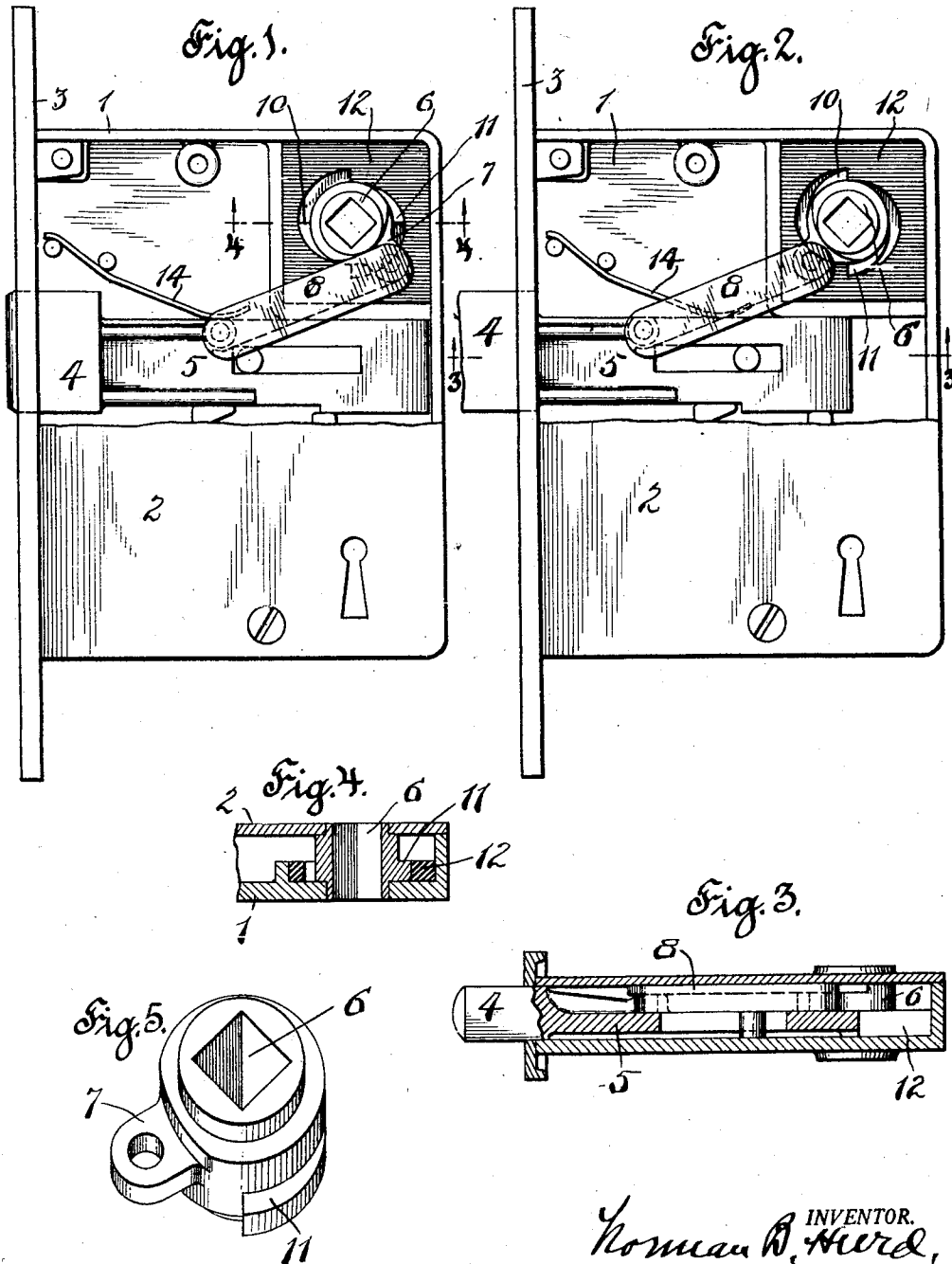
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N. B. HURD

HOSPITAL LATCH

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INVENTOR.
Norman B. Hurd,
BY
Mitchell & Beckel
ATTORNEYS.

UNITED STATES PATENT OFFICE.

NORMAN B. HURD, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE AMERICAN
HARDWARE CORPORATION, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF
CONNECTICUT.

HOSPITAL LATCH.

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This invention relates to certain improvements in latches, particularly designed for hospital service where silent operation is greatly to be desired.

5 The object of the invention is to provide a construction which will admit of the silent operation of the locking unit.

In the accompanying drawings—

10 Fig. 1 is a side elevation of a latch constructed to embody my invention, with a part of the cap removed;

Fig. 2 is a similar view of the same with parts in a different position;

15 Fig. 3 is a section on the line 3—3 of Fig. 2;

Fig. 4 is a section on the plane of the line 4—4 in Fig. 1;

Fig. 5 is a perspective view, relatively enlarged, of a roll back.

20 1 is the body portion of the latch case; 2 is the cap; 3 is the face plate; 4 is the dead bolt; 5 is the tail of the dead bolt; 6 is the hub of a roll back, having an offset or arm 7. 8 is a link pivotally connecting the end of the roll back arm 7 with the tail 5 of the bolt 4. The hub of the roll back has its ends suitably seated in the case 1 and the cap 2, whereby it may be oscillated, as by the ordinary knob spindle (not shown). 10—11 are eccentric portions on the roll back hub, each eccentric being provided with an abrupt shoulder at corresponding ends. 12 is a block, having a recess therein forming two eccentric portions in which the portions 10—11 of the roll back stand. At the end of each of the eccentric recesses in the block 12 are stop shoulders. There is sufficient clearance in the recessed portions of the block 12, so that the roll back may be turned from the position indicated in Fig. 2 (where the bolt is projected) to the position indicated in Fig. 1 (where the bolt is retracted). The block 12 is made of a suitable sound deadening

material, preferably, hard fiber, so that when the shouldered portions of the roll back hub 45 come into contact with the stop shoulders of the block 12 (as indicated in Fig. 2) no noise will occur. In this position, which is the locking position of the bolt 4, it will be noted that the link 8 is sufficiently close to a dead center line to make it impossible to force the bolt 4 back by an instrument inserted between the door and the casing.

When the roll back is turned from the position shown in Fig. 2 to that shown in Fig. 55 1, the bolt 4 will be retracted, and when the eccentric portions thereon come into contact with the eccentric portions on the block 12, as indicated in Fig. 1, no noise will occur.

14 is a drag spring, which may be employed if desired to hold the locking bolt 4 in any desired position within the range of its reciprocation.

What I claim is:

65 1. In a latch of the character described, a case, a bolt, a roll back, means of connection between the roll back and the bolt for reciprocating the latter as the roll back is turned, a shoulder on the roll back and a stop within the lock case to check the stop on the roll back, one of said parts being formed of sound deadening material.

2. In a latch of the character described, a case, a reciprocating bolt, a roll back for operating the same, a shoulder on the roll back, and stop means of sound deadening material within the case to limit the rotary movement of the hub.

3. In a latch of the character described, 80 a case, a reciprocating bolt, a roll back for operating the same, a shoulder on the roll back, and stop means of sound deadening material within the case to limit the rotary movement of the hub in both directions.

NORMAN B. HURD.