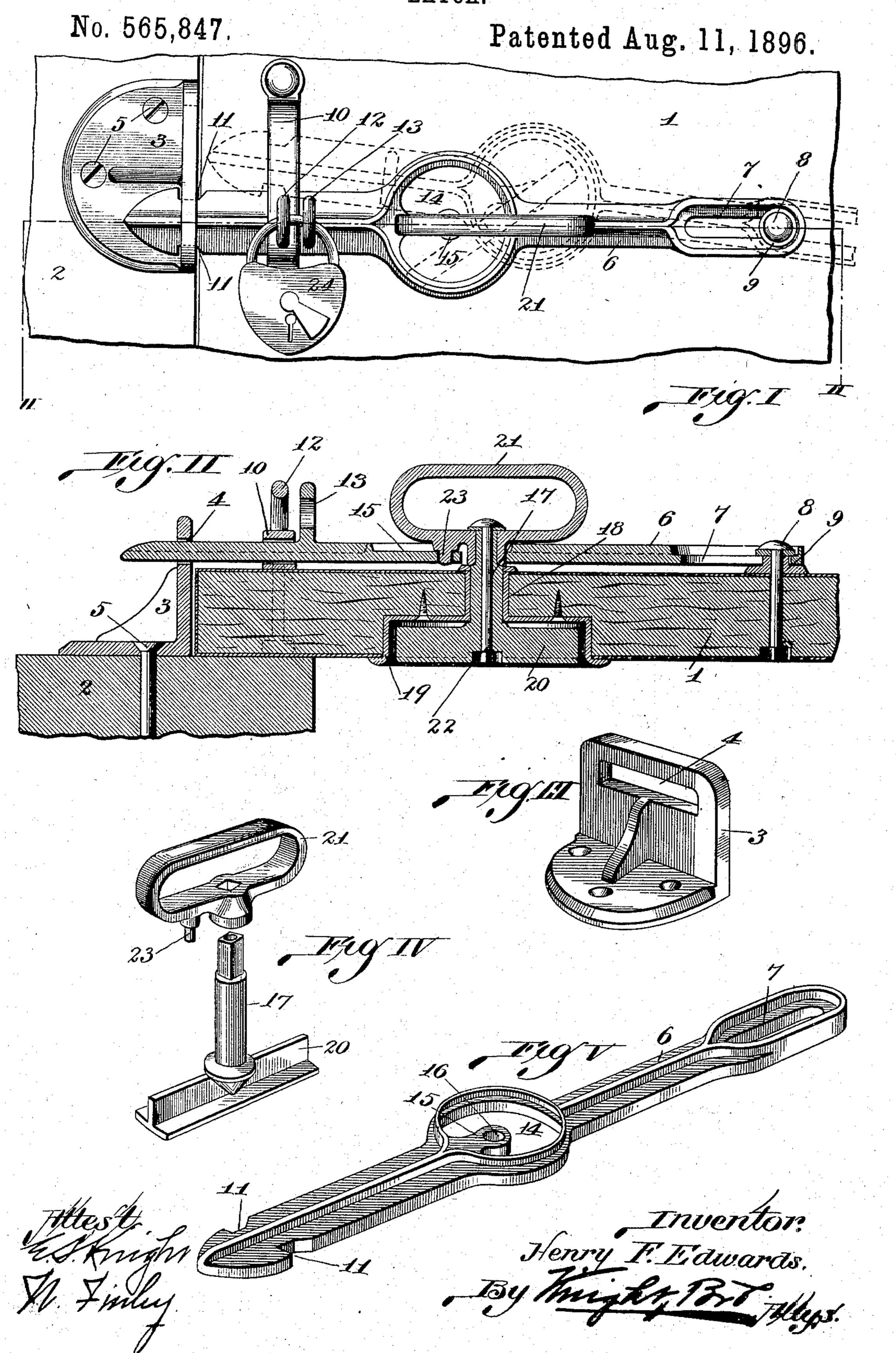
H. F. EDWARDS. LATCH.



United States Patent Office.

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LATCH.

SPECIFICATION forming part of Letters Patent No. 565,847, dated August 11, 1896.

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To all whom it may concern:

Be it known that I, Henry F. Edwards, of the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Door-Latches, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a latch especially 10 adapted for use on warehouse-doors, although it is capable of use on other doors; and my invention consists, broadly, of a keeper, a laterally and longitudinally sliding latch-bar, which engages the keeper, and an operating 15 handle mounted on a spindle, which has a connection with the latch-bar outside of the spindle. The latch-bar is formed with a slot in its rear end, through which a bolt passes, in order, when the latch-bar is turned, to pro-20 duce the lateral and longitudinal movement, and at an intermediate point a large opening is formed, through which the spindle passes, and at which point the controlling connection between the handle and bar is made.

My invention further consists in features of novelty hereinafter fully described, and

pointed out in the claims.

Figure I is a front elevation of the latch. Fig. II illustrates a longitudinal section taken on line II II, Fig. I. Fig. III is a view in perspective of the latch-keeper. Fig. IV is a view in perspective of the latch-operating handles, the ring member being shown removed. Fig. V is a view in perspective of the latch-bar.

In the drawings, 1 designates a portion of a door, to which I have shown my latch applied, and 2 a portion of a wall against which

the door abuts.

3 designates the keeper provided with a slot 4 for the reception of the latch-bar. This keeper may be secured to the wall by any suitable fastening, the means shown being screws 5.

6 designates the latch-bar, provided at its rear end with a slot 7, that receives a bolt 8, surrounded by a washer 9. By this arrangement the latch-bar is free to move longitudinally the distance of the length of the slot 7, but is otherwise confined.

The forward end of the latch-bar rests in

a slotted bar 10, in which it is allowed vertical movement from the position illustrated in full lines to that illustrated in dotted lines, Fig. I. In the edges of the forward end of 55 the latch-bar are notches 11, the lower one of which engages with the keeper 3 when the latch is in engagement. Only the lower notch is of service when the latch is in use, the purpose of providing one at each edge being to 60 adapt the latch for right or left hand application to doors, according to whichever way the door may be hung.

On the slotted bar 10 is an eye 12, and on the latch-bar is an eye 13, the latter of which, 65 when the latch is in engagement, is coincident with the former. These eyes are adapted to

receive the bow of a padlock.

In the central portion of the latch-bar is an opening 14, into which an arm 15 on said latch- 70 bar extends. This arm is provided with a hole 16.

17 designates a spindle fitted in a bushing 18, extending through the door. The bushing 18 has formed upon it a face-plate 19 that is 75 sunk into one side of the door, and on the spindle 17 is a handle 20, that is contained in the sunken face-plate 19 in such manner as to be flush with the plane of the door. The opposite end of the spindle 17 carries a ring- 80 handle 21, rigidly secured by a bolt 22, passing lengthwise through the spindle.

23 designates a stud on the ring-handle 21. This stud fits in the hole 16 of the arm 15.

24 designates a padlock by which the latch 85 may be locked when in engagement with the keeper.

In the actuation of the latch, when the latch is in engagement, as shown by full lines in Fig. I, and it is desired to release it, either of 90 the handles 20 or 21 is turned, and the stud 23 carries the arm 15 in an arc of a circle concentric with the surface of the spindle 17 until the stud reaches a point to the rear of the spindle, when the latch will be completely 95 retracted and in the position shown in dotted lines, Fig. I. A reverse operation of the handle throws the latch into engagement.

I claim as my invention—

1. In a latch, the combination of a latch- 100 bar and keeper; said latch-bar being provided with a slot at its rear end and an opening in-

termediate of its ends; an arm on said latchbar extending into said opening; said arm being provided with a hole; an operating-handle passing through said opening; and a stud 5 carried by said handle adapted to operate in said hole in said arm; substantially as described.

2. In a latch, the combination of a latch-bar and keeper; said latch-bar being provided with a slot at its rear end, a notch in its forward end, and an opening intermediate of its ends; an arm extending into said opening; said arm being provided with a hole; an operating-handle passing through said opening; a stud carried by said handle adapted to operate in said hole in said arm; a slotted bar inclosing the forward end of the latch-bar; an eye on said slotted bar; and an eye on said latch-bar adapted to be brought into coinci-

dence with the eye on said slotted bar, all 20 substantially as and for the purpose set forth.

3. In a latch, the combination of a suitable keeper, a latch-bar having at its rear end a bearing permitting a combined laterally and longitudinally sliding movement, and an en-25 larged opening at an intermediate point, and a spindle having a fixed bearing passing through the enlarged opening in the latchbar, and having a controlling connection with said latch-bar eccentric to the spindle where-30 by it moves said bar laterally and longitudinally by the turning of the spindle as explained.

HENRY F. EDWARDS.

In presence of— E. S. KNIGHT, W. FINLEY.