No. 631,034. Patented Aug. 15, 1899.

C. C. BIELITZ.

TIME CHECK FOR DOORS.

(Application filed Mar. 20, 1899.)

(No Model.)

Fig. 1.

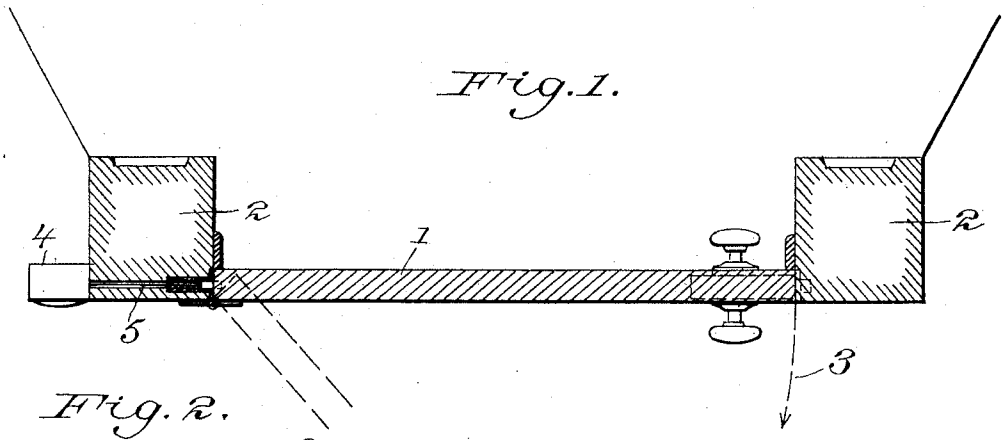


Fig. 2.

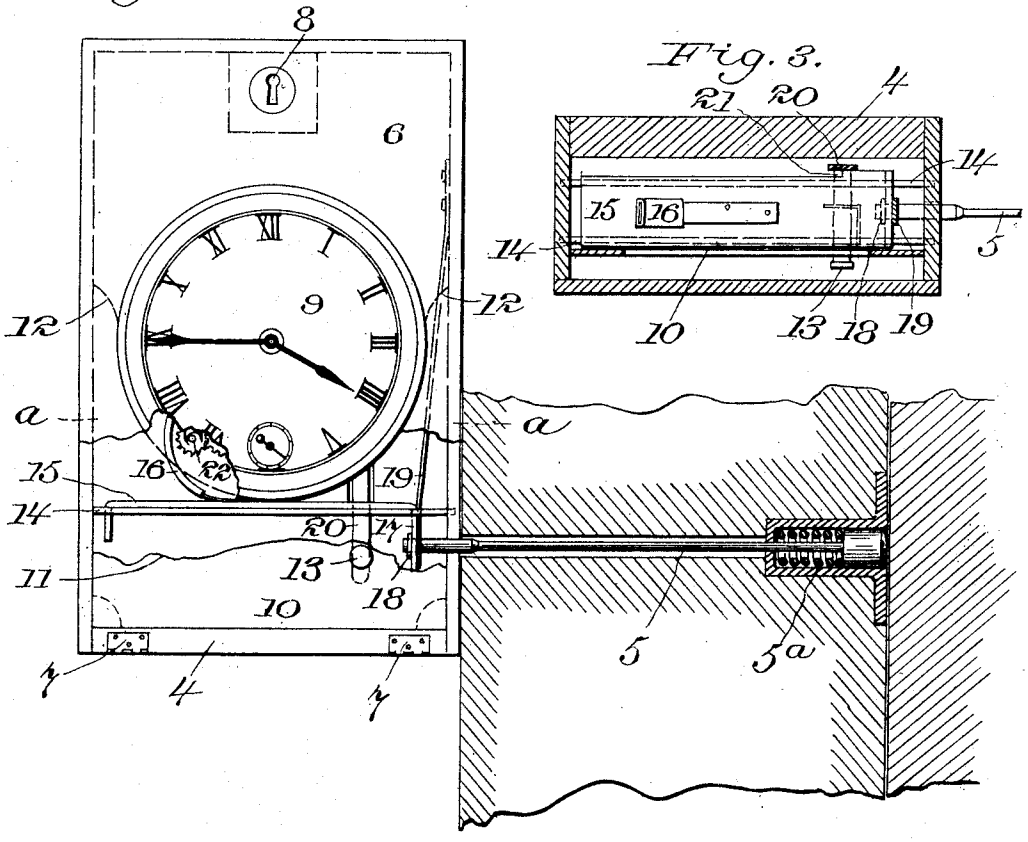


Fig. 3.

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TIME-CHECK FOR DOORS.

SPECIFICATION forming part of Letters Patent No. 631,034, dated August 15, 1899.

Application filed March 20, 1899. Serial No. 709,703. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. BIELITZ, a citizen of the United States, residing in the city of New York, borough of Brooklyn, county of Kings, and State of New York, have invented a certain new and useful Improvement in Time-Checks for Doors, of which the following is a specification.

The main object of my present invention is the provision of a simple means easily applied to doors, and particularly to the doors of stores and like structures, whereby the time when the door in question is first opened after the setting of my device is accurately ascertained.

The principal use of my device will be to furnish a check upon the arrival of clerks whose duty it is to open stores, so that their employers may be made aware of the hour at which they arrive in the morning.

My invention is automatic in its action and does not depend upon the clerk's remembering to make a record of his arrival by operating the device.

My present invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a horizontal section, on a small scale, showing the way in which my device is applied to and operated by an ordinary store-door. Fig. 2 is an elevation, on a larger scale, of my device as applied to a store-door, the door-jamb being shown in section and certain portions of the casing of my improvement being broken away to make the construction clear; and Fig. 3 is a horizontal section of my device on the line *a a* of Fig. 2, the clock being removed.

In Fig. 1 the door is shown at 1 and the two door-jambs situated, as common in stores, at 2. The dotted arrow at 3 shows the direction in which the door is supposed to open.

As shown at 4, my improved time-check is adapted to be applied directly to the door-jamb to which the door is hinged and is operated by a sliding rod 5, which extends through an appropriate aperture in said jamb.

As shown best in detail in Fig. 2, the outer end of the sliding rod 5 is provided with a propelling-spring 5^a, so placed as to push the rod against the surface of the door when closed and to propel the sliding rod outward when the door is opened, as shown in dotted lines in Fig. 1.

In its preferred form my time-check has the appearance exhibited in Fig. 2, being provided with a door 6, preferably hinged, as at 7, and having a lock 8, whereby tampering with the interior of the casing may be prevented. The clock-face 9 projects through the front of the door 6, as shown. It is an advantageous feature of this invention that an ordinary cheap clock may be used therewith without modification of its construction. Within the outer casing 4 and under the door 6 I prefer to use a protecting plate 10, the edge of which, as broken away in Fig. 2, is shown at 11, and which has two points extending up at the two sides of the clock, as shown in dotted lines in Fig. 2 at 12. Through this plate extends the resetting-button 13, the use of which is hereinafter explained. Upon a track 14 there moves a slide 15, which carries a stopping-pawl 16, preferably made of springy substance and covered with a soft layer, as of rubber, at the end. At one end of this slide there is an offset 17, perforated so as to permit the operating sliding rod 5 to pass through it. Said rod is provided with a shoulder 18, which prevents the rod from being withdrawn toward the right in Fig. 2; but the sliding rod is free to move toward the left in Fig. 2 without moving the offset 17 and slide 15.

A spring 19 is attached to the interior of the casing 4, and its lower or operative end bears, as shown, against the offset 17, so as to tend to move the slide 15 toward the left. Hence the shoulder on the sliding rod 5 and the spring 19 act against each other.

A spring 20, tending constantly forward, is so placed as to spring in front of the shoulder 21 on the slide 15 when the latter is moved far enough to the right. The end of the resetting-button 13 bears on the spring 20, so as to force it away from said shoulder 21 when desired.

A small portion of the clock-casing is cut away, as shown in Fig. 2, so as to expose the balance-wheel or escapement-wheel 22 to the action of the pawl 16 when the slide 15 moves to the right.

It is to be understood that while I have

shown and described my device as operative on movement of the slide 15 to the right it is within the spirit of my invention to make the same operative in either direction by modifications well understood by any mechanic.

The operation of my device is as follows: The parts being in the position shown in Fig. 1, when the door is opened the spring 5^a is at once free to move the sliding rod 5 to the right, and the shoulder 18 pulls the slide 15 to the right, bringing the pawl 16 in gentle contact with the wheel 21 of the clock and stopping said clock. At the same time the spring 20 falls behind the shoulder 21 on the slide 15 and holds it, so that when the door is again closed the sliding rod moves loosely through the offset 17 and the slide remains in such position as to prevent further movement of the clock. The spring 19 is of course flattened against the side of the casing 4 and ready at the proper time to restore the slide 15 to the position shown in the drawings. Thus when the door is first opened in the morning after the device has been set the night before subsequent opening and shutting of the door will leave the same unaffected, and when the proprietor arrives he can ascertain from reading the clock at what hour the store was opened.

The setting of the device is very simple. The door 6 is opened and the inner plate 10 is exposed with the button 13. Upon pressing this button the spring 20 is depressed, and the slide 15, being no longer held, will move to the left under the influence of the spring 19, thus assuming the position shown in the drawings and allowing the clock to run again. The clock can be made removable, the same being simply supported between the points 12 of the plate 10, and it can therefore be taken out and reset by the usual means at its back or otherwise.

My device is capable of a number of modifications without departing from the spirit of my invention, and it is to be understood that I am not limited to the exact details herein shown and described.

What I claim is—

In a time-check for doors, a clock, a casing therefor adapted to be fastened to the door-jamb, a clock-stopping slide within said casing, a slide-rod projecting through said jamb for moving said slide, means for returning said slide, and a spring-catch for retaining said slide against said returning means.

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