J. K. JOHNSTON.

BURGLAR-ALARM.

No. 192,698 Patented July 3, 1877.

Fig. 1.

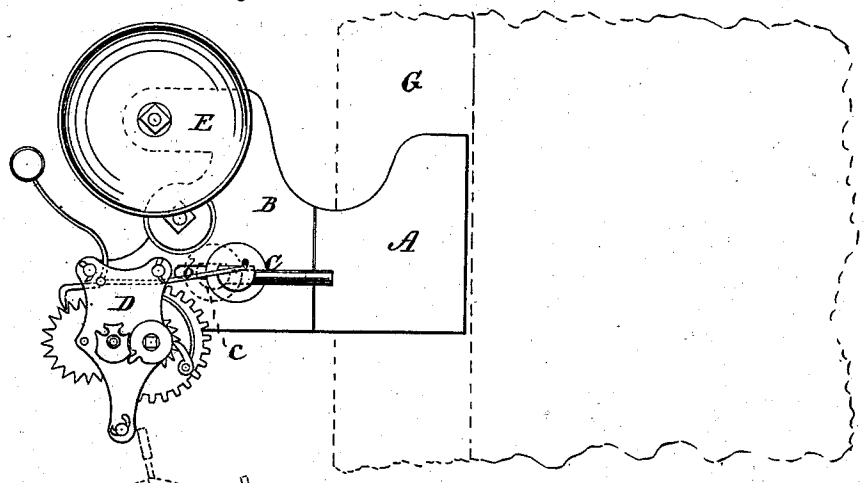


Fig. 2.

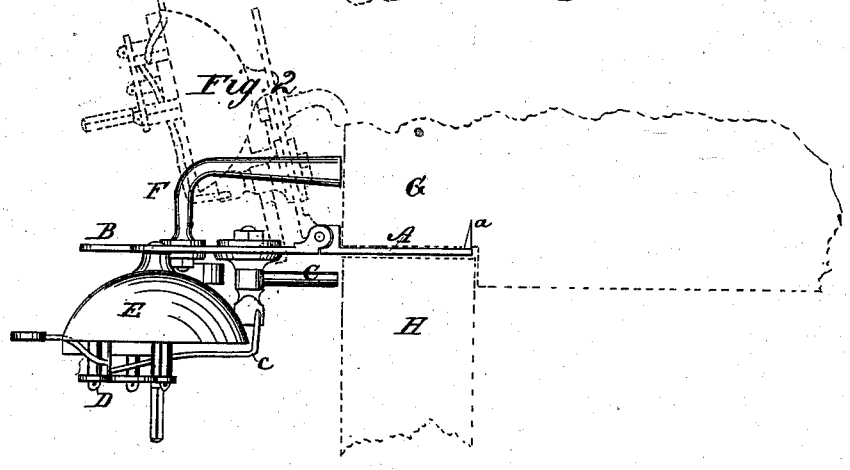
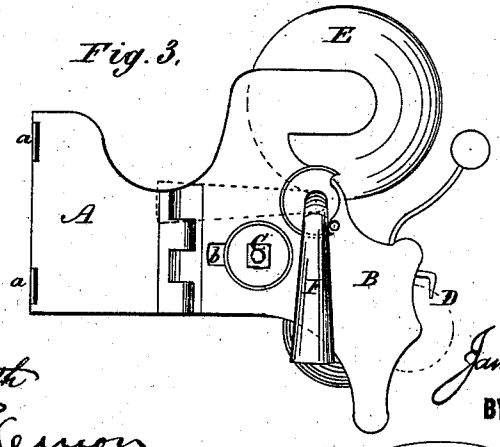


Fig. 3.



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JAMES K. JOHNSTON, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN BURGLAR-ALARMS.

Specification forming part of Letters Patent No. **192,698**, dated July 3, 1877; application filed June 4, 1877.

To all whom it may concern:

Be it known that I, JAMES K. JOHNSTON, of St. Louis, in the county of St. Louis and State of Missouri, have invented a new and Improved Door-Fastener and Burglar-Alarm; and the following is a full, clear, and exact description of the invention.

The fastener consists of a toothed plate, having a hinged extension, to which alarm mechanism is attached; also, a curved arm, which is pivoted to the extension, and is adjustable in either of two positions for the purpose of allowing the hinged extension to be turned to one side when it is desired to open and close the door, or for holding the extension rigidly in alignment with the toothed plate when the alarm is set for use. Thus, the device may be applied to a door-jamb, and the alarm mechanism be thrown back out of the way of the door while being opened and closed, but may be instantly brought into and held in position for action by a simple movement of the curved arm.

The advantages of the device are compactness, portability, simplicity and cheapness of construction, and the facility with which it can be applied to and removed from a door.

In the accompanying drawing, forming part of this specification, Figures 1 and 3 are views of opposite sides of the device. Fig. 2 is a plan view, showing the device applied to a door. The dotted lines exhibit the position of the hinged plate when the alarm is not set or required for use.

A is a plate, having teeth *a a*, and B is the hinged extension thereof, to which a sliding trigger, C, and an alarm mechanism, are attached. The trigger consists of a screw-bolt passing through a horizontal slot, *b*, and having an arm extending forward parallel to the plate B.

The alarm consists of an ordinary clock-work, D, and bell E. The pallet, arm, or trigger *c* of the clock-escapement is in contact with the trigger C when the latter is adjusted at the inner or forward end of the slot *b*, as shown in full lines, Fig. 1, but is tripped when the trigger is moved back in the slot, as shown in dotted lines, same figure.

F is a curved arm, attached to the hinged plate B on the side opposite the alarm mechanism, and pivoted in such manner that it may be adjusted in horizontal or vertical position. It has a notched or slotted shoulder, which engages a stud fixed on plate B, so that the movement of the arm is limited. Its two positions are shown in Figs. 2 and 3.

The operation is as follows: To apply the fastener to a door, the curved arm F is turned into vertical position, Fig. 3, the trigger C slid back toward the clock-work, and the plate B turned at an obtuse angle to the toothed plate A, as shown in dotted lines, Fig. 2. The latter, A, is then placed in position against the casing or jamb G, and, the door H being shut, the teeth *a* are forced into the casing, as shown in Fig. 2. The plate B is then swung into adjustment with plate A, the curved arm F turned down into horizontal position for the purpose of holding the plate B in that position, and the trigger is slid forward till the end of its horizontal arm comes in contact with the door H, so that all the parts are in the position shown in full lines, Fig. 2. The clock-work is then wound up, by means of a key, in the usual way. In case the door is forced open it will push or slide back the trigger C, and thus release the pallet *c*, so that the power of the coiled spring will be at once set free, the bell E be struck by the hammer, and an alarm sounded. But the movement of the trigger is limited by the slot *b*, and hence the door can be opened but slightly, and the device will still perform its function as a fastener after the alarm has been sounded. The arm F will thus co-operate with the plates A B to hold or secure the door irrespective of the operation of the alarm.

What is claimed is—

1. The combination, with toothed plate A, of the hinged plate B, clock-work and alarm mechanism, the sliding trigger, and adjustable arm, as shown and described, for the purpose specified.

2. The combination of the curved axially-adjustable arm F, the plates A and B hinged together, and the stop C, all as shown and described, to operate as specified.

The above specification of my invention signed by me this 15th day of May, 1877.

JAS. K. JOHNSTON.

Witnesses:

THOS. C. LIDWELL,

I. W. RICE.