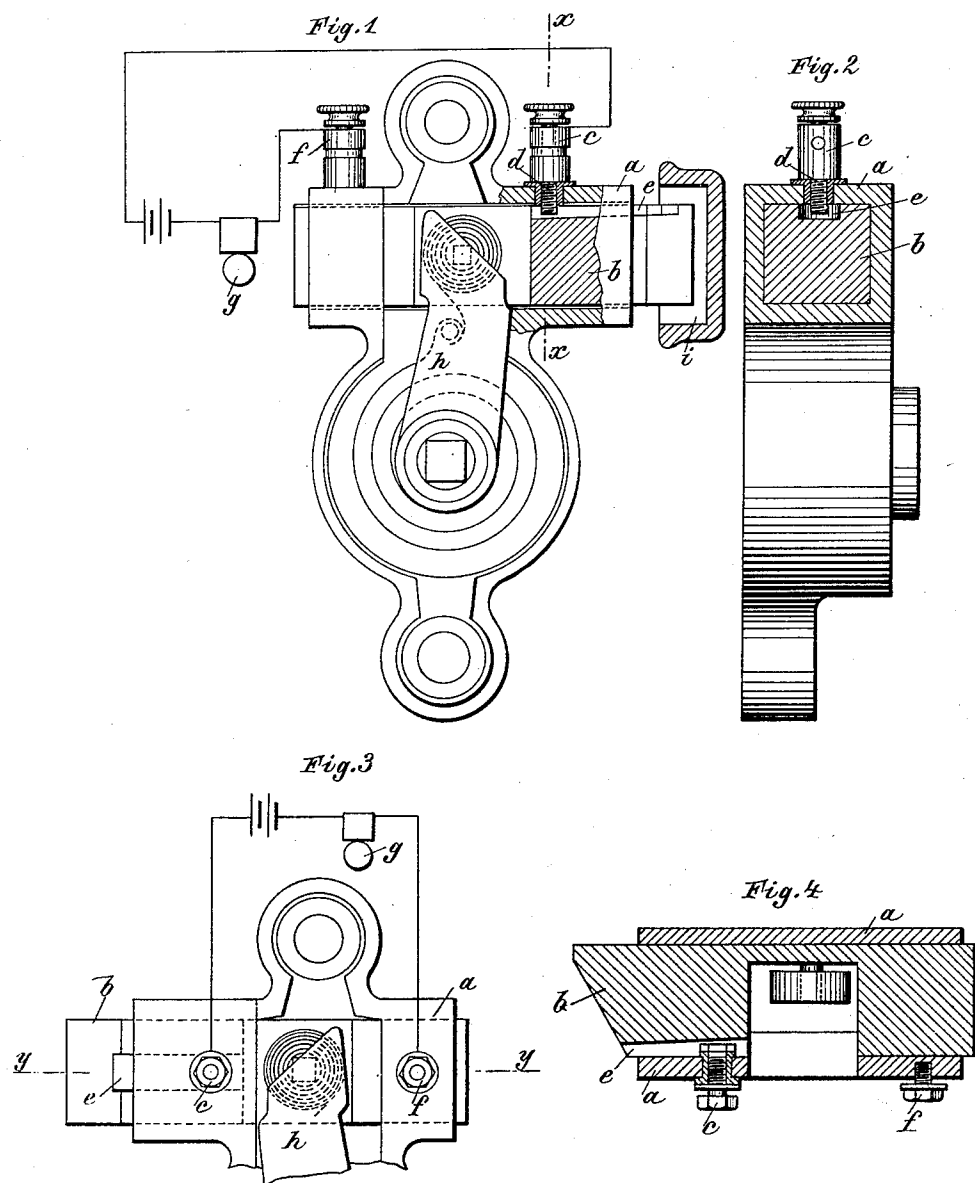


(No Model.)

A. J. MOULART.
DOOR HANDLE WITH ELECTRIC ALARM.

No. 560,043.

Patented May 12, 1896.



Witnesses
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UNITED STATES PATENT OFFICE.

ADRIEN J. MOULART, OF PARIS, FRANCE.

DOOR-HANDLE WITH ELECTRIC ALARM.

SPECIFICATION forming part of Letters Patent No. 560,043, dated May 12, 1896.

Application filed July 1, 1895. Serial No. 554,615. (No model.)

To all whom it may concern:

Be it known that I, ADRIEN J. MOULART, a citizen of the French Republic, residing in Paris, France, have invented a new and useful Improvement in Door-Handles with Electric Alarms, of which the following is a specification.

This invention is an improved lock-alarm; and it consists in the novel construction of a device for keeping doors, windows, shutters, and the like closed, combined with an electric apparatus, whereby, whenever the bolt is drawn to open the door, &c., an electrical alarm in the circuit will be made to operate.

Two forms of this device are represented in the drawings, in which—

Figure 1 is a front elevation of one form of the lock-alarm, partially in section. Fig. 2 is a section on line *xx*, Fig. 1. Fig. 3 is an elevation of a modified form of the lock-alarm. Fig. 4 is a section on line *yy*, Fig. 3.

The lock-case *a* may be of any suitable construction and provided with a spring-projected locking-bolt *b*, which may be retracted by an arm *h* on the handle-shaft *A*, the particular form of these devices not being essential features of this invention. On the case *a*, Fig. 1, over bolt *b* is a binding-post *c*, which is secured in an insulating-bushing *d*. The end of the post enters the casing and projects into the path of the bolt *b*, which is formed with a groove *e*, longitudinally wedge-shaped, as shown, so that when the bolt is retracted it will eventually make contact with the end of the post *c*. A second binding-post *f* is fastened on the other end of the casing *a*, but is not insulated therefrom.

To the binding-posts *c* and *f* are connected the opposite terminals of wires *zz'*, forming a circuit for an electric current from a battery *Z* and having in it an alarm-bell *g*.

The operation of the described safety device, when the bolt is unfastened, is as follows: When by a partial rotation of the door-knob latch *h* is rocked and the bolt *b* is moved, so as to withdraw its end from keeper *i*, the lower end of screw *d* in groove *e* will come in contact with the bolt just as or before it has entirely disengaged the keeper. Thereupon an electric current flows from the battery *Z*

through wires *zz* to post *c*, thence through bolt *b* and casing *a* to the post *f*, and thence through wire *z'* and bell *g* to the battery. Thus the circuit is closed by the retraction of the bolt, and bell *g* will sound. It is evident that the alarm will be sounded if the bolt should be pushed away from its staple by any instrument, and the device affords absolute security against surreptitious opening of the lock.

In the modified form shown in Figs. 3 and 4 the binding-posts *c* and *f* are not secured on the top of the bolt-casing *a*, but on the rear wall of the same, and the groove *e* is accordingly in the side of the bolt facing the post *c*. The mode of operation is in this form the same as in the first-described form.

Having thus described my invention, what I therefore claim as new, and desire to secure by Letters Patent thereon, is—

1. The combination with a lock-case, and locking-bolt, having a slot in it; an insulated binding-post on the casing having a contact-piece lying in the slot of the bolt and adapted to contact therewith when the bolt is retracted; an uninsulated binding-post on the casing; wires connecting the respective binding-posts with an electric supply, and a bell interposed in the circuit; all arranged so that an alarm is sounded when the bolt is retracted, substantially as described.

2. A device for doors and the like, consisting of a lock-casing *a*, a bolt *b* having a tapered groove *e*, an insulated binding-post *c* and an uninsulated binding-post *f* on said casing, the screw *d* of said insulated binding-post projecting into the groove of the bolt; so that the displacement of the bolt from its locking position brings it into contact with said binding-post *c*, thus closing an electric circuit and operating an alarm-bell in said circuit, substantially as and for the purpose set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ADRIEN J. MOULART.

Witnesses:

Z. LÖWE,

P. AUDRILLE.