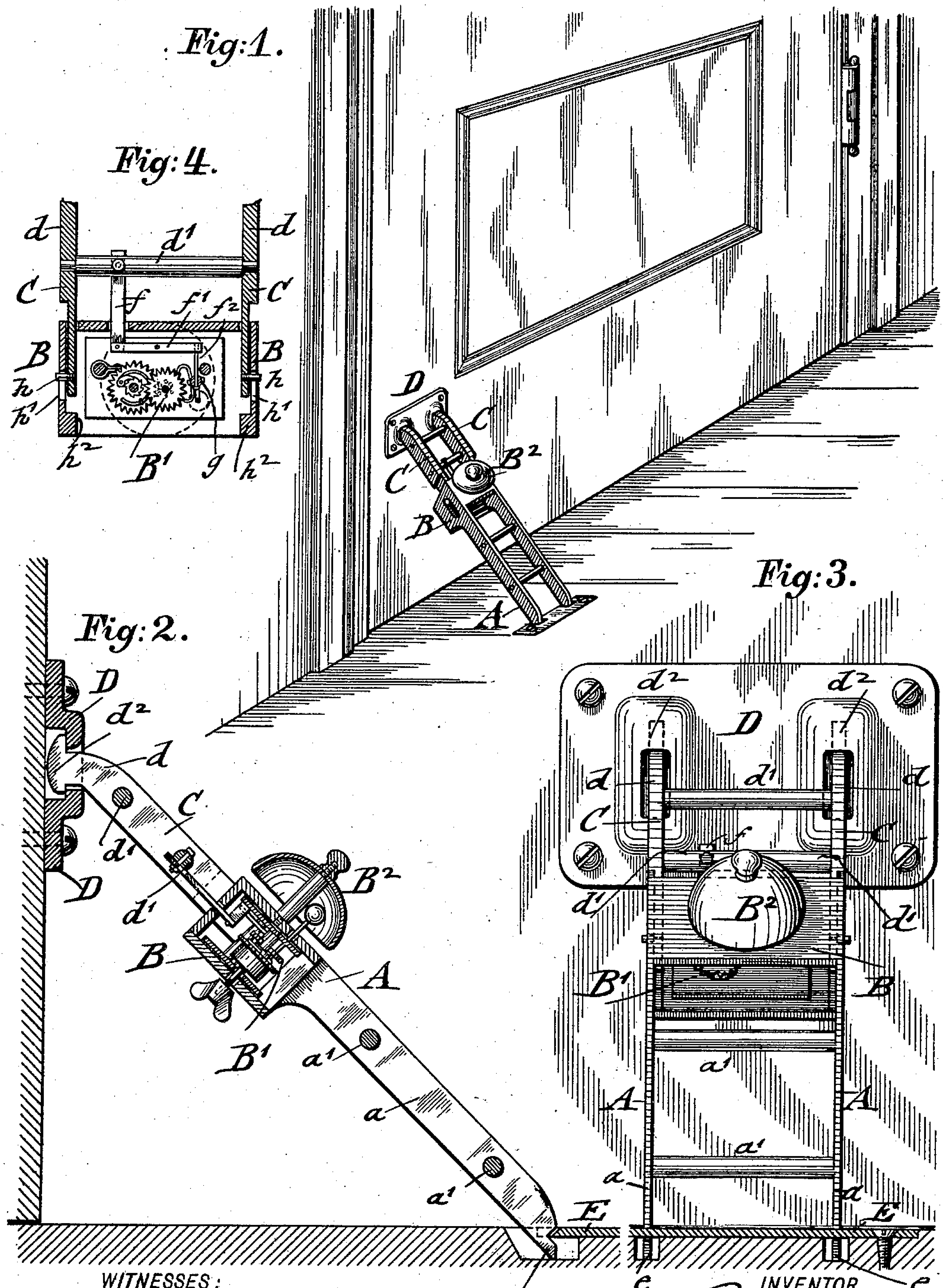
No. 686,093. Patented Nov. 5, 1901.

R. LEHMAN.

BURGLAR ALARM.

(Application filed Mar. 6, 1901.)

(No Model.)



WITNESSES:

M. P. Potter

Irving E. Dooly

INVENTOR

Richard Lehman

BY

ATTORNEYS

UNITED STATES PATENT OFFICE.

RICHARD LEHMAN, OF NEW YORK, N. Y.

BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 686,093, dated November 5, 1901.

Application filed March 6, 1901. Serial No. 50,070. (No model.)

To all whom it may concern:

Be it known that I, RICHARD LEHMAN, a citizen of the Empire of Germany, residing in New York, borough of Bronx, in the State of New York, have invented certain new and useful Improvements in Burglar-Alarms, of which the following is a specification.

This invention relates to certain improvements in burglar-alarms of that class which are set in an inclined position between the door and the floor so as to give an alarm when an attempt to open the door is made; and the invention consists of a burglar-alarm comprising a main frame provided at its lower end with means for engaging the floor, a clock-train supported on said main frame and having a suitable casing, an alarm-bell operated by said clock-train, a slide-frame having at its upper end two heads located in the same horizontal plane, means for guiding said slide-frame in said casing, means for arresting motion of the slide-frame, means interposed between the slide-frame and clock-train for releasing the latter by the motion of the slide-frame, and a socket-plate attached to the door and provided with two sockets or recesses located in one horizontal plane and at the same distance apart as the heads of the slide-frame, said recesses or heads being so formed as to permit detachment of the slide-frame from the socket-plate when the main frame is raised from the floor, but to interlock when engaging the floor.

In the accompanying drawings, Figure 1 represents a perspective view of my improved burglar-alarm, showing it in position for use. Fig. 2 is a vertical longitudinal section drawn on a larger scale. Fig. 3 is a front view of the same, partly in section; and Fig. 4 is a detail horizontal section through the clock-train, showing the slide-frame and the means for starting the clock-train by the same.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents a main frame, which is composed of parallel pieces a a, that are connected by transverse brace-pins a'. To the middle part of the main frame is applied the box-shaped casing B of a clock-train B′, which is wound up by a key in the usual manner and so arranged that an alarm-bell B^2 is sounded when the escapement of the clock-train is released. On the upper end of the main frame A is guided in the box B of the clock-train an auxiliary slide-frame C, the sides d of which are stiffened by a transverse pin or rods d'. The slide-frame C is provided at its upper ends with T-shaped heads d^2 at a suitable inclination, so as to permit their insertion into the recesses of a metallic socket-plate D, that is attached to the door by screws or otherwise. The sockets may be made into the form of mortices cut in the door; but it is preferable to use a metallic socket-plate that is screwed onto the door, so as to prevent injuring or defacing the door. The lower pointed ends of the side pieces a of the main frame A are inserted into recesses of the floor and a recessed retaining-plate E, which is screwed to the floor. When a carpet or other floor-covering is used, it is preferable to dispense with the recesses in the floor and the recessed plate E and insert the lower ends directly into the carpet or floor-covering when the burglar-alarm is placed in position for use.

To one of the transverse rods d' of the slide-frame C is pivoted a link f, the opposite end of which is pivoted to a fulcrumed lever f' at the interior of the casing of the clock-train B′, the opposite end of the fulcrumed lever being connected with an arm f^2 on the arbor of the escapement g', as shown in Fig. 4.

The lower ends of the side pieces d of the auxiliary frame C are provided with stud-pins h, which are guided in slots h' of the side walls of the casing, so as to limit the motion of the slide-frame C in connection with stop-blocks h^2 on the side walls of the casing. This downward motion of the slide-frame C produces the release of the escapement by the action of the intermediate levers, so that the clock-train is started, the hammer of the alarm-bell operated, and the latter sounded.

When my improved alarm is placed in position for use, as shown in Fig. 1, its upper end is inserted into the socket-plate attached to the door, while the lower end engages the floor or carpet. The slide-frame is in extended position, so as to place the escapement in gear with the escapement-wheel and hold thereby the clock-train in position of rest. As soon as an attempt is made to open the door the auxiliary frame is moved in downward

direction, so as to release the escapement by the lever mechanism described and produce thereby the ringing of the bell, which is continued until the slide-frame is raised again and the escapement set into engagement with the escapement-wheel.

I am aware that burglar-alarms of similar construction have been patented heretofore. In most of these constructions the upper pointed ends of the alarm scratch the door or otherwise injure the same when setting the alarm in position for use. At the same time such an alarm can be made inoperative by slight and repeated motion imparted to the door before fully opening the same, so that the ends are released from the door and the alarm dropped to the floor without ringing the bell. This disadvantage is avoided in my construction by the use of the socket-plate, into which the upper T-shaped heads of the slide-frame are inserted, so that the alarm cannot be detached or liberated from the door by shaking or otherwise moving the door from the outside, but can only be disengaged by raising the main frame from the floor and swinging the device in upward direction. When the alarm is not required for use, the heads of the slide-frame are detached from the socket-plate and the entire alarm device hung up on a hook alongside of the door, to be taken off from the hook and placed in position whenever required for use.

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

A burglar-alarm, consisting of a main frame provided at its lower end with means for engaging the floor, a clock-train supported on main frame and having a casing, an alarm-bell operated by said clock-train, a slide-frame having at its upper end two heads located in one horizontal plane, means for guiding the slide-frame in said casing, means for arresting the motion of the slide-frame, means interposed between the slide-frame and clock-train for releasing the latter by the motion of the slide-frame, and a socket-plate attached to the door and provided with two sockets or recesses located in one horizontal plane and at the same distance apart as the heads of the slide-frame, said recesses and heads being so formed as to permit detachment of the slide-frame from the socket-plate when the main frame is raised from the floor, but to interlock and prevent detachment when engaging the floor, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

RICHARD LEHMAN.

Witnesses:
PAUL GOEPEL,
GEORGE GEIBEL.