

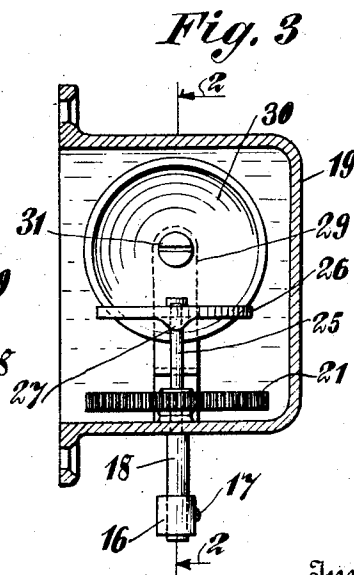
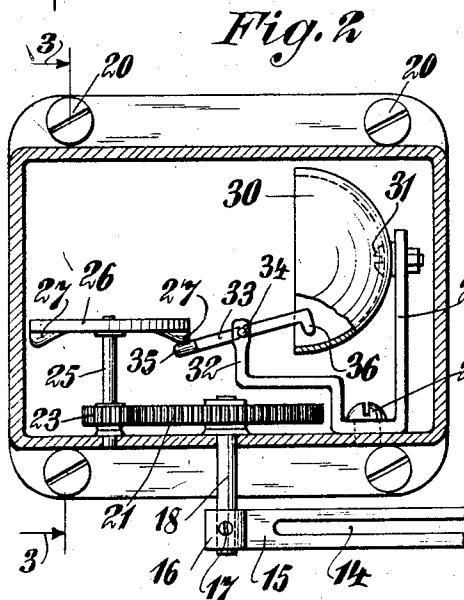
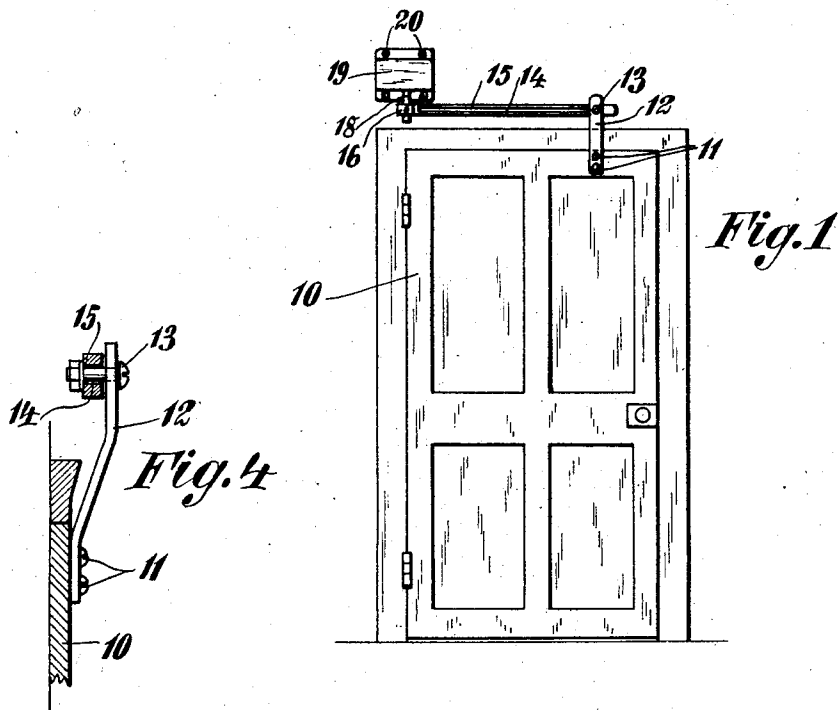
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C. DENSER

AUDIBLE ALARM

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By his Attorney
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UNITED STATES PATENT OFFICE.

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AUDIBLE ALARM.

Application filed January 6, 1926. Serial No. 79,525.

This invention relates to audible alarms and has as its main object to provide a device to sound an alarm when the door is opened.

5 Another object is in the provision of an appliance that is simple, compact, inexpensive and efficient.

This device has many uses, such as in the store or in the office, where many times, 10 when an attendant is busy or in the rear of the same, fails to hear a person enter. This may lead to the losing of a customer or client. Whereas, had this alarm been installed, the attendant would have heard 15 them enter and could have attended to their wants.

In the household, it may be used as a burglar alarm. The fact that it gives a clear and loud sound makes it readily adaptable 20 to that purpose.

These and other objects are accomplished by the novel construction, combination and arrangement of parts hereinafter described and illustrated in the accompanying drawing, in which:— 25

Figure 1 is a front elevational view of a conventional type of a door and an application of the device thereto.

30 Figure 2 is a partial sectional view of the alarm mechanism taken on line 2—2 of Figure 3.

Figure 3 is a transverse sectional view of the same taken on line 3—3 of Figure 2.

35 Figure 4 is a partial sectional view of the arm actuating device attached to the door, showing its connection to the arm lever, taken on line 4—4 of Figure 1.

Referring more in detail to the drawing:—

40 Set in the wall of a building is a swinging door 10 of ordinary type provided with the usual actuating knob and hinges at its rear edge. Rigidly attached to the uppermost right side of the door, by means of 45 screws 11 is a bent plate 12 having near its top a bar 13, operatively engaged in a slot 14 of an arm 15. This arm has at its end a collar 16 having a set screw 17 which is used to clamp on a spindle 18.

50 Above the door 10 and in a line with the hinges is a metal box 19, secured to the wall in any preferred manner, such as screws 20.

Enclosed within the casing 19 is a spur

gear 21 fixed on the spindle 18. The gear 21 which is of considerable size, meshes 55 with a pinion 23, which is smaller than the first named gear so as to be able to get up an increased speed. The second named gear 23 is mounted on another spindle 25, 60 journaled in the casing.

Rigidly engaged on the spindle 25 is a disc 26 having a plurality of depending cam lugs 27.

Bolted to the lower wall of the casing, 65 by means of a screw 28, is a bracket having an inreaching arm 29, and mounted on the arm 29 is a common semi-circular bell 30, by means of a screw and nut 31. On the other, bent arm 32 is pivotally mounted 70 a lever 33, fulcrumed at 34.

One end of the lever 33 extends into intercepting relation with the path of the cam lugs 27, and the other end 36 is shaped 75 to produce a hammer, weighted so as to strike the inner surface of the bell and cause the same to emit sound.

Thus, when the door 10 is opened, the arm 15 slides on the bar 13 and at the same 80 time causes rotating of the spindle 18, which in turn, revolves the gear wheel 21, meshing with the pinion 23, turning the disc 26 at a rapid rate of speed.

When the cam lugs 27 come in contact with the end 35 of the lever 33, causing it 85 to tilt, the hammer or weighted end 36 is lifted away from the bell 30 and as the cam lugs continue to revolve past the end of the lever, gravity causes the hammer to strike the bell intermittently, causing the 90 same to ring in a clear loud tone.

Having thus described my invention, and set forth the manner of its constructive application and use, what I claim as new and 95 desire to secure by Letters Patent, is:—

1. An audible alarm comprising in combination with a rigid door actuated lever, a casing having a bell enclosed therein, a 100 train of gears in said casing adapted to be operated by said door lever, a disc having cam lugs thereon actuated by said gears, and a hammer lever fulcrumed in said casing actuated intermittently by said cam lugs to actuate said bell.

2. An audible alarm comprising a casing 105 adjacent a door, a driving and a driven spindle vertically journaled therein, said driving spindle being in alignment with the

hinges of the door, a train of gears operated by said driving spindle, a cam fixed on said driven spindle, a lever fixed to said driving spindle, said lever being connected to the door, a bracket in said casing, a lever fulcrumed on one arm of said bracket operable by the action of said cam, said lever having a hammer at one of its ends, and a bell on the other arm of said bracket, sounded by the hammer end of said lever. 10

In witness whereof I have affixed my signature.

CHARLES DENSER.