

A. D. GIRARD.

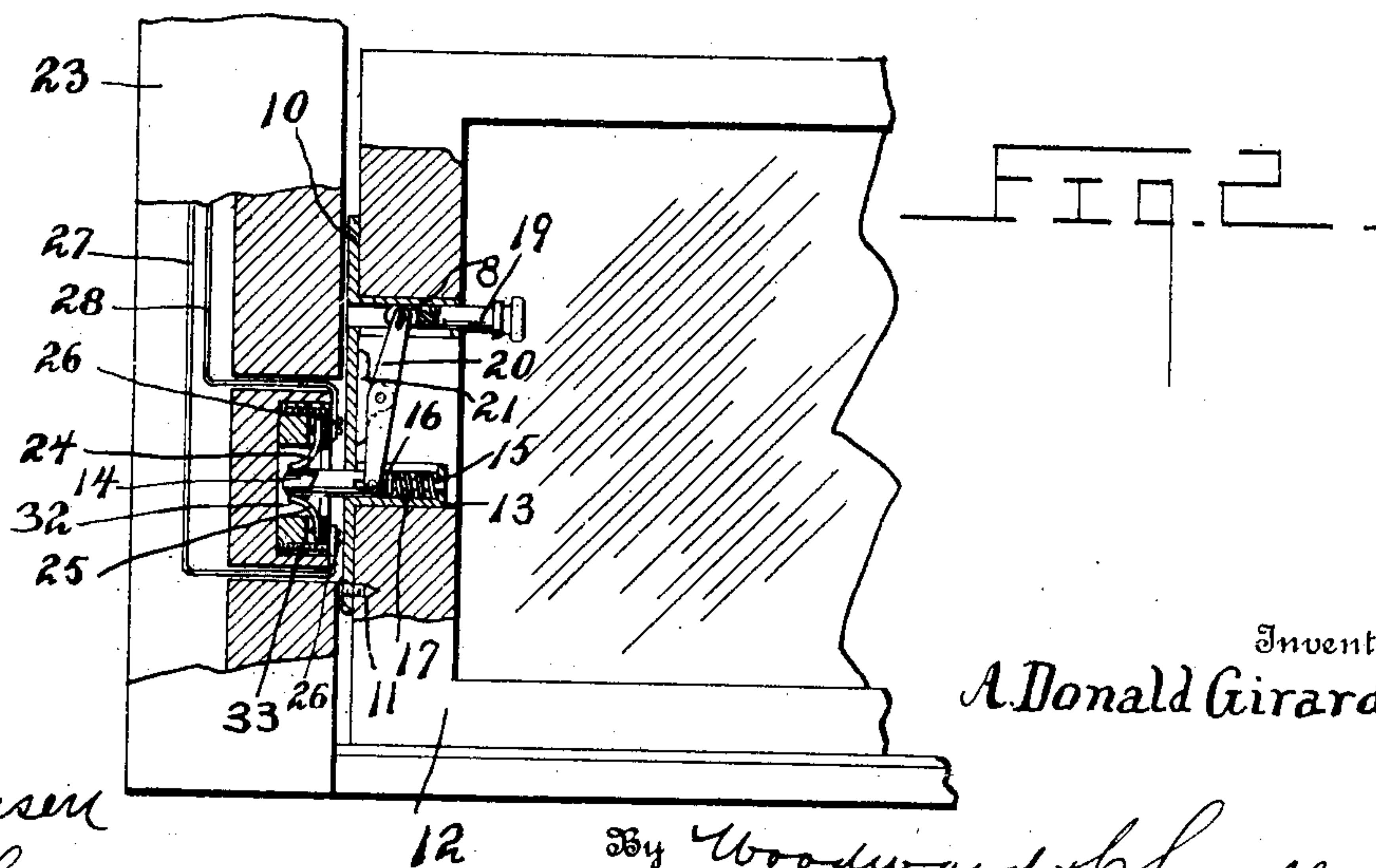
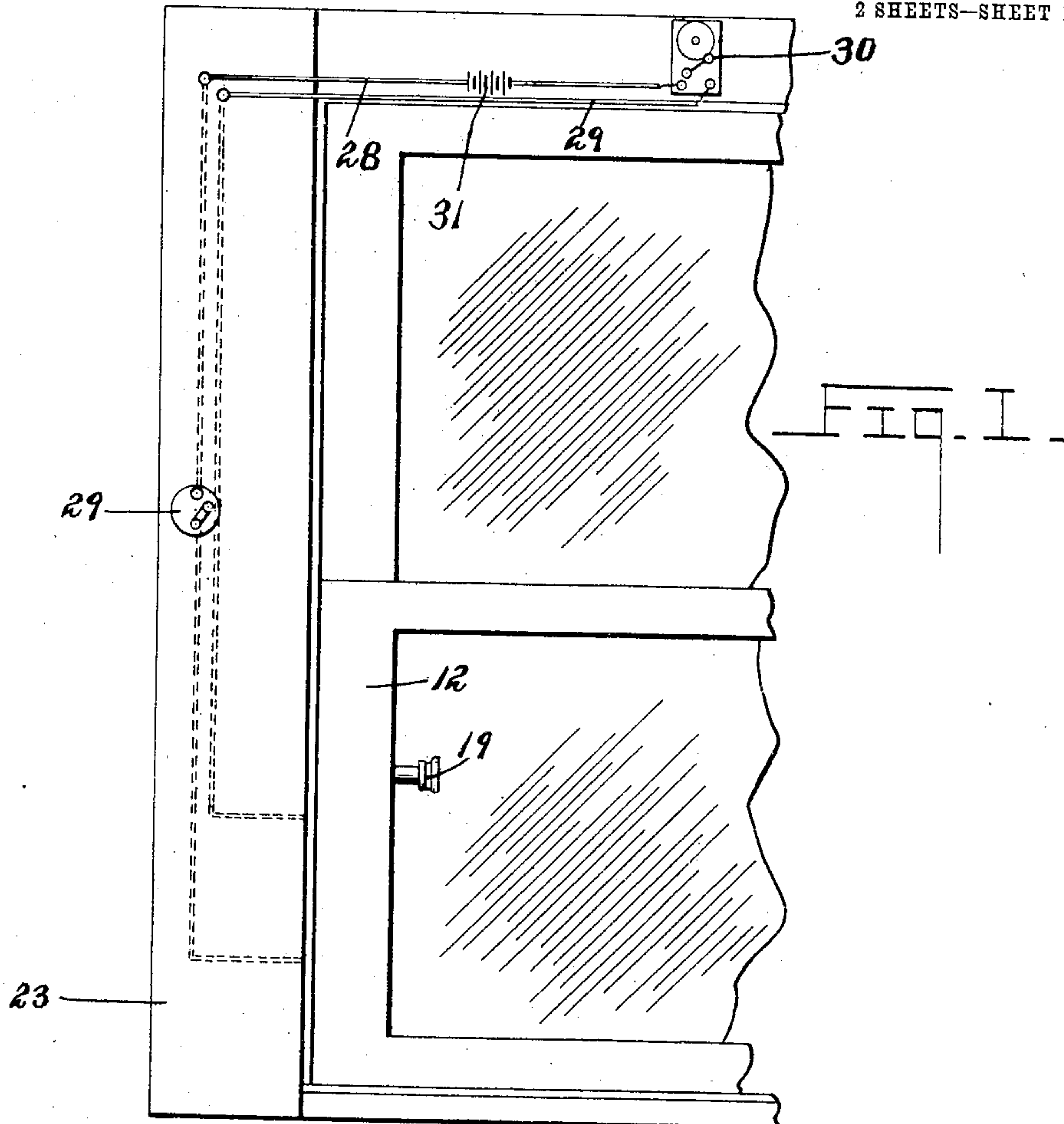
WINDOW ALARM.

APPLICATION FILED JAN. 15, 1909.

945,935.

Patented Jan. 11, 1910.

2 SHEETS—SHEET 1.



Witnesses
E. E. Johansen
E. L. Chandler

Inventor
A. Donald Girard

By Woodward & Chandler
Attorneys

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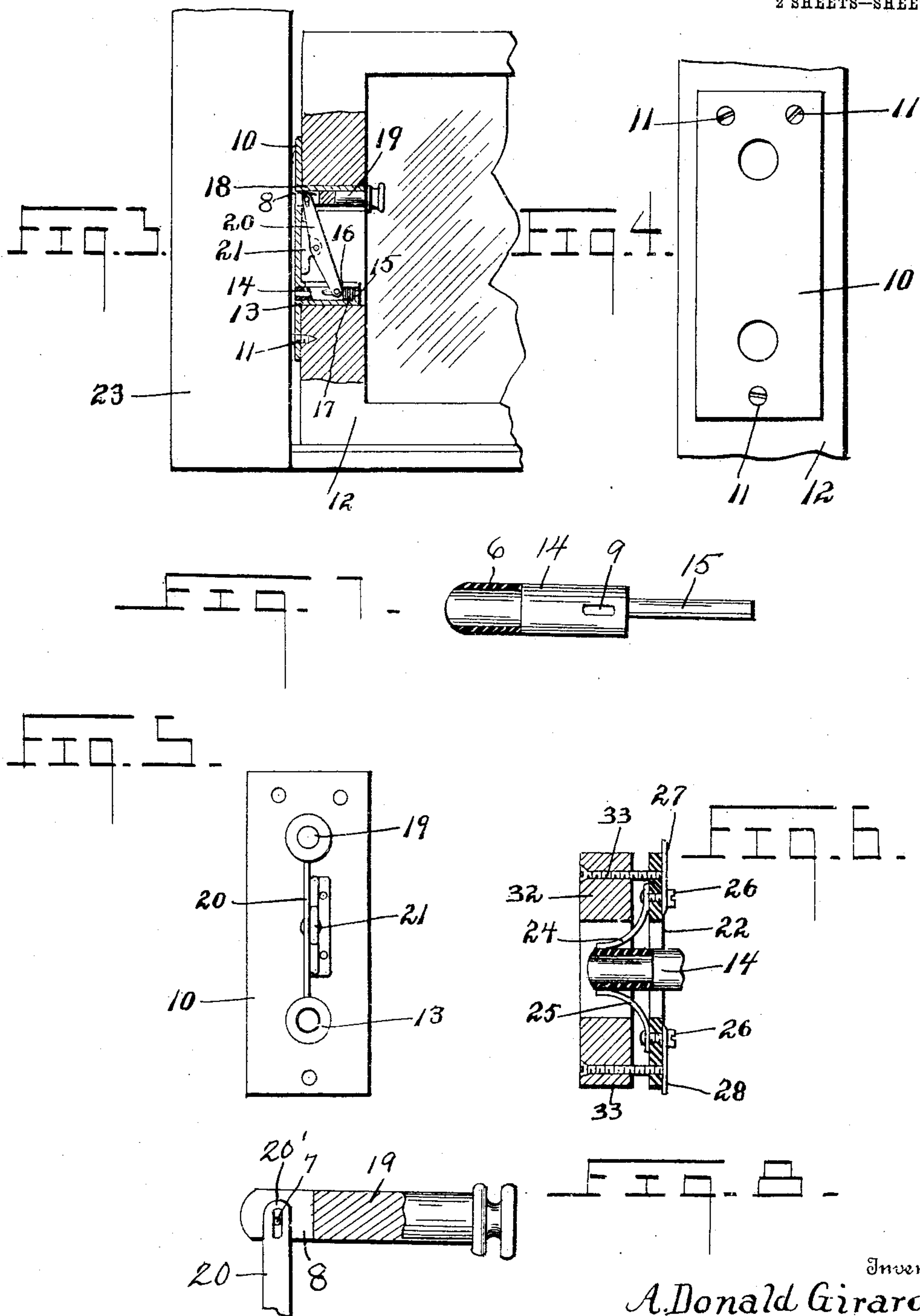
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Attorneys

UNITED STATES PATENT OFFICE.

AIMÉ DONALD GIRARD, OF WARE, MASSACHUSETTS.

WINDOW-ALARM.

945,935.

Specification of Letters Patent.

Patented Jan. 11, 1910.

Application filed January 15, 1909. Serial No. 472,535.

To all whom it may concern:

Be it known that I, AIMÉ DONALD GIRARD, a citizen of the United States, residing at Ware, in the county of Hampshire and State of Massachusetts, have invented certain new and useful Improvements in Window-Alarms, of which the following is a specification.

This invention relates to signals and has reference to a special construction of alarm device.

An object of the invention is to provide an alarm which may be positioned upon windows or the like whereby a bell is sounded upon the opening of the window upon which said device is positioned.

Another object of the invention is the construction of an alarm of this character which is provided with means for locking a window.

The invention has for a further object the provision of means by which the alarm and lock may be readily set and released.

Other objects and advantages will be apparent from the following description and it will be understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a front elevation of a fragmentary view of a window having the device applied thereto, Fig. 2 is a vertical section of the same showing the device in a locked position, Fig. 3 is a detailed view of the alarm in side elevation and section in a released position, Fig. 4 is a front edge view of the device, Fig. 5 is a rear edge view, Fig. 6 is a detailed view of the contact member, Fig. 7 shows an enlarged detached detail of the locking bolt, Fig. 8 is a fragmentary portion of the operating bolt, showing the manner of connecting the lever.

Referring to the drawings, 10 designates a plate which is adapted to be secured by screws 11 or the like upon the outer edge of a window frame 12 and which is provided with a rearwardly extended slotted tubular casing 13 in which is mounted a sliding bolt 14. The sliding bolt 14 is provided with a reduced extremity 15 which is passed through an aperture formed in the inner end of the casing 13 and supports the coil spring 17

which is disposed about the reduced portion 15 and is held upon the shoulder 16 and against the inner face of the rear end of the casing 13. The spring 17 is utilized for the purpose of normally holding the bolt 14 in an outward position. The plate 10 is provided at the opposite extremity thereof with a second slotted rearwardly extended tubular casing 18 for the reception of an operating plunger 19 which is pivotally and loosely connected to a lever 20 pivoted at a central portion to the rearwardly projected ear 21 carried by the plate 10. The opposite extremity of the lever 20 is extended through the slot within the side of the casing 13 and is loosely connected to the bolt 14. The lever 20 is secured to the bolt, in inserting the end of the same, into the square socket 9, of the bolt 14. The operating plunger 19 is slotted at its inner end 8, and has the pin 7, which works within a slot of the lever 20 as shown in Fig. 8.

A plate 22 of non-conducting material of preferably circular formation is counter-sunk within the inner face of the window jamb 23 which is centrally apertured for the reception of the bolt 14 the aperture in the plate 22 being of a greater diameter than the bolt 14 for the purpose of admitting of the positioning of two springs 24 and 25 which are carried by the plate 22. The springs 24 and 25 are secured upon the back of the plate 22 by set screws 26 which also serve the purpose of holding the terminals of the wires 27 and 28 which are led through a switch 29 to an alarm bell 30. A battery 31 is positioned in the circuit formed through the wires 27 and 28 for the purpose of furnishing the necessary current for the operation of the device. The end of the lever 20 is rounded as shown at 20'. The plate 22 is provided upon its rear surface with an annulus 32 which extends beyond the extremity of the bolt 14 and springs 24 and 25 to serve as a guard for the same and through which are passed the screws 33 for holding the plate 22 in position.

In operation, when the window 12 is closed the spring 17 forces the bolt 14 which has its forward end covered with a suitable non-conducting material 6 through the plate 22 against the springs 24 and 25 to separate the same to break the circuit through the wires 27 and 28. It is thus seen that the bolt 14 serves the purpose of locking the window 12 in a closed position and also in

preventing the closing of the alarm circuit. Should the window 12 be forced open the springs 24 and 25 would come into contact with each other and close the circuit sounding the alarm 30. When it is desired to open the window 12 from the inside the switch 29 is first opened and the plunger 19 is depressed to withdraw the bolt 14 from the plate 22 and thus release the window 12.

10 The window casing 23 is provided with any desired number of plates 22 so that the bolt 14 may be secured at different heights to lock the window in the position desired to prevent the opening of the same from the

15 outside without sounding an alarm. This arrangement is employed for the purpose of admitting of the opening of windows upon the ground floor for ventilating purposes without the danger of having any one enter

20 through the window while open.

The device may be applied to the upper window frame if it is desired to lock the same in various heights or for the purpose of locking the same when in a closed position for protecting from burglars and the like.

What is claimed is:—

1. An alarm comprising a plate having an aperture, a casing carried by said plate, a

30 bolt of insulating material slidably disposed in said casing and projecting through said aperture, a spring mounted in said casing and contacting with said bolt for normally extending said bolt through said aperture,

35 an ear secured to said plate, a lever fulcrumed to said ear, one extremity of said lever being movably connected to said bolt, a guide disposed at the opposite extremity of said plate in parallel relation to said casing,

40 a plunger mounted in said guide connected to the remaining extremity of said lever, an apertured plate disposed in registered relation to said bolt, contact-forming springs carried by said last mentioned plate adapted

45 to contact centrally of said last mentioned aperture, said bolt being arranged to slide

between and disconnect said springs, and a circuit terminating in said last mentioned springs.

2. A device of the class described comprising an insulated bolt slidably disposed within a window frame, a plunger carried in said window frame connected to said bolt for withdrawing the same at times, a spring carried by said bolt for normally extending

55 the same, a plate apertured for the reception of said bolt, contacting springs forming a normally closed circuit secured to said plate adapted to be separated by the insertion of said bolt, and a circuit terminating

60 in said contact forming springs.

3. A device of the class described, comprising a plate having an aperture, a slotted casing disposed at one extremity of said plate having an opening, a bolt in said casing adapted to extend through said aperture,

65 a reduced portion upon the rear end of said bolt adapted to pass through said opening, a spring disposed upon said reduced portion for engagement against said bolt and said

70 casing, an ear projecting rearwardly from said plate, a lever fulcrumed intermediately of its length on said ear, one extremity of said lever extending through the slot of said casing and connected to said bolt, a guide

75 mounted at the opposite extremity of said plate parallel with said casing, a plunger disposed in said guide pivotally connected to said lever, an apertured plate disposed in registered relation to said bolt, springs

80 mounted on the rear face of said last mentioned plate for normal contact with one another, and a circuit terminating in said springs, said bolt having an insulated end

85 contacting between said springs.

In testimony whereof I affix my signature, in presence of two witnesses.

AIMÉ DONALD GIRARD.

Witnesses:

DENNIS F. SHEA,
DENNIS DRISCOLL.