

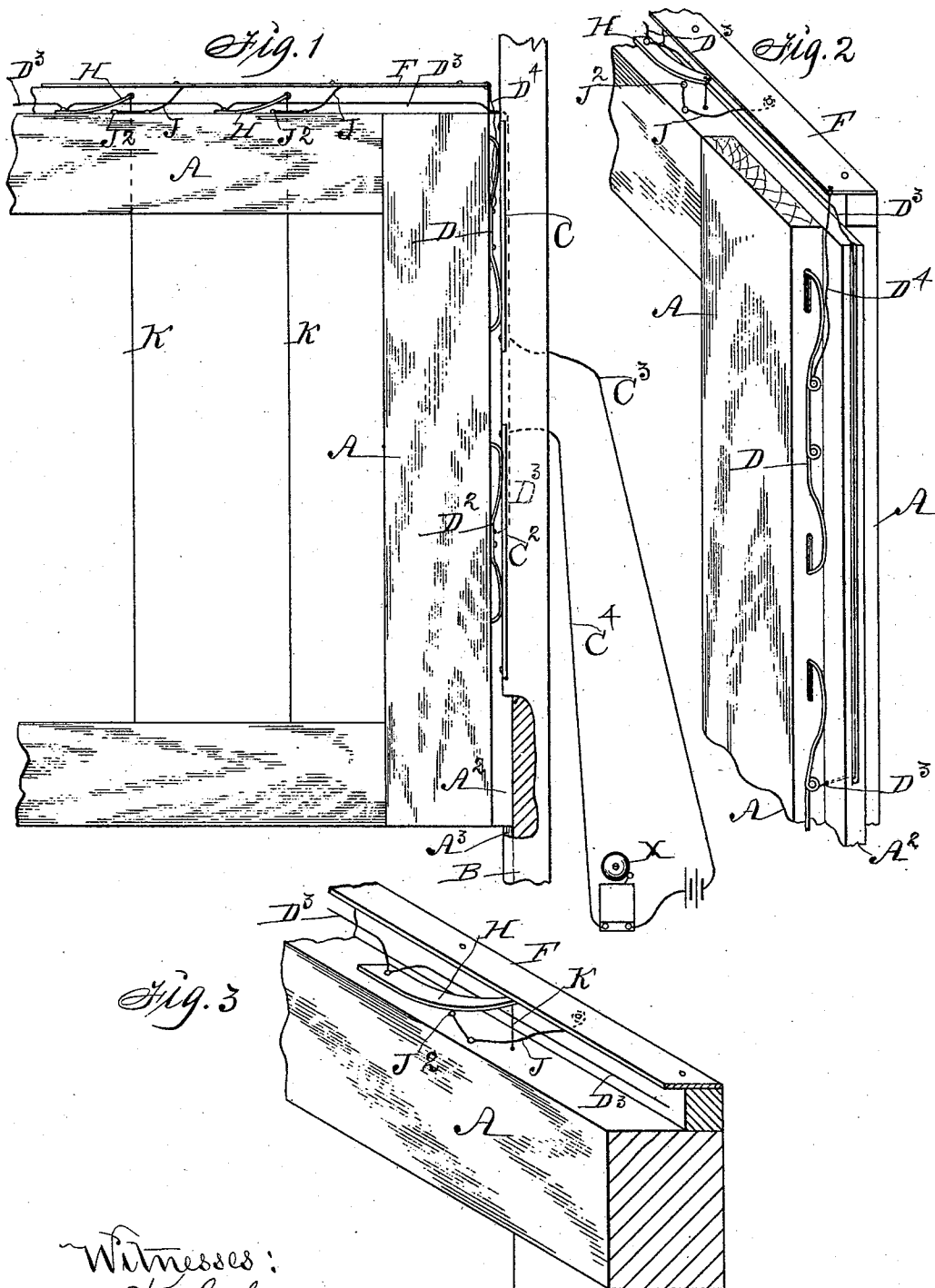
(No Model.)

F. C. PAGE.

ELECTRICAL BURGLAR ALARM FOR WINDOWS.

No. 469,266.

Patented Feb. 23, 1892.



Witnesses:

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FRIEND C. PAGE, OF CRESTON, IOWA.

ELECTRICAL BURGLAR-ALARM FOR WINDOWS.

SPECIFICATION forming part of Letters Patent No. 469,266, dated February 23, 1892.

Application filed June 16, 1891. Serial No. 396,423. (No model.)

To all whom it may concern:

Be it known that I, FRIEND C. PAGE, a citizen of the United States of America, residing at Creston, in the county of Union and State of Iowa, have invented a new and useful Electric Burglar-Alarm for Windows and Doors, of which the following is a specification.

My invention relates to the manner of constructing and combining a plurality of circuit-closing devices adapted to be attached to window-screens, sashes, &c., by which a person on approaching a window-sash or attempting to raise the same will unwittingly close the said circuit and thereby cause an electric bell contained in said circuit to sound an alarm.

My invention consists in the combination, with a metal plate extended across the top of a window-sash, of a series of leaf-springs attached to the top of a window-sash and wires extending across said frame, connected with the said leaf-springs, as required, to complete the circuit through said springs when the wires are either moved laterally or severed, an attachment to be placed on the side of a window-sash adapted to complete a circuit when the sash is raised and to provide a continuity of electrical conductors to the top of the sash when the sash is either in a closed or partly open position, and other parts hereinafter fully described, pointed out in my claim, and illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of a window-sash and part of the window-frame in juxtaposition thereto and showing my complete invention connected therewith as required in practical use. Fig. 2 is a perspective view of a part of the device, showing the arrangement of the parts at the side of the sash; and Fig. 3 is a perspective view of a section of the sash, showing one of the leaf-springs in engagement with the metal plate on the top of the sash, as required to complete the circuit therethrough.

A represents a window-sash of common form having a tongue A² on its sides to enter the groove A³, formed in the window-frame B, as required to prevent lateral movement of the sash in the frame.

C and C² represent sheet-metal plates fixed in the window-frame in juxtaposition to the hereinafter-described spring-metal loops. The

plate C, having a conducting-wire C³, is connected thereto from a source of electrical supply, and the plate C² is connected to a return-wire C⁴.

D and D² represent double spring-metal loops attached to the side of a window-sash and normally held outward therefrom and having their free ends adapted to enter bores formed therein. The upper loops have an electrical connection D⁴ with a metal plate F, which is fixed to the top of the window-sash, and the lower ones having an electrical connection with the conducting-wire D³, hereinafter mentioned. It will readily be seen that if the sash and frame, being in proper relative positions, were moved vertically either upward or downward one of the double springs will bridge the space between the plates C and C², thereby completing the circuit and causing the electric bell X, contained in the circuit, to sound an alarm, or when said sash is in a normal position relative to the frame, as illustrated in Fig. 1, a continuity of electrical conductors will be provided throughout the sash, except where broken by the leaf-springs H, hereinafter described.

H represent concavo-convex-shaped leaf-springs, having one end attached to the top portion of the sash and their free ends adapted to normally engage the overlapping metal plate F, as shown in Fig. 3. The conducting-wire D³ from the double spring C² is connected with the lower portion of each of the leaf-springs H, and electrical conductors J connect the contact-points J², which are attached to the top portion of the window-sash A on the under side of the leaf-springs H, with the metal plate F. Wires or cords K are attached to the free ends of the leaf-springs H, extend through vertical bores in the top portion of the window-sash, and are attached to the lower portion of the said sash.

It will readily be seen by referring to Fig. 1 that if all the operative parts were in proper relative positions a person on trying to enter a house by a window provided with my invention will, if he raises the window-sash, thereby complete the circuit through the double spring-loop D² and cause the electric bell X to sound an alarm; or should he try to enter through the window-sash and move the wires or cords K laterally he would bring the leaf-spring in

engagement with the contact-point J² and thereby complete the circuit; or should he sever the said wires or cords the said leaf-springs will engage the metal plate F by means
5 of their elasticity and cause the bell to ring.

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

10 An improved electro-magnetic burglar-alarm for window-sashes, &c., consisting of a galvanic battery or other source of electrical supply, two metal plates attached to the window-frame in juxtaposition to the movable
15 sash, a wire leading from the battery attached to the upper one and a return-wire connected to the lower one and to an electro-magnetic bell, which is provided with a return-wire to the battery, two double contact-points attached to the movable sash and adapted to
20 bridge the space between the said metal plates when the sash is moved vertically in the frame

and to provide a continuity of electrical conductors to the top of the sash when in either a closed or partially open position relative to the frame, a wooden strip attached to the top
25 of the movable sash, a metal strip electrically connected with the upper double contact-point, fixed to the top and projecting over its one side, a series of leaf-springs electrically
30 connected with the lower double contact-point on the top of the sash and under the projecting edge of the said strip, having wires or cords attached to the ends of the said leaf-springs and extending across the window-sash, and means for completing a circuit
35 through the leaf-spring when the said wires or cords are either moved laterally or severed, substantially as shown and described.

FRIEND C. PAGE.

Witnesses:

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