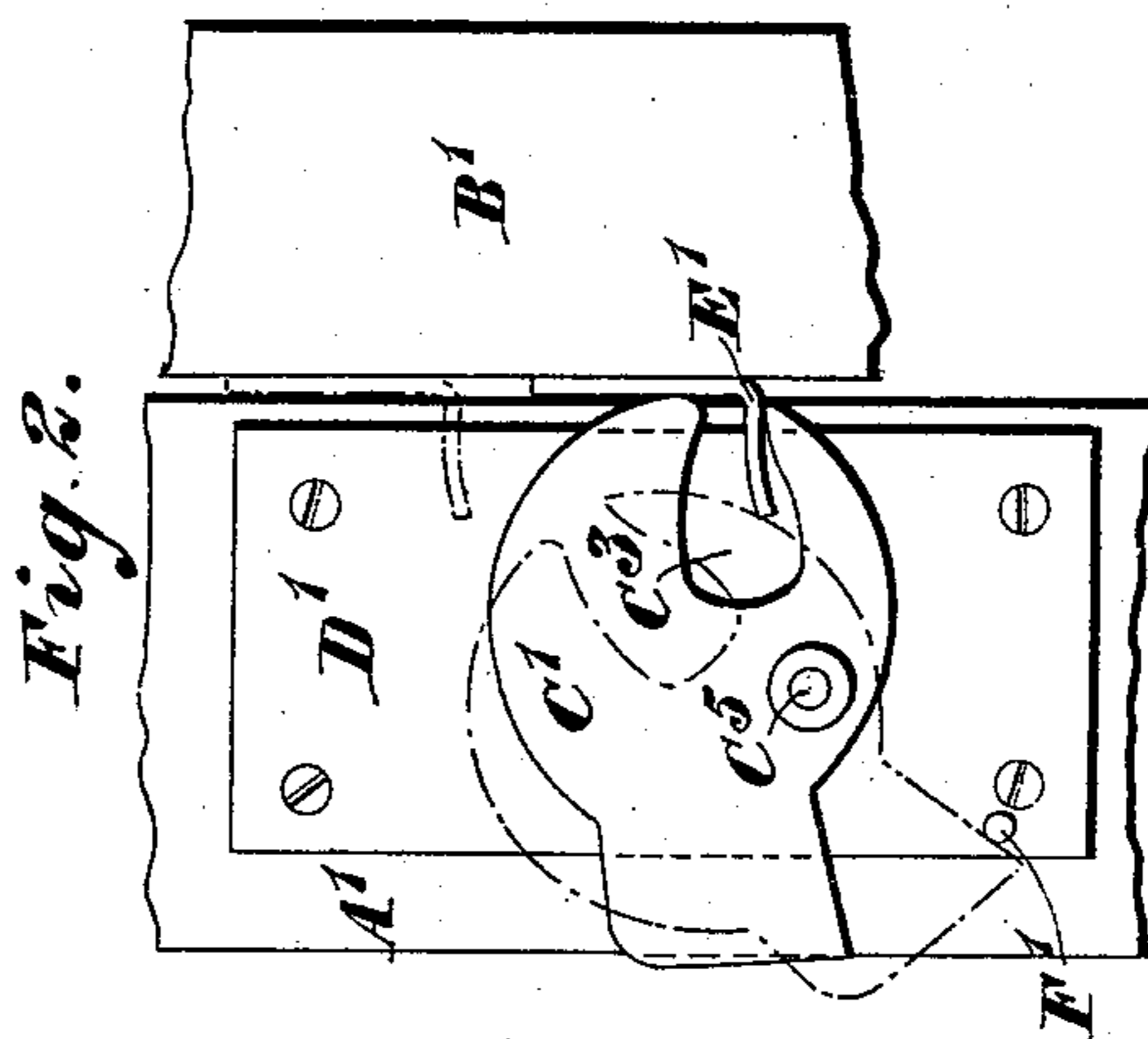
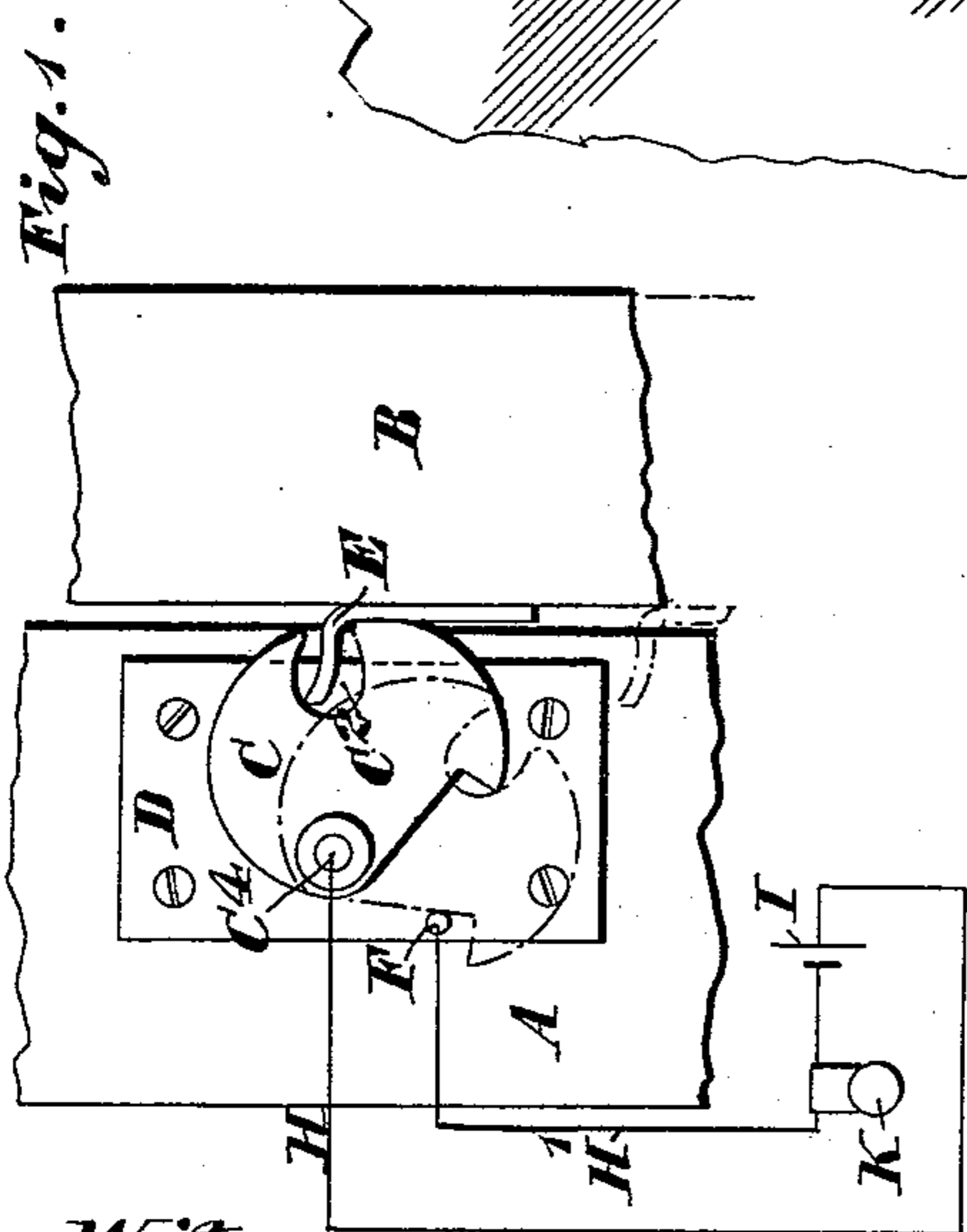
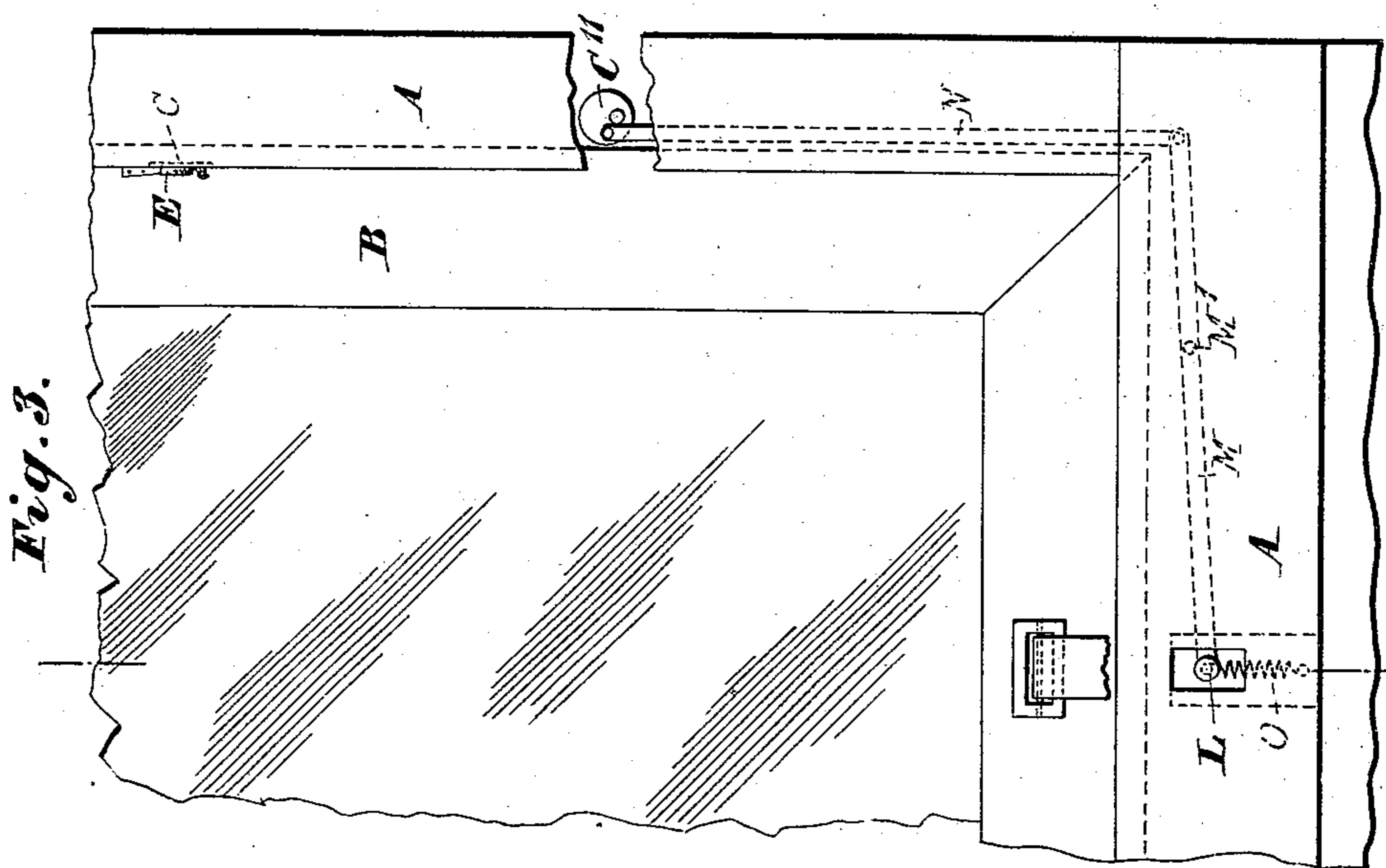
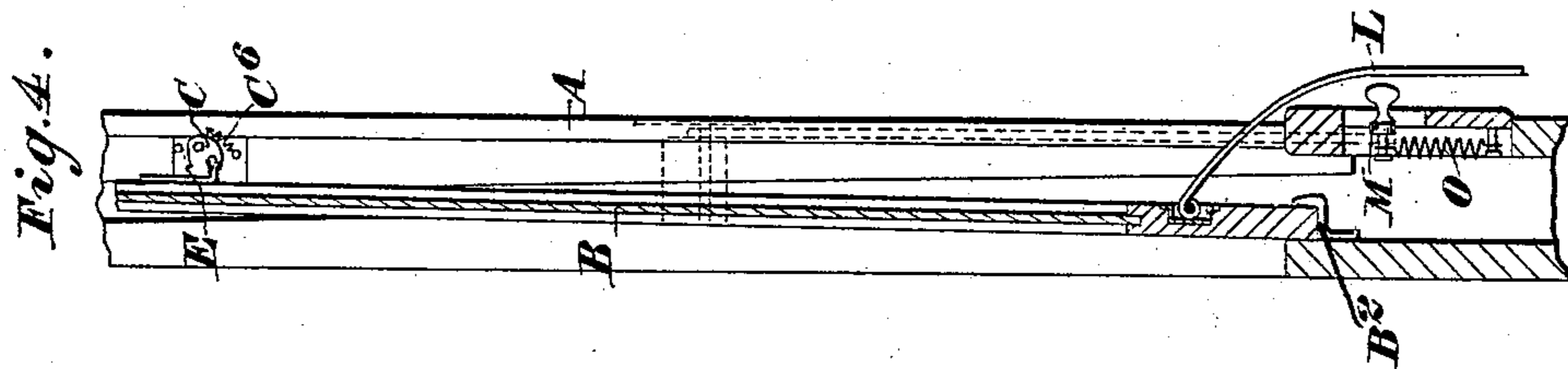


(No Model.)

H. S. MOORE.
SASH HOLDER.

No. 486,788.

Patented Nov. 22, 1892.



Witnesses
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UNITED STATES PATENT OFFICE.

HUBERT STUART MOORE, OF LONDON, ENGLAND.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 486,788, dated November 22, 1892.

Application filed March 29, 1892. Serial No. 426,892. (No model.) Patented in England February 2, 1892, No. 1,963, and in Belgium March 19, 1892, No. 98,885.

To all whom it may concern:

Be it known that I, HUBERT STUART MOORE, a subject of the Queen of Great Britain and Ireland, residing at Albion Street, Hyde Park, in the county of London, England, have invented improved means or appliances for preventing or mitigating the rattling of windows and the like as well as draft, of which the following is a specification.

10 This invention is covered by patent in Great Britain, No. 1,963, dated February 2, 1892, and also by Belgian Patent No. 98,885, dated March 19, 1892.

15 The object of this invention is to obviate or mitigate by simple means the rattling of windows and the like—for example, sliding shutters and doors (hereinafter included in the expression “window”) as well as draft—and, if desired, giving an alarm should a window be 20 improperly opened. To prevent rattling, the window is in an automatic manner jammed against the frame in which it slides by means of an eccentric device (or there may be more than one) able to turn on a suitable pin or pivot. 25 The eccentric device has formed in it a recess of suitable shape, into which, as the window is being closed, there enters a suitably-curved finger or projection that is attached to the window, and which, during the completion of 30 the closing movement, causes the eccentric device to make a partial rotation and to press the window against its frame. A suitable stop arrests the eccentric device when the window is open and retains the said device in a position such that the finger or projection before 35 mentioned will again engage with it when the window is being closed. When it is desired that an alarm should be sounded on the opening of the window or when the window is negligently left open, electrical apparatus is arranged in connection with the said stop, and 40 this may be so constructed that the reclosing of the window will not break the electric circuit, the current passing through which operates the alarm. When the eccentric device 45 is applied to a window that moves horizontally or approximately so, suitable means—such as a spring—are employed to insure the return of the eccentric device into position 50 against its stop.

When applying my invention to windows

such as those of railway and other carriages, I adapt it to prevent the rattling of windows when partly open and when closed. For this purpose the eccentric device or devices is or 55 are suitably connected with the button that holds the window-strap and which is pivoted or otherwise made capable of movement in such a way that when through the strap the weight of the window is cast upon the button 60 the consequent movement of the button will, through the intervening connection or connections, move the eccentric device or devices into a position in which it or they will press against and prevent or mitigate the rattling 65 of the window.

In the accompanying drawings, Figure 1 shows in side elevation an eccentric device applied in accordance with my invention, so as to be operated by the closing of an upper vertically-sliding sash. Fig. 2 is a like view 70 adapted to be operated by a lower vertically-sliding sash. Fig. 3 shows part of a carriage-window having my invention applied to it. Fig. 4 is a sectional view at right angles to 75 Fig. 3.

Referring to Figs. 1 and 2, A A' represent portions of the stationary frame of the window; B, a portion of the upper sliding part or sash of the window; B', a portion of the 80 lower sliding part or sash; C C', the respective eccentric devices; C² C³, the recesses therein; C⁴ C⁵, the pins, studs, or pivots on which the eccentric devices are able to turn; D D', the plates that carry these pins, studs, 85 or pivots and which are adapted to be readily secured to the window-frame.

E E' are the peculiarly-curved fingers or projections attached to the sliding sashes or parts of the window. 90

F F' are the stops for limiting the movement of the eccentric devices in one direction. The pins, studs, or pivots C⁴ C⁵ can be formed with screw-threads and be each furnished with a tightening device—such as a 95 nut or a pair of lock-nuts—by adjusting which more or less resistance to turning can be imparted to the eccentric device. When the window is open the finger or projection E or E' causes the eccentric device C or C' to 100 turn and fall against the stop F or F', as indicated in dotted lines, in which position the

finger or projection will clear the eccentric device. As the window is closed the finger or projection will re-enter the recess and turn the eccentric device into the position shown in full lines in the figures so that its part of greatest radius will bear against the window, as shown in full lines, thus jamming the window securely in the frame. When it is desired that an alarm should be given on the opening of the window or on its being left open negligently, the contact between the eccentric device C or C' and the stop F or F', (which will in such a case be insulated from the plate D or D'), may be caused to complete an electric circuit, as will be readily understood, a suitable alarm being included in said circuit. Such an arrangement is indicated in dotted lines in Fig. 1, H H' being conductors, I battery, and K an alarm, such as an electric bell.

In Figs. 3 and 4, A represents the window-frame of a carriage, B the window, and C an eccentric device mounted in said frame and adapted, when partly rotated by a finger or projection E, (which operates when the window is being pushed down into the groove B²), to jam the said window in its frame.

C'' is another eccentric device which is mounted in the window-frame with its axis of rotation at right angles to that of the eccentric device C. When on opening the window the finger or projection E is removed from the recess in the eccentric device, the eccentric device is brought into position against the stop by means of a small spiral spring C⁶.

L is a button or stud for the window-strap. It is fixed to a lever M, pivoted at M'.

N is a link connecting the said lever to the eccentric device C''. The button or stud L is fixed to the free end of the lever and projects through a slot in the frame A, the lever and link being, as I prefer, located inside the said frame. A spring O tends to keep the button or stud L (when not supporting the window) in a position in which the eccentric device C'' will be clear of the window. The parts being arranged, as shown, when the window-strap is passed on to the button or stud the latter is moved upward by the weight of the window and through the medium of the lever and link causes the eccentric device C'' to make a partial rotation and to jam the window against

the opposite side of the window-frame. It will be seen that this arrangement enables the window to be secured against rattling when partly open.

When I adapt my invention to a horizontally-sliding window or door I use an eccentric device C, and finger or projection E similar to and arranged in analogous positions to those shown in Figs. 1 and 2.

What I claim is—

1. Means or appliances for preventing or mitigating the rattling of windows and the like, as well as draft, comprising a pivoted eccentric device attached to a part of the window-frame and formed with a recess, and a projection attachable to the moving part of the window and arranged to enter said recess and act against opposite sides thereof, whereby when said projection is moved in one direction with said moving part of the window it will act against and move said eccentric device in one direction and jam said window, and when it is moved in the other direction it will act against and move said eccentric device in the opposite direction and release said window, substantially as herein described.

2. Means or appliances for preventing or mitigating the rattling of windows and the like, as well as draft, comprising a pivoted device C, formed with a recess C², and having a part of its periphery eccentric to its axis, a plate D, adapted to be fixed to the window-frame and carrying a pivot-pin C⁴, and a pin F for said pivoted device, a spring connected to said pivoted device and tending to partly turn it into its inoperative position, and a projection E, fixed to the movable part of the window and arranged to enter the recess in said pivoted device and to move the same into its operative position when said movable part of the window moves in one direction, substantially as herein described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HUBERT STUART MOORE.

Witnesses:

PERCY E. MATTOCKS,

WM. THOS. MARSALL,

Both of 2 Popes Head Alley, Cornhill, London, E. C., Gentn.