

(No Model.)

A. AYERS.
SASH HOLDER.

No. 448,108.

Patented Mar. 10, 1891.

Fig. 1.

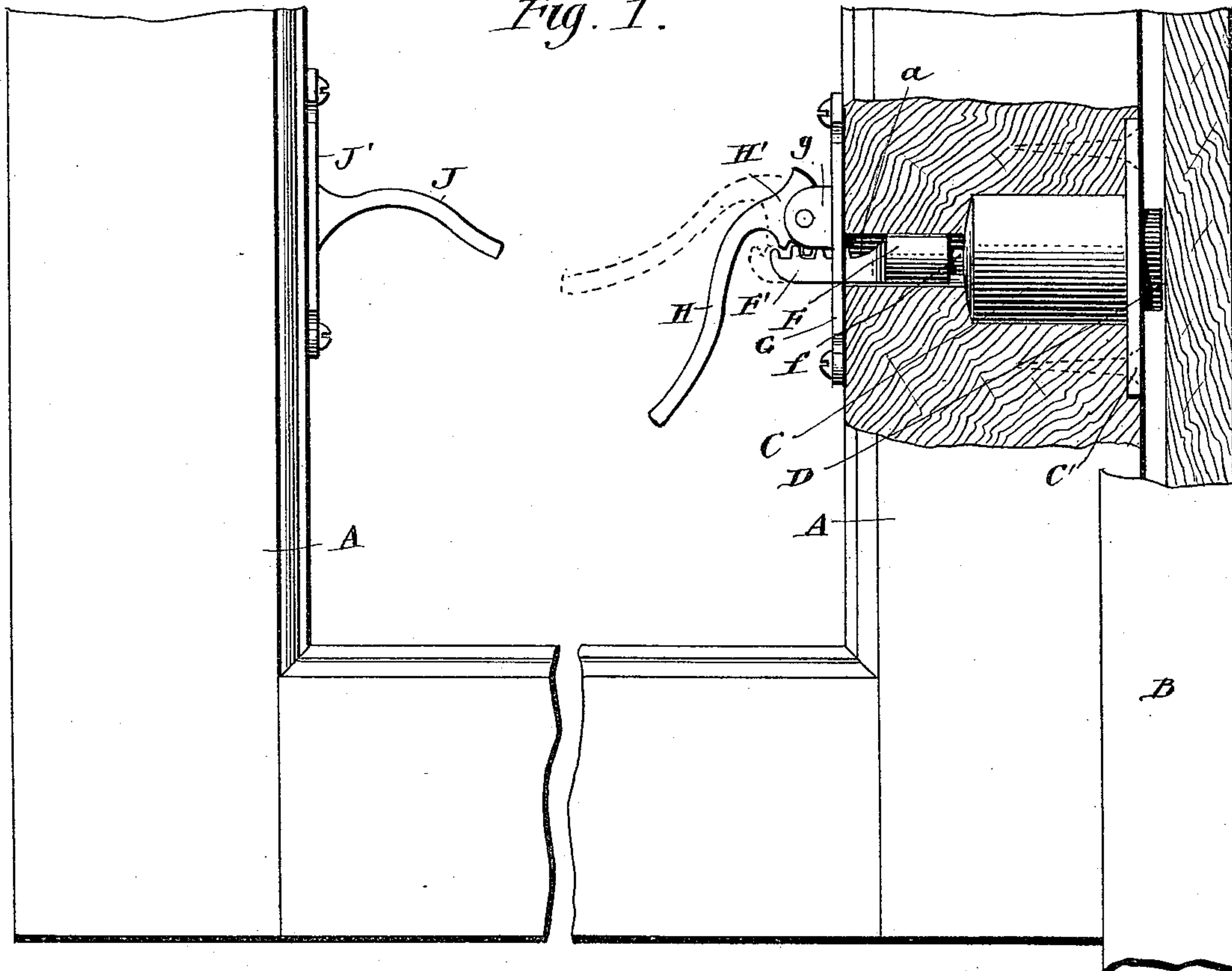
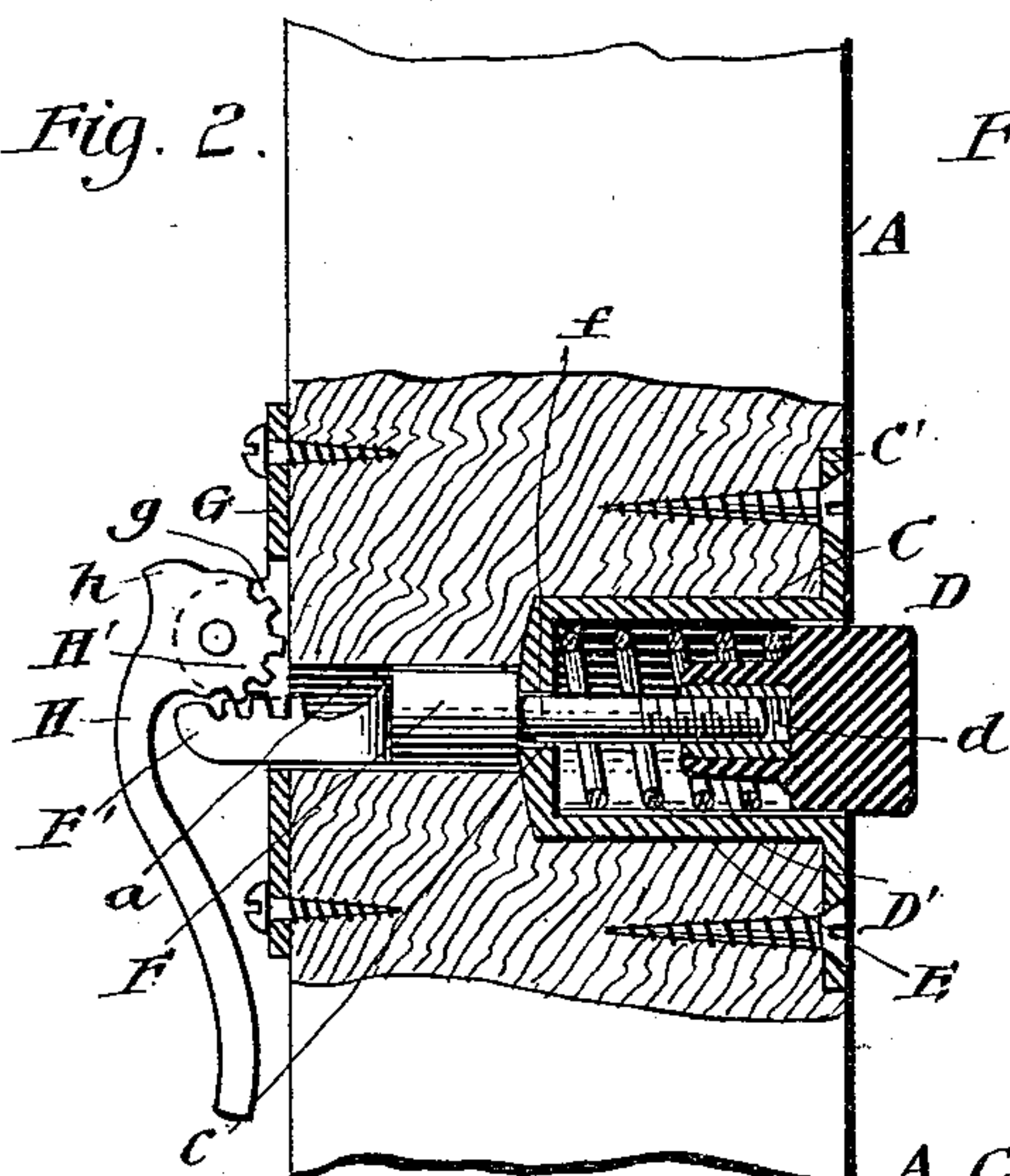


Fig. 2.



WITNESSES:
H. Clark.
C. Sedgwick.

Fig. 3.

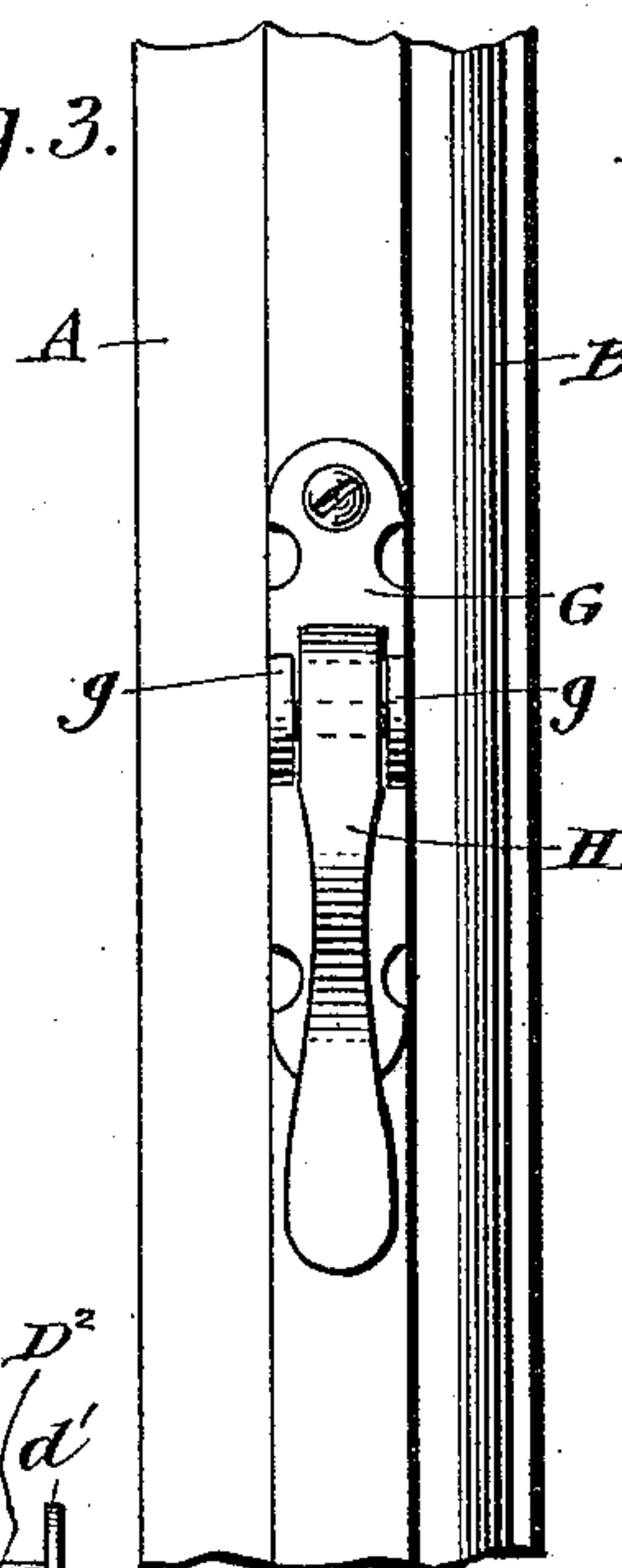
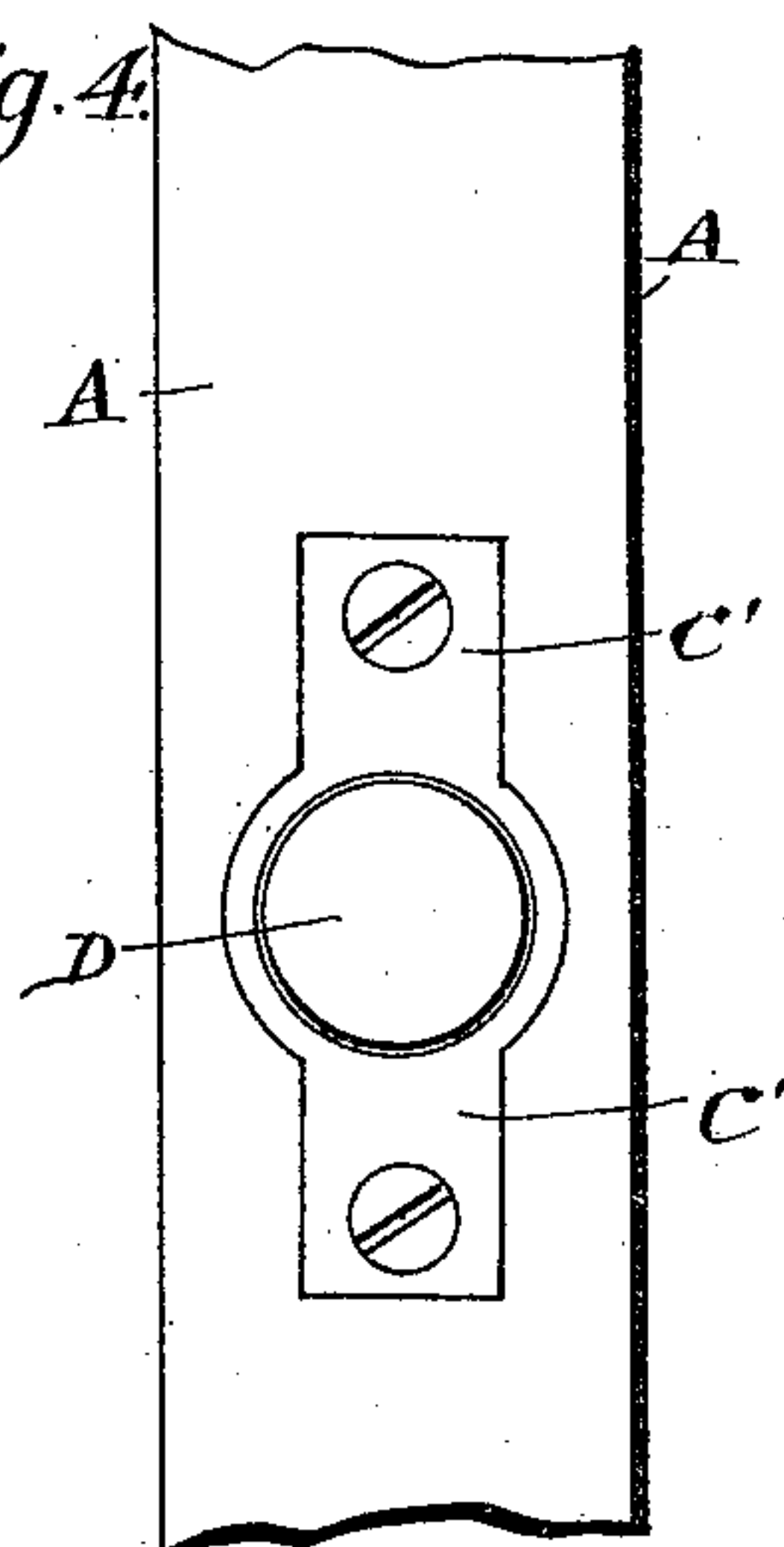


Fig. 4.



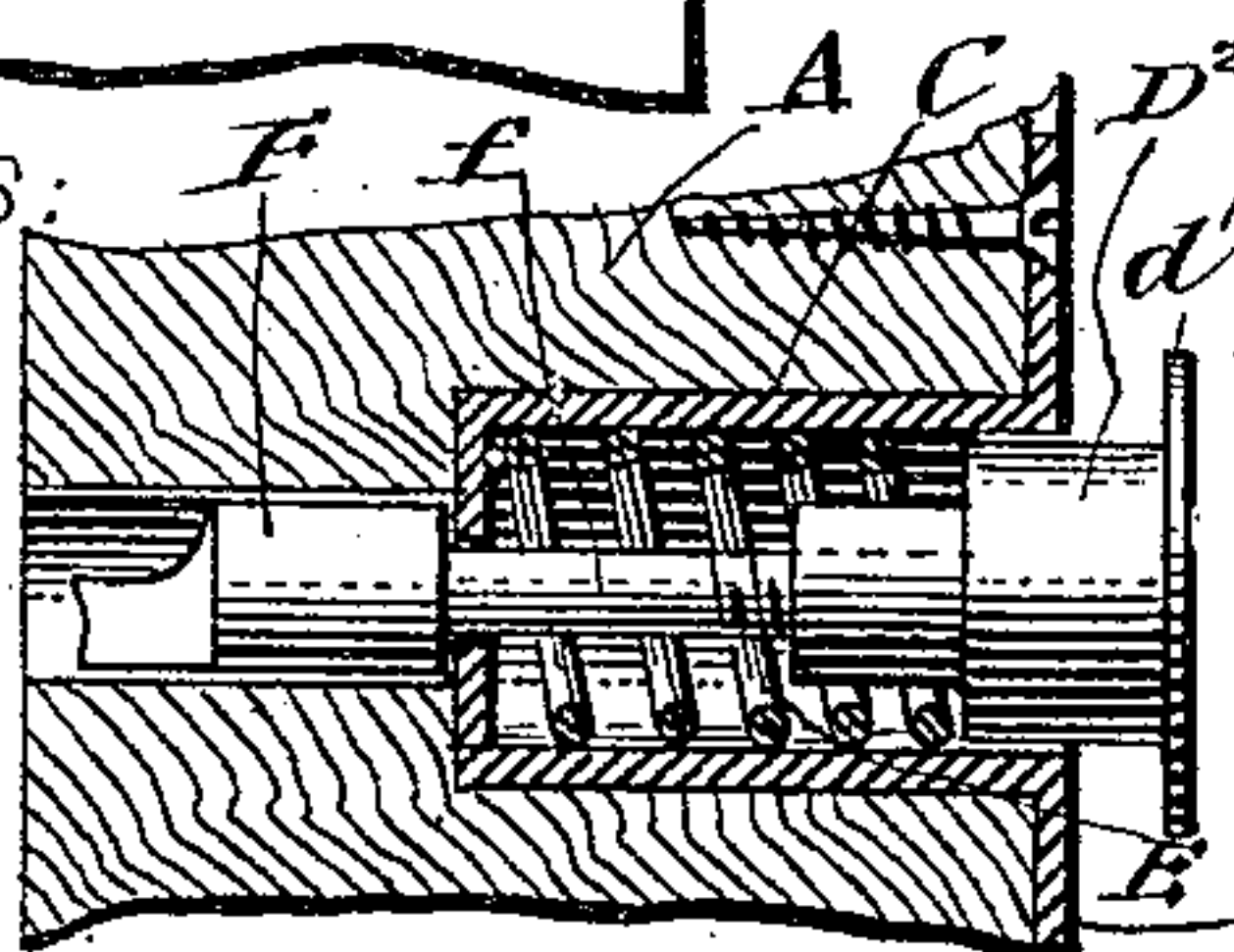
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Fig. 5.



UNITED STATES PATENT OFFICE.

ALBERT AYERS, OF RAHWAY, NEW JERSEY.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 448,108, dated March 10, 1891.

Application filed September 15, 1890. Serial No. 365,036. (No model.)

To all whom it may concern:

Be it known that I, ALBERT AYERS, of Rahway, in the county of Union and State of New Jersey, have invented a new and Improved Sash-Holder, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of sash-holders which are used to maintain a window-sash in a desired position; and the object of my invention is to produce a sash-holder of simple construction, which may be easily applied to a window, which may be very easily operated, and which will firmly hold a window in any desired position.

To this end my invention consists in certain features of construction and combinations of parts, which will be hereinafter fully described, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a broken front elevation of a window-sash provided with my sash-holder, a portion of the sash being broken away to show the holder. Fig. 2 is a detail view, partly in section, of the sash-holder, showing the same applied to the sash. Fig. 3 is an end view of the sash-holder as applied to a sash, the view being taken from the inside edge of the stile. Fig. 4 is an end view of the sash-holder, taken from the opposite end to that shown in Fig. 3; and Fig. 5 is a detail sectional view of the sash-holder provided with a modified form of a plug.

The window-sash A is of the common form and moves in suitable grooves in the window-frame B in the usual manner. The sash-holder is applied to one of the stiles of the window-sash, so that the spring-pressed plug in the holder will bear against the surface of the window-jamb opposite the outer edge of the sash. The sash-holder has a socket C, which is inserted in the outer edge of one of the stiles of the sash, the said socket having at its outer end a laterally-extending flange C', which is let into the outer edge of the stile, so as to present a smooth exterior surface, and which is firmly attached to the stile. The socket C has a hole c through the cen-

tral portion of its inner end, through which extends a rod F, as hereinafter described.

A cylindrical plug D, which is preferably of hard rubber, but which may be made of any suitable material, fits nicely in the socket C, said plug having an inwardly-extending reduced end D', and the plug is normally pressed outward by the spiral spring E, which is inclosed in the socket and which encircles the reduced end of the plug. A tube d, which is internally screw-threaded, is inserted in the inner end of the plug D, which tube is adapted to engage with the reduced and threaded end f of the rod F, so that the position of the plug upon the rod may be easily changed.

The rod F extends transversely through a slot a in the stile of the window-sash A, said slot aligning with the hole in the inner end of the socket C, and the outer end of the rod is reduced so as to extend through the hole in the socket and into the tube d of the plug D, as described above. The inner end of the rod F projects slightly from the inner edge of the sash-stile and is formed into a rack F', having teeth upon its upper edge.

A plate G is fastened firmly to the inner edge of the stile, the plate having a longitudinal slot therein, through which extends the rack F' of the rod F, and on opposite sides of the slot above the rack are the projecting ears g. A lever or handle H is pivoted at one end between the ears g, the said pivoted end H' of the handle being enlarged and provided with teeth which mesh with the teeth on the rack F', so that when the handle is raised the rod F will be moved longitudinally, and on the upper side of the enlarged end H' of the handle is a projection h, which when the handle is raised engages the plate G, and thus limits the movement of the handle and prevents the rod F from being withdrawn too far.

In Fig. 5 I have shown a modified form of the plug, the plug D² moving in the socket C in the same manner as the plug D, already described; but the plug D² is provided at its outer end with an annular flange d', which strikes against the flange C' of the socket C and against the outer edge of the sash-stile, and thus prevents the plug from being moved

too far inward, and in case the latter form of plug is used the handle H need not be provided with the projection *h*, as the flange on the plug answers the same purpose.

5 A handle J is attached to the stile of the sash A opposite the stile carrying the sash-holder, the said handle J having a suitable base-plate J' to enable it to be firmly attached to the stile, and the handle being at about
10 the same height on the sash as the sash-holder enables the sash to be easily operated.

The operation of the device is as follows: When the sash is to be raised, the operator lifts on the handles H and J, thus moving
15 the handle H upwardly, as indicated by dotted lines in Fig. 1, and withdrawing the rod F, thus drawing the plug D into the socket C, and the window may then be easily moved; but when the pressure on the handle H is re-
20 moved the spring E immediately forces the plug D outwardly and causes it to frictionally engage the window-jamb, so that the sash A is thereby held in place. To lower the sash, the handle H is raised sufficiently to remove
25 the pressure of the plug D on the window-jamb and the sash is allowed to drop of its own weight. The grooves in the window-frame B may be painted, if desired, to enable the sash to run easily, and by adjusting the
30 plug D upon the threaded end of the rod F it may be made to compensate for the difference in size between the window-sash and the width of the window-frame, so that the slack will be entirely taken up and the window
35 cannot rattle.

I do not claim, broadly, the socket C and the spring-pressed plug D therein, as a device having those parts was patented to me November 3, 1885, said patent being numbered 329,803.

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

1. In a sash-holder, the combination, with the socket and the spring-pressed plug there- 45 in, said plug having an internally-screw-threaded tube in its inner end, of a rod extending into the socket, said rod having its inner end screw-threaded to engage the tube in the plug and having its outer end formed 50 into a rack, as shown, and a pivoted handle having its pivoted end enlarged and provided with teeth to fit the rod-rack, substantially as described.

2. The combination of the spring-pressed 55 plug, the rod connected therewith and provided at its outer end with a rack, the slotted plate to receive the outer end of the rack, and the handle pivoted in the plate, said handle having its pivoted end enlarged and pro- 60 vided with teeth to fit the rod-rack and having upon its upperside a projection to engage the plate and limit its movement, substantially as described.

ALBERT AYERS.

Witnesses:

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