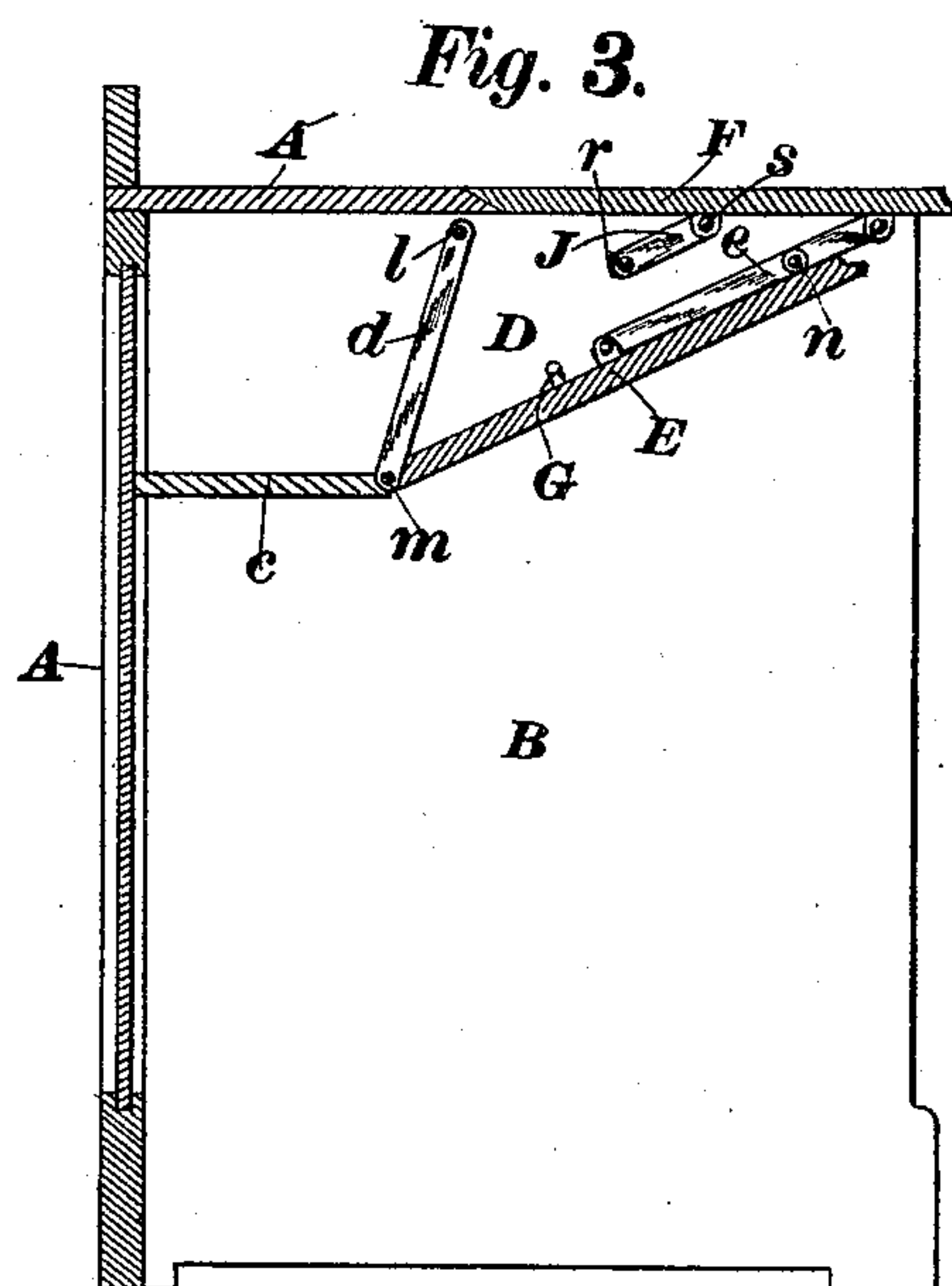
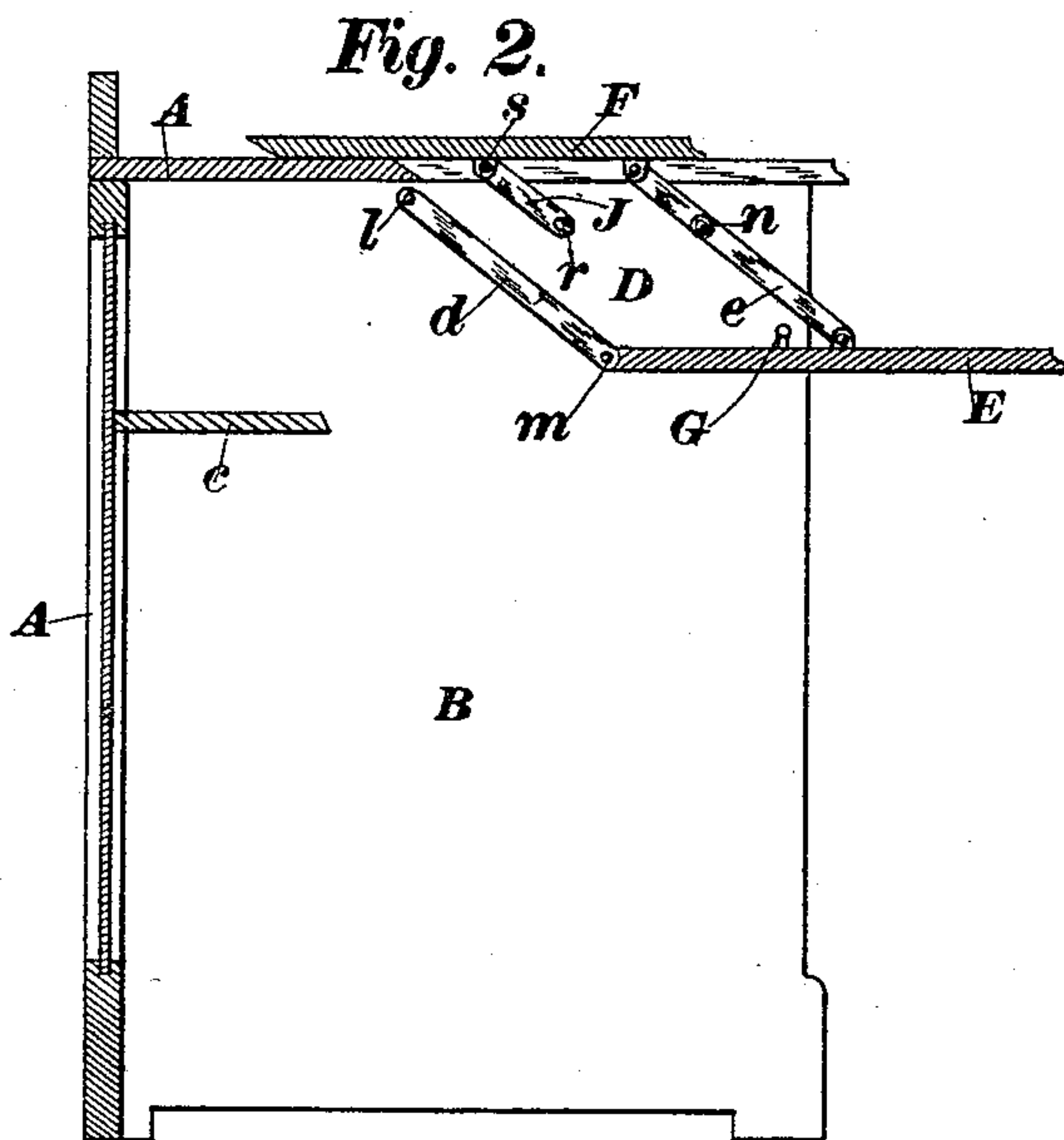
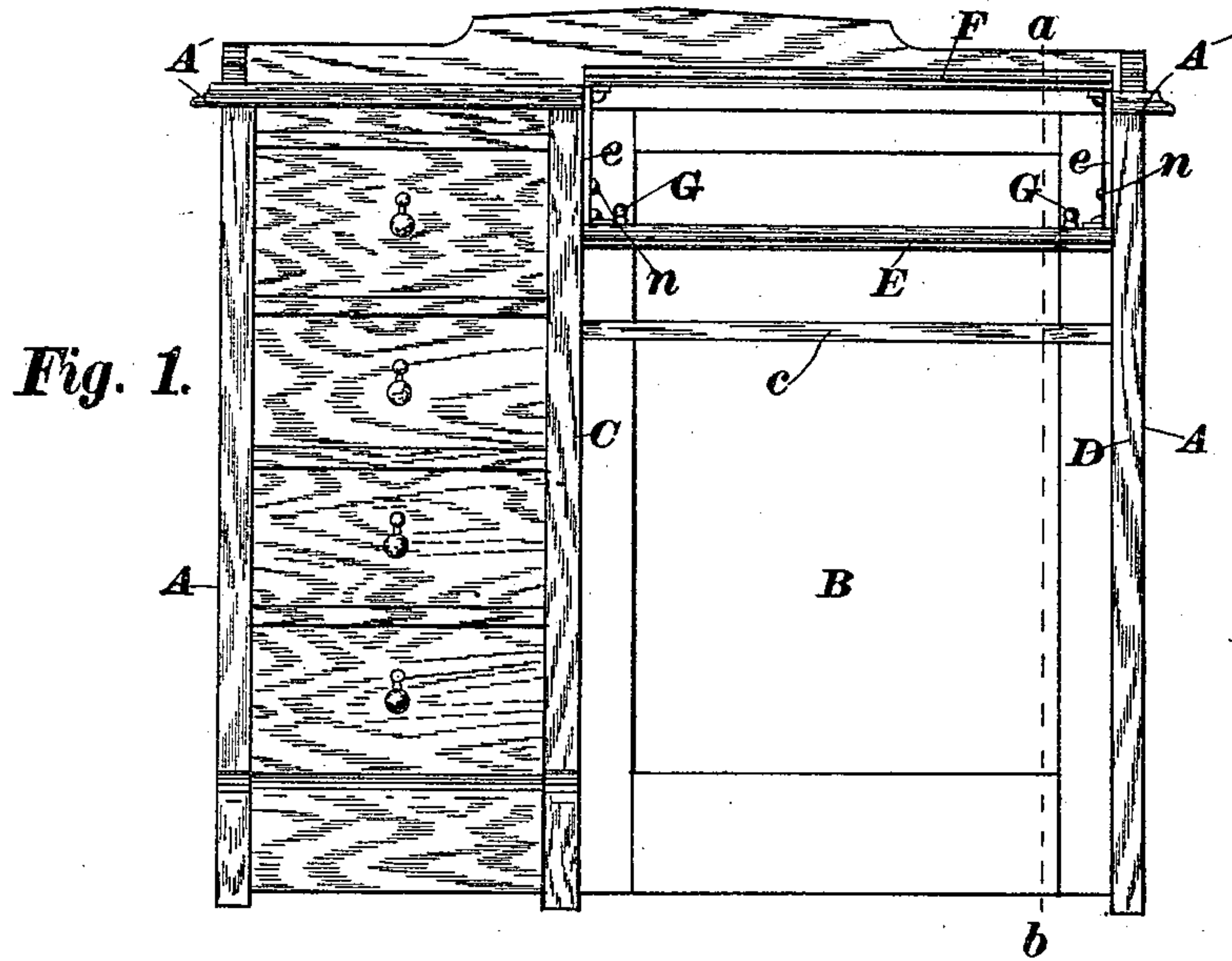


(No Model.)

V. LAPHAM.
TYPE WRITER CABINET.

No. 459,406.

Patented Sept. 15, 1891.



Witnesses
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UNITED STATES PATENT OFFICE.

VALENTINE LAPHAM, OF CHICAGO, ILLINOIS, ASSIGNOR TO ELWOOD T. BAKER, OF BRIDGEPORT, CONNECTICUT.

TYPE-WRITER CABINET.

SPECIFICATION forming part of Letters Patent No. 459,406, dated September 15, 1891.

Application filed May 9, 1891. Serial No. 392,211. (No model.)

To all whom it may concern:

Be it known that I, VALENTINE LAPHAM, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Type-Writer Cabinets, of which the following is a specification.

My invention relates, particularly, to an improvement in type-writer cabinets invented by Frederick Sanderson, of Chicago, Illinois, and for which application for patent was filed October 13, 1890, Serial No. 367,952, and allowed February 26, 1891.

In the invention above referred to there is a sliding board F, which has a forward or backward movement over the rear part of the top of the cabinet respectively when the cabinet is closed or opened, and the manner of action of said board in relation to the top of the cabinet being objectionable my object is to introduce a means operating in combination with the other parts which will obviate the objectionable feature and give the operative parts a smoothness of action never before attained.

My improvement is shown in combination with the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front view of the cabinet in the open position. Fig. 2 is a section of Fig. 1 on line *a b*, with the several links and their hinge attachments in elevation for one side only. Fig. 3 is the same section as Fig. 2, except that the cabinet is shown in the closed position, Fig. 2 being open.

Similar letters refer to like parts throughout the several views in the accompanying drawings and also in the drawings accompanying the application for patent of Frederick Sanderson, hereinbefore referred to, as far as is necessary to fully describe my improvement.

Referring to the accompanying drawings, A is the body of the cabinet, and A' the top. In this instance, as shown in Fig. 1, about two-thirds of the length of the cabinet is used for the type-writer and forms a space B from top A' to the floor. At *c* is the usual stationary shelf, which forms the rear bottom of the type-writer receptacle. When the cabinet is

closed, *d* and *e* are respectively the rear and front suspension-links.

C is the left and D the right side of space B.

E is the board upon which is placed the type-writer. F is a board which forms the movable top.

G is the knob, of any form of catch or lock for holding the parts in an open or closed position. Link *d* is pivoted to the side D of space B at *l* and its lower end is pivoted to the rear of board E at *m*. Link *e* is pivoted to the side D of space B at *n* and its top end is pivoted to board F, as shown, while its lower end is pivoted to the type-writer board E.

In Sanderson's invention, hereinbefore referred to, the operative parts consisted of top board F, links *d* and *e*, and type-writer board E, with links *d* and *e* pivoted to the cabinet and to boards F and E, as herein shown and described. The rear of board F rested upon the top of a small roller which was pivoted at the top of the cabinet at *j*, and the top of the roller projecting above the top A' of the cabinet held board F above the surface thereof and prevented its abrading the surface when board F was reciprocated forward or backward in the act of closing or opening the cabinet. This construction was found to be objectionable for the reason that papers lying upon the top of the rear part of the top of the table were slid backward whenever the cabinet was opened, and also the parts did not operate smoothly and without a disagreeable noise. These objectionable features were entirely removed by the introduction of the third link J, whose lower end is pivoted to the side D of space B at *r* and its upper end to the under side of board F at *s*, being at the rear of link *e*, and having its pivotal centers the same distance apart as the top and center pivotal centers of link *e*. It is very obvious that in opening and closing the cabinet the link J and upper end of link *e* will partake of a vibratory partial rotary motion, the top ends of links J and *e* moving in the segment of circles of an equal size, and therefore holding the board F firmly and always parallel with the top A of the cabinet, the board F first being lifted from the position shown in Fig. 3, carried backward and

downward upon the rear of the top A without sliding or abrading the top, and with a movement free from noise or irregularity.

What I claim as my invention is—

- 5 In a type-writer cabinet, the combination of the links *d*, *e*, and J, turning upon pivotal centers *n*, *l*, and *r* on the sides of the cabinet in space B, the front link *e* having an arm extending above its pivotal center, the type-
10 writer table E, to which the lower ends of links *d* and *e* are hinged, and movable board

F, hinged to the upper ends of links *e* and J, the distance between the pivotal centers of the link *e* from *n* to the center of the hinge at its upper end being substantially the same 15 as the distance between centers *s* and *r* of link J, the parts operating for the purpose and substantially in the manner described.

VALENTINE LAPHAM.

Witnesses:

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