

(No Model.)

2 Sheets—Sheet 1.

J. A. WESER.

MUSIC RACK FOR MUSICAL INSTRUMENT CASES.

No. 475,369.

Patented May 24, 1892.

FIG. 1.

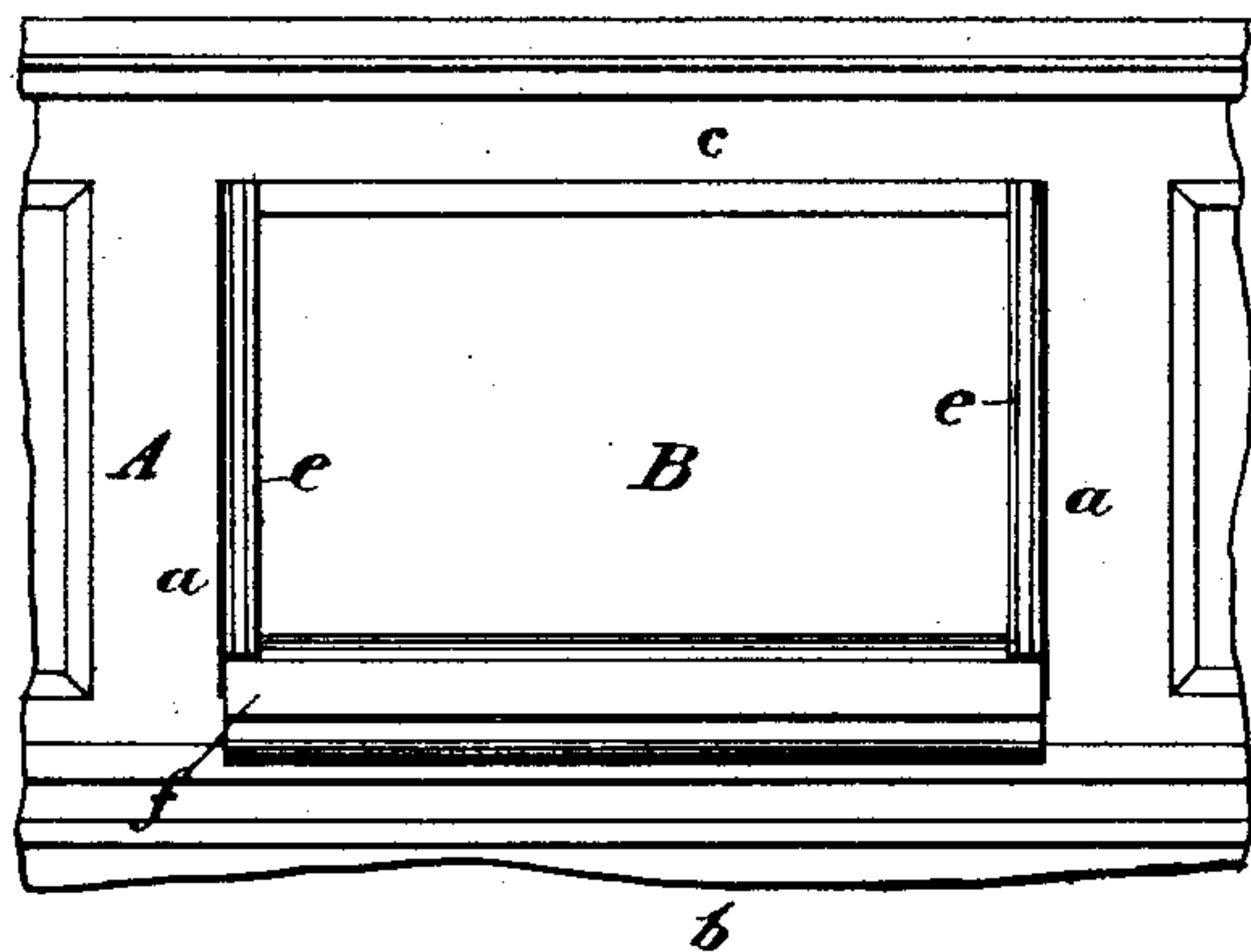


FIG. 2.

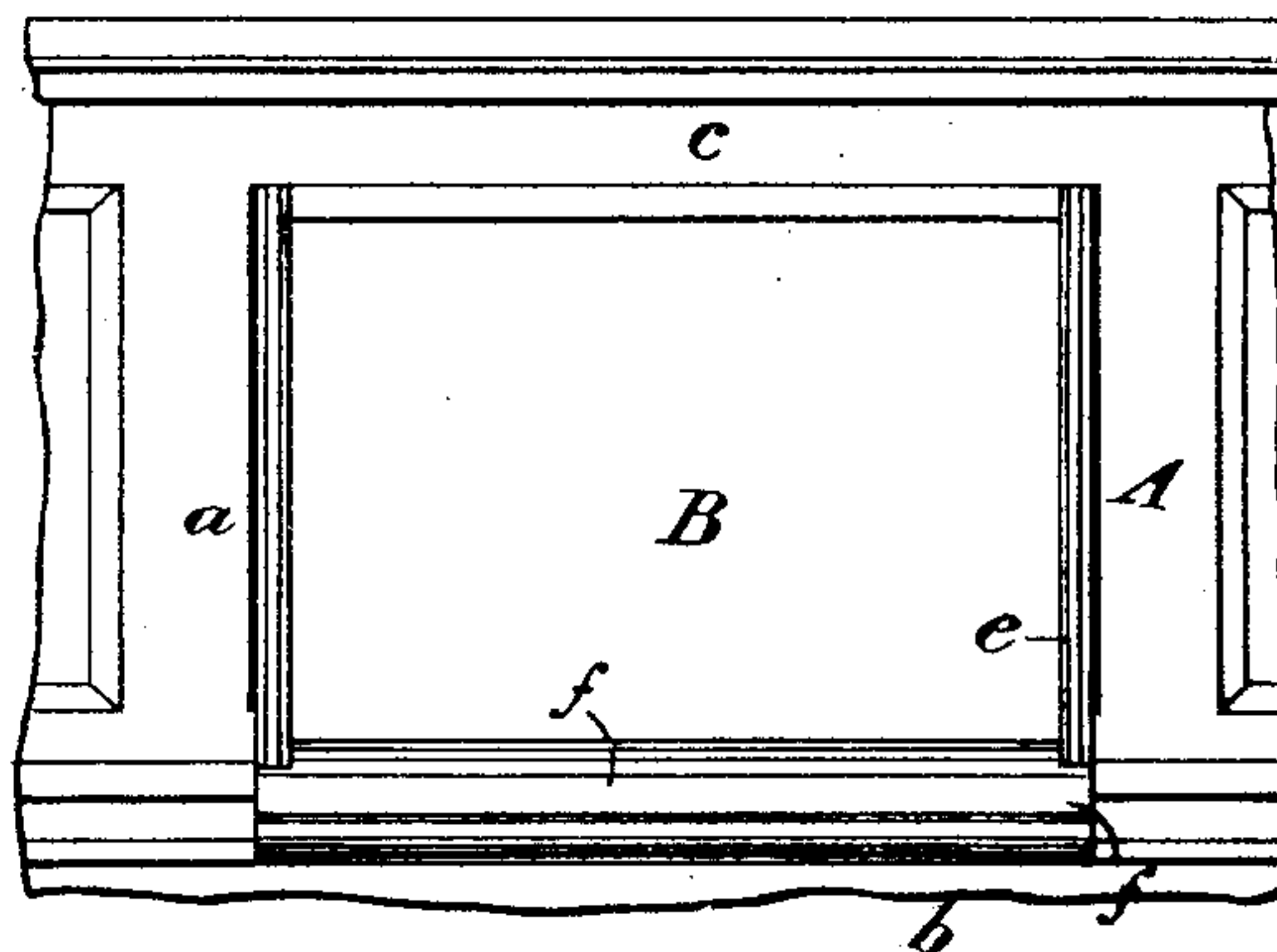
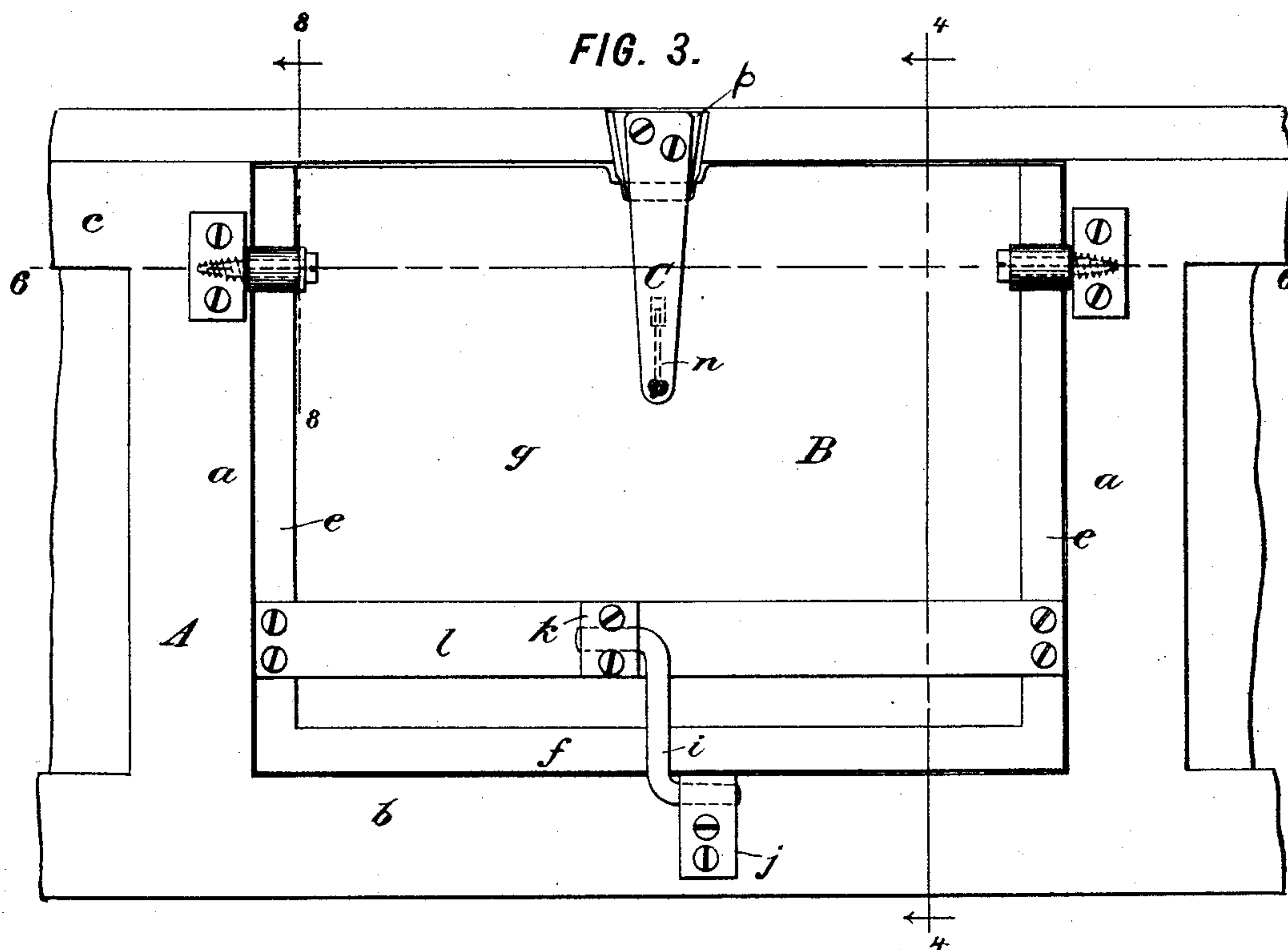


FIG. 3.



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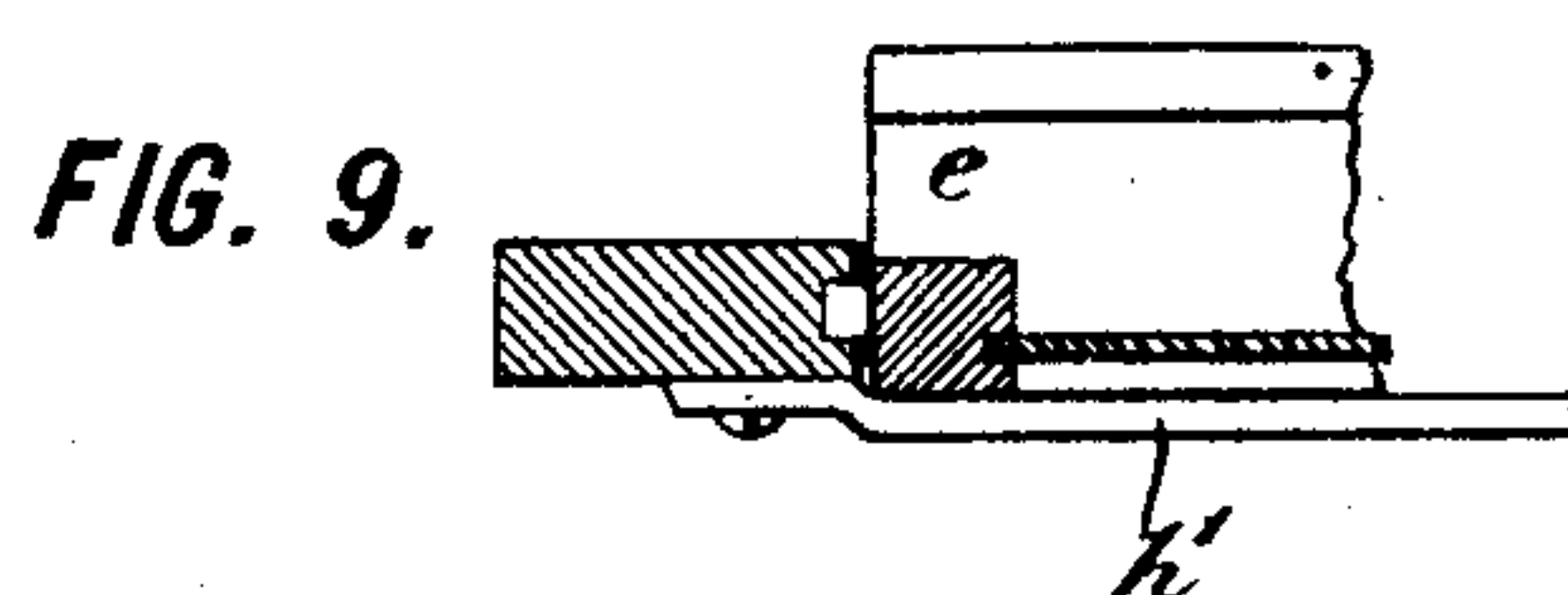
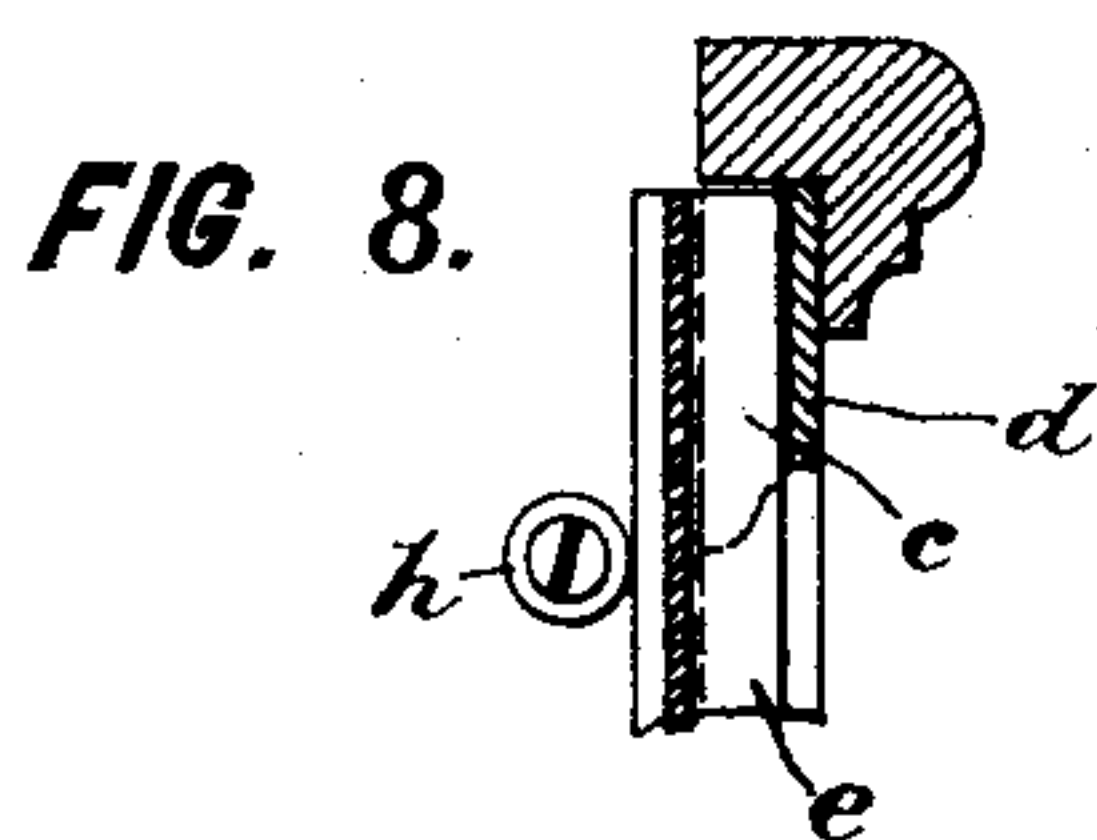
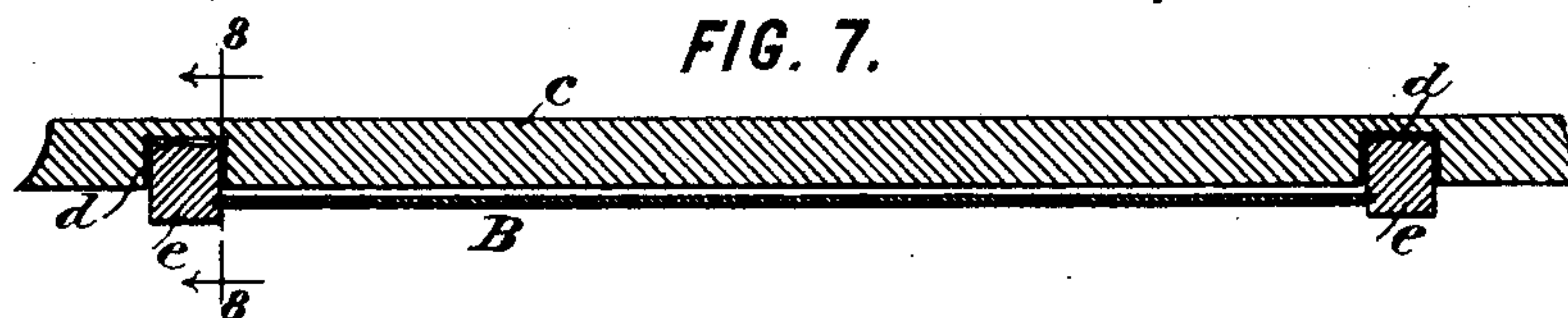
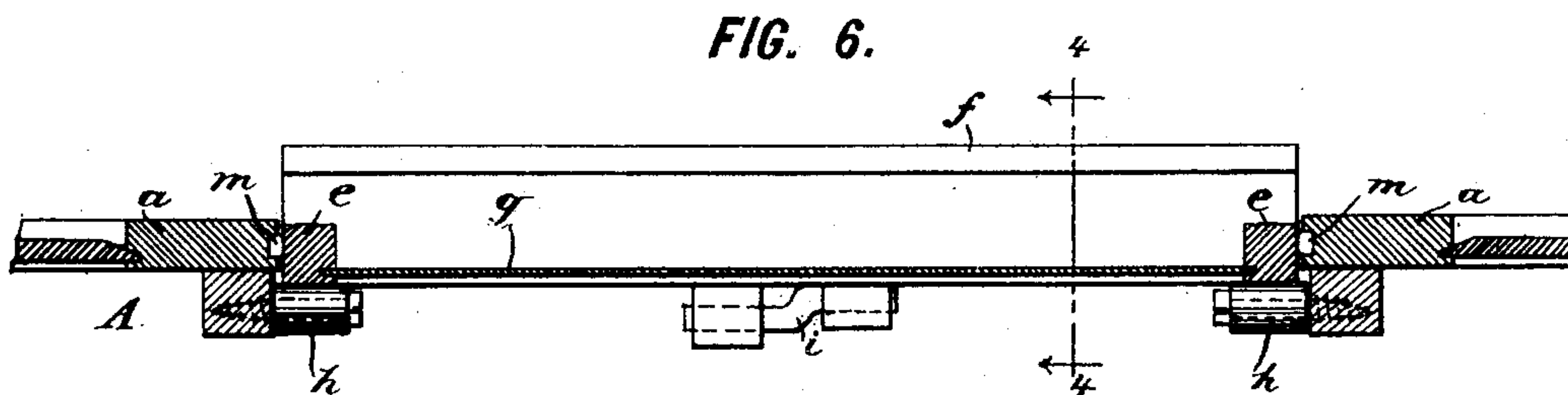
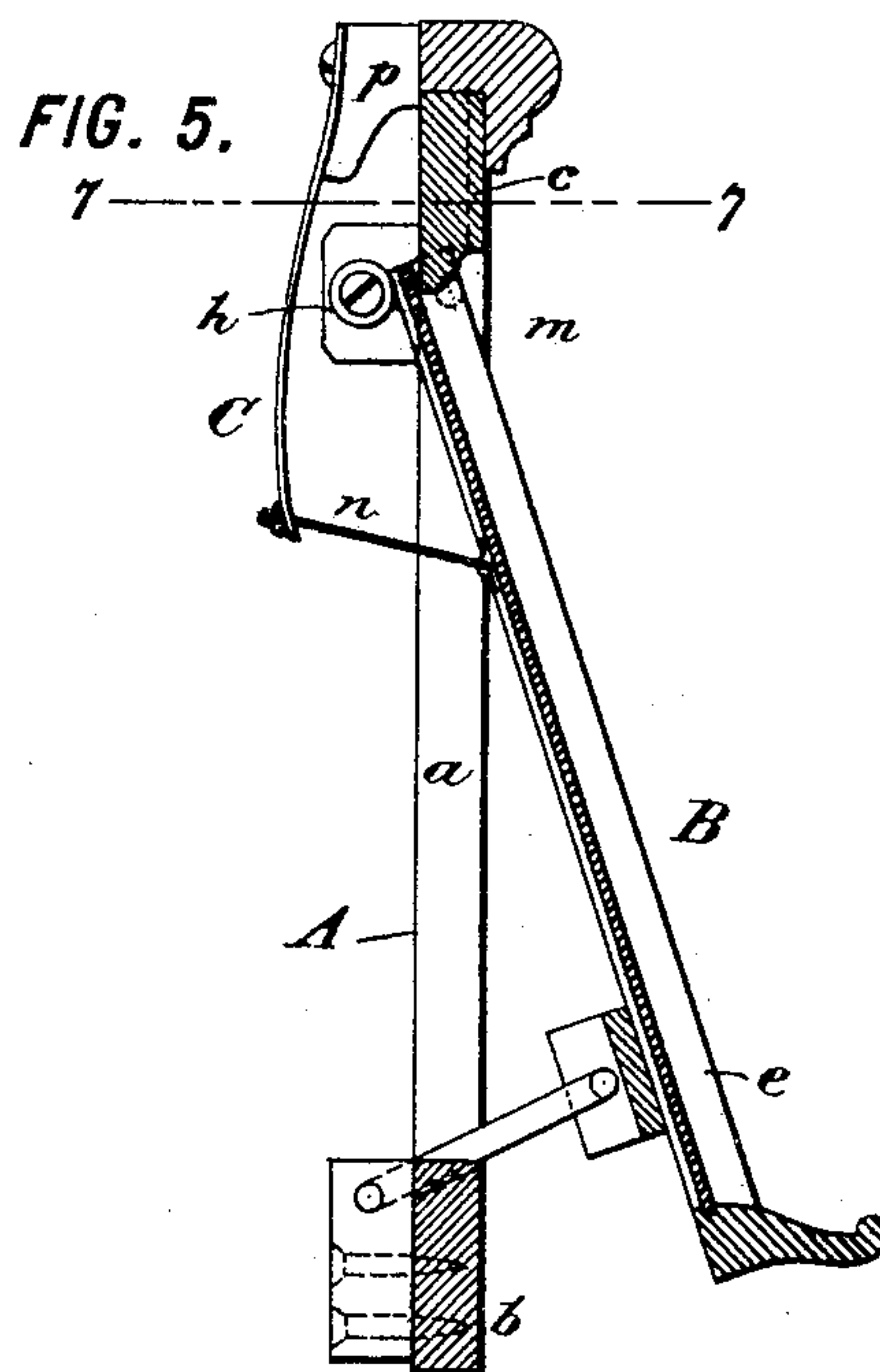
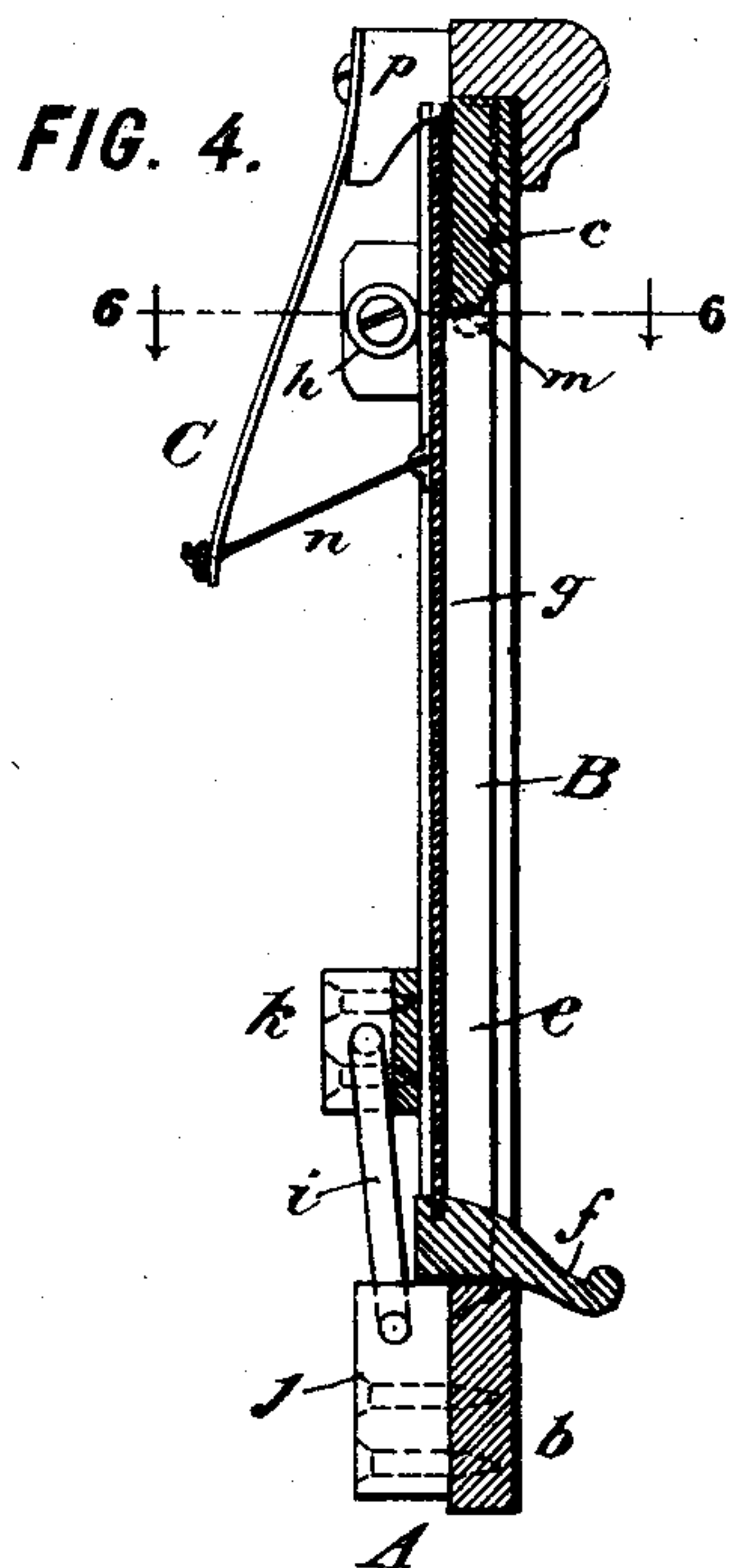
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UNITED STATES PATENT OFFICE.

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MUSIC-RACK FOR MUSICAL-INSTRUMENT CASES.

SPECIFICATION forming part of Letters Patent No. 475,369, dated May 24, 1892.

Application filed July 23, 1891. Serial No. 400,412. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. WESER, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Music-Racks for Musical-Instrument Cases, of which the following is a specification.

This invention provides an improved construction of musical rack, desk, or leaf applicable to the use of upright piano-fortes and organs.

Figure 1 of the accompanying drawings is a fragmentary front elevation of the upper part of the case of an upright piano-forte, showing the music rack or desk closed. Fig. 2 is a similar view showing the music rack or desk open or lowered. Fig. 3 is a rear view of the music-rack in its closed position and of the surrounding parts of the case. Fig. 4 is a vertical transverse section on the line 4 4 in Fig. 3, showing the desk closed. Fig. 5 is a similar view showing it open. Fig. 6 is a horizontal section on the line 6 6 in Figs. 3 and 4. Fig. 7 is a horizontal section on the line 7 7 in Fig. 5. Fig. 8 is a fragmentary vertical section on the lines 8 8 in Figs. 3 and 7. Fig. 9 is a fragmentary horizontal section in the same plane as Fig. 6 and showing a modification.

Let A designate in general the front part of the case of a musical instrument—as, for example, an upright piano-forte—and B the music rack, desk, or leaf thereof.

The case A is made, as usual, with an opening, which is closed by the rack B when the latter is in its normal position or out of use. When the rack is in use, it is swung forward at the bottom and turned down to the position shown in Fig. 5. It is consequently both a swinging and a sliding rack, since to admit of its descending movement its upper end is arranged to slide in the case at the upper side of the opening. My invention is designed to provide an improved construction for music racks or desks of this character.

The case A is formed, as usual, with side bars *a a* at opposite sides of the music-rack opening, with a cross-bar *b* beneath the opening, and with a cross-bar *c* extending across the front of the case to the top of the opening. This upper bar *c* is formed on its rear

side with two vertical grooves *d d*. (Shown best in Fig. 7.)

The rack or desk B is constructed with a frame consisting of side bars *e e* and bottom bar *f*, the latter being extended forward sufficiently to form a rest for the music. Within this frame is held a board or plate *g* on the music-desk, which may be made of thin wood or other material and of open-work or not, according to any usual or suitable construction. The board *g* is arranged as close as convenient to the rear side of the frame *e e f*, being preferably held in grooves therein, as shown in cross-sections, Figs. 4 and 6. When the desk is closed, as shown in Fig. 4, the board *g* occupies a plane inside of the inner face of the bars *a b c* of the case A, or at least behind the inner face of the upper bar *c*, as shown best in Figs. 4 and 7. In this position the upper ends of the bars *e e* of the desk-frame lie in the grooves *d d* in the back of the top bar *c*, as shown in Fig. 7. As the desk is swung out at its lower side and turned down its upper end descends, the ends of its bars *e e* sliding down in the grooves *d d* to the lower part thereof, being stopped in the position shown in Fig. 5. Thus these bars are not drawn out of the grooves *d*, and consequently no gap is left between their upper ends and the frame of the case at the opening, as in the constructions of such desks heretofore employed.

The music-desk is guided in its movement at its upper portion by means of two rollers *h h*, arranged at opposite sides, as shown in Fig. 6, and just back of the lower edge of the front bar *c*, as shown in Figs. 4 and 5. These rollers bear against the rear side of the bars *e e* and form a rolling fulcrum on which the bars may slide and rock. The rollers are preferably covered with felt to render the movement noiseless. These rollers might be substituted by a rod or wire extended from one side to the other of the opening just back of the upper part of the music-desk, as shown at *h'* in Fig. 9; but the felt-covered rollers are deemed preferable.

The lower end of the music-desk may be supported and guided in its movement in various ways, of which the one that I deem preferable is that shown consisting of a crank arm

or link *i*, made, preferably, of bent wire, as shown in Fig. 3, and pivoted at one end to the case at the lower side of the opening and at the other end to the back of the desk B.

5 These pivotal connections are preferably made by means of blocks *j* and *k*, the former being attached to the bar *b* of the case and the latter to the bar *l*, extending across the rear of the music-desk. The lower portion of
10 the desk is consequently caused to move in the arc of a circle, being stopped at the limit of its downward movement by the abutment of the crank-arm *i* against the upper edge of the bar *b*, as shown in Fig. 5. When the desk
15 is closed, bar *f* is swung in by the crank just out of contact with the upper edge of the bar *b*, so as not to rub against it, thereby avoiding any injury to the finished wood-work, and when fully closed is stopped by the rear side
20 of the bar *f* striking the crank-arm *i*, as shown in Fig. 4.

It is very desirable to prevent the side edges of the music-desk from rubbing against the edges of the opening in the case, which
25 would mar the varnished surface of the wood, and to this end I insert guides *m m* in the opening at opposite sides, as shown in Fig. 6 and in the position shown by the dotted circles in Figs. 4 and 5, these guides projecting
30 slightly into the opening and bearing against the edges of the music-desk, so as to hold the latter out of contact with the edges of the side bars *a a*. These guides may be made of any soft material having sufficient rigidity, such
35 as firm vulcanized rubber, or they may be made of a firm smooth substance, such as wood or bone. They are essentially guiding projections designed to prevent the lateral displacement of the desk B sufficiently to
40 cause its sides to rub against the sides of the opening.

In order to prevent the board *g* and the side bars *e e* from rubbing against the rear side of the bar *c* during the up-and-down
45 movement of the desk, I provide means for drawing the upper part of the desk inwardly with a tension which acts continually to keep the upper part of the desk out of contact with the bar *c*. For this purpose I provide a spring-
50 arm C, preferably a leaf-spring, acting through a strap or link *n* upon the music-desk. The leaf-spring C is attached rigidly to a block *p* and projects down to about the distance shown in Figs. 4 and 5, where its free end is con-
55 nected by the strap or cord *n* to the back of the desk. The spring is under sufficient tension, so that it exerts a continual pull upon the connection *n*, and consequently keeps the music-desk B continually drawn backwardly,
60 so that the finished front surfaces of the board *g* and side bars *e e* are held out of contact with the bar *c*. When the desk is in its closed position, the pull of the spring is diagonally inward and downward, as shown by the position of the connector *n*, as in Fig. 4, so that it
65 exerts a slight downward thrust upon the

desk. The inward pull of the spring in this position acts to hold the desk B closed by imparting to its bottom portion a tendency to move inwardly, so that it is held firmly against
70 the stop afforded by the crank-arm *i*.

To open the desk, it is grasped by the projecting bar *f* and drawn forward, after which, as it moves in the arc of a circle, it assumes
75 also a downward movement and in so doing draws the connector *n* into the position shown in Fig. 5. In this position the tension of the spring C acts not only to draw the music-desk rearward, but also has a slight tendency to
80 lift it, so that in closing it, since it is slightly lifted, the tension of the spring will suffice to complete its movement. The spring thus insures that the desk shall not be left in a half-open position.

My improved construction not only avoids
85 any unsightly gap above the side bars *e e* when the desk is drawn down, but by making the side bars *e* so that they extend to the extreme upper edge of the board *g* the latter is fully supported by them, and it consequently
90 requires no particular strength of its own, so that it may be made very thin and light and be ornamented by any suitable open-work instead of being necessarily made so thick as
95 to afford the proper strength for sustaining the upper part of the music-desk, as has heretofore been necessary in music-desks of this character.

My invention also, while it provides what is substantially a sliding music-desk, avoids all
100 sliding movement except in contact with the guiding projections *m m*, the movements elsewhere being rolling or pivotal movements, involving very little friction, and being noiseless, so that this objection to music-desks of
105 this character as heretofore constructed is removed.

My improved music-desk also is so constructed as to avoid all liability to rub or chafe
110 the highly-finished surface of the wood either at the top of the desk or at the sides or edges thereof. It also has the advantage of being substantially self-closing, so that it cannot accidentally be left in a partially-open condition.
115

I claim as my invention the following-defined novel features or improvements, substantially as hereinbefore specified, namely:

1. The combination, with a musical-instrument case having a front opening and with
120 grooves formed in its inner surface extending vertically upward from the opposite sides of said opening, of a music-desk adapted to close said opening, mounted to swing out and slide down, and constructed of a board passing up
125 behind the front of the case above said opening and high enough to leave no gap when drawn down, a bottom bar on said board, and side bars on its front side, the upper ends of which side bars enter said grooves, whereby
130 in either position of the desk its board appears as a panel inclosed by the side bars, the bot-

tom-bar, and the top molding of said opening, said panel differing only in being of greater height when the desk is open than when closed.

2. The combination, with a musical-instrument case having a front opening, of a music-desk adapted to close said opening, mounted to swing out and slide down, and having its upper part extending behind the case above said opening, rearward guides applied to the case adjacent to the upper part of the opening and forming a sliding connection engaging the upper part of the desk, and a spring arranged to exert a rearward tension against the upper part of the desk, whereby it is pressed back against said guides and its finished front surface is kept out of contact with the case to prevent its being marred by the sliding movement of the desk.

3. The combination, with a musical-instrument case having a front opening, of a music-desk adapted to close said opening, mounted to swing out and slide down, and means for exerting a rearward tension against said desk, adapted to prevent abrasion of its upper portion by contact with the case.

4. The combination, with a musical-instrument case having a front opening, of a music-desk adapted to close said opening, mounted to swing out and slide down, having at its upper part a sliding connection with the case, and having means for guiding its lower part

in its swinging and downward movements, a spring arranged behind the desk and exerting a tension in a rearward direction, and a loose connection between said spring and the back of the desk for transmitting the rearward tension of the spring to the desk, arranged to extend obliquely upward when the desk is open and communicate an upward pressure tending to close it and to extend obliquely downward when the desk is closed and communicate a downward and rearward pressure tending to hold it closed.

5. The combination, with a musical-instrument case having a front opening, and grooves in its rear side above said opening, of a music-desk adapted to close said opening, and constructed with side bars entering said grooves, rearward guides engaging the upper part of the desk, and a spring arranged to exert a rearward tension upon the desk to draw it against said guides and thereby keep its finished front surface out of contact with the case at the upper side of the opening.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JOHN A. WESER.

Witnesses:

LOUIS BECKHARDT,

M. ANNIE W. BECKHARDT.