

No. 686,357.

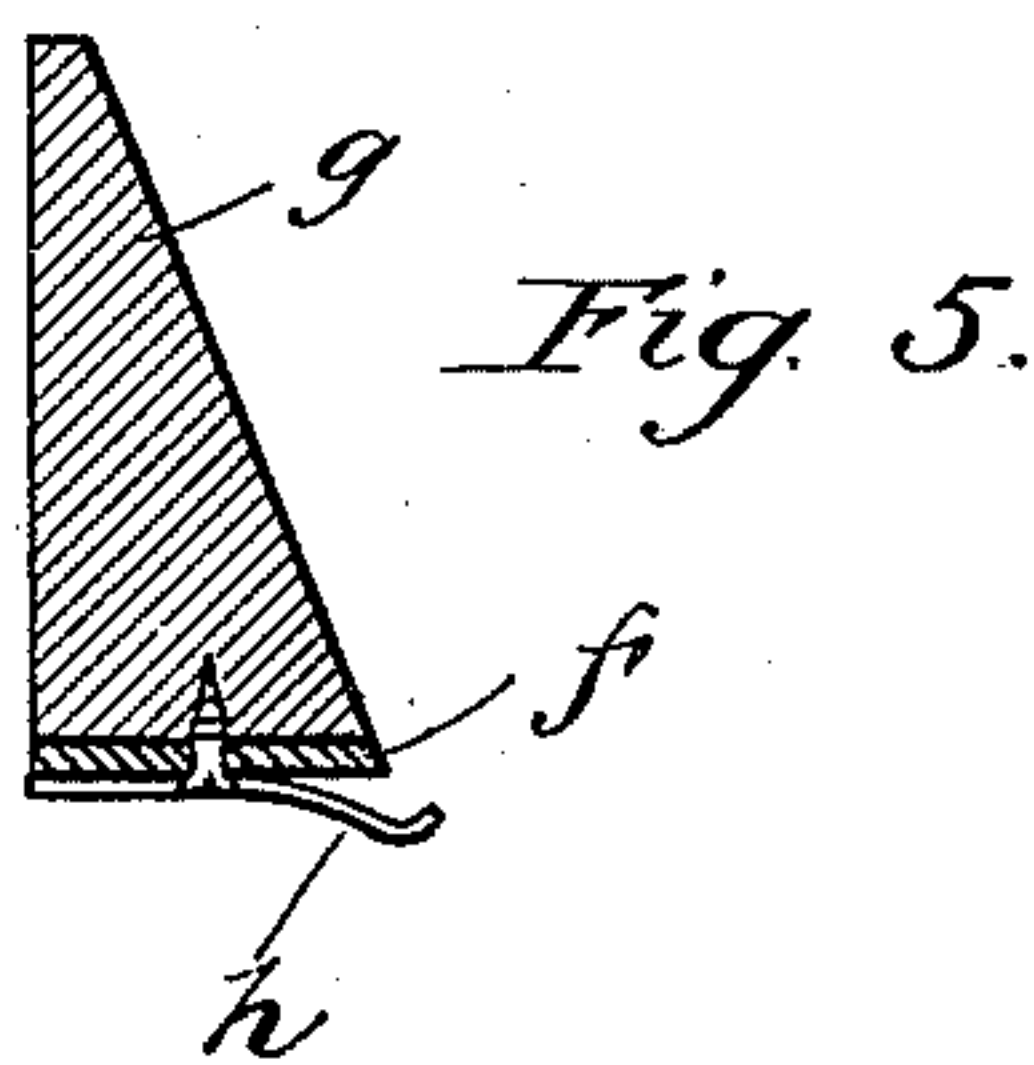
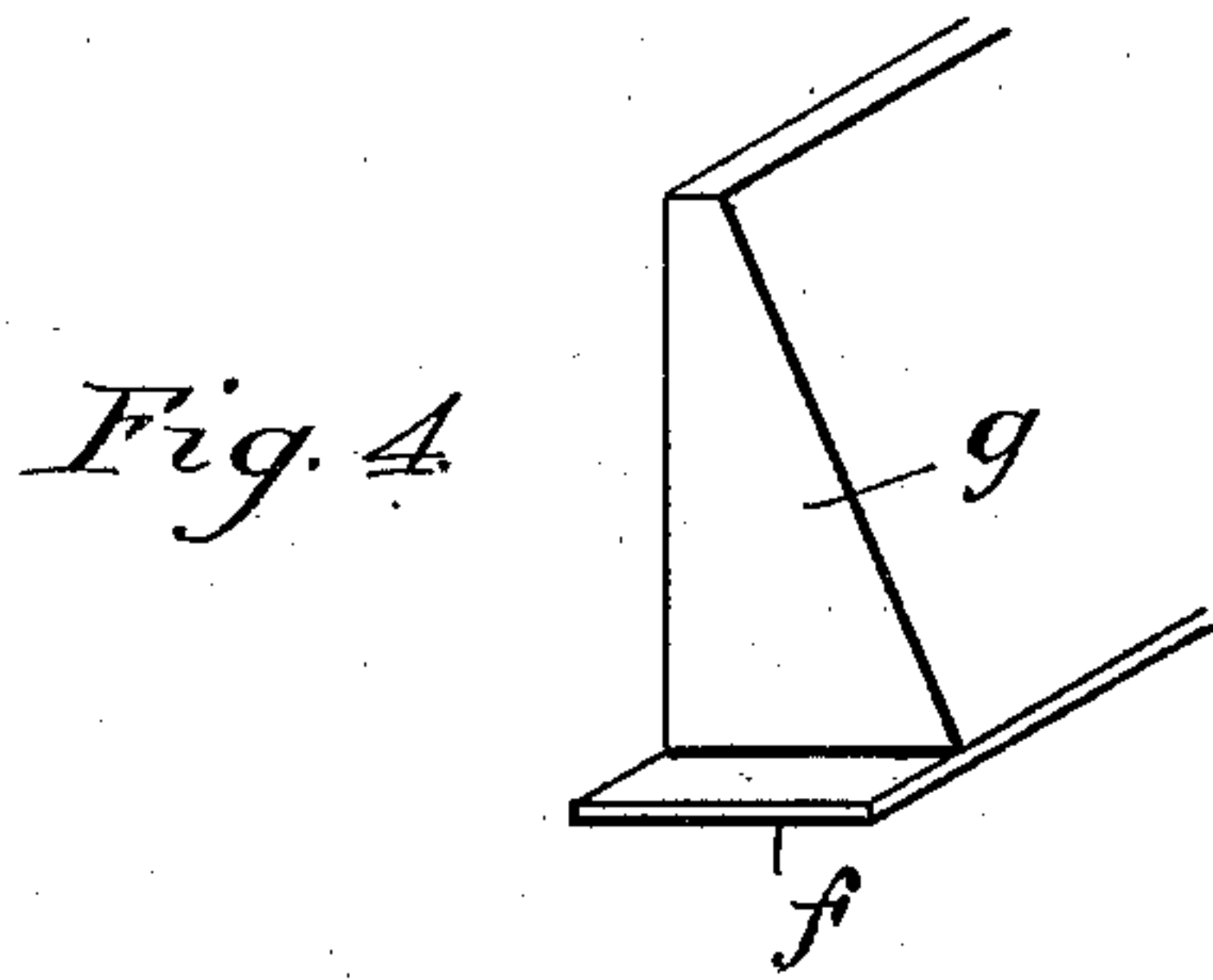
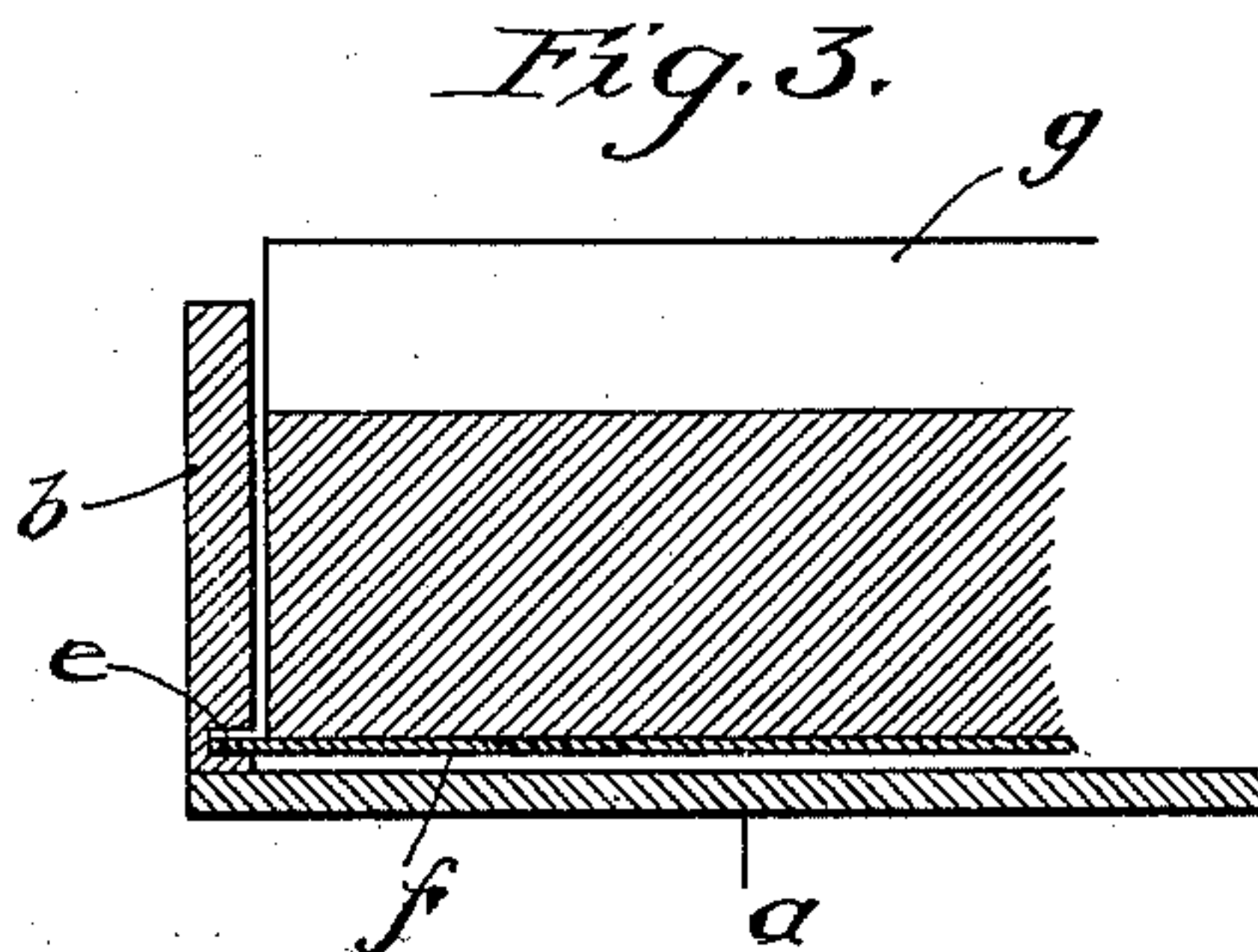
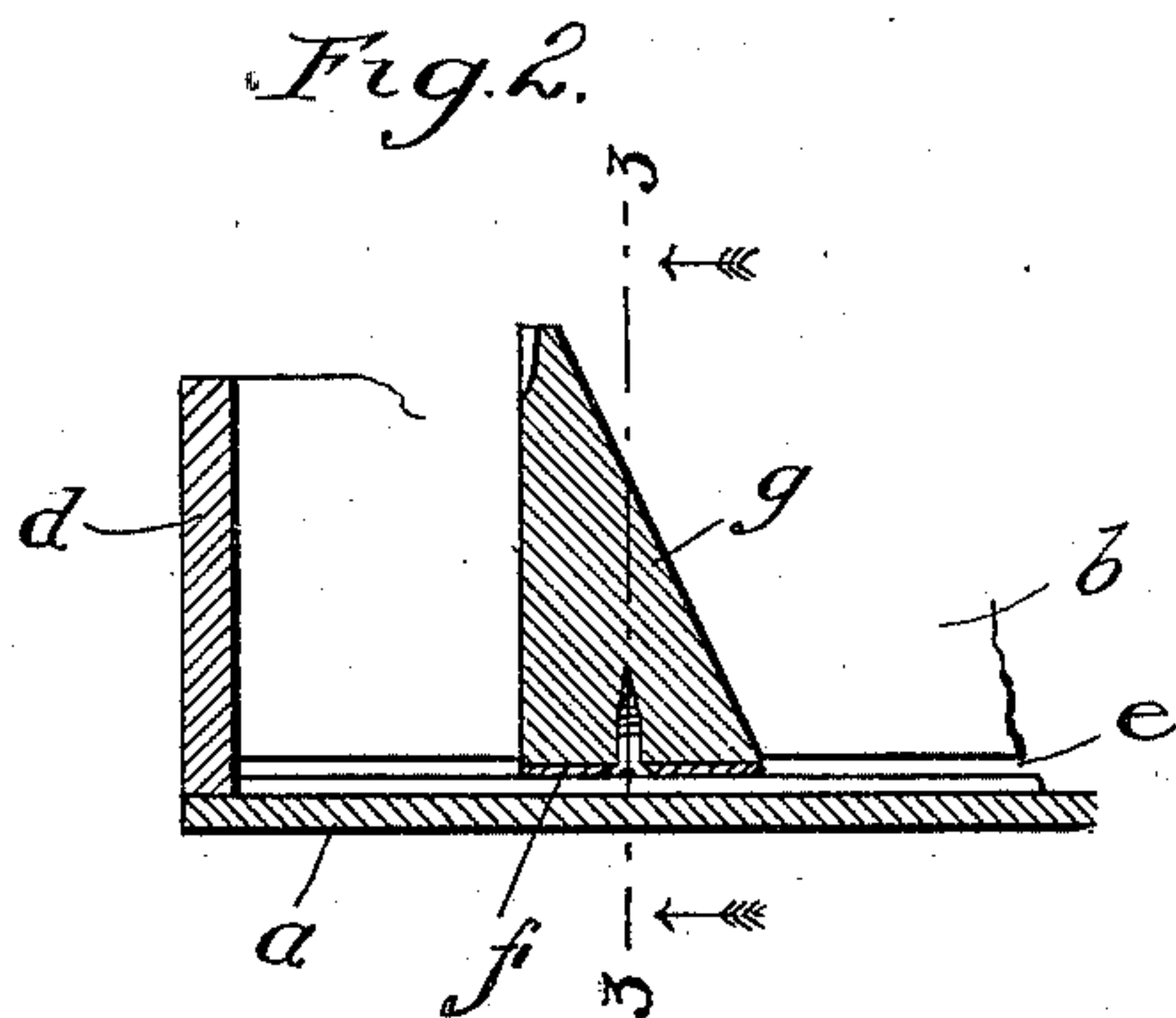
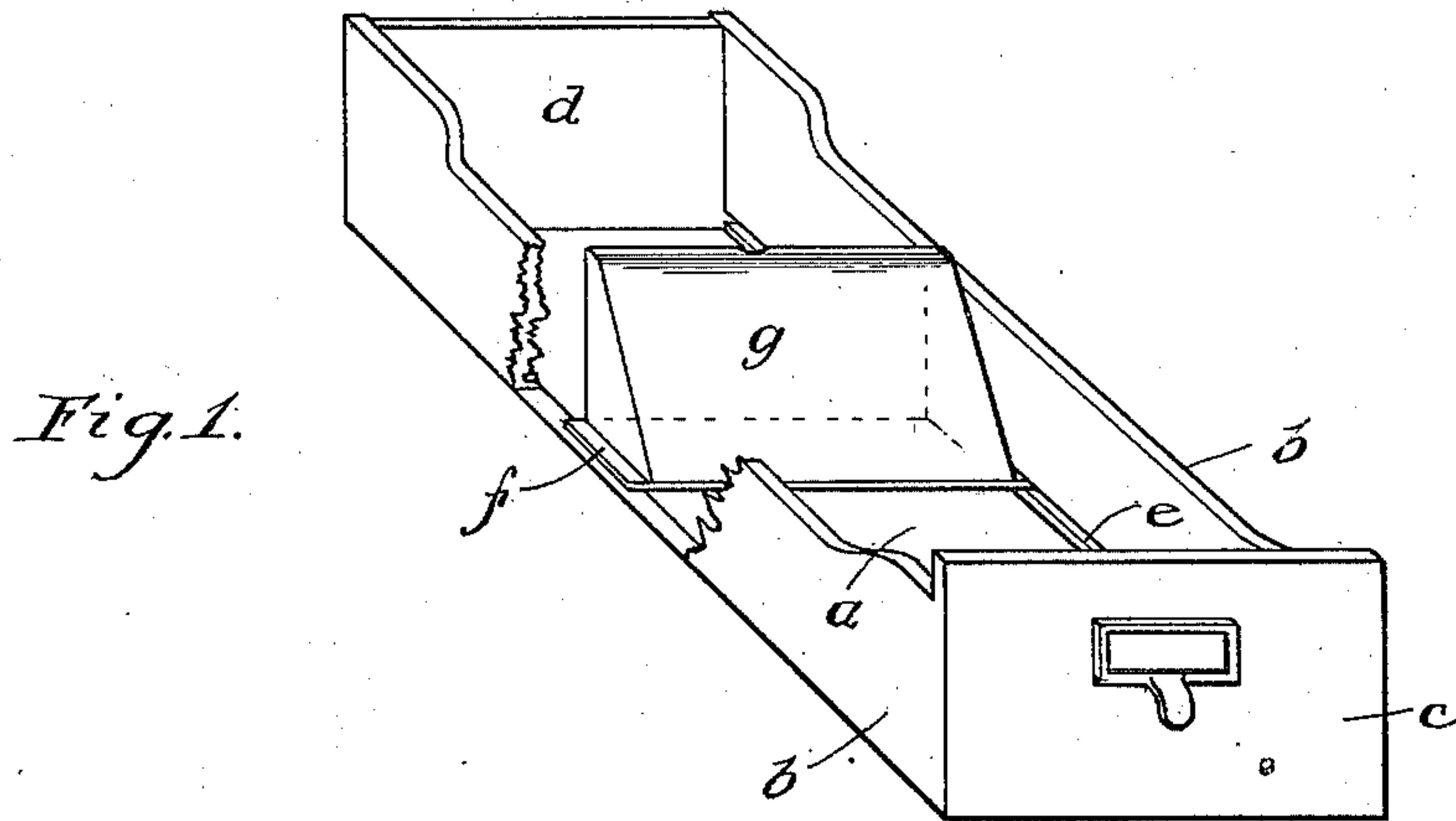
Patented Nov. 12, 1901.

R. A. SIMONSON.
CARD RECEPTACLE.

(Application filed Apr. 27, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses

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2 Sheets—Sheet 2.

Fig. 8.

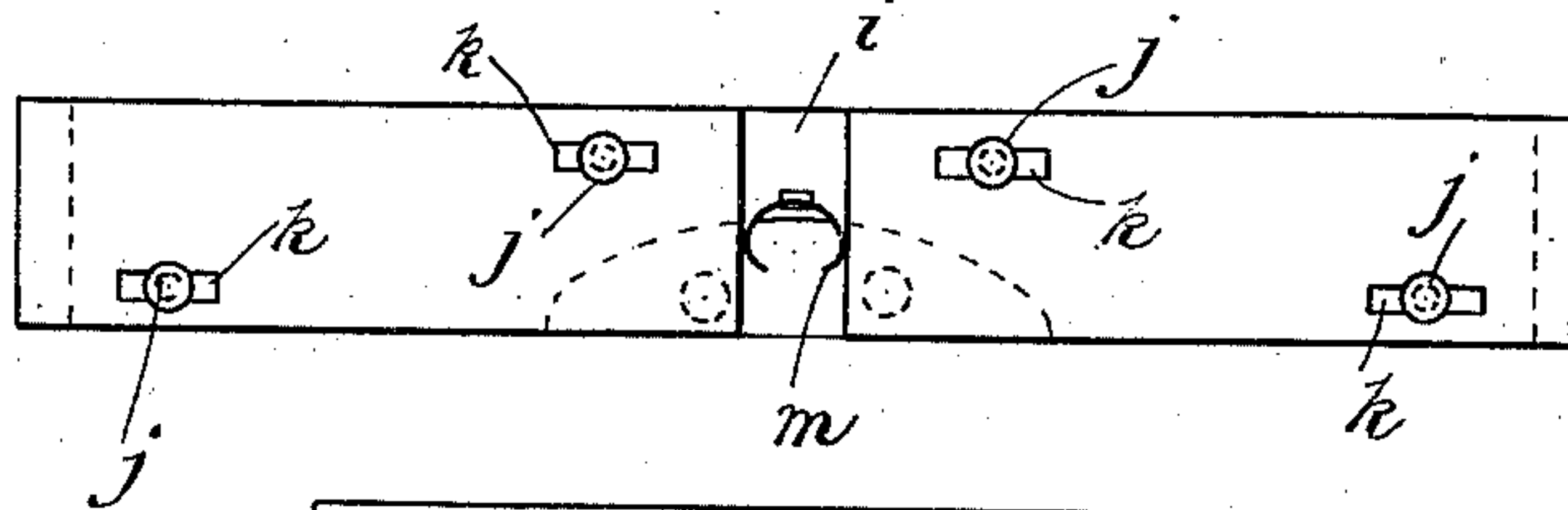


Fig. 9.

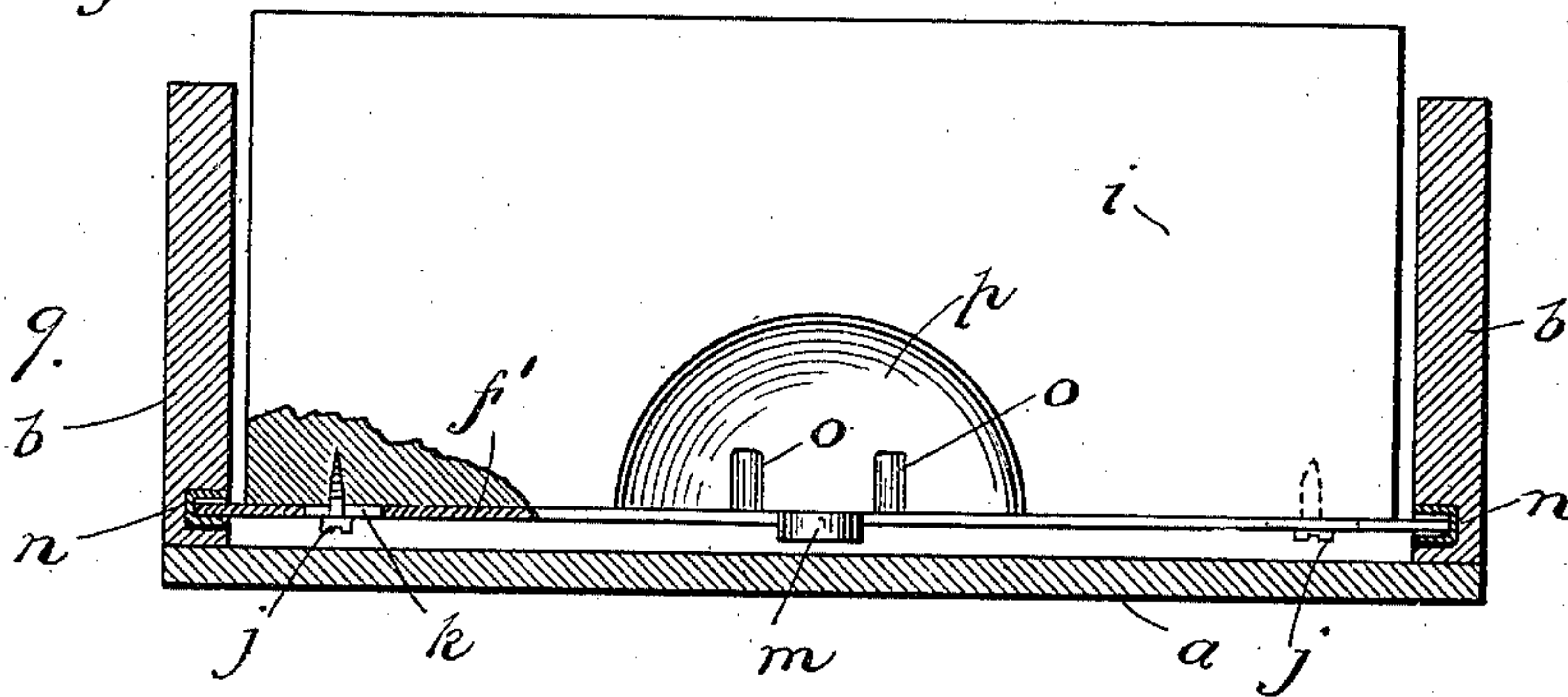


Fig. 7.

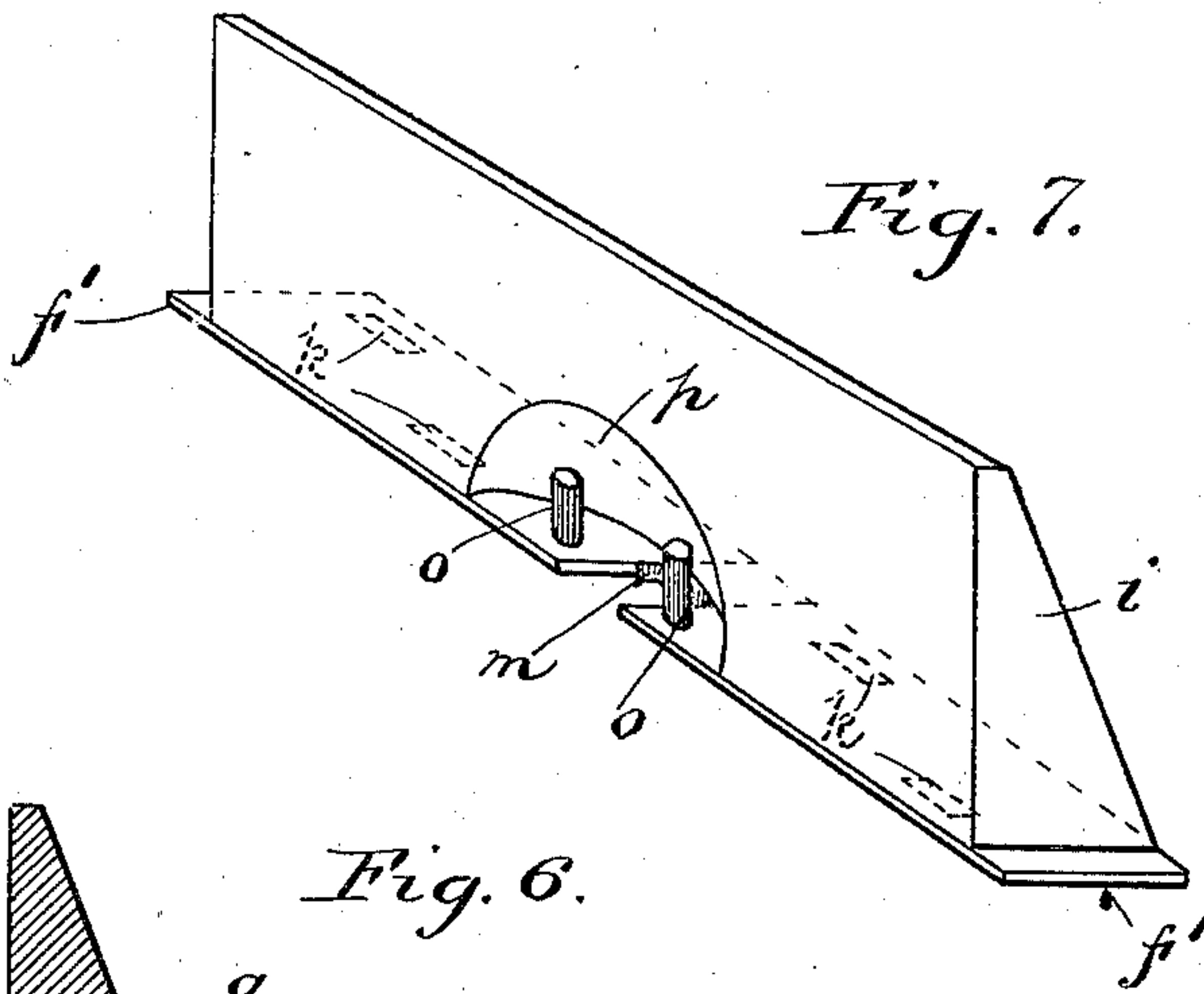
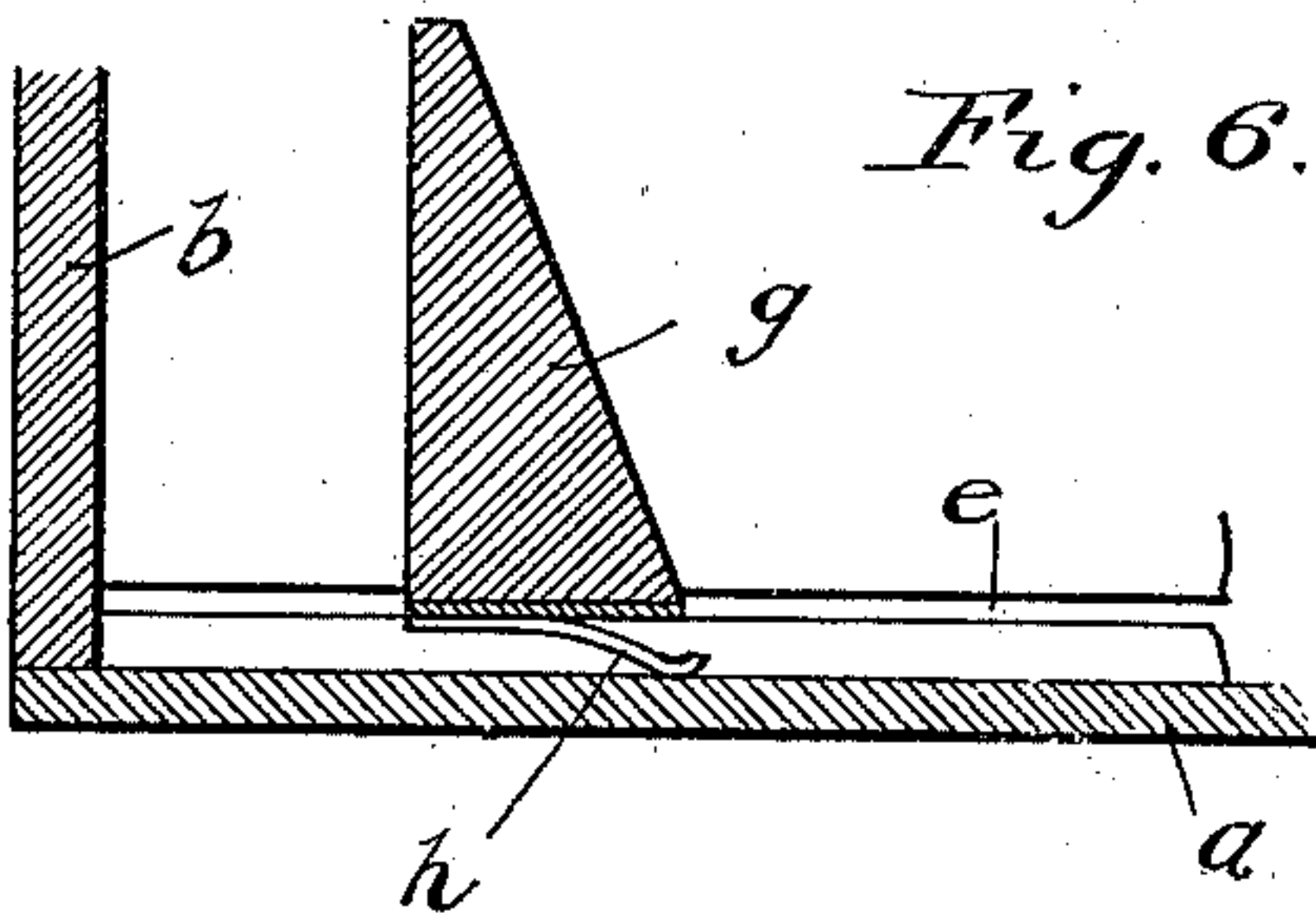


Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

ROGER A. SIMONSON, OF BERWYN, ILLINOIS.

CARD-RECEPTACLE.

SPECIFICATION forming part of Letters Patent No. 686,357, dated November 12, 1901.

Application filed April 27, 1901. Serial No. 57,830. (No model.)

To all whom it may concern:

Be it known that I, ROGER A. SIMONSON, a citizen of the United States, residing at Berwyn, in the county of Cook, State of Illinois, have invented a new and useful Improvement in Card-Receptacles, of which the following is a specification.

My invention relates to card-receptacles, particularly of the class known as "card-catalogues" or "card-indexes." It will be understood by those familiar with such devices that it is desirable that the number of cards may be varied to suit the requirements of the catalogue or index, thereby avoiding the presence of surplus cards. Moreover, for convenience in manipulating the cards it is desirable that they be held in proximity one to another without being crowded too closely together. These desiderata are commonly attained by the employment of a block or stop movable backward or forward in the receptacle to accommodate the number of cards in use. This block or stop will be referred to as the "angle-block;" and it is the object of my invention to provide means whereby said block may be easily and quickly adjusted to the desired position, at the same time avoiding the use of unsightly or cumbersome mechanism and also eliminating the employment of slots or of wearing-pieces in the bottom of the receptacle. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the complete device. Fig. 2 is a vertical sectional view of the block and receptacle taken longitudinally. Fig. 3 is a transverse vertical section of the block and receptacle, taken on the line 3 3, Fig. 2. Fig. 4 is a perspective view of one extremity of the angle-block, showing the projecting extremity of the sole-plate. Fig. 5 is a vertical cross-sectional view of an angle-block, showing a tilting-spring attached thereto. Fig. 6 is an assembly view of the receptacle containing the form of block shown in Fig. 5. Fig. 7 is a perspective view of an alternative form of angle-block having extensible sole-plates. Fig. 8 is a view of the block as shown in Fig. 7 looking from beneath. Fig. 9 is an assembly view taken transversely to the receptacle and showing in position in

said receptacle the form of block shown in Figs. 7 and 8.

Similar letters refer to similar parts throughout the several views.

Referring to Figs. 1, 2, 3, and 4, *a* represents the bottom, *b b* the sides, and *c d* the front and rear walls, respectively, of the card-receptacle embodying my invention. Extending in the sides of the receptacle in a direction parallel to the bottom thereof are the grooves or ways *e e*, opening toward the area within the receptacle and adapted to receive the projecting extremities of the sole-plate *f* of the angle-block *g*. Said angle-block is of the ordinary configuration, having its forward surface slightly inclined to facilitate the fingering of the cards. To the bottom of said block is secured the sole-plate *f*, which consists, preferably, of a thin piece of metal projecting at the extremities beyond said block, so as to travel within said ways or grooves *e*. The width of the angle-block *g* is slightly less than the distance between the sides *b b* of the receptacle in order that said block may travel freely in the direction of the length of the receptacle, but is prevented by the said sides from becoming cocked or cramped in its forward and backward travel. The parts are so arranged and proportioned that said block may travel freely in the direction of the length of the receptacle, being maintained in its proper position in the said receptacle by means of the said sole-plate, the extremities whereof are engaged within the said grooves or ways *e*. When in the operation of the device the cards (not shown) rest against the forward oblique surface of the angle-block *g*, the force of said weight is resolved into two components, whereof one tends to tilt or upset the block. Such tilting or upsetting of the block causes the sole-plate *f* to become cramped between the upper and lower surfaces of the grooves or ways *e*, the resulting friction preventing the travel of said sole-plate and block—that is to say, the weight of the cards themselves acting upon the block prevents the movement of the block lengthwise of the receptacle, thereby maintaining the block in the position to which it has been previously adjusted. When, however, it is desired to readjust the block to ac-

commodate a greater or smaller number of cards, said block is moved by hand in such a manner that the sole-plate is prevented from becoming cramped in the grooves or ways *e*. The cramping effect of the moment of the force due to the weight of the cards acting upon the face of the angle-block to overturn the same may be enhanced or decreased by varying the front to rear dimension of the sole-plate *f*. In the present device the front to rear dimension of said sole-plate is shown to be equal to that of the angle-block; but by diminishing or increasing said dimension a greater or less cramping effect may be attained.

In case the cramping effect due to the weight of the cards alone should in any particular case be insufficient to hold the block at its desired point of adjustment I have shown in Figs. 5 and 6 an auxiliary device for increasing the overturning moment. This device consists of a spring *h*, secured to the under surface of the sole-plate or block in such a manner that the forward extremity of said spring bears against the upper surface of the bottom *a* of the receptacle. Said spring *h* is so arranged that the force thereof tends to rotate or overturn the block *g*, thereby causing the sole-plate *f* to become jammed or cramped in the grooves or ways *e* in the manner hereinabove described.

An alternative construction of the sole-plate is shown in Figs. 7, 8, and 9, in which the friction between the block and the receptacle acts in a lateral direction instead of in a vertical direction, as in the two forms of devices just described. In said alternative form, Figs. 7, 8, and 9, the sole-plate is formed in two sections *f' f'*, parted at a point preferably near the center line of the receptacle. Said sections *f f* are slidably secured to the under surface of the block *i* by means of the screws or pins *j j*, which penetrate through the slots *k k* in said sections *f'* into the said angle-block *i*. This construction permits said sole-plate sections *f'* to move laterally—that is to say, in a direction toward and from the sides *a a* of the receptacle. At a point between the inner extremities of said sections *f' f'* there is secured to said block *i* a spring *m*, so arranged as to act upon the inner extremities of said sections *f f* and cause the same to extend or to project toward the sides *a a* of the receptacle. The form of receptacle is similar to that shown in the above-described forms; but for convenience the grooves or ways are provided with a preferably metallic lining *n*. The spring *m*, acting upon said sections *f*, causes the outer projecting extremities of said sections to make contact with the sides of said linings *n n*, the resulting friction preventing the motion of said block *i* in the direction of the length of said receptacle. In order to release the pressure of the sections *f' f'* against the sides of the linings *n n*, there is provided in each of said sections

a post *o*, which may be grasped by the fingers of the operator to force said sections toward each other against the spring and out of contact with the sides of the linings *n n*. For convenience in manipulating said posts *o o* the block *i* is provided with a suitable recess *p*.

In the operation of the last-described form when it is desired to adjust the block within the receptacle the posts *o o* are forced toward each other, thereby partially withdrawing the outer extremities of the sections *f'* from the linings *n*, or at least sufficiently to eliminate the friction between said sections and said linings. The block is then free to be moved longitudinally of the receptacle, and when it has reached the selected point of adjustment posts *o o* are released and the spring *m* forces said sections *f' f'* against the linings *n*, the resulting friction preventing the further motion of said block.

It is obvious that the cramping effect of the sole-plate sections *f'*, due to the weight of the cards, is also present in the last-described form of device.

In the present device by the employment of grooves or ways in the side of the receptacle the means for holding the block are hardly noticeable to a casual observer. Unless the spring *h* is employed the block makes contact at no points with the bottom of the receptacle, and as a result no attachment or mechanism secured to the bottom of the receptacle is required. Moreover, by this construction the slotting or cutting away of the bottom of the receptacle is avoided, the bottom of the receptacle in my device being therefore dust-tight.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a card-index file, the combination of a card-receptacle having grooves in the sides near the bottom thereof, an angle-block, a sole-plate on the bottom of said block, projecting into the grooves in said receptacle and a spring mounted beneath said sole-plate for tilting said block, to thereby cause friction between the sole-plate projections and the top and bottom surfaces of the grooves in said receptacle.

2. In a card-index file, the combination of a card-receptacle having grooves in the sides near the bottom thereof, an angle-block, a pair of metallic strips upon the bottom of said block, said strips being slidably mounted on said block and projecting beyond the ends thereof for entering the grooves in said receptacle, and a spring acting upon said strips to force the same apart toward the sides of said receptacle.

3. In a card-index file, the combination of a card-receptacle having grooves in the sides near the bottom thereof, an angle-block, a pair of metallic strips having slots extending lengthwise therein, pins or similar devices for penetrating said strips to slidably secure the same to the bottom of said angle-block, said

strips projecting beyond the extremities of
said block to enter the grooves in the sides of
the receptacle, a spring secured to said block
for tilting the same, a second spring acting
5 upon said metallic strips to force the same
laterally toward the sides of the receptacle,
and posts or handles secured to said metallic

strips whereby said strips may be forced to-
ward each other to be released from lateral
pressure against the sides of the receptacle.

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