

916,307.

2 SHEETS—SHEET 1.

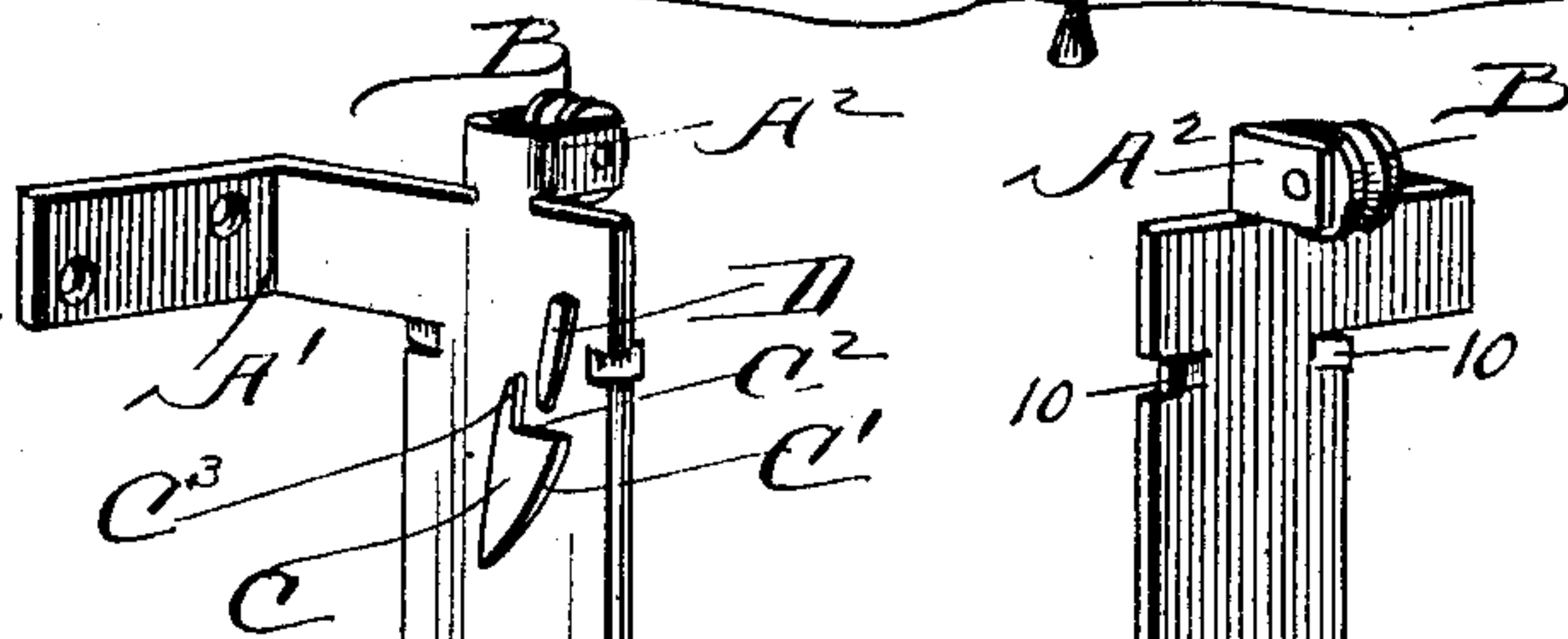
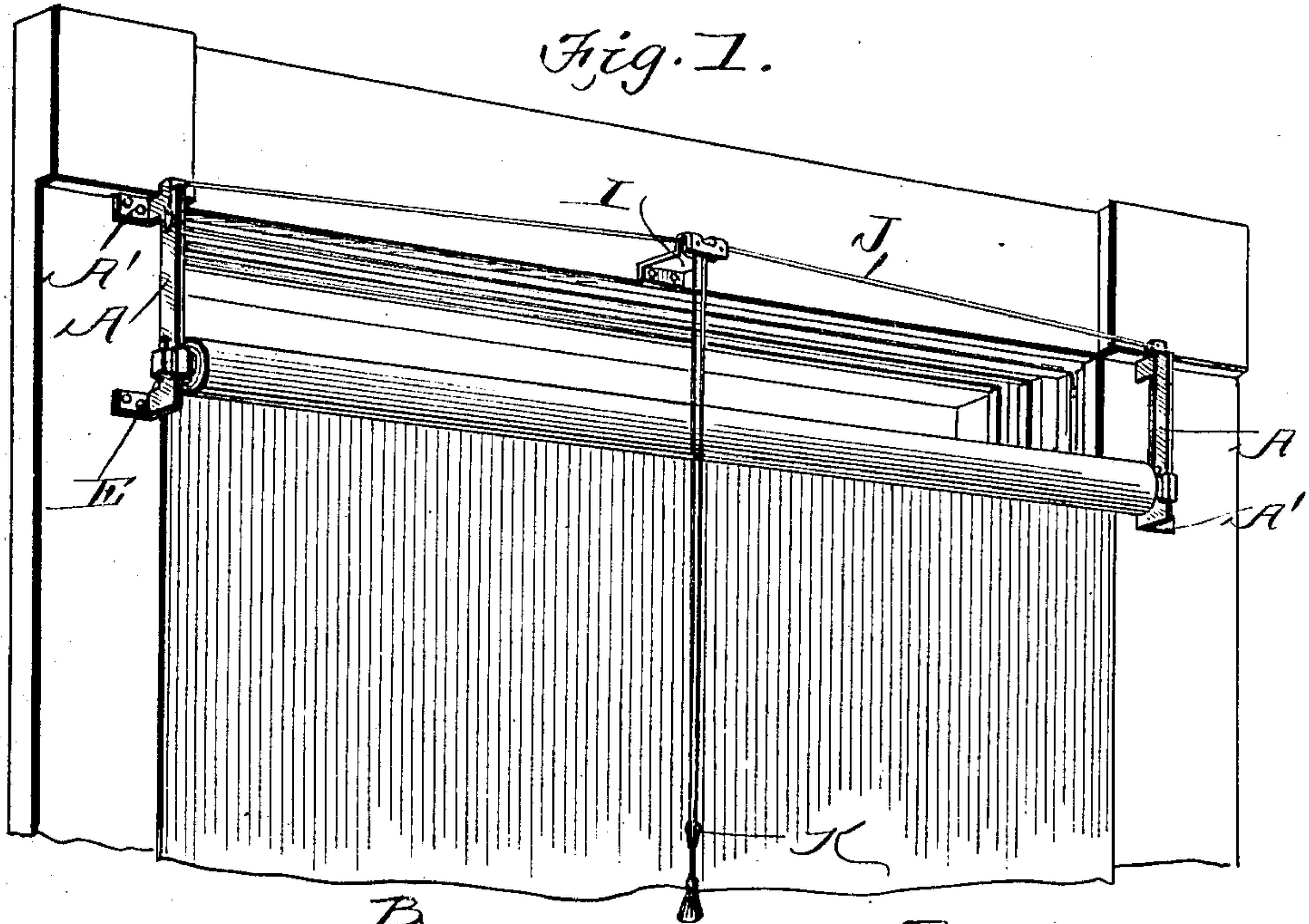
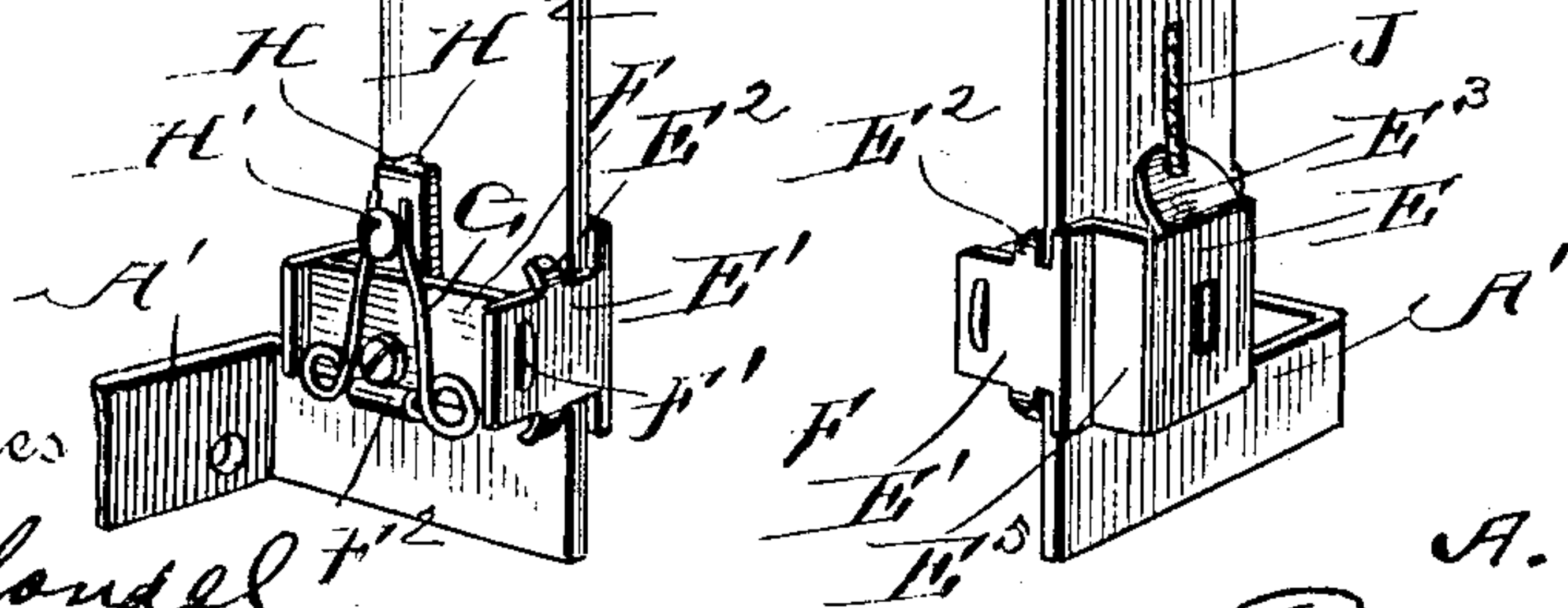


Fig. 3.

Fig. 2



Witnesses

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CURTAIN-FIXTURE.

No. 916,307.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed May 19, 1906. Serial No. 317,760.

To all whom it may concern:

Be it known that I, ALEXANDER HANSEN, a citizen of the United States, residing at Dorchester, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Curtain-Fixtures, of which the following is a specification.

This invention relates to curtain fixtures and more particularly to vertically adjustable curtain brackets, the object being to provide a fixture with adjustable brackets so that the curtain can be lowered out of the way to enable the room to be thoroughly ventilated.

Another object of my invention is to provide means for locking the brackets without any danger of the brackets being pulled down when the curtain is operated.

Another object of my invention is to provide means for operating the brackets so that both can be operated at the same time, thereby preventing the same from wedging when allowed to drop.

With these objects in view, the invention consists of the novel features of construction, hereinafter fully described and pointed out in the claims.

In the drawings forming a part of this specification:—Figure 1 is a perspective view of my improved fixture showing it attached to the window frame, and the curtain in place. Fig. 2, is an inside perspective view of one of the shade bracket supports. Fig. 3, is an outside perspective view of one of the shade bracket supports. Fig. 4, a detail side elevation of my improved support showing the bracket arranged thereon. Fig. 5, a detail side elevation of my improved support showing the bracket in engagement with the locking member. Fig. 6, a detail side elevation of my improved support showing the shade bracket locked in position. Fig. 7, a section taken on the lines 7—7 of Fig. 4. Fig. 8, a section taken on the lines 8—8 of Fig. 5. Fig. 9, a section taken on the lines 9—9 of Fig. 6. Fig. 10, a detail vertical sectional view of the support and bracket. Fig. 11, a perspective view of the locking member of my improved bracket detached. Fig. 12, a plan view of the blank from which the bracket is made. Fig. 13, a side view of the cord support, and Fig. 14, a detail sectional view of the same.

In the drawing A indicates a pair of plates

having outwardly extending angled perforated arms A' at their top and bottom, through which screws are adapted to pass and secure the plate to the window frame. Projecting inwardly from the top of each plate are spaced apertured ears A², between which grooved pulleys B are mounted, for the purpose hereinafter described. A plate C is secured on the outside of each of the plates A adjacent its upper end, and has a cam-edge C', a square upper edge C², having an upwardly projecting pointed lug C³, formed at one end thereof. A pointed lug D is secured to each of the plates A over the plate C, the point of said lug extending down below the point of the lug C³. The edges of the plate A are split and punched inwardly adjacent the upper arms forming stop lugs for the purpose hereinafter described.

The bracket is formed out of a plate E having reduced slotted ends E', provided with tongues E², and apertured ears E³ and being bent on the dotted lines E⁴, to form a casing shown at E⁵, having guide-arms adapted to work on the edge of the plate A, and be securely held thereon by the tongues E², which are bent inwardly forming guides. A plate F having reduced ends F' is adapted to fit in the slots of the ends E' and to be secured between the same. The plate F, is provided with a tongue bent to form an eye F² in which the wire spring G is secured, the ends of the springs bearing against a screw H', secured in the arm H, pivoted on the under side of the plate F. The arm H is provided with an inwardly projecting lug H² at its end for the purpose hereinafter described.

One of the casings is provided with a round opening and the other with a slot adapted to receive the ordinary shade roller.

A bracket I is secured centrally to the window frame provided with spaced grooved pulleys I', over which the ends of the cord J are adapted to pass, and extend over the pulleys B, and have their ends connected to the apertured ears E³. A ring K carrying a tassel is mounted on the cord J.

The operation of the device is as follows:—The stationary members or fixtures A are secured to the window casing, and the shade roll is mounted to the movable members E by inserting the ends thereof in the slots in said members. When it is desired to raise the curtain from the position shown in Fig. 1,

the operator pulls upon the cord J and moves the brackets or members E upward until the members E engage the fixed stops or lugs 10. On the upward movement of each movable member or bracket E, the lug H² engages the cam edge C' of the cam plate C, which latter is located with relation to the normal position of the lug H² so as to insure said engagement, (see Fig. 4). After the lug H² has engaged the cam edge C', further upward movement of the bracket E causes the cam C through its edge C' to turn the arm H and place it under the tension of one arm of the spring G (see Fig. 5), which tension acts to snap the lug H² over against the lug D as soon as the bracket E has been elevated sufficiently to clear the upper point of the cam edge C', and this takes place in practice when the member E engages the fixed stops 10. The lug D serves as a stop to prevent the spring G from throwing the lug H² over and beyond the cam C and to insure the said lug dropping down on the upper edge of the cam plate when the cord J is released. The curtain has now been raised to its highest point and as soon as the operator releases the cord J, the curtain drops by gravity a slight distance until the lug H² rests upon the upper edge C² of the cam plate C, at which time the said lug is below the end of the lug D and is free to be forced laterally by the arm of the spring G, which is still under tension, until the lug H² meets the projection C³ on the cam plate, against which it is forced by the tension of the spring arm. This position is represented in Fig. 6, and the curtain is thus held in its raised position. When it is desired to lower the curtain, it becomes necessary to first raise it, that is, until the lug H² has cleared the projection C³, at which time the right hand spring arm, viewing Figs. 4 to 6, has moved the lug H² to its central position on the other side of the projection C³. The lug H² and the curtain are now free to be lowered, and on the downward movement of the curtain, the left hand spring arm is placed under tension by the cam plate C, so that when the lug H² reaches the lower end of the cam plate, it is moved laterally toward the right, viewing Fig. 4, so as to bring the lug H² into position to again engage the edge C' of the cam plate on the next upward movement of the curtain.

From the above description, it will be seen, that when the curtain is left in its raised position, the lug H² engages the transverse edge or upper wall C² of the cam plate and is held under spring pressure against the projection C³, so that in order to lower the curtain, it is first necessary to raise the same slightly before it can descend; that is, it is necessary to raise the curtain until the lug H² clears the projection C³ on the cam plate. It will also be observed, that the cam plate C places the lug H² under reverse spring ten-

sion on the downward movement of the curtain, so as to insure the said lug being restored to its normal position, that is, to a position in which it will engage the edge C' on the upward movement of the curtain. In the present instance, the spring-actuated arm H is carried by the bracket E and moves with the curtain, while the cam plate C and its coöperating lug D are fixed to the plate or bar A, but I do not desire to limit my invention to this particular location of parts.

From the foregoing description, it will be readily seen that I have provided very novel means for raising and lowering the curtain roller, so that it can be readily dropped so that the room can be ventilated without raising the curtain.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. In a device of the kind described, in combination, stationary members capable of being secured to the window casing, movable members slidable on said stationary members and capable of supporting a curtain, cam plates on said stationary members, spring-actuated arms on the movable members and coöperating with said cam plates to hold the curtain in its raised position and prevent its downward movement until said curtain is further moved in an upward direction, and means connected to said movable members for raising the same on said stationary members substantially as described.

2. In a device of the kind described, in combination, stationary members capable of being secured to the window casing, movable members slidable on said stationary members and capable of supporting a curtain, cam plates on said stationary members, spring-actuated arms on the movable members coöperating with one edge of said cam plates on the upward movement of said curtain to place said arms under spring tension tending to move them laterally in one direction, lugs against which the said spring actuated arms are moved when the said arms clear the upper edges of the cam plates, and which compel the curtain to be lowered in order to permit the said arms to move laterally in engagement with the upper edges of said cam plates, lugs to limit said lateral movement of said arms and compel the curtain to be raised to permit further lateral movement of said arms into a position to permit descent of the curtain, and springs to cause the said arms to engage the opposite side of the cam plate on the descent of the curtain, said cam plate placing the said arms under spring tension to move them into position to engage the cam plates on the upward movement of the curtain, and means connected with said movable members for raising the same on said stationary members substantially as described.

3. In a device of the kind described, in combination, stationary members capable of being secured to the window casing, movable members slidable on said stationary members and capable of supporting a curtain, a cam on one of said parts, a spring-actuated device on the other of said parts and cooperating with said cam to hold the curtain in its raised position and prevent its downward movement until said curtain and its supporting member are further moved in an upward direction, and means cooperating with said cam to maintain spring pressure on said cooperating device until said curtain has been moved high enough to release the spring pressure and permit the said device to be moved laterally to enable the curtain to descend, and means connected with said movable members for raising the same on said stationary members substantially as described.

4. In a device of the kind described, in combination, a stationary member capable of being secured to the window casing, a movable member slidable on said stationary member and capable of supporting one end of a curtain, a cam plate on one of said members provided with a projecting lug, a lug cooperating with the lug on the cam plate to form a passage, a device on the other of said members cooperating with said cam-plate and lugs, springs to move said device in opposite directions, one of said springs being rendered effective by the cam plate to move the said device laterally in one direction and into line with the passage formed by said lugs when the curtain is partially raised and to move said device further laterally in the same direction when the curtain is further raised, and the other of said springs being rendered effective by the cam plate on the downward movement of the curtain to move the said device laterally in the opposite direction to

restore it to its normal position, substantially as described.

5. In a device of the kind described, the combination with supporting plates provided with angled arms adapted to be secured to the window frame, and pulleys carried by said plates, of cam plates secured to the outer sides of said supporting plates and provided with cam edges and with straight upper edges having upwardly projecting lugs, lugs formed on said supporting plates above the cam plates and separated therefrom and from said upwardly projecting lugs, brackets provided with openings to receive the shade roller and slidably mounted on said supporting plates, spring actuated arms mounted on said brackets provided with projecting lugs adapted to engage the cam edges of said plates and the lugs on said supporting plates after they have left the said cam edges, a bracket provided with a pulley secured to the frame between the sliding brackets, and a cord passing over said pulleys, for the purpose described.

6. In a device of the kind described, the combination with supports having cam-shaped plates provided with upwardly extending lugs secured thereon, of lugs secured to said supports over said cam-shaped plates, brackets provided with openings to receive the shade roller slidably mounted on said supports, arms pivotally mounted on said brackets having inwardly projecting lugs at their ends, springs secured to said brackets and bearing against said arms, and a cord connected to said sliding brackets to effect movement of the same in one direction, for the purpose specified.

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Witnesses:

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