

J. Jeffreys,

Inside Blinds,

N^o 42,438.

Patented Apr. 19, 1864.

Fig. 3.

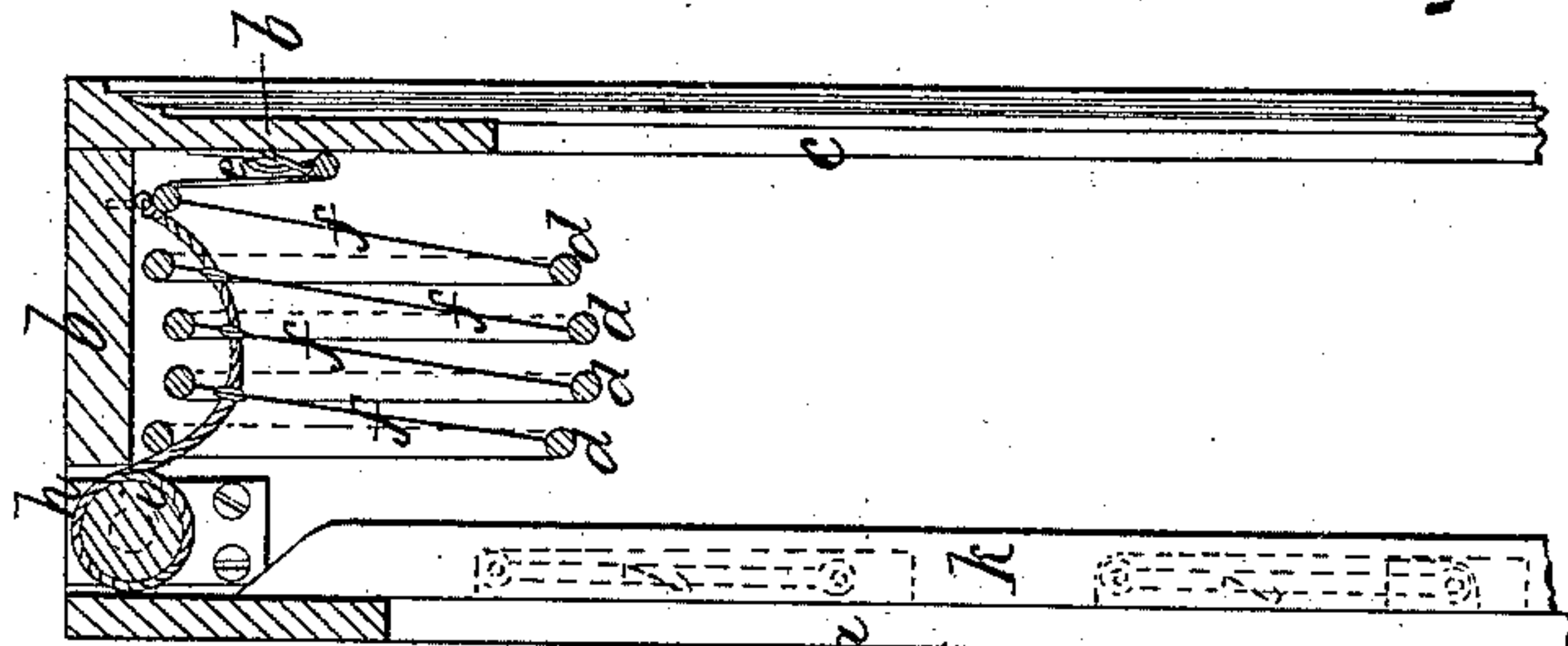


Fig. 2.

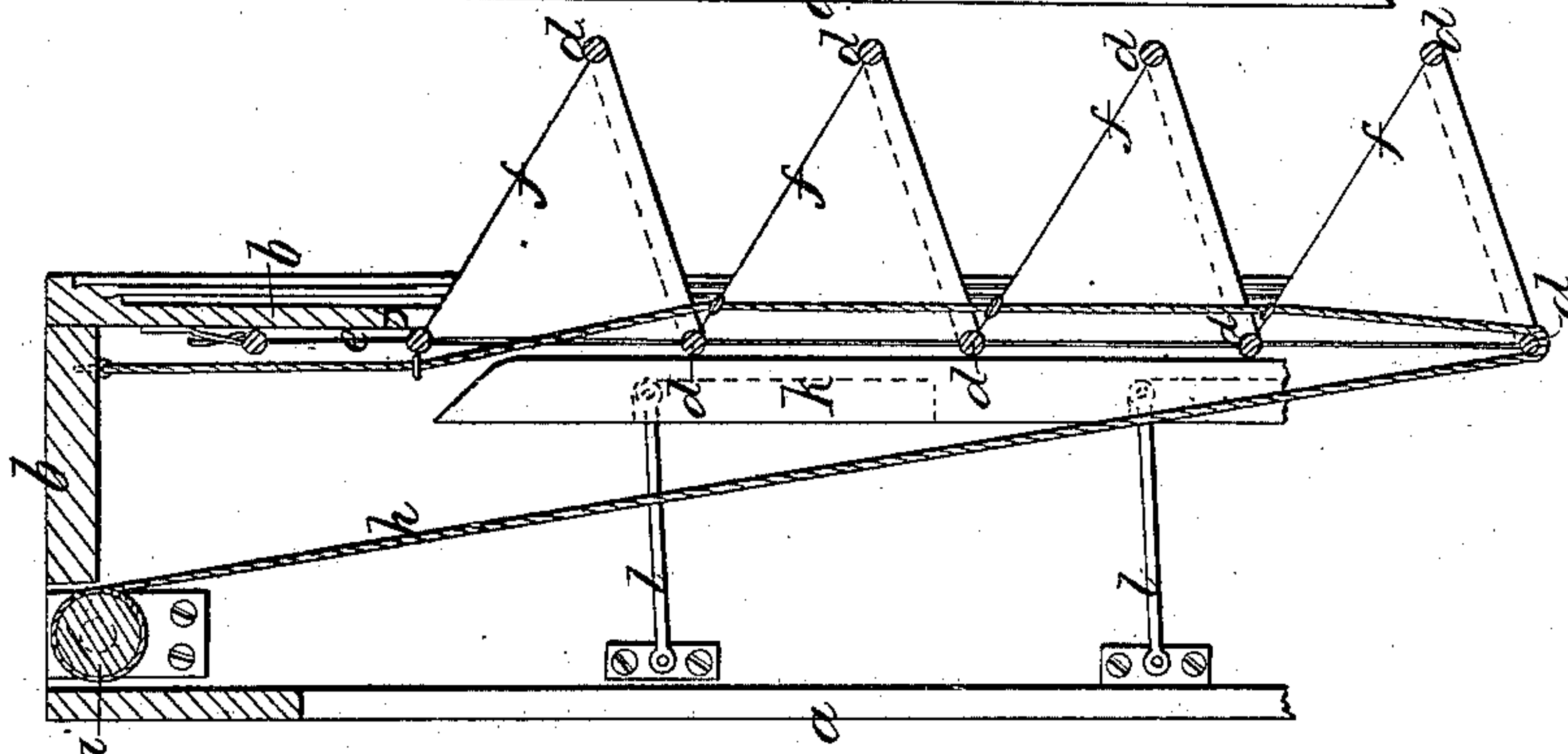
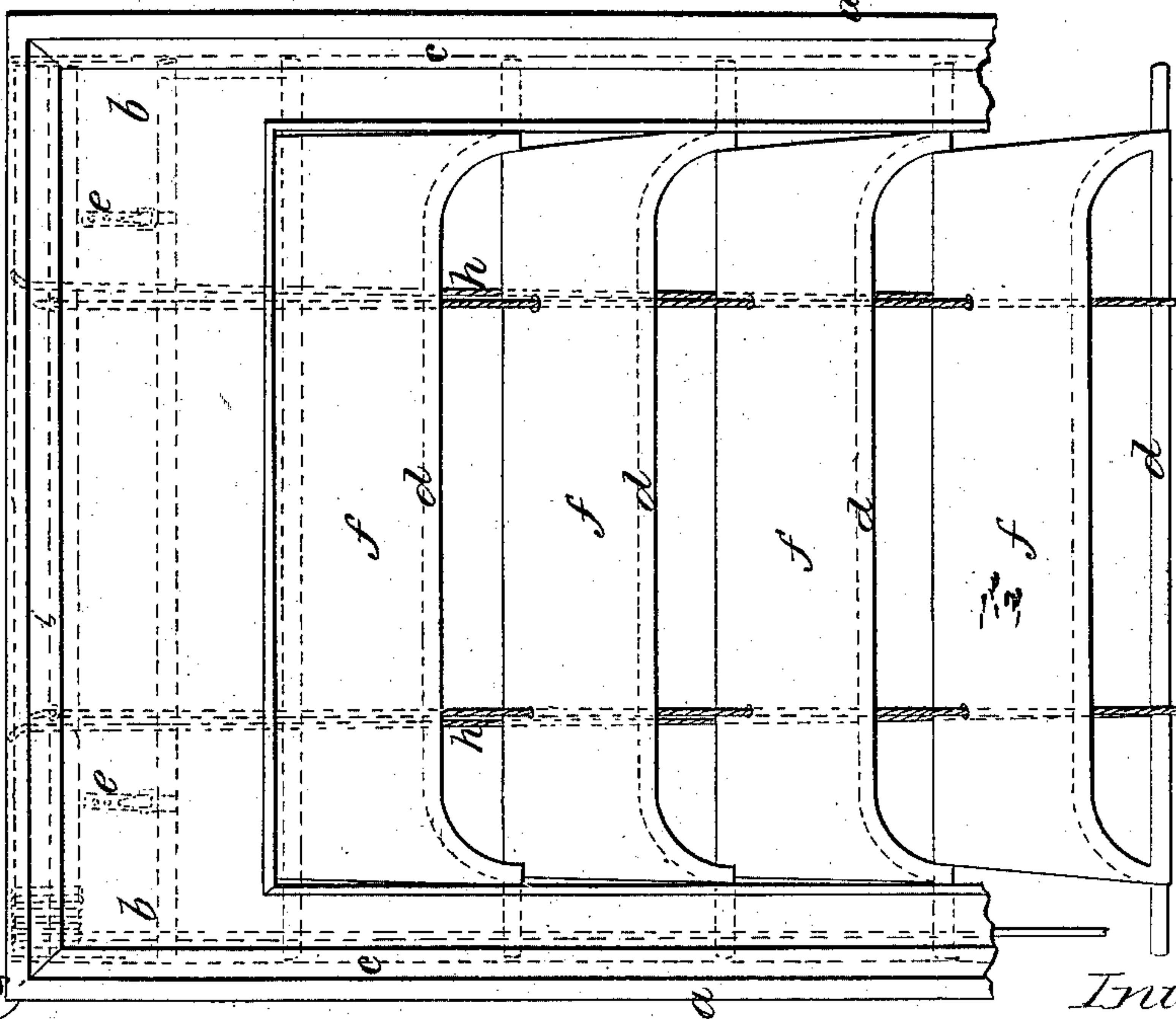


Fig. 1.



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UNITED STATES PATENT OFFICE.

JULIUS JEFFREYS, OF UPPER NORWOOD, COUNTY OF SURREY, ENGLAND,
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IMPROVED SUN-BLIND.

Specification forming part of Letters Patent No. 42,438, dated April 19, 1864.

To all whom it may concern:

Be it known that I, JULIUS JEFFREYS, of Upper Norwood, in the county of Surrey, England, esquire, a subject of the Queen of Great Britain, have invented or discovered new and useful Improvements in Sun-Blinds; and I, the said JULIUS JEFFREYS, do hereby declare the nature of the said invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement thereof—that is to say:

This invention has for its object improvements in sun-blinds. For this purpose I employ a series of frames made of wire or other suitable material. These frames are suspended by webs or straps from a blind-case fixed exterior to the window to which the blind is fitted. The suspending webs or straps are so placed and the construction of the blind is so arranged that the metal frames may hang (when the blind is down) horizontally or tilting upward at their outer edge—viz., that part of the frame farthest from the window. The inclination, however, may be varied. Pieces of canvas or other fabric of suitable form and texture are attached to the outer edge, and the two sides of each of the frames and the piece of canvas or fabric so attached to either of the frames is also secured to the inner edge of the frame next above it, except in the case of the highest frame, and in this case it is attached to a wire or a metal tube carried by the suspending cloth or fabric at the top of the blind, which cloth is supported by the straps or webs above referred to. The pieces of canvas or fabric are thus stretched diagonally from frame to frame, while the top cloth hangs vertically. In order to raise the blind, cords are employed. They are each attached at one end to the blind-case or a lath or batten screwed up under the head or top of the blind-case. They then pass downward in front of the inner edge of each of the frames, and afterward they return upward at the back of all the frames to a roller fixed in the blind case or on the lath above named, or they pass at once over pulleys fixed in the blind-case without the intervention of any roller. By winding up or drawing up these cords the frames will be in succession lifted by their inner edges, and will thus be thrown into a vertical position, and when they are fully raised they

enter the top of the blind-case, by which when out of use they will be sheltered from weather. This blind-case need not project far beyond the front of the window, as the frames being thrown into a vertical position occupy much less space than they would if raised while still horizontal. The roller on which the cords are wound may be a spring-roller, such as is ordinarily used in spring-blinds, the roller having a cord on it by pulling which the roller may be turned against the action of the spring and so as to unwind the blind-cords and lower the blind, and by releasing the cord above mentioned the spring of the roller will cause it to revolve in the contrary direction and to raise the blind. The roller-cord may, if desired, be led through the window-frame and into the room. In some cases I substitute plates of metal or glass for the canvas-covered frames. Also when making blinds of such plates of metal or glass I sometimes fit them with spherical ends of metal stamped or formed separate, and afterward secured to the plates.

The blind-case in which the blind works up and down is made of wood or metal, and has a slip or strip of wood or metal down the sides at their back and front edges, so that the inner part of the sides have a wide groove for the blind to work in much like an ordinary Venetian blind-case, but I apply to this case a contrivance for keeping the blind firm from shaking in the wind, and I also use it for keeping the ordinary Venetian blinds from shaking in the wind. My invention for this purpose consists in attaching a strip or batten or fillet of wood or metal of suitable form by means of jointed or hinged pieces of metal to the fixed strip of wood or metal running down the inner edge of blind-case, and which fixed strip forms the inner or back portion of the groove referred to above. The movable strip of wood works on the hinged metal pieces and falls back against the fixed back slip to leave room in the groove for the blind to ascend or descend, and when the blind is down or in use the said movable slip may be pushed forward so as to jamb or press both ends of the blind firmly against the front strip fixed on the front edge of the sides of the blind-case. By this means the blind is fixed very firmly from shaking in the wind. I will proceed to describe the drawings hereunto annexed.

In the drawings, Figure 1 is a front view of a sun-blind constructed according to my invention. Fig. 2 is a transverse section of the same. Fig. 3 is a transverse section showing the position of the blind when raised.

a a is the window with its frame.

b is the blind-case at the top of the window, and *c c* are the strips or fillets of wood or metal, one on each side of the blind case.

d d are frames of iron wire or iron tubes, galvanized, tinned, painted, or japanned.

e e are suspending cords attached to the inner edges of these frames, and also at their upper ends to the case *b*, as is shown.

f f are pieces of canvas or fabric stretched on the frames. *h h* are the lifting-cords. They are attached at one end to the blind-case, and they pass down through eyes in the canvas or fabric in front of the inner edges of the frames *d d*. They then ascend to the top of the case and are there attached to the roller *i*, which may be a spring roller, such as above described, and the construction of which is well understood by blind-makers, or an ordinary roller with a cord round it to cause it to revolve to draw up the blind may be employed. The weight of the

blind will be sufficient to cause it to descend when this cord is released.

k k are fillets or strips of wood which are brought forward by means of the hinged metal pieces *l l*, which cause them to press against the ends of the frames *d d*, as shown in Fig. 2, so as to hold them firmly against the front fixed strip or fillet of the blind-case above described, or, where Venetian blinds are used, such fillets may be used to cause the laths to press against the front fixed strips or fillets.

Having thus described the nature of my invention and the manner of performing the same, I would have it understood that what I claim is—

The combining of the parts *c d e f h i* in a case, *a b*, substantially as above described, and combined therewith or with ordinary Venetian blinds of the parts *h l*, substantially as described.

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