

(No Model.)

J. W. SHAW.  
SKYLIGHT COVER.

No. 351,533.

Patented Oct. 26, 1886.

Fig. 1.

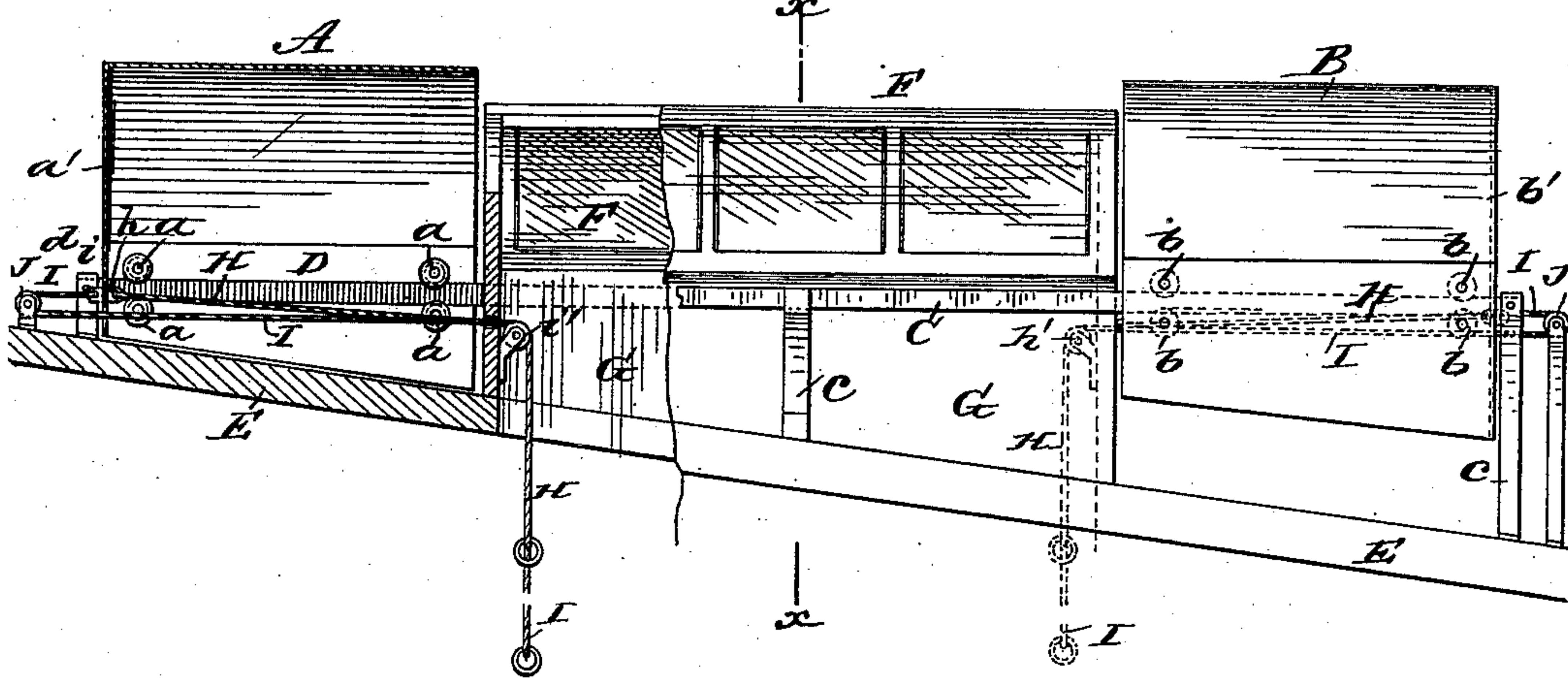


Fig. 2.

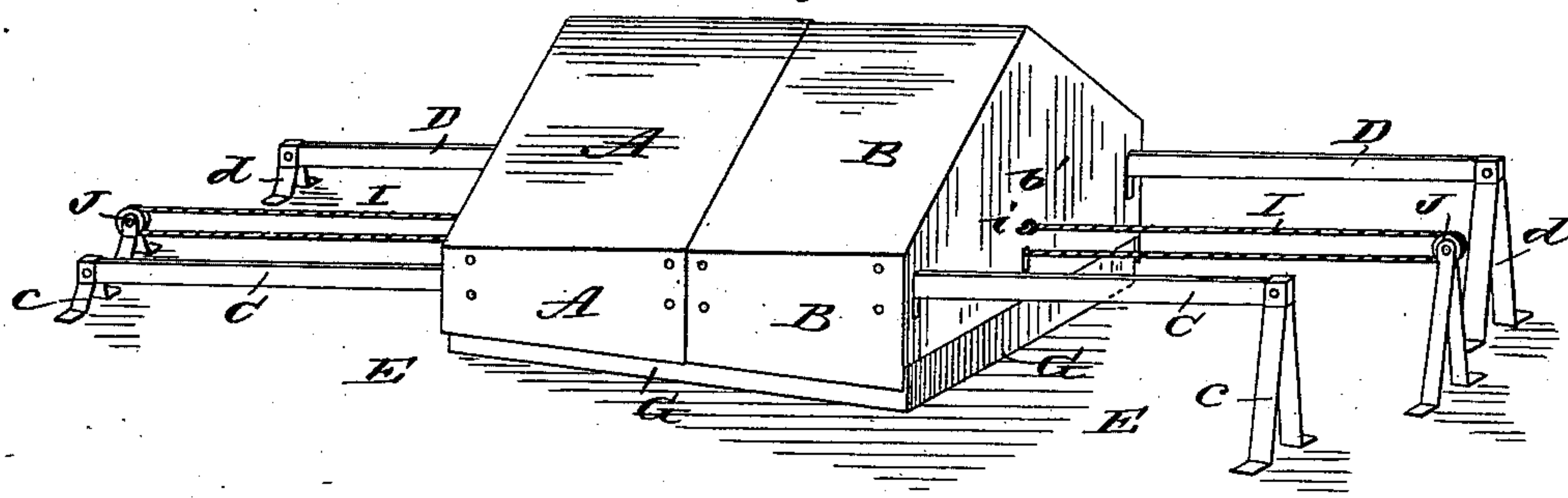


Fig. 4.

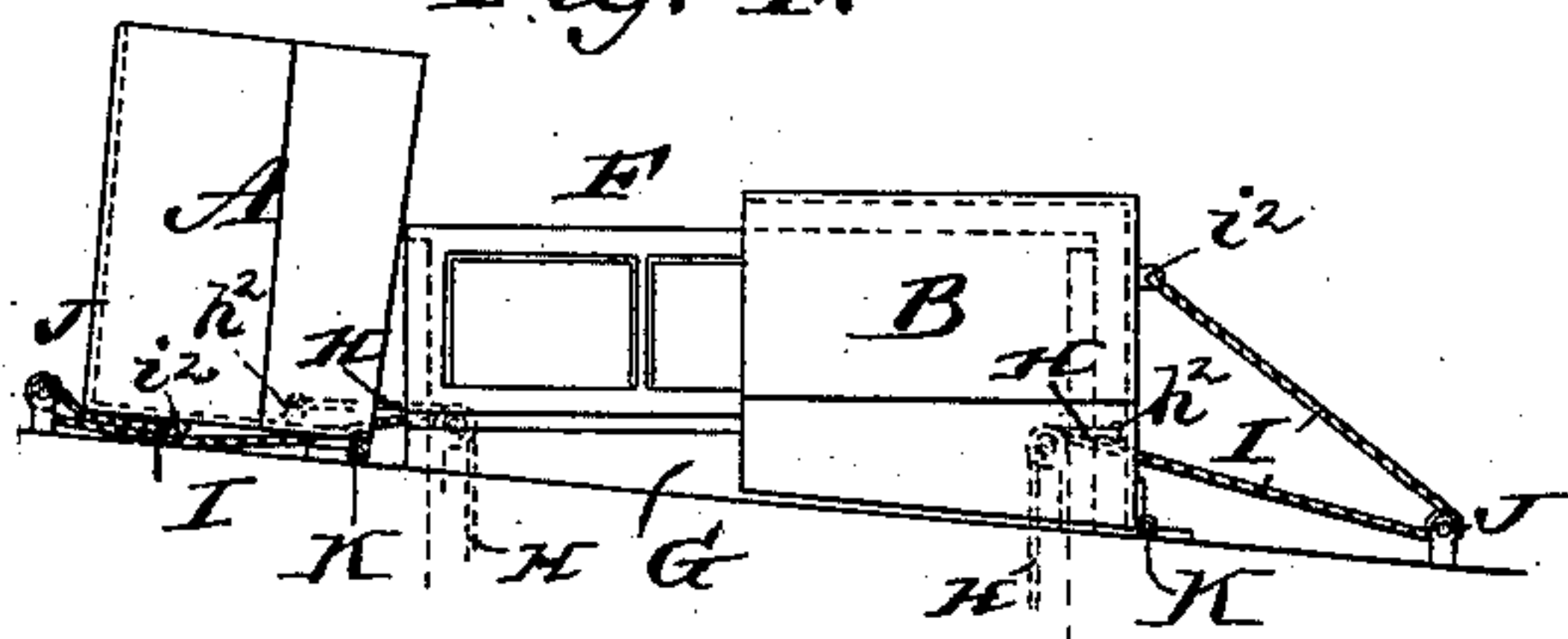


Fig. 5.

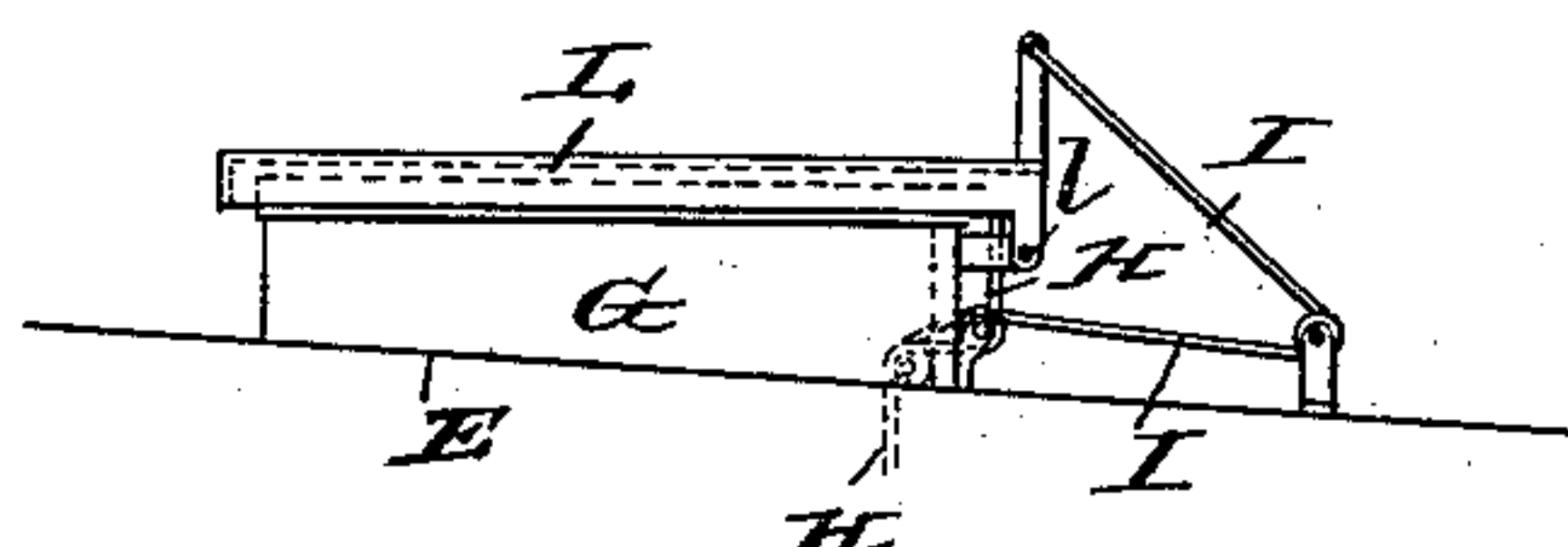
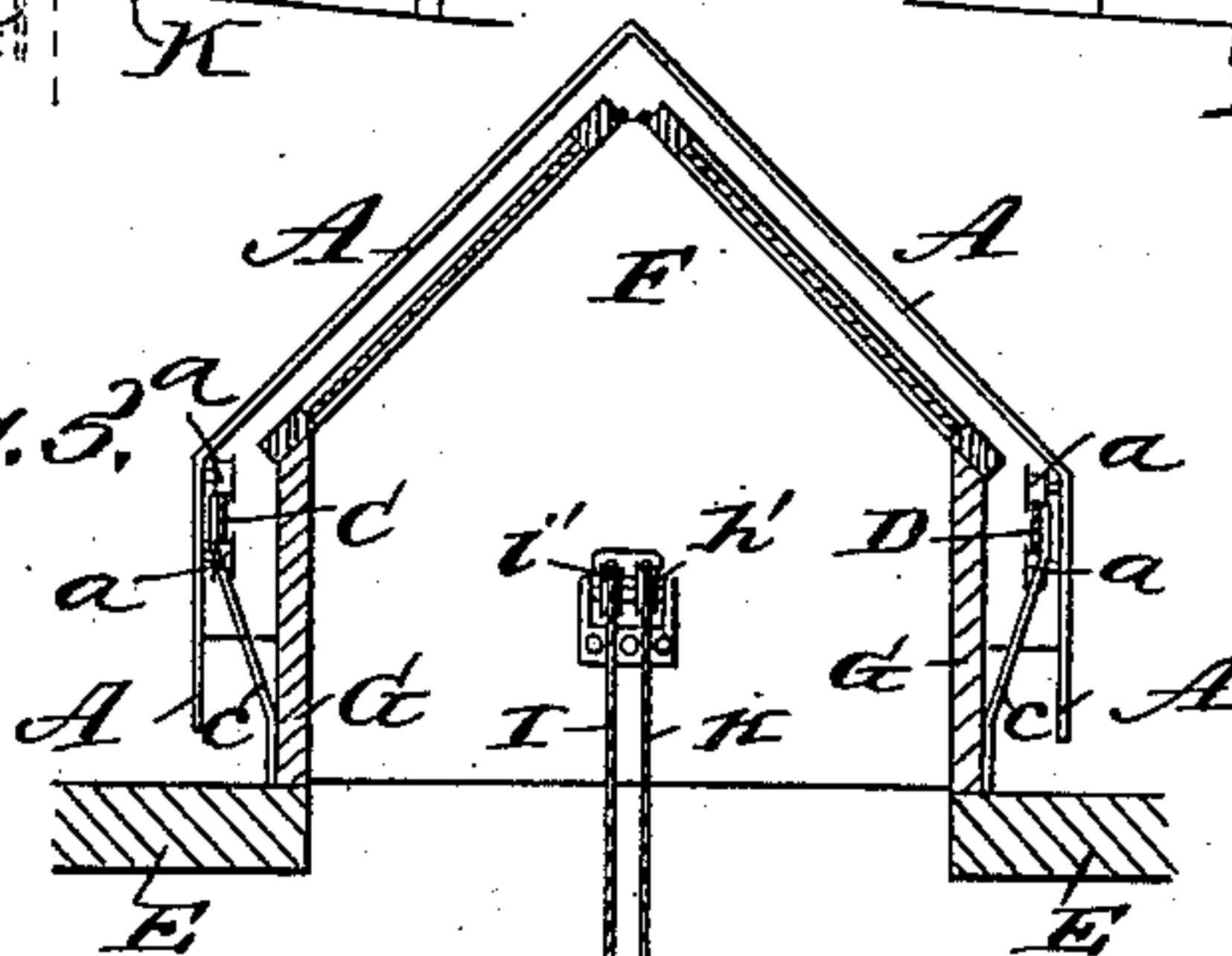


Fig. 3.



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# UNITED STATES PATENT OFFICE.

JAMES WESLEY SHAW, OF BALTIMORE, MARYLAND.

## SKYLIGHT-COVER.

SPECIFICATION forming part of Letters Patent No. 351,533, dated October 26, 1886.

Application filed July 23, 1886. Serial No. 208,862. (No model.)

### *To all whom it may concern:*

Be it known that I, JAMES WESLEY SHAW, of Baltimore, State of Maryland, have invented new and Improved Skylight-Covers, of which the following is a full, clear, and exact description.

My invention relates to covers for skylights, and has for its object to protect the skylights from damage by the heat or flying embers from adjacent burning buildings, and thus prevent spreading of fire by way of the skylights of buildings; and also to protect the skylights from hail or other storms, and to provide simple, inexpensive, and effective means for quickly and easily shifting the covers over the skylights when occasion requires.

The invention consists in certain novel features of construction and combination of parts of the skylight-covers and their operating mechanism, all as hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal vertical sectional elevation of the skylight fitted with my improved covers, which are open. Fig. 2 is a perspective view showing the covers closed over the skylight. Fig. 3 is a cross-sectional elevation taken on the line *x x*, Fig. 1. Fig. 4 is a side elevation of a modified construction of the covers, one of the pair of covers being open and the other closed; and Fig. 5 shows a hinged cover arranged over a flat skylight.

I prefer to make the covers of large skylights in two sections, A B, which have journaled at their opposite sides two pairs of rollers, *a b*, respectively, which are arranged to travel above and below metal guide-rails C D, supported from the roof E of a building by suitable metal brackets, *c d*, as clearly shown in Figs. 1, 2, and 3 of the drawings, and to which the description of the invention will at present be confined.

The skylight F shown is of the ordinary gable or double inclined pattern, and the tops of the covers A B are shaped correspondingly at the top and have closed ends *a' b'*, which stand outside of the ends of the skylight when the covers are closed over it, and the covers are

deep enough to extend nearly down to the roof E to give ample protection to the frame G on which the skylight rests, and as will be understood from the drawings.

The rollers *a b* of the covers A B preferably have flanges at each side of their peripheries, to keep them on the rails C D, and the arrangement of the rollers in pairs at opposite sides or edges of the rails insures a positive, true, and easy movement of the covers along the rails to cover or uncover the skylight; but the covers may have cleats fitted to slide on the rails instead of the rollers, as above described. The covers may be shifted either way directly by hand, and may be locked open or closed by any suitable latch devices; but I propose to operate them from inside the building below the roof, and for this purpose each of the covers A B has attached to the inner face of its outer end, by an eye, *h*, or otherwise, a rope or chain, H, which passes inward through the end of the skylight-frame and over a pulley, *h'*, fixed thereto, and hangs down within reach of a person on the upper floor; or it may be on any lower floor of the building. To the outer face of the end of each of the covers A B there is fixed, by means of an eye or staple, *i*, the end of a rope or chain, I, which is rove through a pulley, J, held to the roof E of the building, and thence the rope I extends inward through the end of the skylight-frame G and over a pulley, *i'*, held to the inner face of the frame, preferably next the pulley *h'*, and thence the rope I hangs within reach of a person below like the rope H. It is evident that by pulling on the pendent ends of the ropes I the skylight-covers A B will be opened to admit light and allow free ventilation by raising the skylight or opening parts of it in any approved way, and that by pulling on the pendent ends of the ropes H the covers A B will be closed to prevent injury to the skylight by hail-storms, or to prevent cracking of the glass or breaking of the skylight by the heat from an adjacent burning building, or the falling of burning embers so common in cases of fire, and whereby the communication of fire from one building to another in this way will be prevented and life and property will be protected far better than when no effective cover or shield is provided for the skylight.



Instead of the skylight-covers A B being arranged to slide as in Figs. 1, 2, and 3, they may be hinged to the skylight-frame G or to the roof E, as shown at K in Fig. 4 of the drawings, the pull-ropes H I in this case being connected at  $h^2 i^2$  to the inner and outer faces of the ends of the covers in places giving proper leverage for swinging the covers shut by pulling on the pendent ends of the ropes H and for swinging the covers open by pulling on the ropes I.

Fig. 5 shows how a common flat skylight may be protected by a flat cover, L, hinged at  $l$  to the skylight-frame and arranged to be swung down over the skylight by pulling on a pendent rope, H, and to be swung backward clear of the skylight by pulling on the pendent end of a rope, I, as will be understood from the aforesaid description.

I do not limit myself to any particular size or design of the skylight-covers, as these features of construction may vary with the sizes and forms of the skylight, which widely differ in buildings of different construction.

The entire skylight-covers and mechanism for operating them, where exposed to adjacent fires, will be made of any suitable fire-proof material, metal, or wood metal-lined, being at present preferred.

Should the sliding skylight-cover be made in a single piece or section, the supporting-rails C D will extend only at one end or side of the skylight-frame, as will readily be understood.

I am aware that a burglar-proof skylight has been formed with a grating having a sliding section to be locked. The skylight had pivoted side glazed windows, and the top part of the skylight had an opening over which a cover having rollers running on the roof was adapted to slide. In my construction the en-

tire opening for the skylight is covered, so that the heat from burning buildings cannot crack the glass and sparks enter the house. As the rollers embrace the rails, the cover cannot be blown off, as might be the case if the rollers rested simply on top edges of skylight.

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

1. The combination, with a skylight, of rails at opposite sides thereof, a cover inclosing the sides, ends, and top of the skylight framing and having rollers embracing the said rails, substantially as set forth.

2. The combination, with the skylight, of supports at opposite sides thereof, rails on said supports, a sectional cover having rollers on the inner faces of its sides receiving the rails between them, the outer ends of the sections being apertured for the passage of the rails, and the operating-cords extending within the building, substantially as set forth.

3. The combination, with the skylight, of the supports  $c d$ , at opposite sides thereof, the rails C D on the supports, pulleys J, mounted on supports between the end supports,  $c d$ , the sections A B of the cover having apertures in their outer ends through which the rails pass, rollers  $a b$ , receiving the rails between them, pulleys  $h' i'$  on the inner end faces of the skylight, strands I, secured to the ends of the cover-sections, passed around pulleys J J and inward and over pulleys  $i'$ , and strands H, secured to the ends of the sections and extending inward and over the pulleys  $h'$ , substantially as set forth.

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Witnesses:

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