

No. 693,010.

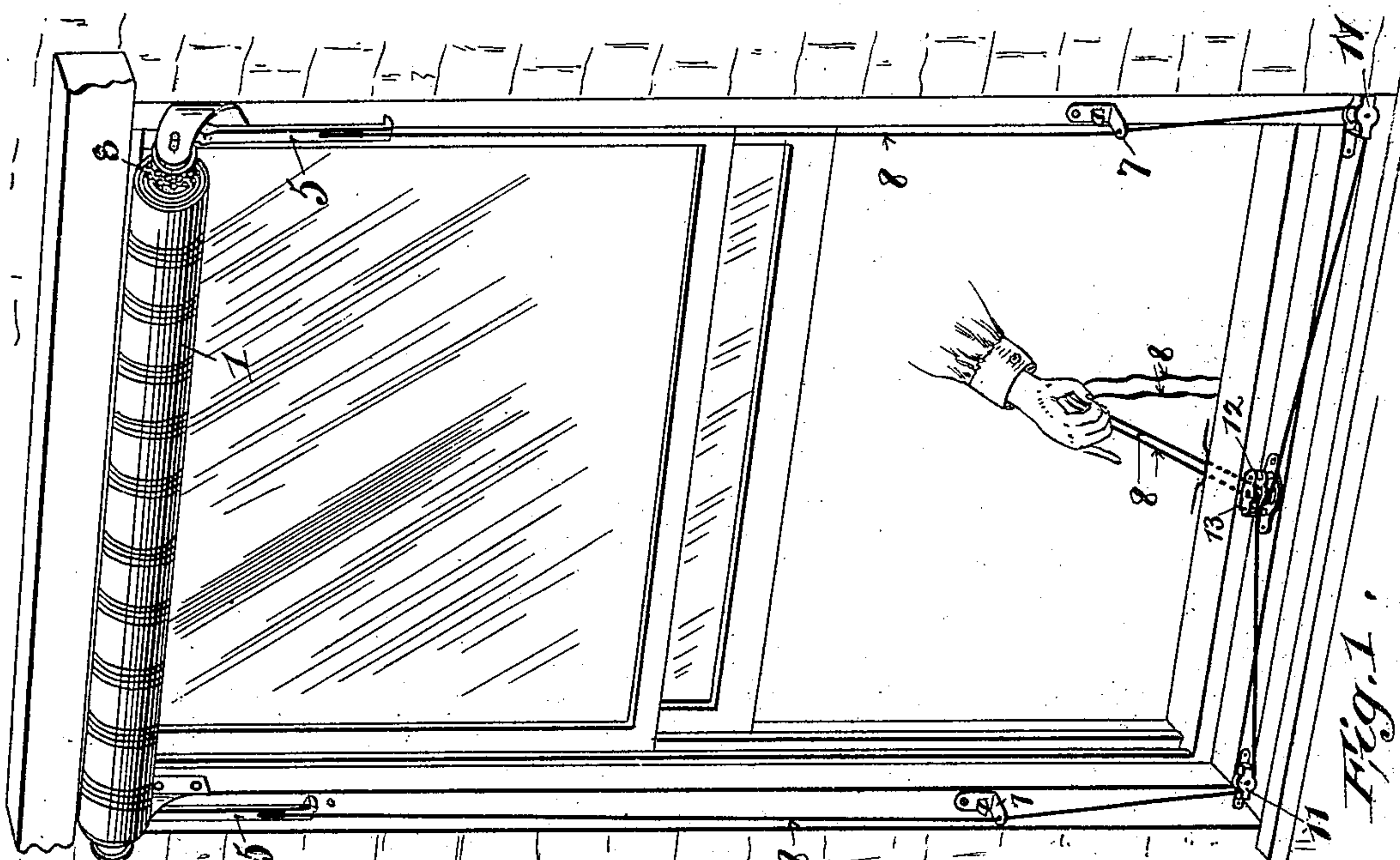
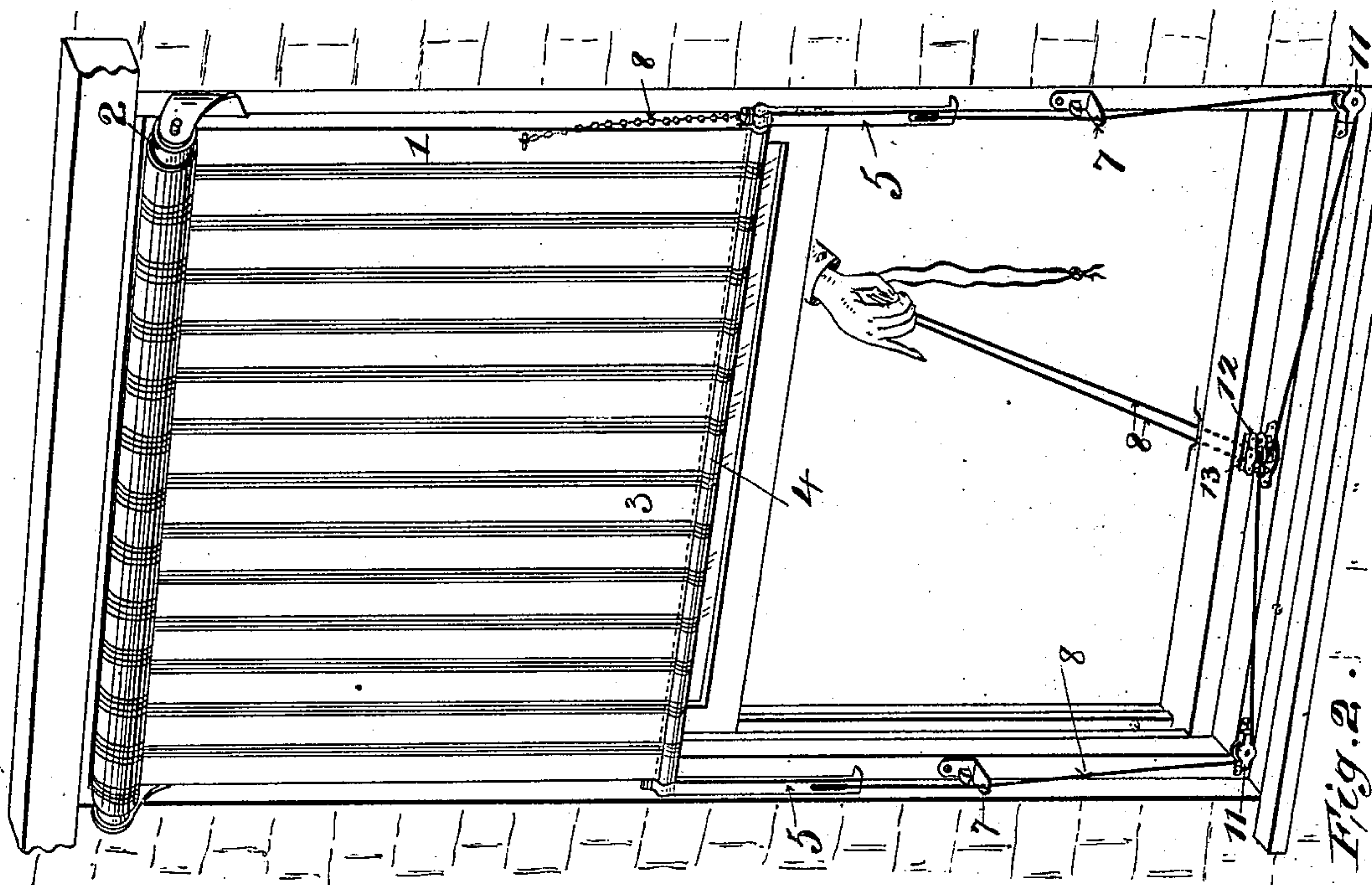
Patented Feb. 11, 1902.

E. F. HARTSHORN.
AWNING.

(Application filed Nov. 16, 1900.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES

Chas. Benjamin
Lance & Pye

INVENTOR

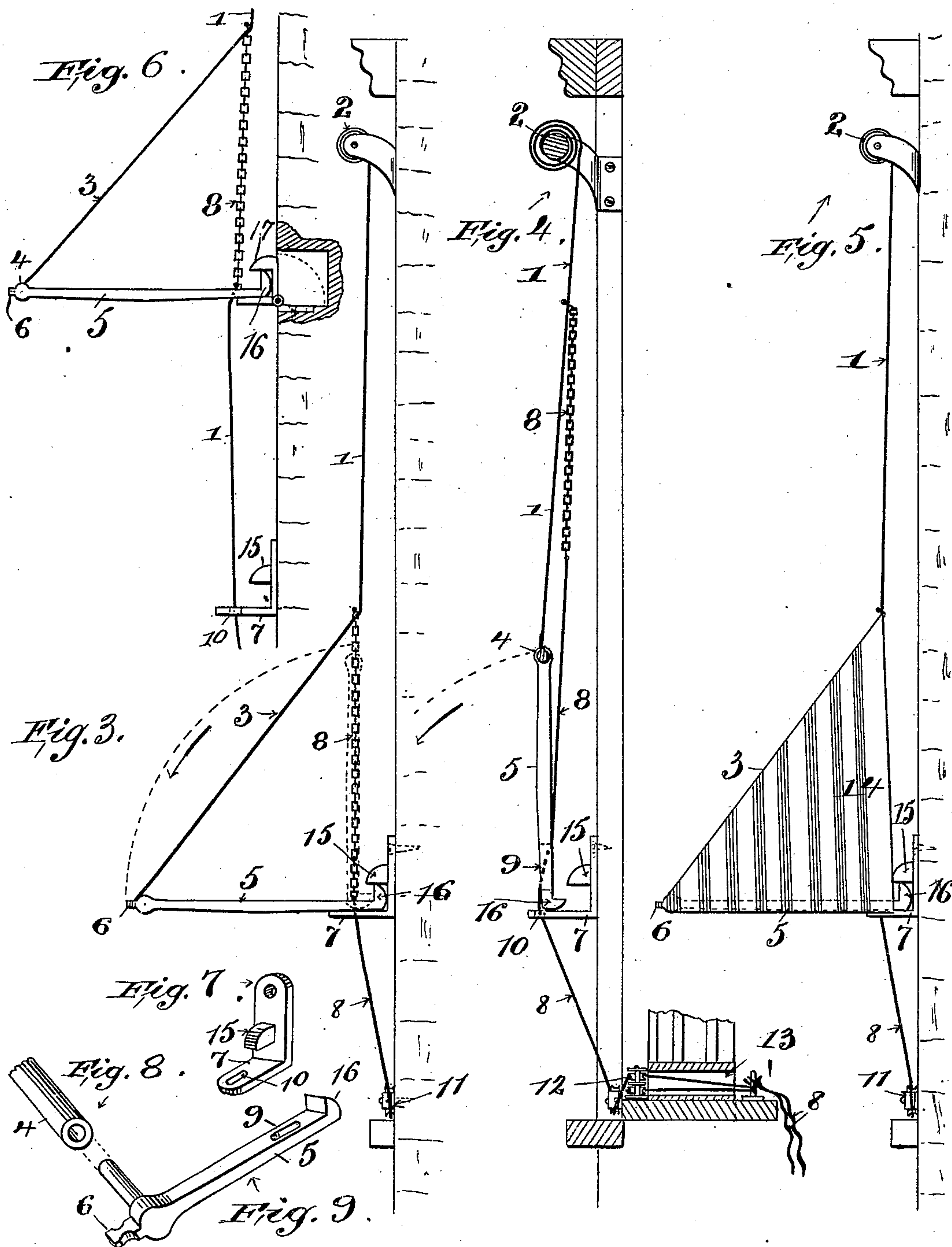
Edmund F. Hartshorn
BY his ATTORNEY
James T. Saw

E. F. HARTSHORN.
AWNING.

(Application filed Nov. 16, 1900.)

(No Model.)

2 Sheets—Sheet 2.



WITNESSES
C. W. Benjamin
Louis E. Rye.

Edmund F. Hartshorn INVENTOR
BY his ATTORNEY
James S. Saw.

UNITED STATES PATENT OFFICE.

EDMUND F. HARTSHORN, OF NEWARK, NEW JERSEY, ASSIGNOR TO STEWART
HARTSHORN COMPANY, A CORPORATION OF NEW JERSEY.

AWNING.

SPECIFICATION forming part of Letters Patent No. 693,010, dated February 11, 1902.

Application filed November 16, 1900. Serial No. 36,666. (No model.)

To all whom it may concern:

Be it known that I, EDMUND F. HARTSHORN, a citizen of the United States of America, and a resident of Newark, county of Essex, State of New Jersey, have invented certain new and useful Improvements in Awnings, of which the following is a specification.

This improvement relates to window-awnings mounted on spring-rollers, and refers particularly to awnings for house-windows; and the invention consists in the constructions and combinations set forth in the claims herein.

In the accompanying drawings, illustrating this invention, Figure 1 is a view of the awning mounted on the window-frame raised or wound up on the roller. Fig. 2 is the same as Fig. 1, showing the awning being lowered or pulled down. Fig. 3 is a side view of the awning on the window-frame lowered or pulled all the way down. Fig. 4 is similar to Fig. 3, showing the engagement of the brace or side arm with the bracket in pulling down the awning. Fig. 5 shows the inclined or lower part of the awning provided with side pieces. Fig. 6 shows the awning pulled part way down and engaging with adjustable brackets on the window-frame, and Figs. 7, 8, and 9 are details.

The drawings show the awning as operated from the inside of the window; but while I deem this preferable I do not wish to confine myself to this mode of operation, as it is evident that the awning may be raised and lowered from the outside, if desired, and, moreover, the form and construction of the several parts may be varied from that shown without departing from the spirit of my invention.

As will be seen from the drawings, the awning in this improvement is lowered or unwound from the roller by a direct pull on the awning itself by means of cords or tapes attached to the side of the awning, and when down the upper part of the awning is held straight and parallel to the window, as in the case of a window-shade, while the bottom is thrown out or inclined, as in the usual form of awning.

1 is the awning, mounted on the ordinary spring-roller 2 at the top of the window-frame

and having the inclined or flaring bottom portion 3, which is thrown out when the awning is pulled down to its lowest position. In the bottom or lower end of the awning is a tube or pipe 4, in each end of which are hung side arms or braces 5, by which the inclined portion 3 of the awning is thrown out and held extended. In the construction shown these arms 5 are attached to the edges of the awning in any suitable manner by the projections 6 on their ends and are thereby held in place in the tube 4 in such manner that they can swing or turn in the latter as the awning is raised and lowered, so that the arms will hang loose or free, as shown in Figs. 1 and 2, when the awning is wound up on the roller or is partially lowered and will be held horizontal, as shown in Figs. 3 and 5, when the awning is pulled down and the bottom thrown out or extended. On each side of the window-frame, in line with the arms 5 as they hang from the tube 4 and at the lowest position of the awning, are brackets or stops 7, against which the arms 5 strike as the awning is lowered and by which they are thrown out to extend the inclined part of the awning.

As stated above and as shown in the drawings, the awning is pulled down by cords or similar appliances 8, which cords pass through slots 9 in the end of the arms 5 and through holes 10 in the stops 7. In the construction shown in the drawings these cords pass down the side of the window-frame and through pulleys 11 11 at the bottom of the latter and thence through the double pulley 12 at the center of the frame and through an opening 13 to the inside of the window, where they are operated together, as shown in Figs. 1 and 2, to pull the awning down or allow it to run up and wind on the roller. Where the bottom of the awning is provided with side pieces 14, as shown in Fig. 5, the cords are attached to the lower or bottom edges of the latter and then pass through the slots in the arms. Where these side pieces are wanting, the cords are attached to each edge of the awning some distance above the bottom, as shown in Figs. 3 and 4, depending on the desired slant of the inclined bottom portion of the awning. In this latter construction the upper part of the cord is preferably

replaced by a chain, as shown, of a size greater than the slot 9 in the arm 5, so that it will not pass through the latter. This chain reaches from its attachment to the awning to the upper side of the arm, Fig. 3, as the latter lies horizontal on the stop, where it is attached to the cord. After the awning is pulled down or lowered and the inclined bottom portion thrown out if the cord is drawn tight it follows that by reason of the attachment of the cord to the bottom of the side piece 14 and to the chain directly above the arm and to the fact that the chain cannot pass through the slot the downward pull of the cord will hold the arm closely down on the stop, and thereby prevent the outer end of the arm being thrown up by the action of the wind on the awning.

On the stops or brackets 7 are horizontal projections 15 above and parallel with the horizontal shelf of the stop. These projections 15 are rounded or inclined on their upper sides, as shown, and have a bearing-surface on their under side. The lower ends 16 of the arms 5 are turned sidewise at an angle in such manner and to such an extent that when the arm rests horizontal on the stop with the bottom of the awning extended, as shown in Figs. 3 and 5, the turned end 16 will extend upward toward and directly below the projection 15 on the stop. If now the outer end of the arm to which the awning is attached is forced downward, the projecting end 16, as will be understood from the drawings, will be thrown up and caused to press against the under side of the projection 15, and the further downward motion of the end of the arm will be prevented. The projection 15, therefore, in connection with the projecting end 16 of the arm, serves to prevent the outer end of the arm being forced downward, as by the force of the wind blowing on the inclined bottom of the awning. As will thus be seen, the side arms are held rigidly and firmly on the stops or brackets by the downward pull of the cord on the arm and by the engagement of the projecting end 16 of the arm with the projection 15 on the stop, and the upward or downward movement of the outer end of the arm is thereby prevented.

In the operation of the awning the awning is lowered or unwound from the roller by pulling on the cords 8. As the awning is pulled down the lower free ends of the hanging side arms 5 strike against the stops 7, Fig. 4, and, bearing on the latter as their downward motion is arrested, cause the upper ends of the arms, and consequently the tube 4, in which they rest, and hence the bottom of the awning, to swing outward until when the awning is pulled all the way down the arms are in a horizontal position and the bottom or inclined part 3 of the awning is thrown out, as shown in Figs. 3 and 5. To raise the awning, the cords 8 are loosened and the spring allowed to wind up the awning on the roller, the arms 5 being drawn up and freed from

engagement with the stop. As the bottom of the awning is wound on the roller the side pieces 14 when used fold and wind up on the roller with the awning.

It may sometimes be desirable to throw out the inclined bottom part of the awning when the awning is only partially pulled down, as is seen in Fig. 6. In such case adjustable stops 17 are placed on the window-frame, which can be turned down or thrown out, so as to engage the arms 5 and throw out the bottom of the awning in the manner described above.

In this construction the awning is lowered as easily and simply as a window-shade and in the same manner by merely pulling down the cords attached to the awning to lower the same and releasing the cords to permit the awning to wind up on the roller when it is desired to raise the awning, and, furthermore, the awning can be cheaply manufactured and easily mounted.

What I claim as new is—

1. In an awning for windows, the combination with the awning mounted on a roller, of side braces, connected by one end to the bottom of the awning; stops with which the ends of the braces engage, and cords fastened to the sides of the awning above the braces, whereby the bottom of the awning is thrown and held out when the awning is pulled down, substantially as described.

2. In an awning for windows, the combination with the awning mounted on a roller of side braces connected by one end to the bottom of the awning; stops with which the ends of the braces engage; and cords fastened to the sides of the awning above the braces, and engaging with the braces and stops, whereby the bottom of the awning is thrown and held out when the awning is pulled down, substantially as described.

3. In a roll-awning, in combination, the awning mounted on the roller; loose side braces connected by one end to the bottom of the awning; brackets adapted to engage with the side braces whereby the bottom of the awning is thrown out; and cords attached to the sides of the awning by which the latter is lowered and held down, substantially as described.

4. In a roll-awning, in combination, the awning mounted on the roller; loose side braces connected by one end to the bottom of the awning; brackets adapted to engage with the side braces whereby the bottom of the awning is thrown out; and cords attached to the sides of the awning, and engaging with the braces and the brackets, by which the awning is lowered and held down, substantially as described.

5. In a roll-awning for windows, in combination, the awning mounted on the roller; loose side braces 5, connected to the bottom of the awning, and adapted to engage with the brackets, whereby the bottom of the awning is thrown out; brackets 7 with which the side braces engage; and cords 8 attached to

the awning and arranged to pass through the braces and brackets by which the awning is unwound from the roller, substantially as described.

5 6. In a roll-awning for windows, in combination, the awning mounted on the roller; loose side braces 5 connected to the bottom of the awning, and provided with the projecting end 16; brackets 7 having the projection
10 15, with which the braces engage; and cords 8 attached to the awning and arranged to pass

through and engage with the braces and brackets, by which the awning is unwound from the roller and held extended, substantially as described.

Signed by me at Newark, New Jersey, this 14th day of November, 1900. 15

EDMUND F. HARTSHORN.

Witnesses:

E. L. DURGIN,

GEO. E. GUNTHER.