

(No Model.)

2 Sheets—Sheet 1.

G. BIEHN.
WINDOW SHADE FIXTURE.

No. 477,495.

Patented June 21, 1892.

Fig 1

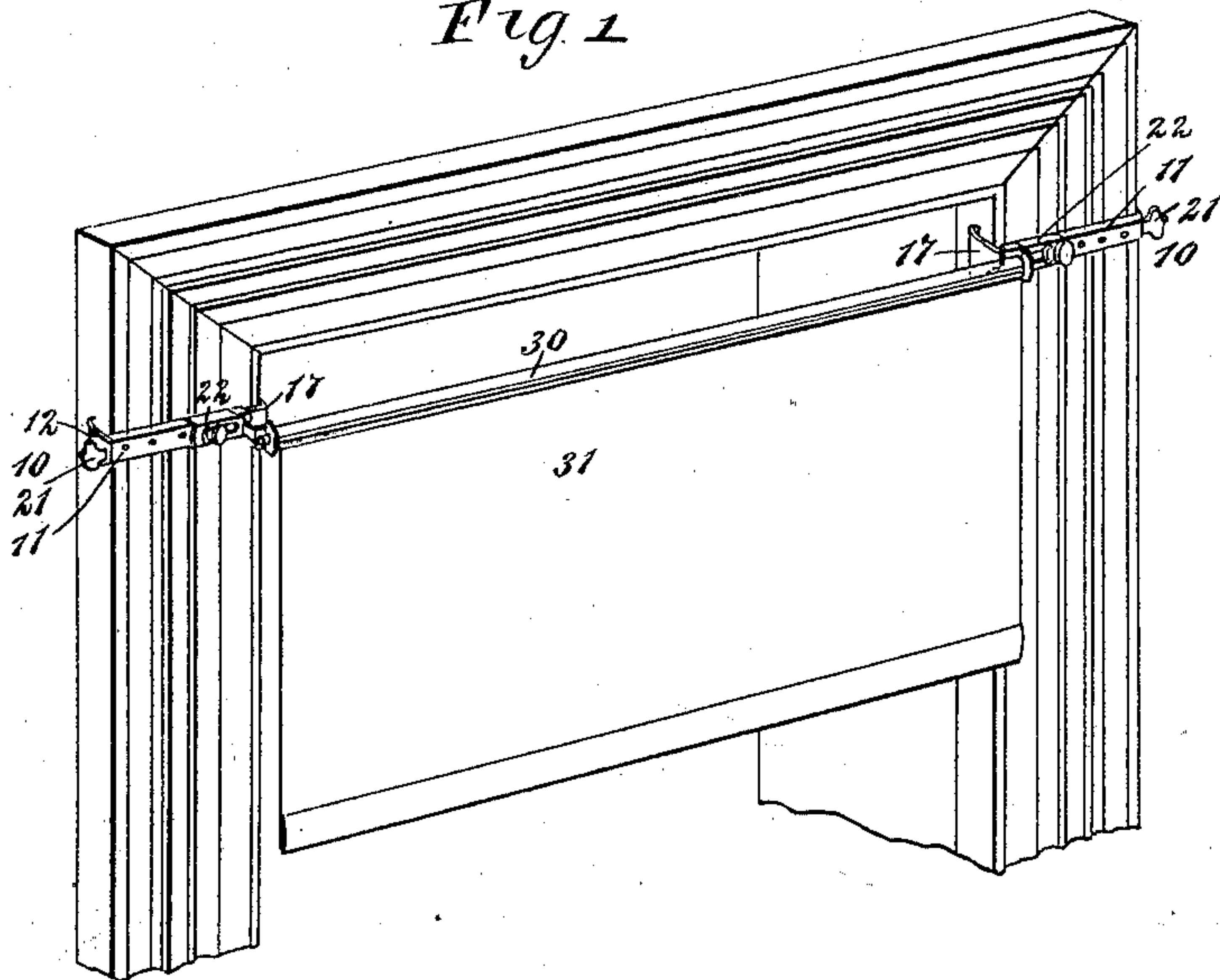


Fig 2

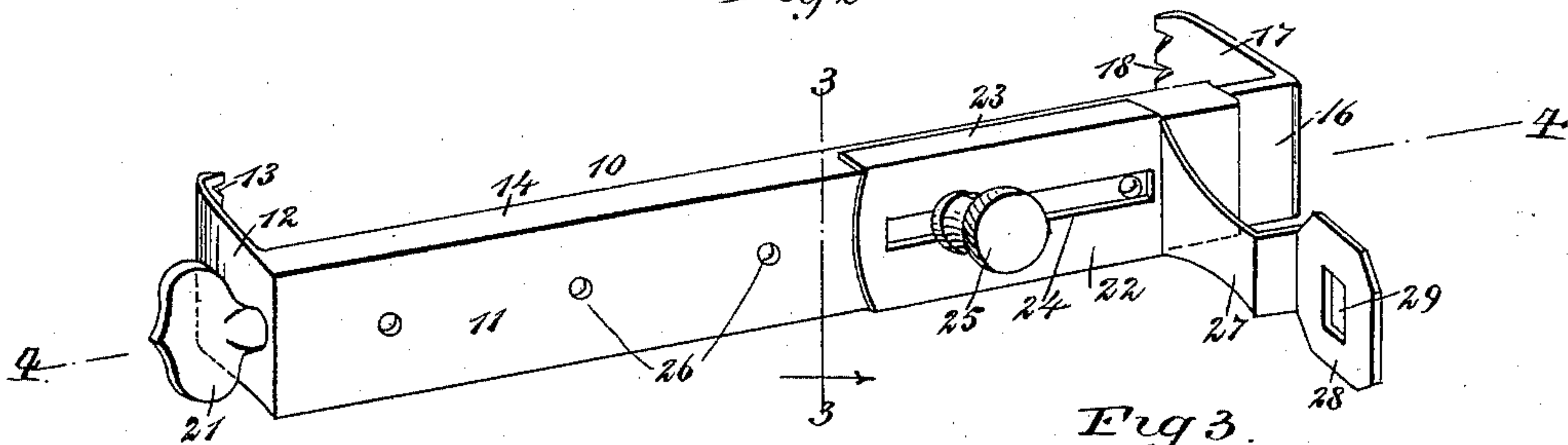


Fig 3.

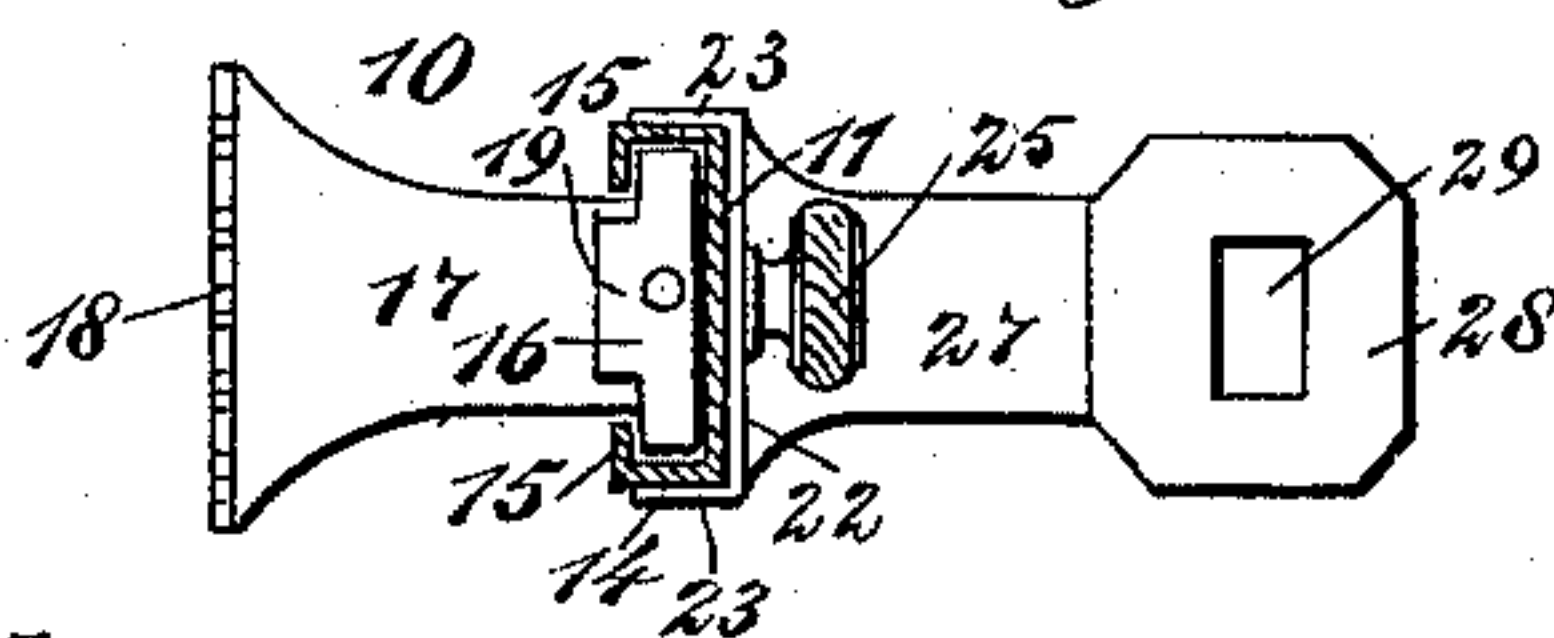


Fig 4.

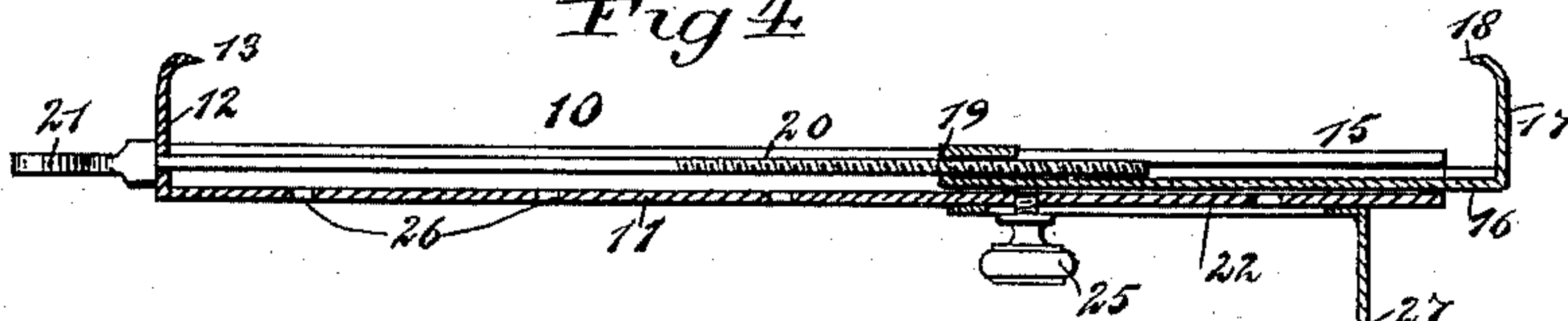
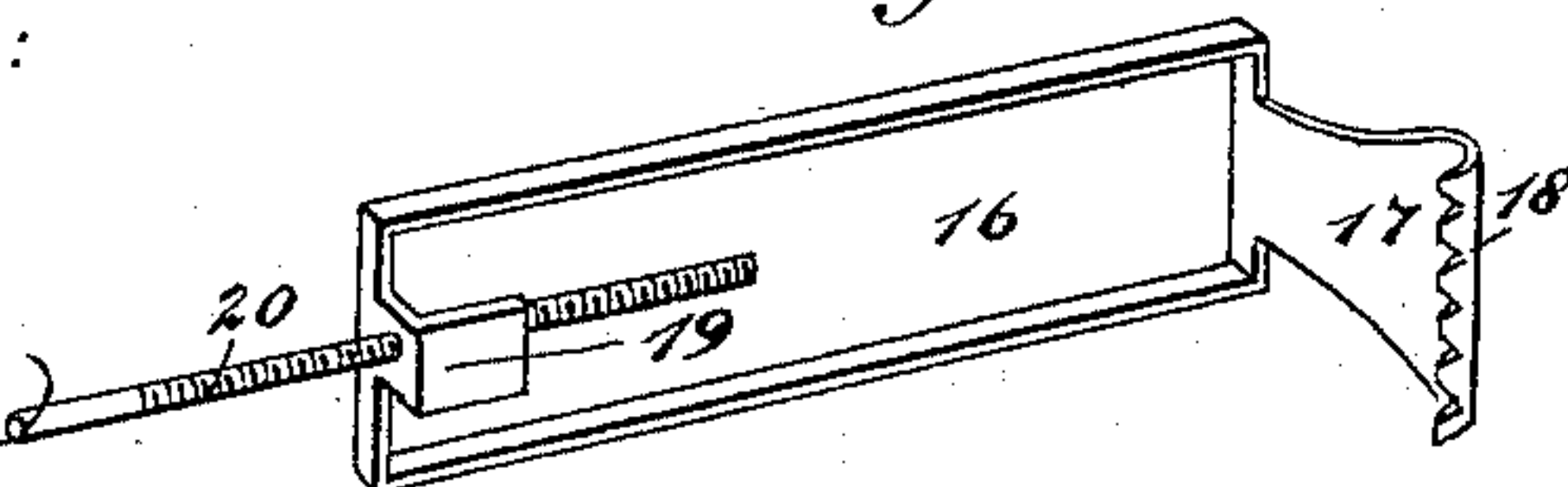


Fig 5.



WITNESSES:

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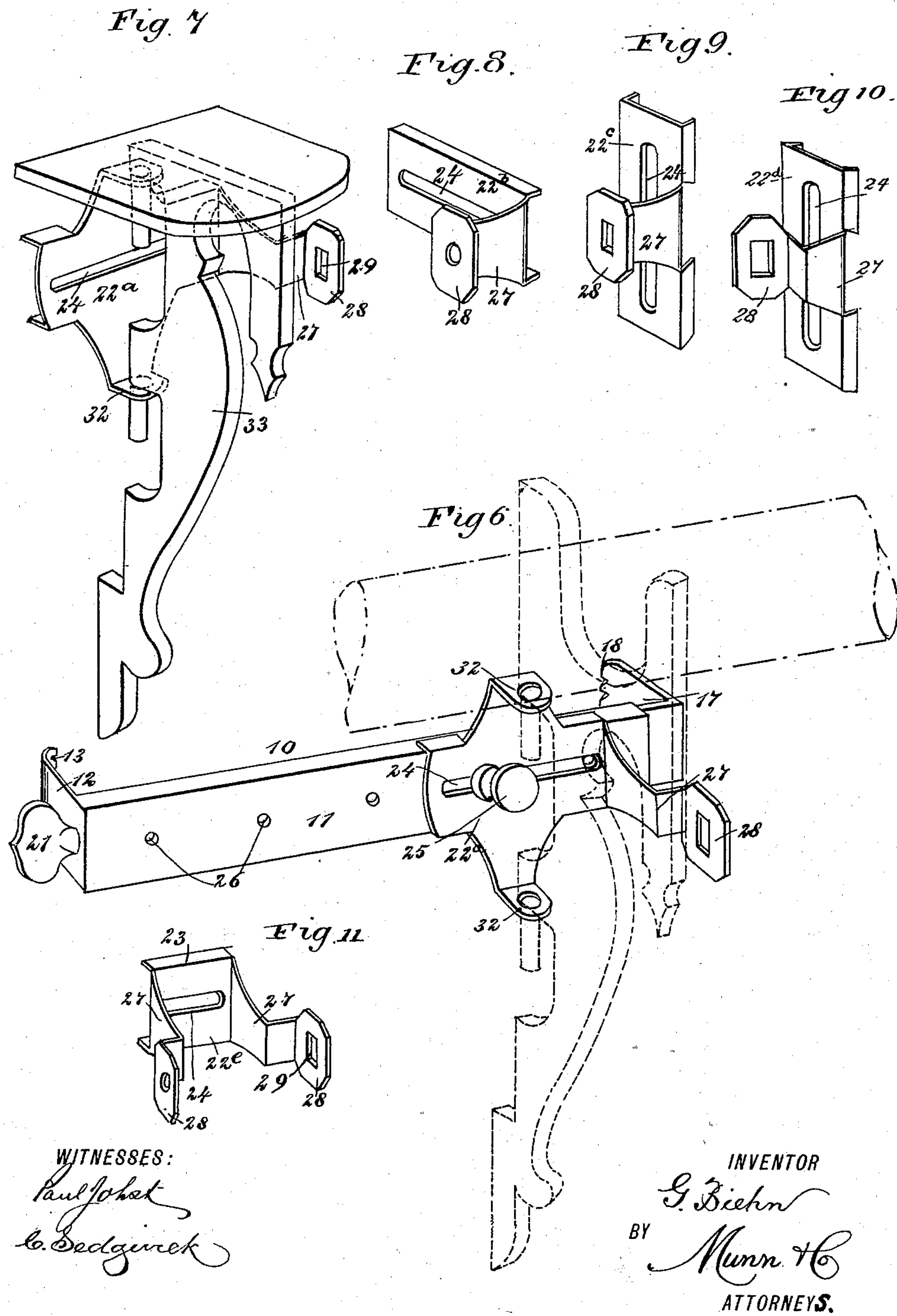
(No Model.)

2 Sheets—Sheet 2.

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WINDOW SHADE FIXTURE.

No. 477,495.

Patented June 21, 1892.



UNITED STATES PATENT OFFICE.

GEORGE BIEHN, OF TACOMA, WASHINGTON.

WINDOW-SHADE FIXTURE.

SPECIFICATION forming part of Letters Patent No. 477,495, dated June 21, 1892.

Application filed August 17, 1891. Serial No. 402,813. (No model.)

To all whom it may concern:

Be it known that I, GEORGE BIEHN, of Tacoma, in the county of Pierce and State of Washington, have invented new and useful
5 Improvements in Window-Shade Fixtures, of which the following is a full, clear, and exact description.

My invention relates to improvements in window-shade fixtures; and the object of my
10 invention is to produce fixtures of simple construction which may be cheaply made, which may be secured to a window-frame of any kind without the use of screws or nails, which
15 may be easily adjusted so as to hold a window-shade at any desired height and so as to fit a shade-roller of any ordinary length, and which can be almost instantly put up or taken down.

To this end my invention consists in certain features of construction and combinations of parts, which will be hereinafter described and claimed.

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

Figure 1 is a perspective view showing the fixtures supporting the window-shade roller and in position upon a window-frame. Fig. 2
30 is an enlarged detail perspective view of one of the fixtures. Fig. 3 is a cross-section on the line 3 3 in Fig. 2. Fig. 4 is a longitudinal section on the line 4 4 in Fig. 2. Fig. 5 is a detail inside perspective view of the sliding
35 plate and jaw. Fig. 6 shows the fixtures adapted to support a pole-bracket. Fig. 7 shows the same supporting an ordinary bracket adapted to hold a flower-pot or other article; and Figs. 8 to 11, inclusive, are different mod-
40 ifications of sliding roller-shade brackets which may be used in connection with the clamp.

The shade-roller is supported in clamps 10, which are secured in place on opposite sides of a window-frame, and each clamp has a
45 main plate 11 which is doubled over at right angles at one end, as shown at 12, to form a jaw, and this jaw terminates in curved teeth 13. The plate 11 has also side flanges 14, which are doubled over so that their inner
50 portions will be parallel with the body of the plate 11, as shown at 15, and the flanges thus

serve as guides for the sliding plate 16, which moves longitudinally on the inner side of the main plate 11 and which is bent inward at a right angle, as shown at 17, thus forming a
55 sliding jaw, which terminates in teeth 18, the jaws 17 and 12 being substantially similar. The inner end of the sliding plate 16 is turned up to form a nut 19, which receives the ad-
60 justing thumb-screw 20, the outer portion of which extends through the jaw 12 and terminates in a thumb-piece 21. It will thus be seen that by turning the thumb-piece the
65 plate 16 may be moved and the jaws 17 and 12 adjusted in relation to each other.

On the outside of the main plate 11 is an adjustable plate 22, which slides on the main plate and which has flanges 23, overlapping the sides of the main plate, causing the slid-
70 ing plate to move steadily thereon. The sliding plate has a central longitudinal slot 24, through which extends a thumb-screw 25, and the thumb-screw turns in threaded perfora-
75 tions 26 on the main plate 11. The plate 22 may be adjusted on the main plate 11 by simply loosening the thumb-screw 25 and then
80 pushing the sliding plate into a desired position and tightening the screw, and by changing the screw and placing it in another hole
85 26 the sliding plate may be adjusted to a very great extent. The sliding plate has a project-
ing arm 27 at one end, which is bent to bring it into a suitable position, and this end terminates in a head 28, which, as shown in Fig.
2, is at right angles to the sliding plate 16 and
90 which has a central aperture 29 to receive a lug on the end of the roller 30, which roller carries a shade 31.

It will be seen that the sliding plate 22 and the arm and head connected therewith form
95 a sliding bracket, and as the clamp and the sliding bracket are arranged on each side of the window-frame they may be adjusted to hold a shade-roller of any ordinary length. The form of sliding bracket above described
100 is the one chiefly used; but other forms may be used, as hereinafter described.

As shown in Fig. 6, the sliding plate 22^a is provided on opposite side edges with project-
ing and vertically-aligning perforated lugs 32,
105 which are adapted to support a pole-bracket, as indicated by dotted lines in the figure. In-

stead, however, of placing the pole-bracket in the lugs an ordinary bracket 33 may be therein suspended, as in Fig. 7, and on this bracket a pot of flowers or any other ornament may
5 be placed.

It is obvious that the arm and perforated head carried by the sliding plate may be bent in any desired shape to conform with the position of the supporting-clamp and of the
10 shade-roller.

In Fig. 8 the sliding plate 22^b and arm 27 are shown provided with a head 28, like that already described, except that the head is bent, so as to be parallel with the sliding plate
15 22^b, and this form of plate is adapted to be used when the clamp is arranged on the inner side of a window-frame and at right angles to the shade-roller.

As shown in Fig. 9, the arm 27 projects from
20 the side edge of the bracket, and the head 28 is parallel with the plate 22^c, and, as shown in Fig. 10, the arm of the plate 22^d projects from the side edge of the bracket in the opposite direction, and the head 28 is at right angles
25 to the plate, these arms, when arranged in this way, carrying the shade to be suspended when the clamp is in a vertical position or when the shade is to be suspended between the jambs of the frame.

Fig. 11 shows a double shade-roller bracket,
30 the plate 22^e having arms 27 at each end, which carry the perforated heads 28, which are at right angles to the plate 22, and this form of bracket is adapted to be used when
35 the clamp is secured to the middle portion of a double window-frame, and the sliding bracket will thus form a support for the ends of two rollers.

I have shown these various modifications
40 of sliding brackets merely to illustrate the fact that the arms on the sliding plate may be bent into all sorts of positions, so that when the clamp is secured to any convenient portion of the frame the sliding brackets may
45 hold the shade in a desired position.

The shade is operated in the usual way,

and from the foregoing description it will be readily seen that the fixtures may be secured to the frame so as to support a shade without marring the woodwork in any way, as to at-
50 tach the clamps it is simply necessary to have the two jaws 17 and 12 embrace one side of the frame, and then by tightening the thumb-screw 21 the jaws will be forced toward each other, and will thus be clamped securely to
55 the frame.

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

1. A shade-fixture comprising inner and
60 outer plates 11 16, sliding one upon the other and having inward-bent ends 12 17, a series of threaded apertures 26 in the plate 11, a nut 19 on the inner plate, the screw-rod extending through the end 12 into engagement
65 with said nut, the longitudinally-sliding bracket on the outer face of plate 12 and having a slot 24 and an arm 27, terminating in a head 28, and the set-screw 25, extending through slot 24 into one of the apertures 26,
70 substantially as set forth.

2. A shade-fixture comprising inner and
outer plates 11 16, sliding one upon the other and having inward-bent ends 12 17, a series of threaded apertures 26 in the plate 11, a
75 nut 19 on the inner plate, the screw-rod extending through the end 12 into engagement with said nut, the longitudinally-sliding bracket on the outer face of the plate 12 and having a slot 24, vertically-aligned apertured
80 ears 32 above and below the slot, and an outward-projecting arm 27, having a head 28, the set-screw 25, extending through slot 24 into one of the apertures 26 and securing the sliding bracket in place, and the vertical bracket
85 having vertically-aligned pintles on its rear edge, entering the apertures in the ears 32, substantially as and for the purpose set forth.

GEORGE BIEHN.

Witnesses:

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BEN E. HERVEY.