

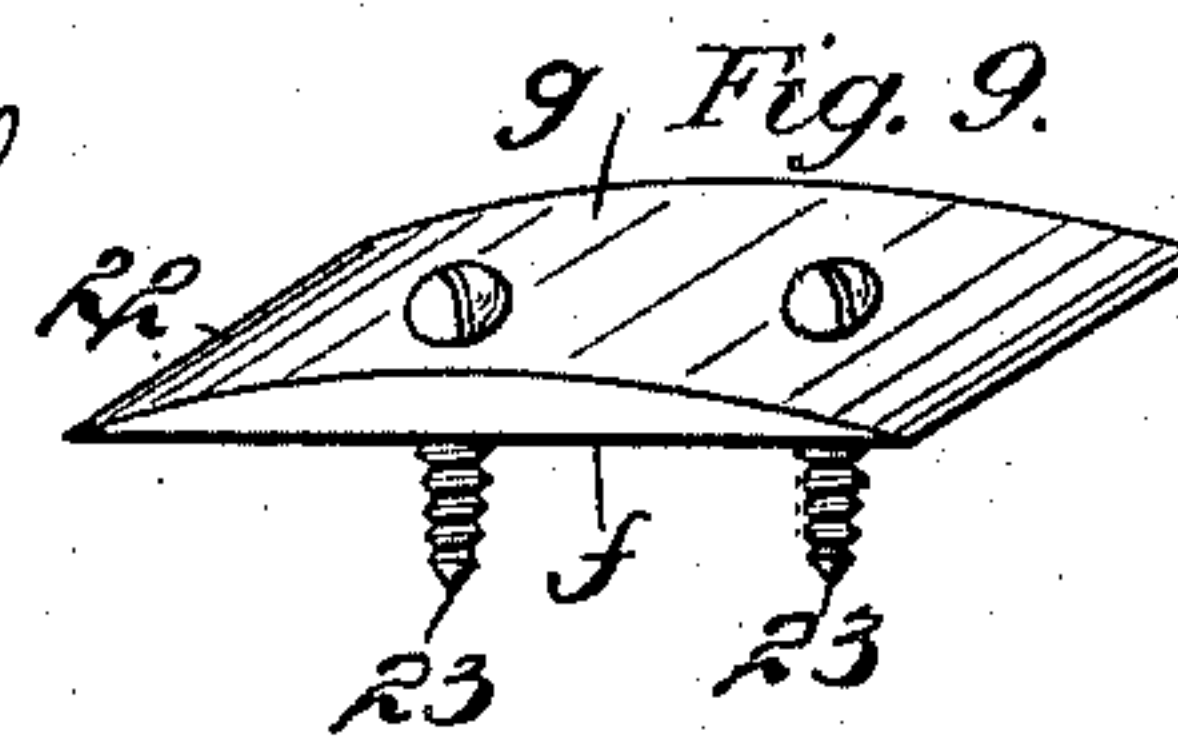
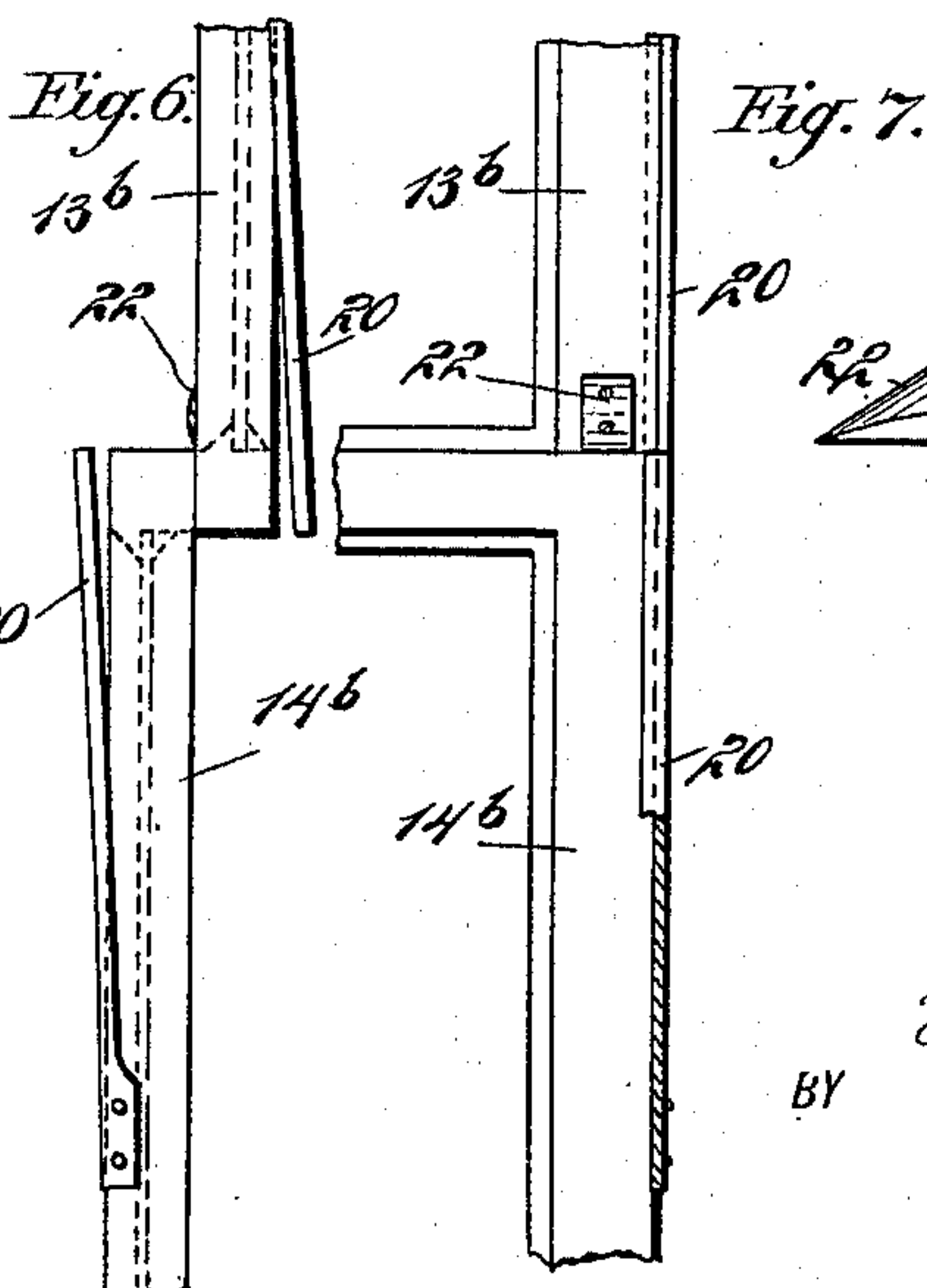
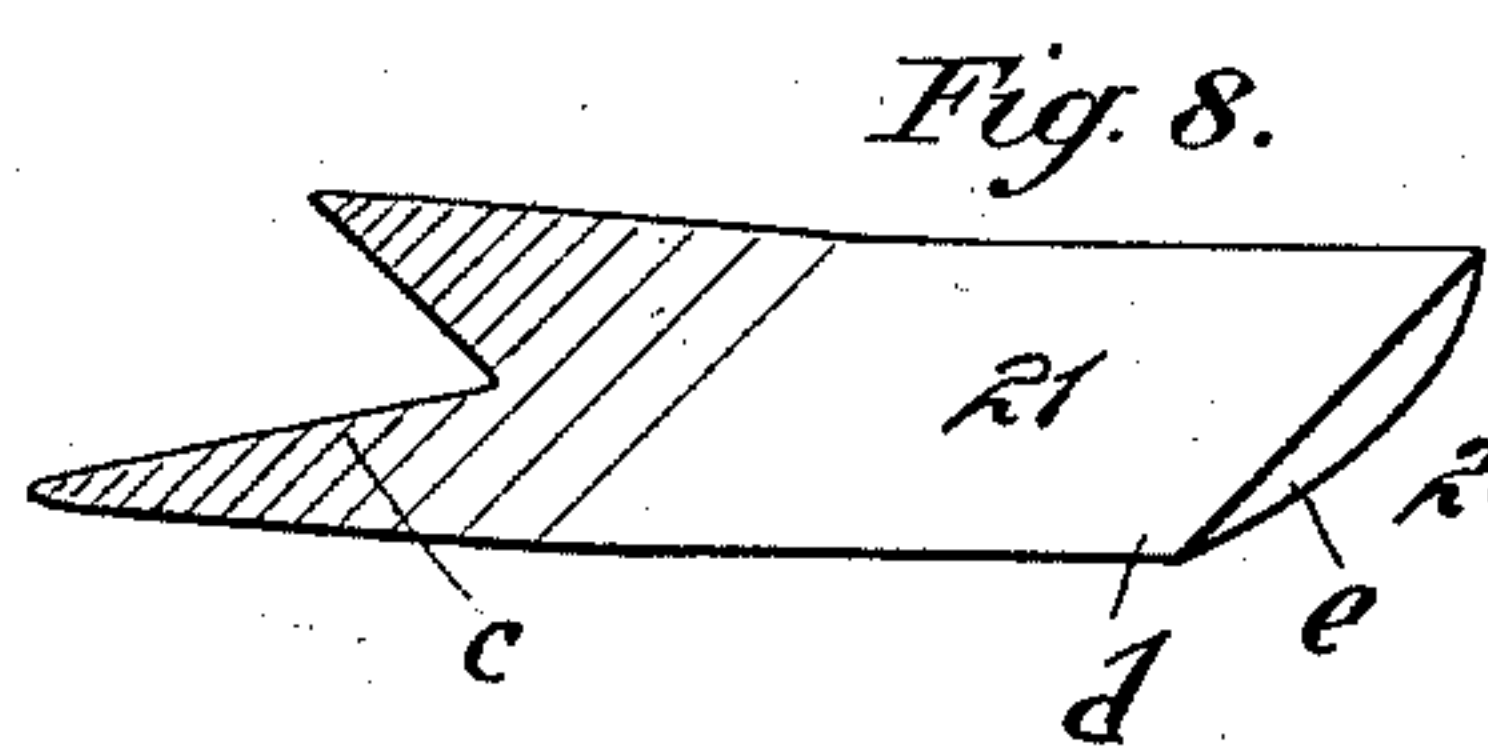
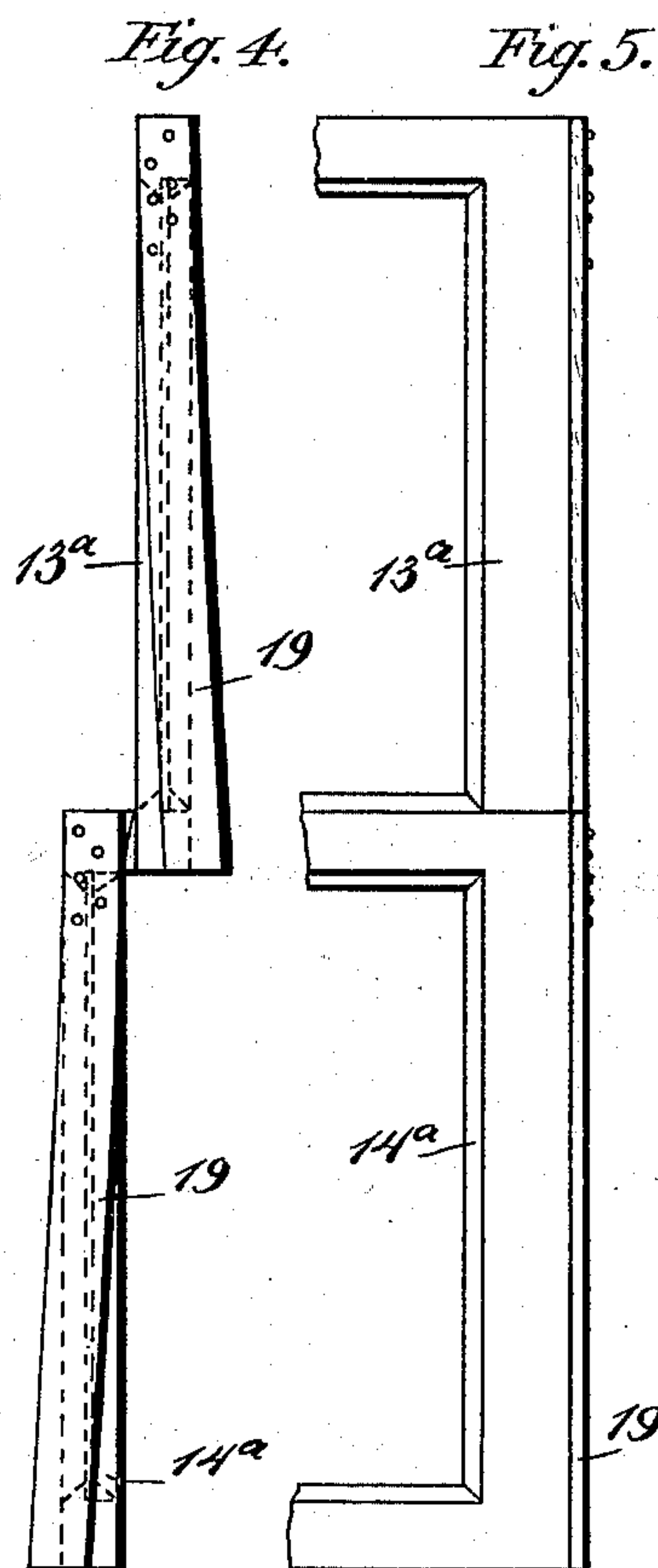
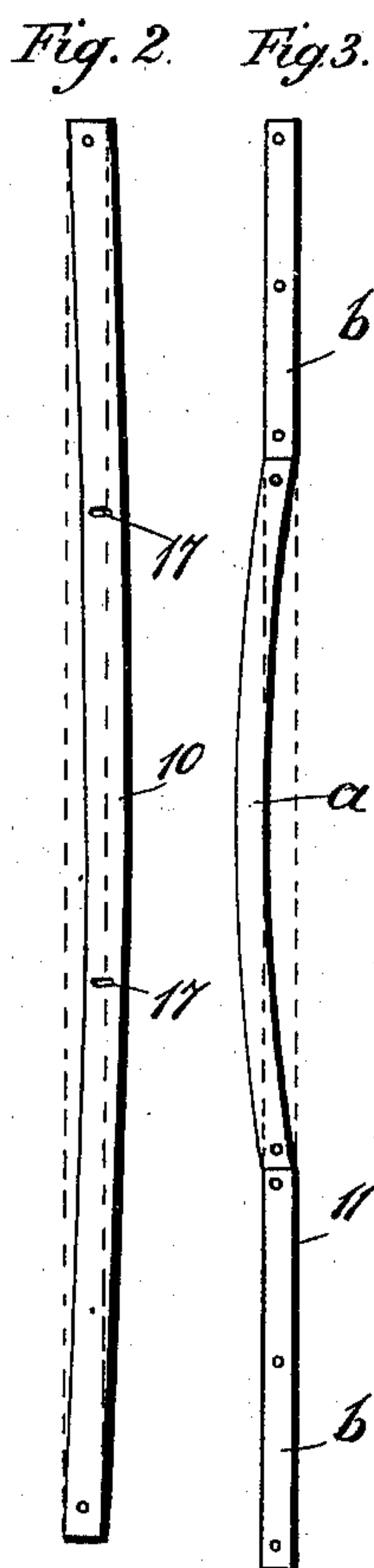
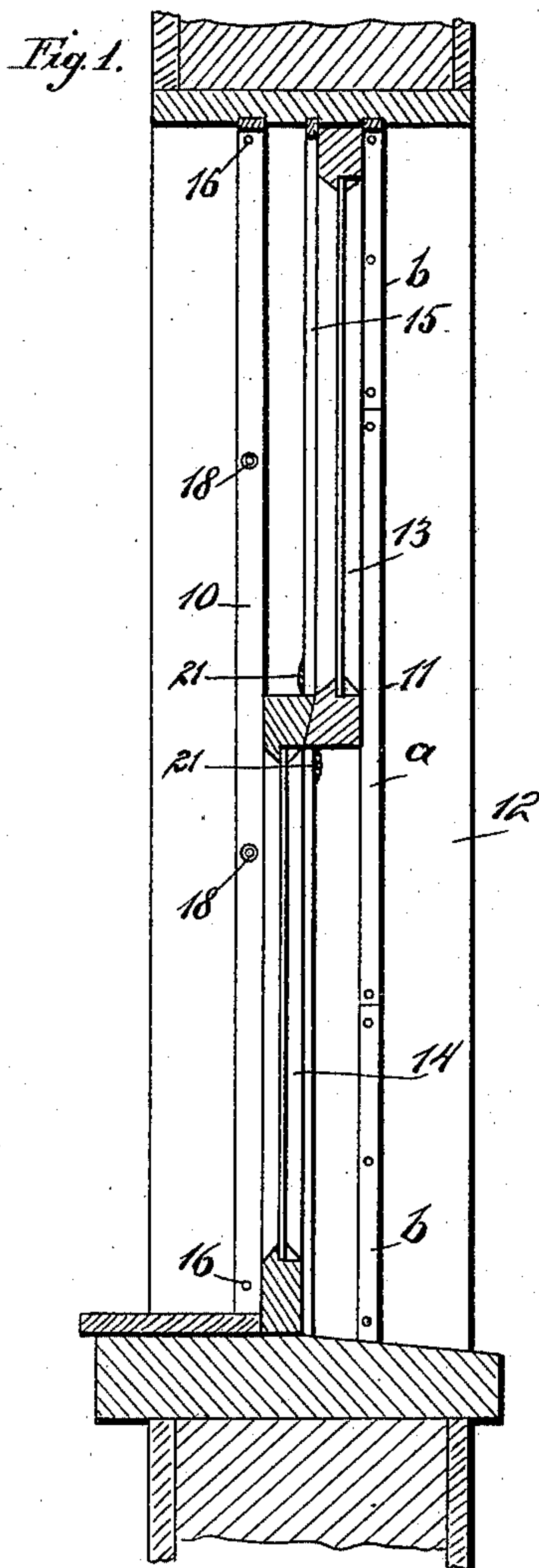
(No Model.)

2 Sheets—Sheet 1.

J. & T. W. LEASK.
SASH HOLDER.

No. 603,907.

Patented May 10, 1898.



WITNESSES:
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Isaac R. Brundage

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(No Model.)

2 Sheets—Sheet 2.

J. & T. W. LEASK.
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Fig. 10.

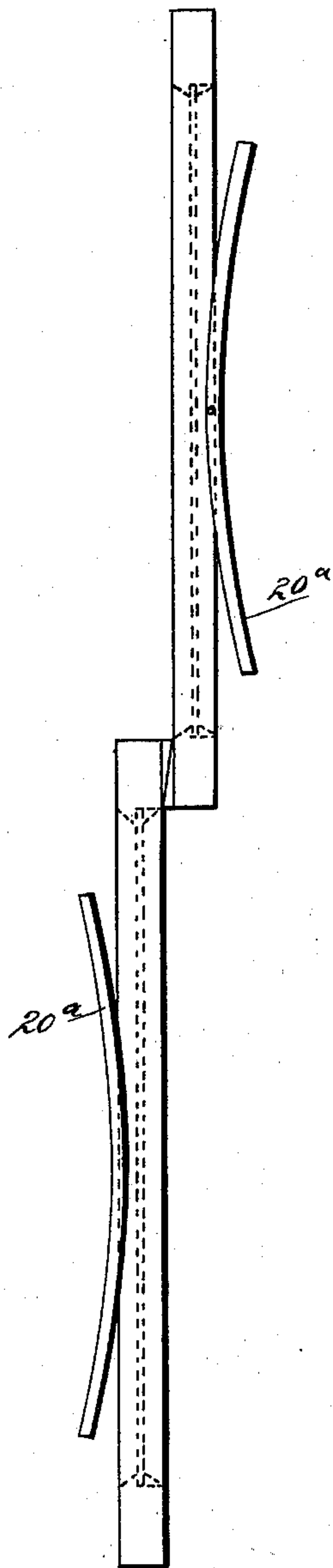
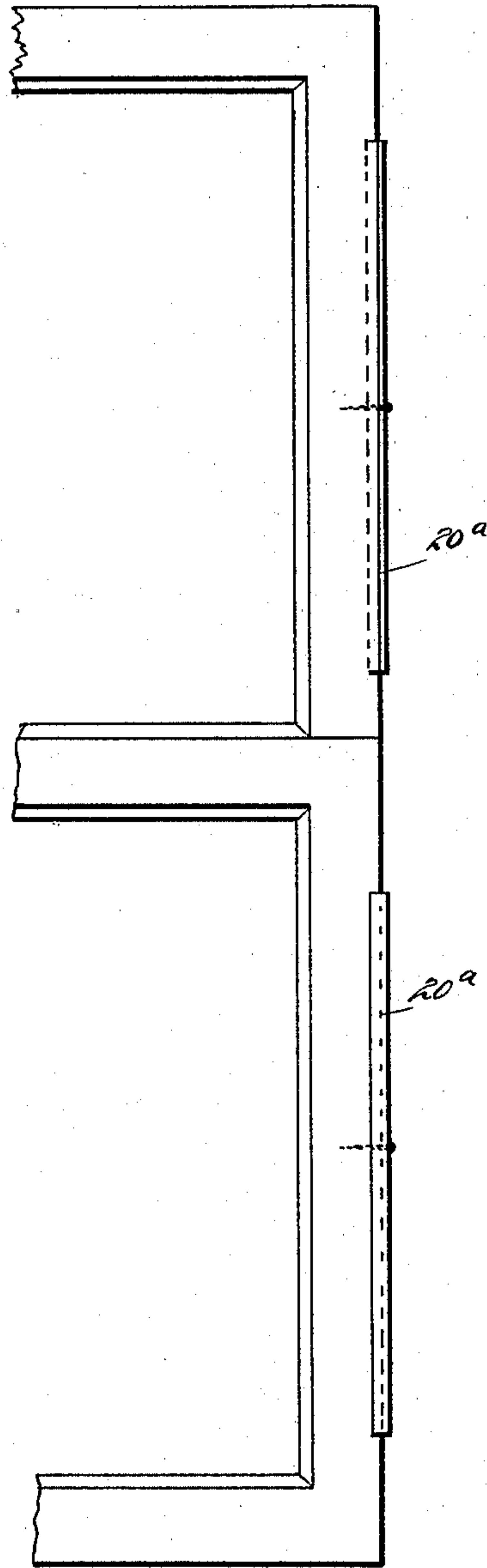


Fig. 11.



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Fig. 12.

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UNITED STATES PATENT OFFICE.

JOHN LEASK AND THOMAS WILLIAM LEASK, OF GORE BAY, CANADA, AS-
SIGNORS OF TWO-THIRDS TO HERMAN CURRIE AND EDWARD LEWIS
BRAZENOR, OF SAME PLACE.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 603,907, dated May 10, 1898.

Application filed June 18, 1897. Serial No. 641,295. (No model.)

To all whom it may concern:

Be it known that we, JOHN LEASK and THOMAS WILLIAM LEASK, of Gore Bay, in the Province of Ontario and Dominion of Canada, have invented a new and Improved Sash-Holder, of which the following is a full, clear, and exact description.

This invention relates to that class of sash-holder adapted to establish a frictional connection between the window-sashes and frame whereby the sashes may be held in any position in which they are put and whereby also the sashes are prevented from rattling.

This specification is the disclosure of several forms of our invention, while the claims define the actual scope of the conception.

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

Figure 1 is a vertical section of the window-frame, showing our invention applied thereto. Fig. 2 is a side elevation of one of the sash-stops. Fig. 3 is a side elevation of a modified form thereof. Fig. 4 is an edge view of two window-sashes having a third modification of the invention attached thereto. Fig. 5 is a fragmentary side elevation of the construction shown in Fig. 4. Fig. 6 is an edge view of a fourth modification of the invention. Fig. 7 is a fragmentary front view thereof. Fig. 8 is a detail perspective view of a wear-plate which we employ. Fig. 9 is also a detail perspective view of another wear-plate which we employ. Fig. 10 is an edge view of a window-sash, showing another modified form of spring. Fig. 11 is a face view thereof, and Fig. 12 is a cross-section of the sash and the spring shown in Figs. 10 and 11.

The arrangement shown in Figs. 1, 2, and 3 consists in spring-plates 10 and 11, applied one to each side of the window-frame 12, in which the upper sash 13 and the lower sash 14 are arranged to slide, as usual. The window-sashes 13 and 14 slide against the faces of parting-strips 15, located one at each vertical side of the frame 12. Each vertical side of the frame 12 carries spring-plates 10 and 11.

The spring-plates 10 form the inner beads at

each vertical side of the frame 12, and the spring-plates 11 form the outer beads at each vertical side of the frame 12. Consequently the spring-plates 10 bear against the sashes 14 and the plates 11 bear against the sashes 13. The plates 10 are held in place at their ends by screws or other fastening devices 16, passed through openings in the ends of the plates 10, as shown in Fig. 1. The intermediate portions of the plates 10 are provided with elongated slots 17, receiving headed pins 18, whereby the plates 10 are prevented from bulging or flexing inward. Fig. 2 shows the slots 17, and Fig. 1 shows the pins 18. The plates 10 are bowed edgewise, so that one edge of each plate 10, contradistinguished from the face of the plate, will bear against the sash 14. The elongated slots 17 permit the plate 10 to flex in an edgewise manner and prevent the plate from bowing or bulging inward. The bow of the plate 10 extends throughout the length of the plate. The bow of the plate 11 is confined to the intermediate portion *a* of the plate, the end portions *b* being rigidly secured to the frame. The bowed portions *a* of the plates 11 are free to bear against the sash 13. The plates 11, like the plates 10, bear edgewise against the sash, contradistinguished from bearing with their faces against the sash.

Figs. 4 and 5 show a modification in which the vertical edge of each sash 13^a and 14^a carries a spring-plate 19. The plates 19 are rigidly fixed at their upper ends to the respective sashes 14^a and 13^a and have their lower ends sprung, respectively, outward and inward from the sashes, so that the edges of the plates 19 will bear, respectively, against the outer and inner window-beads of the frame in which the sashes slide.

Figs. 6 and 7 show a modification in which flat plates, such as the plates 10, 11, and 19, are dispensed with and angle-iron springs 20 are respectively attached to the upper and lower sashes 13^b and 14^b. The angle-iron springs 20 respectively embrace the inner and outer corners of the vertical portions of the window-sashes and bear against the inner and outer beads of the window-frame, so that the sashes will be held in whatever position

they are placed. When the springs 20 are pushed inward, they lie closely against the sashes 13^b and 14^b, as shown in Fig. 7, and when the springs are permitted to expand they occupy the positions shown in Fig. 6.

In Figs. 10 and 11 we have shown spring-plates 20^a, curved or bowed throughout their length and secured at their center to the side rails of the sash; but the position of the plates with relation to the sash may be reversed and have the fastenings at the ends.

In the form of the invention shown in Figs. 1, 2, and 3 the springs 10 and 11 push the sashes toward each other. To prevent frictional engagement between the sashes, which engagement will result in a marring of the finish thereof, we provide a number of plates, such as the plate 21. (Shown in Fig. 8.)

The plates 21 have pointed forked ends *c* and main portions, one face *d* of each of which is plane and the other face *e* of each of which is convex. The plates 21 are driven into the window-frame in the position shown in Fig. 1, so that the convex face *e* of each plate 21 will bear against a face of one of the vertical rails of one of the sashes, which face is contiguous to a face of the companion sash, thus preventing such contiguous sash-faces from engaging with the parting-strip between them. The convex surfaces *e* of the plates 21 permit the sashes to move easily past the plates and do not operate to mar the finish of the sashes.

Fig. 9 shows a plate 22, designed for an analogous purpose. The plate 22 has a plane face *f* and a convex face *g*. The plate 22 is held in the position indicated in Figs. 6 and 7 by means of screws 23, the heads of which are countersunk in the convex faces of the plates 22. These plates 22 are designed to be used in connection with sashes having no

parting-strips, in which cases the sashes would otherwise engage directly with each other and under the pressure of the springs 20 would seriously damage the appearance of the sashes. The plates 22, however, being situated as shown in Figs. 6 and 7, present a smooth convex surface to be engaged by the lower sash 14^b and prevent the direct engagement of the contiguous faces of the sashes, which serves to protect the sashes.

Various changes in the form, proportion, and minor details of our invention may be resorted to without departing from the spirit and scope thereof. Hence we do not consider ourselves limited to the precise construction herein shown, but believe that we are entitled to all such variations as come within the terms of our claims.

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

1. The combination of a window-frame, a window-sash movable therein, and a plate having an edgewise spring, the plate exerting its edgewise pressure between the sash and frame whereby to hold the sash.

2. The combination of a window-frame, a window-sash sliding therein, and a plate forming a window-bead, the plate having each end rigidly secured to the window-frame and having at its intermediate portion an edgewise spring toward the window-sash, one edge of the plate at the said intermediate portion thereof bearing against the sash to hold the sash.

JOHN LEASK.

THOMAS WILLIAM LEASK.

Witnesses:

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