

(No Model.)

N. B. HURD.

FASTENER FOR THE MEETING RAILS OF SASHES.

No. 471,553.

Patented Mar. 29, 1892.

Fig. 1.

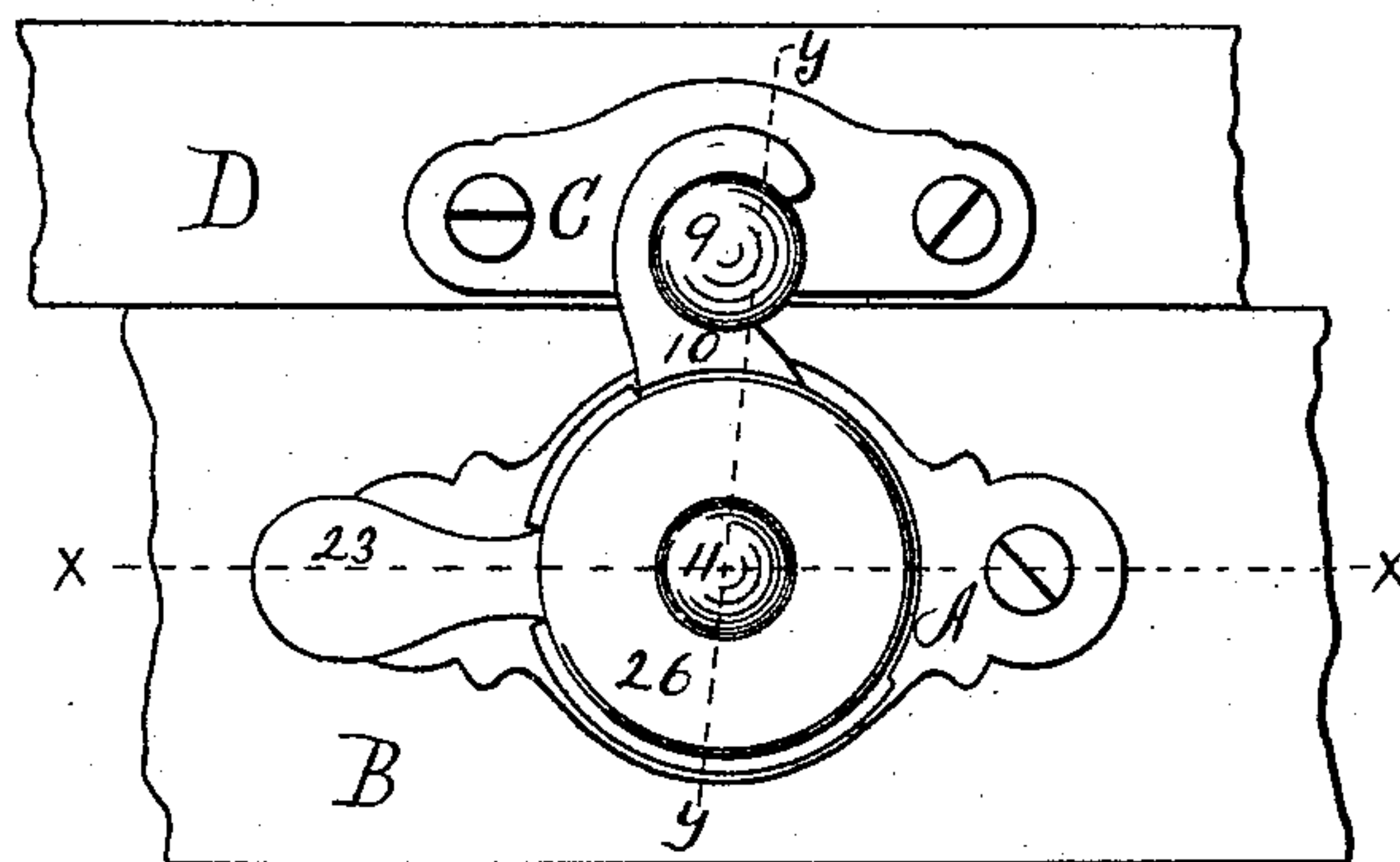


Fig. 2.

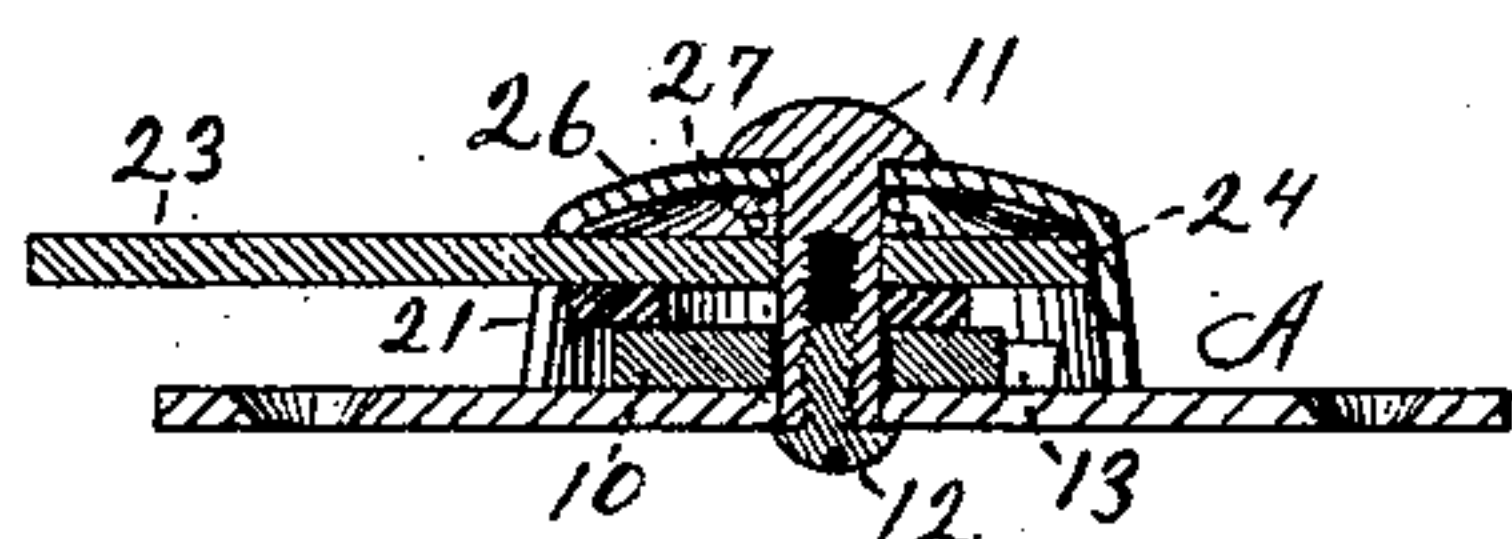


Fig. 3.

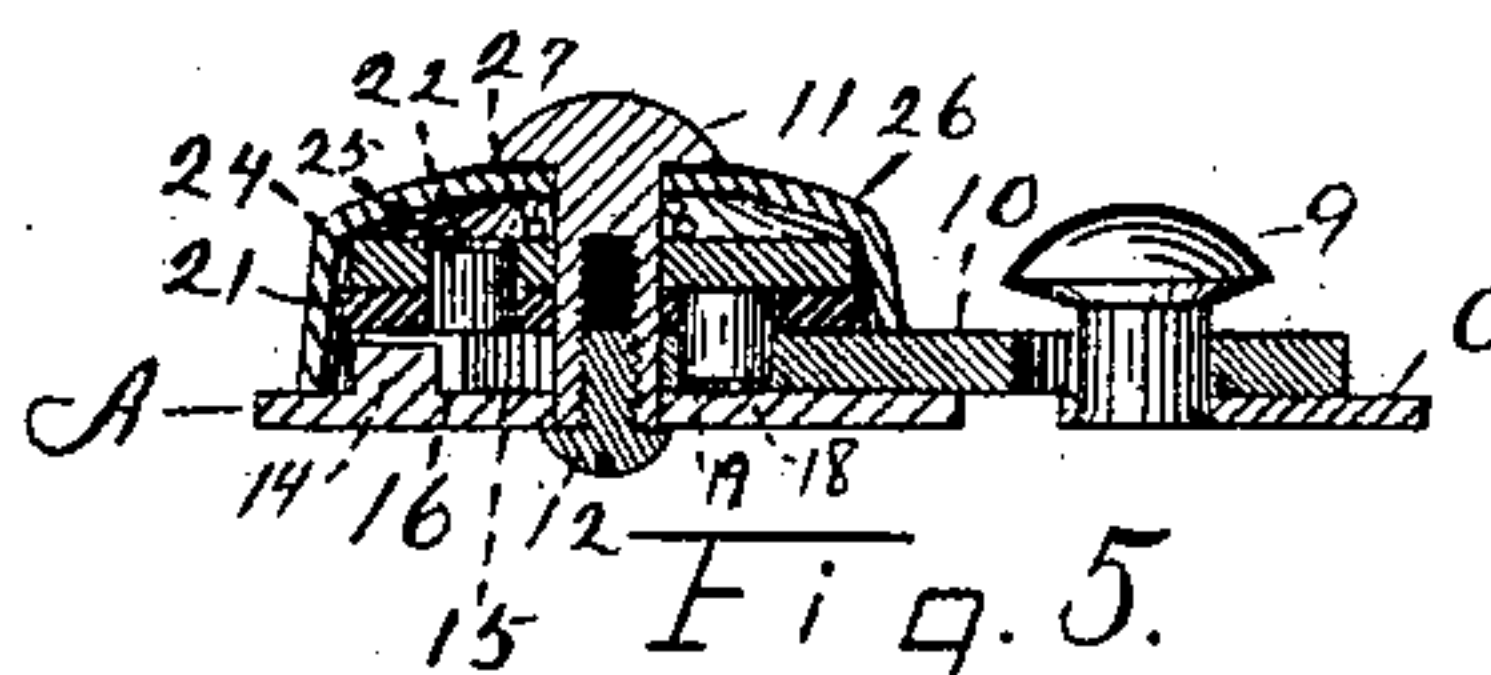


Fig. 4.

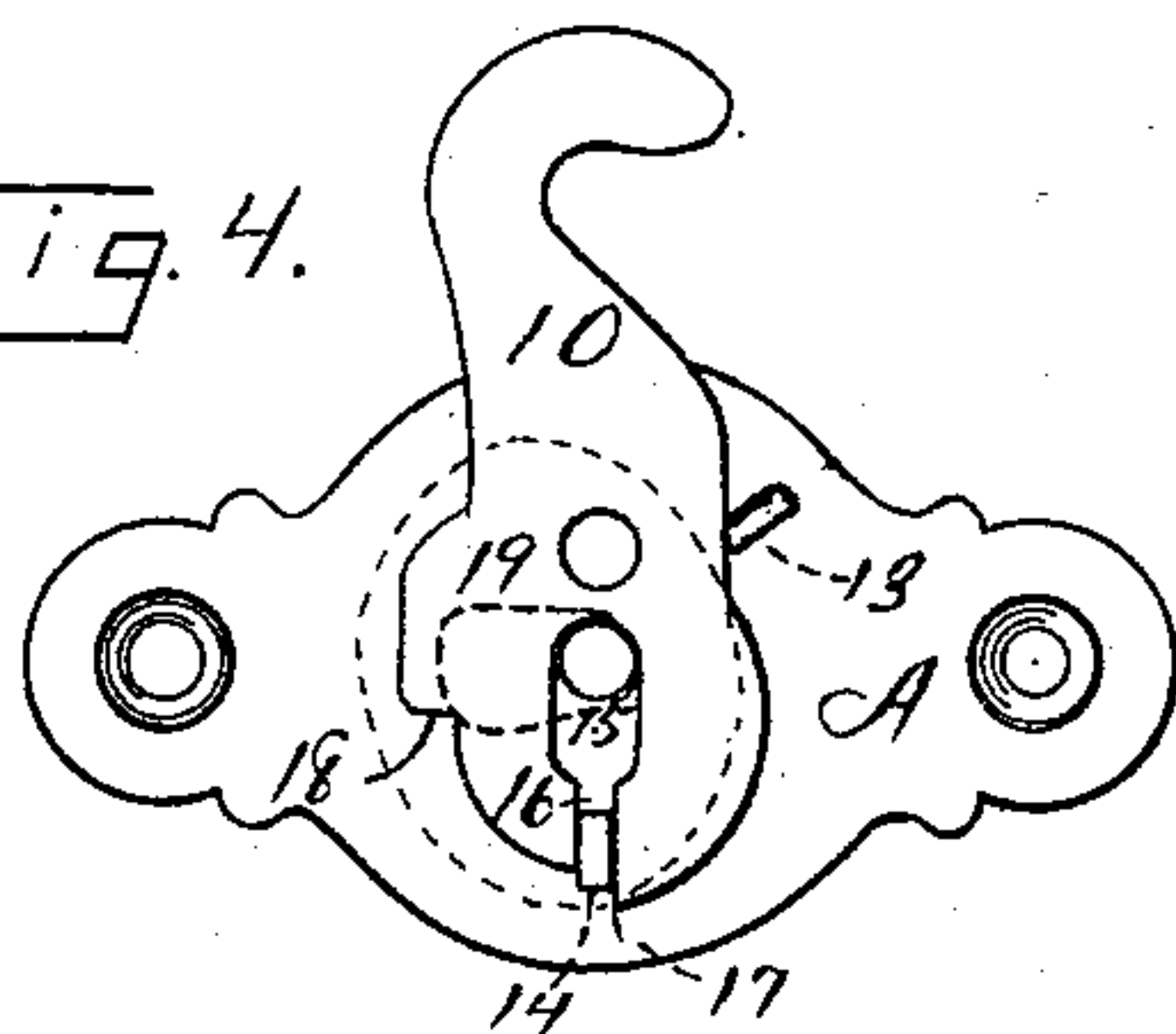


Fig. 5.



Fig. 6.

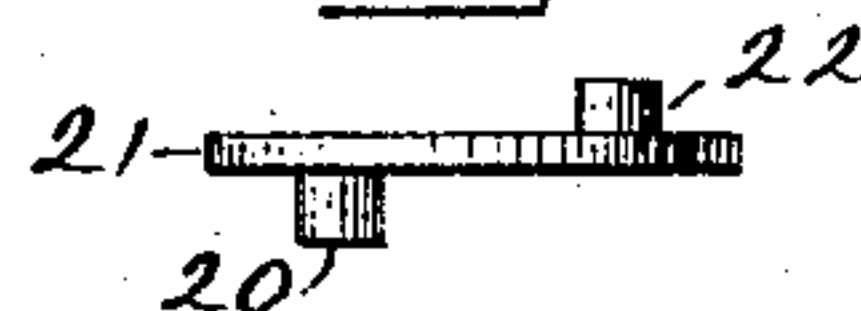


Fig. 7.

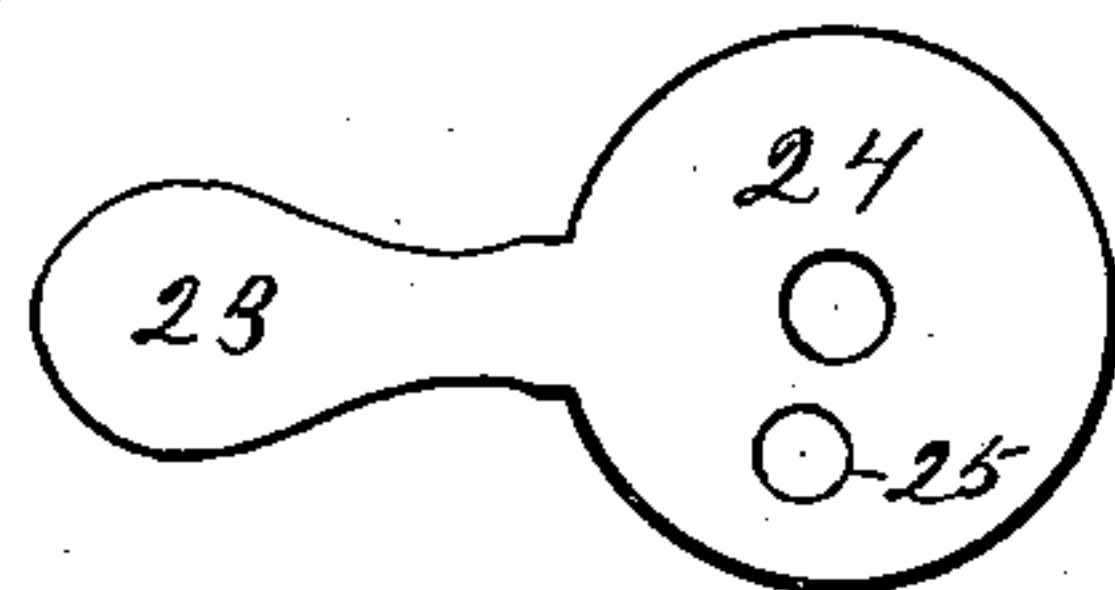
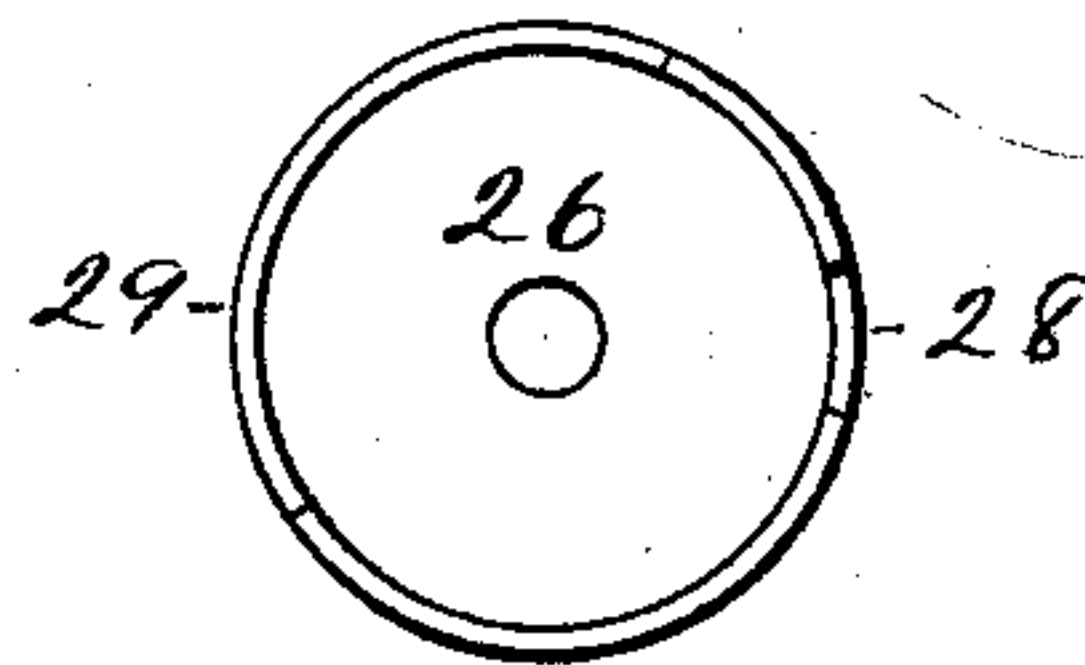


Fig. 8.



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UNITED STATES PATENT OFFICE.

NORMAN B. HURD, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE
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FASTENER FOR THE MEETING-RAILS OF SASHES.

SPECIFICATION forming part of Letters Patent No. 471,553, dated March 29, 1892.

Application filed February 1, 1892. Serial No. 419,871. (No model.)

To all whom it may concern:

Be it known that I, NORMAN B. HURD, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Sash-Fasteners, of which the following is a specification.

In the accompanying drawings, Figure 1 is a plan view of my fastener, together with the meeting-rails of the sash. Fig. 2 is a vertical section of my fastener on the line *x x* of Fig. 1. Fig. 3 is a vertical section of the same on the line *y y* of Fig. 1. Fig. 4 is a plan view of the base-plate and sliding latch. Fig. 5 is a plan view of the pin-plate. Fig. 6 is an edge view of said plate. Fig. 7 is a plan view of the lever, and Fig. 8 is a reverse plan view of the cap.

The base-plate A is designed to be secured to the upper rail B of the lower sash, while the keeper C is designed to be secured to the lower rail of the upper sash. This keeper is provided with a pin or post 9 of any ordinary form for being engaged by the hook of the sliding and swinging latch 10, substantially as in ordinary fasteners of this class. In the center of the base-plate A, I attach a pivotal post 11, which may be secured to this plate in any ordinary manner—as, for instance, by means of a screw 12. The base-plate is also provided with lugs 13 and 14. The latch 10 rests immediately upon the base-plate. It is provided with a slot 15, through which the pivotal post 11 extends, and with a narrower slot 16 at the heel of the latch, as best shown in Fig. 4. The heel of the latch is rounded, as shown, the curve on the right-hand side of the narrower slot 16 being on a larger radius than the curve at the left-hand side, whereby a shoulder 17 is formed at the heel of the latch at one end of the lesser curve, while another shoulder 18 is formed at the opposite end of said curve, as shown in Fig. 4. The latch is also provided with a pin-hole 19 to receive the pivot-pin 20 of the pin-plate 21. This pin-plate 21 is of an elliptical form, slotted at its middle portion, as shown in Fig. 5, and provided with a pin 22, projecting in the opposite direction from that of the pin 20, as shown in Figs. 3 and 6. The lever 23 is provided with a circular head 24, having a central hole to

receive the pivotal post 11 and a pin-hole 25 at one side of the same, as shown in Fig. 7. The pin-plate lies between the lever and latch, (its contour as it lies over the latch being indicated by broken lines in Fig. 4,) with the pivotal post 11 passing through its slot and with its pins 20 and 22 resting, respectively, in the pin-holes of the latch and lever, whereby said plate is pivoted at one point to said lever and at another point to said latch. The portions immediately surrounding the pivotal post 11 are covered by a cap 26, and the elliptical contour of the pin-plate is to enable it to oscillate within this cap. Between the under side of the cap and the head of the lever is a frictional spring 27 to create a slight friction between the parts; but such spring is not essential to the operation of the fastener. The cap 26 is notched or recessed on its edge, as at 28, Fig. 8, for the projection of the lever and also partially cut away, as at 29, Fig. 8, to accommodate the projecting end of the latch. This cap moves with the latch the same as if integral therewith, and aside from forming a cover and chamber for the frictional spring its uses are ornamental rather than functional.

In Figs. 1, 2, 3, and 4 the parts are represented in their locked position. As the lever 23 is turned to bring its handle to the front, the pin-plate acts through its pins to move the latch lengthwise outwardly in a radial direction from the position shown in Fig. 4 into a position where its curved portion between the shoulders 17 and 18 is inside of the inner edge of the stop-lug 14, and the end of the slot in said pin-plate is brought against the side of the pivotal post 11. As the lever is then further removed to the right into a position diametrically opposite that shown in Fig. 1, the latch and pin-plate move with it as if integral, and they are stopped in said position with the shoulder 18 in contact with one side of the lug 14. In order to fasten the sashes again, the motion of the lever is reversed, the parts all moving together until the movement of the latch 10 is arrested by the shoulder 17 at the point of the heel coming in contact with the stop-lug 14. The further movement of the lever from directly in front to the position shown in Fig. 1 operates the

pin-plate to draw the latch radially inward again into the position shown in Fig. 4, with the narrower slot 16 drawn over the lug 14 to firmly lock the latch in this position. The inner edge of the stop-lug 14 and of the guiding-lug 13, against which the curved edges of the heel of the latch bear, serve to guide the latch and support it as it swings about the axis of the pivotal post.

By my improvement the parts are of simple and easy construction, whereby the fastener is produced at a small cost. By the employment of the pin-plate between the latch and the lever the operation of the fastener is not only certain and effective, but the parts work very smoothly and easily.

I claim as my invention—

1. The combination of a base-plate, the slid-

ing and swinging latch mounted thereon, a lever, and a pin-plate pivoted to said latch at one point and to said lever at another point, substantially as described, and for the purpose specified.

2. The combination of the base-plate having lug 14, the pivotal post 11, the latch slotted to receive said post and also slotted at its heel, the pin-plate also slotted for the reception of said pivotal post and connected by a pin to said latch, and the lever also connected by a pin to said pin-plate, substantially as described, and for the purpose specified.

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Witnesses:

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