J. H. SOUTHEY.

SASH FASTENER.

APPLICATION FILED DEC. 9, 1919.

1,359,121. **Patented Nov. 16, 1920.**

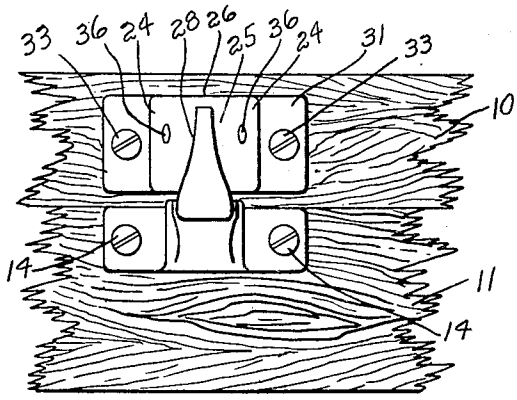


Fig. 1

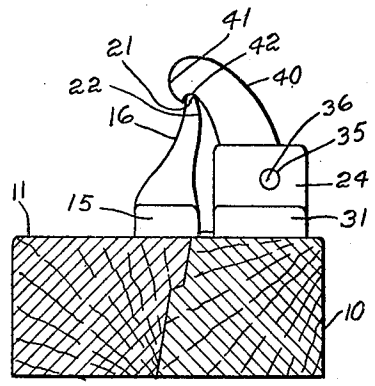


Fig. 2

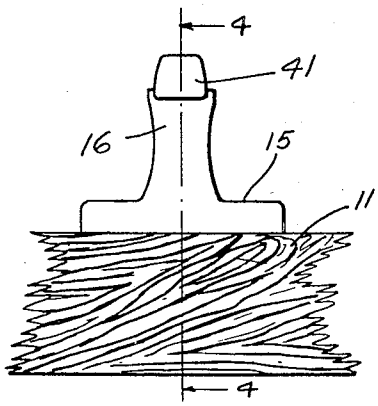


Fig. 3

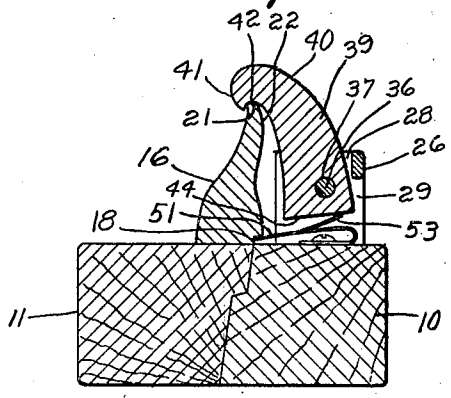


Fig. 4

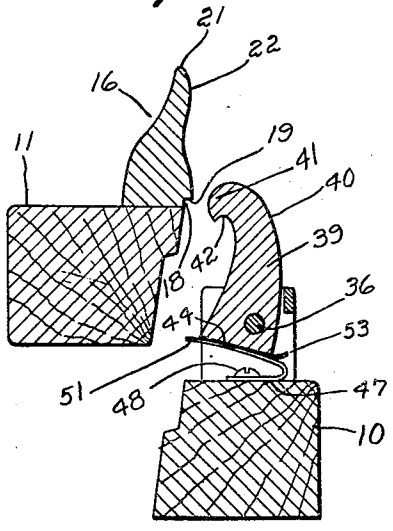


Fig. 5

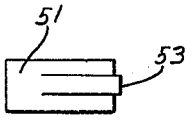


Fig. 6

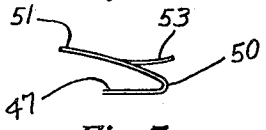


Fig. 7

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UNITED STATES PATENT OFFICE.

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SASH-FASTENER.

1,359,121. Specification of Letters Patent. Patented Nov. 16, 1920.

Application filed December 9, 1919. Serial No. 343,597.

To all whom it may concern:

Be it known that I, JOSEPH H. SOUTHEY, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Sash-Fasteners, of which the following is a specification.

My invention relates to locks for window sashes and has for its essential objects the automatic engagement of the locking parts by the act of closing the window, security, and simplicity of construction.

To the above ends essentially my invention consists of such parts and such combinations of parts as fall within the scope of the appended claims.

In the accompanying drawings which form a part of this specification—

Figures 1 and 2 are plan and side elevations respectively of my novel sash lock,

Fig. 3, a front elevation of the post member of the lock showing the beak end only of the companion member,

Figs. 4 and 5, sections of the lock, in locked and unlocked positions respectively, on line 4—4 of Fig. 3, and

Figs. 6 and 7, a plan and side elevation respectively of the spring member.

Like reference characters indicate like parts throughout the views.

In the drawings 10 represents the lower sash of an upper window frame, and 11 the upper sash of the lower window frame. Upon the latter is fixed by screws 14 or otherwise an attaching portion 15 of a post 16 so located that its inner edge coincides with that lateral face of the sash which is adjacent the sash 10. The inner face of the portion 15 is cut away to form a transverse cavity 18 beneath a shoulder 19. The post is tapered at its top to form a broad rounded point 21, beneath which on its inner face is an inclined laterally tapering portion 22.

Upon the sash 10 adjacent the post is a bearing member, in this instance in the form of a housing, comprising upwardly tapering sides or walls 24, a top 25, and rear wall 26. The front of the bearing member is open, and the top provided with a slot 28, while the whole or a portion of the rear wall is cut away as at 29. Integral with the walls 24 are flanges 31 attached to the sash by screws 33. In openings 35 in walls or uprights 24 is a pintle or rod 36 loose in a transverse opening 37 in the flat shank portion 39 of a catch member 40 which terminates in a broad, projecting round beak 41 above its engaging cavity 42. The shank of the catch, which is reciprocable in the slot 28, is broad at its bottom and tapers upwardly, so that it is substantially triangular, with a plane bearing face 44 upon its bottom. The bearing opening 37 is located near the rear lower corner of the shank so that the catch naturally gravitates inwardly or toward the post 16. Actuating the catch is a compound spring member shown in detail in Figs. 6 and 7. This is formed from a strip of resilient material, and comprises a rearwardly directed base portion 47 fixed to the sash 10, which constitutes the floor of the housing, by a screw 48. The material of the base is bent to form an inwardly directed open loop 50 and an upwardly inclined resilient arm 51. Cut from an intermediate portion of the latter is a rearwardly directed elevated resilient finger 53. When the member 40 is in unlocked position, as shown in Fig. 5, the shank face 44 is engaged by both the arm 51 and finger 53.

The operation of my device is as follows. In locked position the parts are as shown in Fig. 4, with the beak 41 engaging in its cavity 42 the point 21 of the post 16. If it is desired to raise the sash 11 the catch 40 is disengaged by manually tilting it rearwardly to its position shown in Fig. 5 while the sash 17 is being raised. Thus the latch has its beak 41 maintained substantially out of the path of the post by the arm 51 which is sufficiently strong to overcome the gravity of the eccentrically mounted latch shank 39. When the sash 11 is to be lowered to original locked position the manual depression of the sash automatically locks the parts thus. As the sash descends the post 16 passes out of contact with the latch. The shoulder 19 of the post engages and depresses the arm 51 and locks it in the cavity 18. Meanwhile gravity and the finger 53 press the beak against the incline 22 as the post descends until the beak overlaps the point 21.

I claim:—

1. In a sash lock, a post, a housing adjacent the post, a pintle in the housing, a vibratory latch comprising a shank mounted on the pintle, and a beak overlapping the

top of the post, and a resilient arm in the housing in the path of the post for vibrating the latch.

2. In a sash lock, a post, supporting walls adjacent the post, a pintle in the walls, a vibratory latch comprising a shank pivotally mounted on the pintle, and a beak adapted to engage the post, and resilient means engaging the shank and the post for vibrating the latch.

3. In a sash lock, a post, a shoulder on the post, supporting walls adjacent the post, a pintle in the walls, a latch comprising a substantially triangular shank pivotally mounted off center on the pintle, and a beak adapted to engage the post, and a resilient arm intermediate the walls engageable with the shank and shoulder.

4. In a sash lock, a post, a shoulder on the post, supporting walls adjacent the post, a pintle in the walls, a vibratory latch comprising a broad shank mounted on the pintle, and a beak engageable with the post, a resilient arm intermediate the walls engageable with the shank and shoulder, and a finger on the arm engageable with the shank.

5. In a sash lock, a post provided with a laterally tapering portion at its upper end, a lateral shoulder upon the lower portion of the post, a housing adjacent comprising side walls and a top provided with a slot, a pintle in the walls, a vibratory latch comprising a broad shank eccentrically mounted on the pintle and movable in the slot, and a beak engageable with said tapering portion, and a resilient arm between the walls engageable with the shank and shoulder.

In testimony whereof I have affixed my signature.

JOSEPH H. SOUTHEY.