

(No Model.)

P. MARSHALL.
SASH LOCK AND LIFT.

No. 598,797.

Patented Feb. 8, 1898.

Fig. 1.

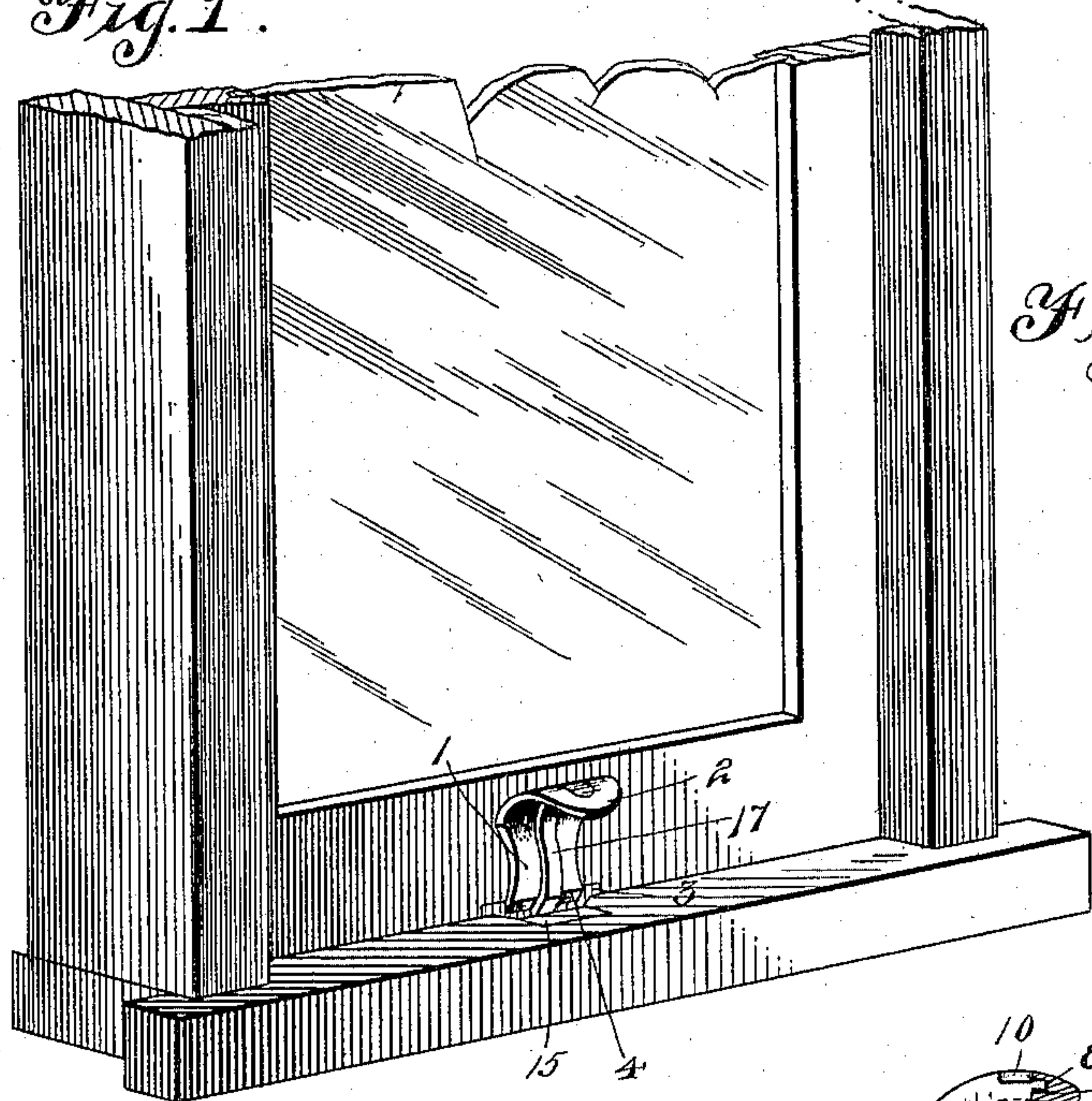


Fig. 2.

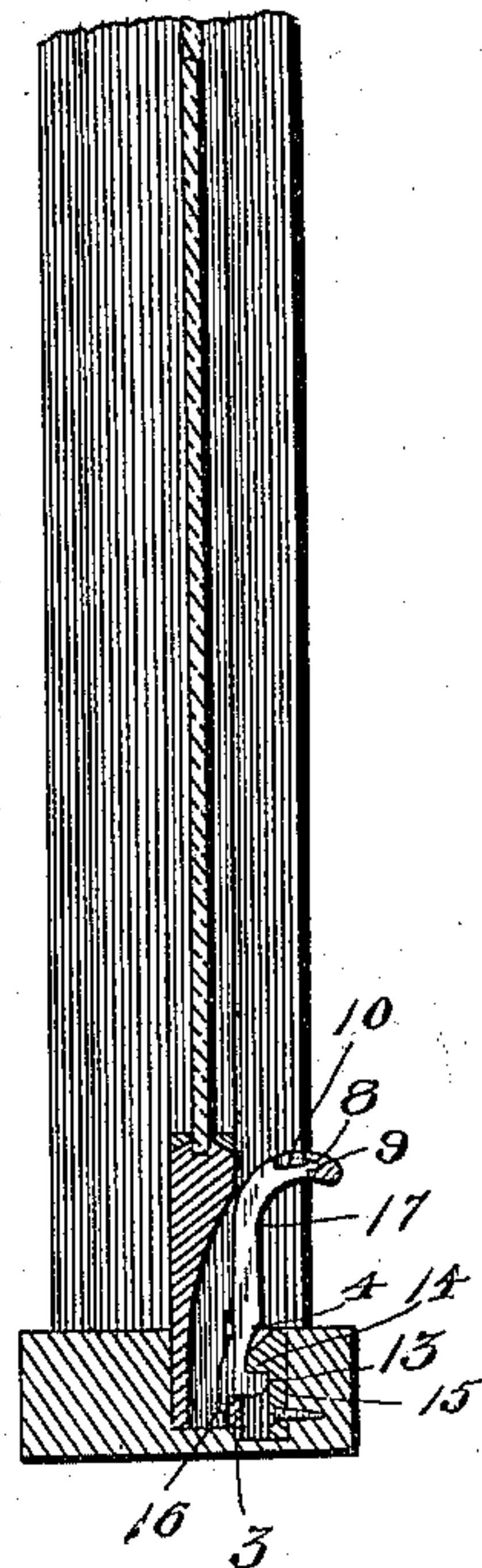


Fig. 3.

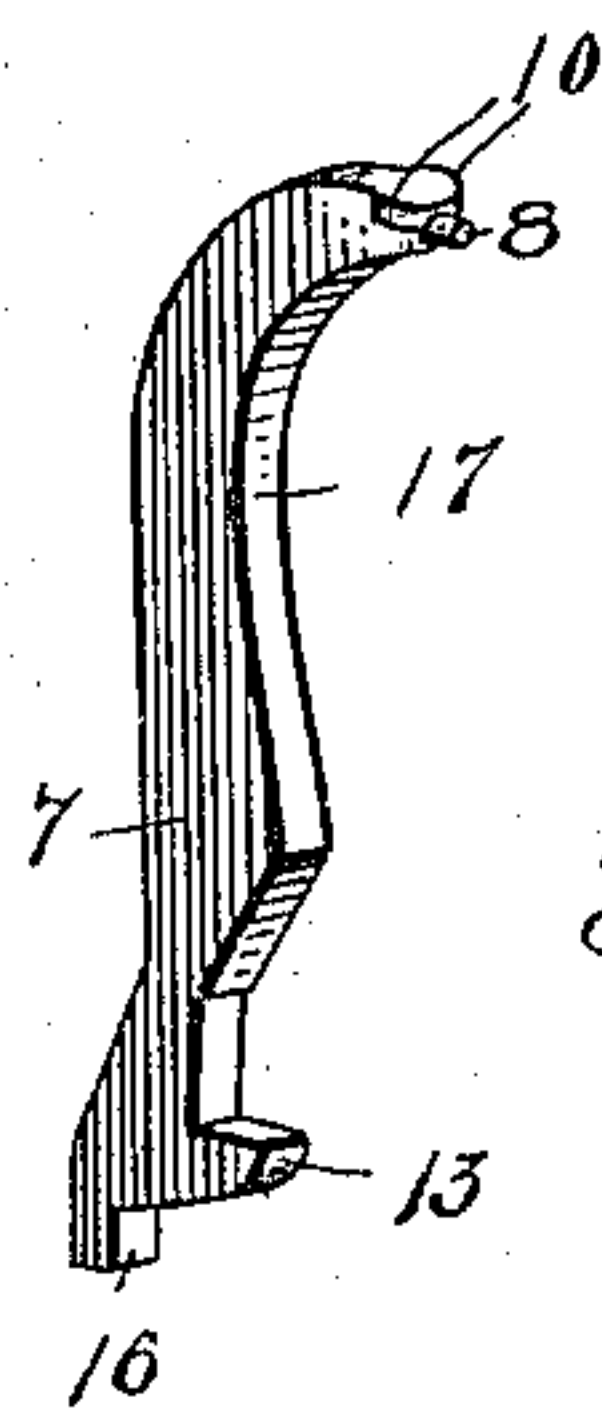


Fig. 7.

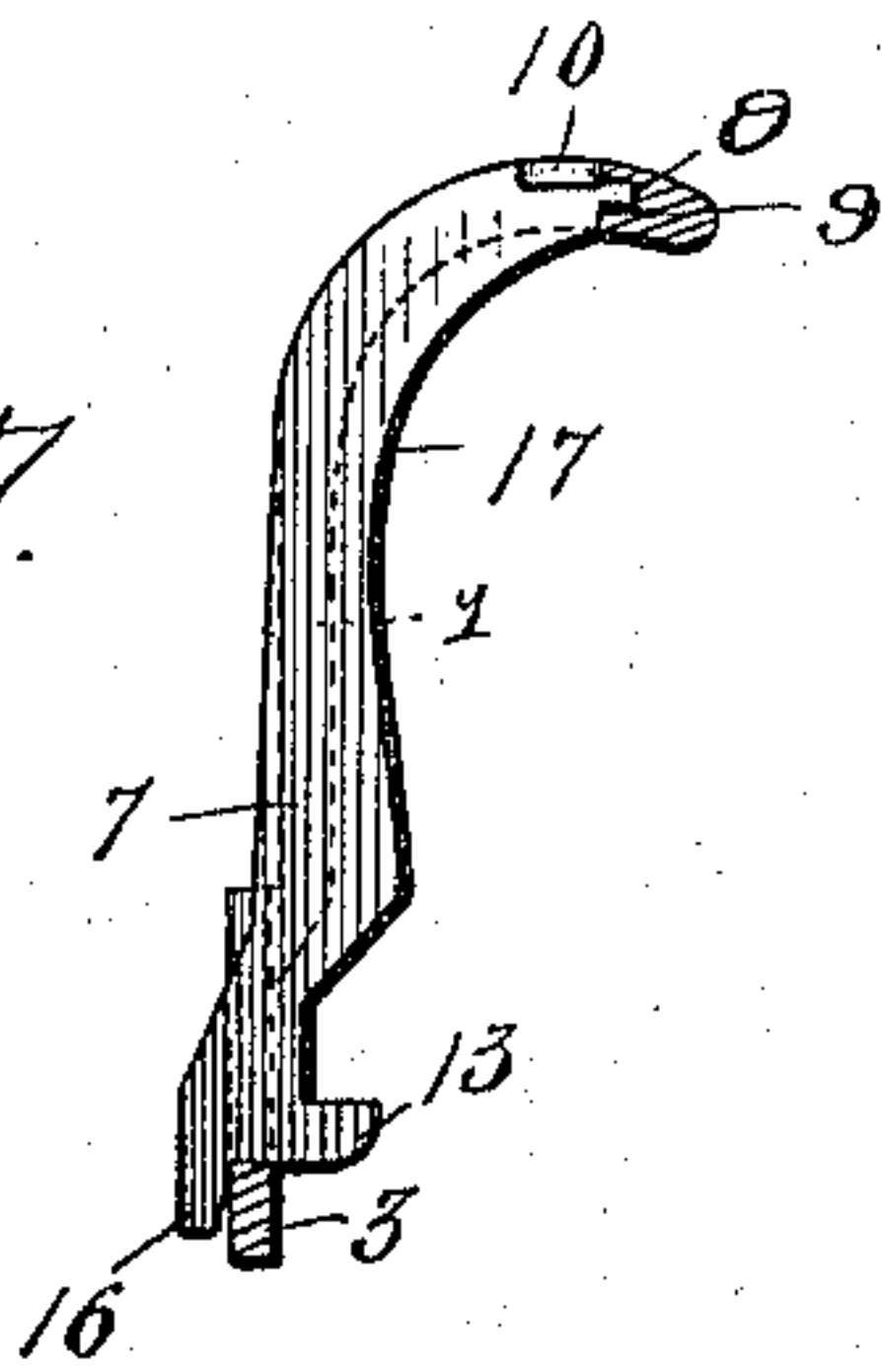


Fig. 4.

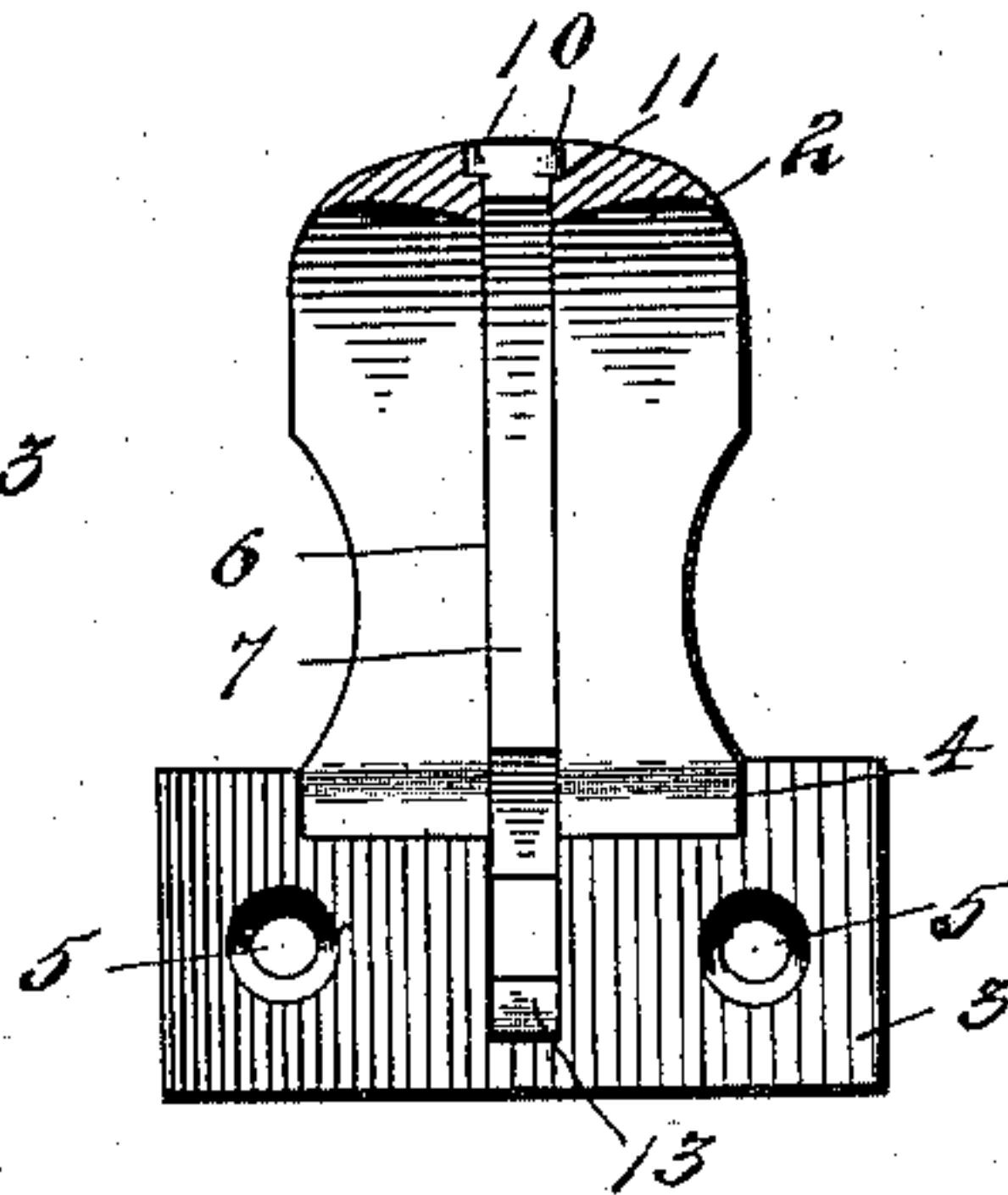


Fig. 5.

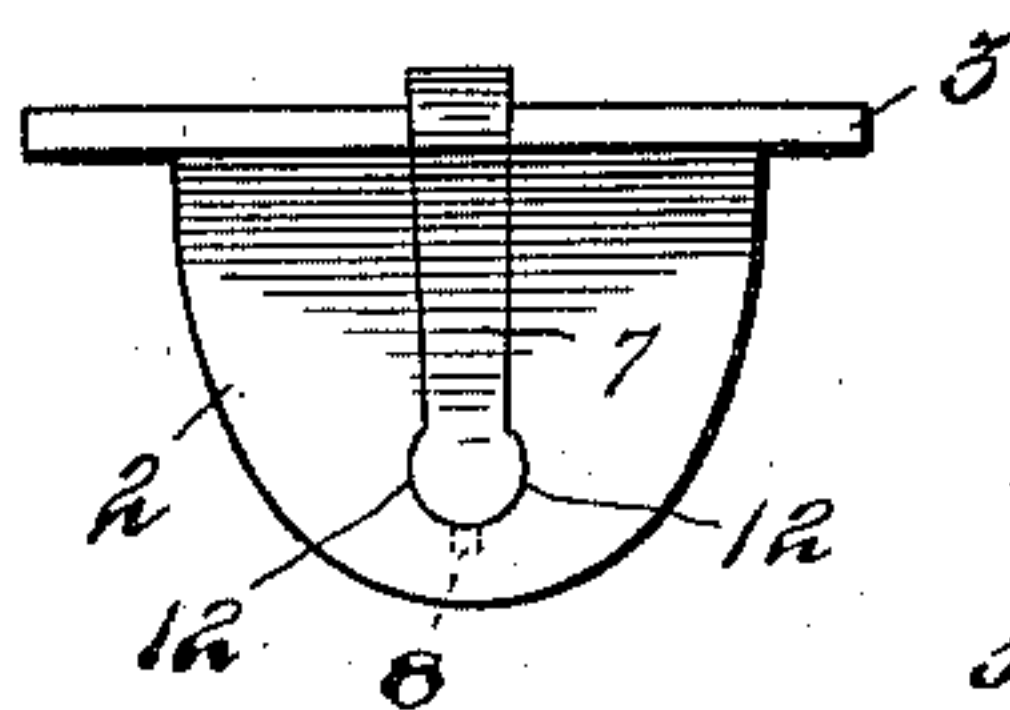
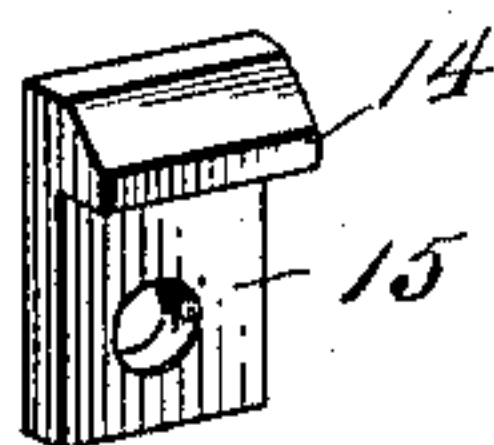


Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

PORTER MARSHALL, OF FAIR PLAY, MISSOURI, ASSIGNOR OF ONE-HALF
TO A. S. HOWARD, OF SAME PLACE.

SASH LOCK AND LIFT.

SPECIFICATION forming part of Letters Patent No. 598,797, dated February 8, 1898.

Application filed October 14, 1896. Serial No. 608,869. (No model.)

To all whom it may concern:

Be it known that I, PORTER MARSHALL, a citizen of the United States, residing at Fair Play, in the county of Polk and State of Missouri, have invented a new and useful Sash Lock and Lift, of which the following is a specification.

This invention relates to sash lifts and locks for windows, &c.; and the object in view is to provide, in connection with a sash-lift secured rigidly to the sash, a gravity-latch which is so fulcrumed upon the lift that it is instantly detachable, the latch being fulcrumed in a manner that will insure the engagement thereof with the keeper on the sill without the aid of a spring. The latch is so disposed with relation to the lift that it will be moved out of engagement with the keeper by means of the operator's finger in the mere act of raising the sash.

Other objects and advantages of the invention will appear in the course of the ensuing description.

The invention consists in a combined sash lift and lock embodying novel features and details of construction and relation of parts, as hereinafter particularly set forth, illustrated in the drawings, and pointed out in claims.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a sash and window-frame, showing the combined lift and lock applied thereto. Fig. 2 is a vertical cross-section through the same. Fig. 3 is a detail perspective view of the latch. Fig. 4 is a vertical section through the upper portion of the sash-lift, showing the manner of fulcruming the latch. Fig. 5 is a plan view of the device. Fig. 6 is a detail perspective view of the keeper. Fig. 7 is an enlarged vertical section through the sash-lift, showing the latch in elevation.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

1 designates the main body of the sash-lift, the upper portion 2 of which is curved and extends forwardly beyond the front face of the vertical portion of the lift to form a lip, beneath which the operator's finger may be placed lengthwise in the act of lifting the

sash. At the base of the lift 1 the latter is provided with a rectangular portion 3, which by means of an offset 4 is located in a plane back of the normal plane of the lift 1, and said portion 3 has openings 5 for the reception of suitable fasteners by which the lift is secured to the sash and to the bottom rail thereof, as shown in Figs. 1 and 2.

The sash-lift 1 is provided with a vertical slot 6 entirely through it, which extends downward into the portion 3 and upward into the lip 2. Within this slot is mounted a gravity-latch 7, the same being pivotally suspended from its upper end. The latch 7 is provided at its upper extremity with a forwardly-projecting stud 8, which enters a socket 9, provided therefor in the lip 2 and forming a continuation of the slot 6. The latch is also provided at its upper end with laterally-projecting segmental ears 10, adapted to rest in recesses 11, formed in the lip 2 on opposite sides of the slot 6 at its upper end portion, the recesses being of such depth that a flush surface will be presented when the ears are in the recesses. The ears 10 prevent the lateral displacement of the latch, while the stud 8 prevents the vertical displacement thereof, and said ears and stud contribute to form the fulcrum upon which the latch swings, which fulcrum is in advance of the front face of the vertical portion of the lift.

The latch 7 at its lower or free end has a forwardly-projecting lip 13, which is adapted to engage under the lips 14 of a keeper 15, secured to the window-sill. The latch is also provided at its lower end with a depending stop projection 16, which extends downward in rear of the base portion 3 of the lift and limits the forward movement of the latch. The latch 7 is made enough thicker than the lift 1 to enable the same to normally project at the edge 17 in front of the sash-lift, so that as the operator's finger is placed lengthwise under the lift in the effort to raise the window the latch will be vibrated out of engagement with the keeper, thus permitting the sash to be raised. When the sash is lowered, upon removing the finger from the sash-lift the latch will move by gravity into engagement with the keeper and lock the sash. Should, however, the free inward movement

of the lower end of the latch be arrested by the frictional engagement of the interlocking surfaces of the hook and the keeper or otherwise, pressure can be applied to the rear face of the latch near its upper end to force the hook into positive engagement with the keeper, as will be readily understood.

The combined sash lift and lock will ordinarily be applied to the bottom rail of a sash, as shown in Fig. 1, and such rail will of course be mortised to receive the base portion 3 and permit the rocking of the latch. By fulcruming the latch at a point considerably in advance of the lower end thereof and near the forwardly-projecting end of the lip 2 the gravitation of the latch into engagement with the keeper is insured. By making the latch instantly detachable from the lift in the manner described the work of applying the device to a window-sash is greatly facilitated, as after the latch is removed the sash-lift may be placed against the surface of the sash-rail and its position outlined by a suitable instrument for guiding the workman in mortising said rail to receive the device.

It will be understood that the device is susceptible of changes in the form, proportion, and minor details of construction which may accordingly be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new is—

1. A sash-lift, comprising a vertical portion having a forwardly-extending overhanging lip at its upper end and a perforated plate

portion at its lower end, said vertical portion being slotted entirely through it, and the slot extending at its respective ends into the perforated plate portion and the overhanging lip, a gravity-latch of greater thickness than the lift mounted in said slot and pivoted at its upper end in the overhanging lip, the front face of the latch normally projecting beyond the front face of the vertical portion of the lift, and said latch having at its lower end a forwardly-extending lip adapted to engage a keeper, the construction being such that pressure may be applied to either the rear or front face of the latch to positively engage it with or disengage it from the keeper, substantially as described.

2. The combination with a sash-lift having an overhanging lip for the finger and also provided with a vertical slot, the upper end of which extends into the overhanging lip and is cut away upon opposite sides to form recesses, said overhanging lip having also a socket formed therein communicating with said slot, of a gravity-latch mounted and movable in said slot and provided at its upper end with laterally-projecting ears which rest in the said recesses and with a forwardly-extending stud which fits loosely in said socket, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

PORTER MARSHALL.

Witnesses:

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HARRY D. MCMAHAN.