

No. 630,462.

Patented Aug. 8, 1899.

D. L. LONG.
SASH LOCKING DEVICE.
(Application filed Aug. 19, 1898.)

(No Model.)

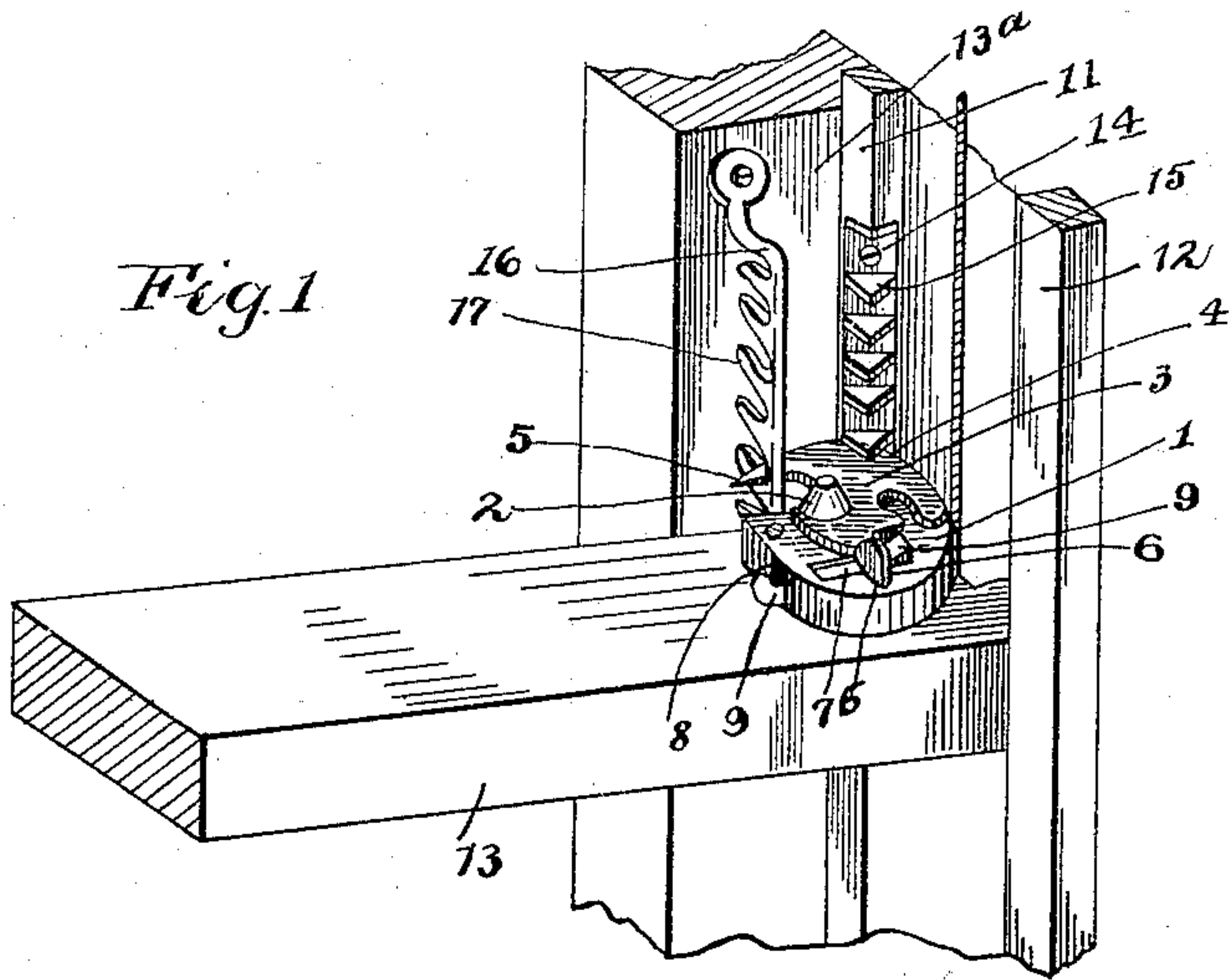


Fig. 2

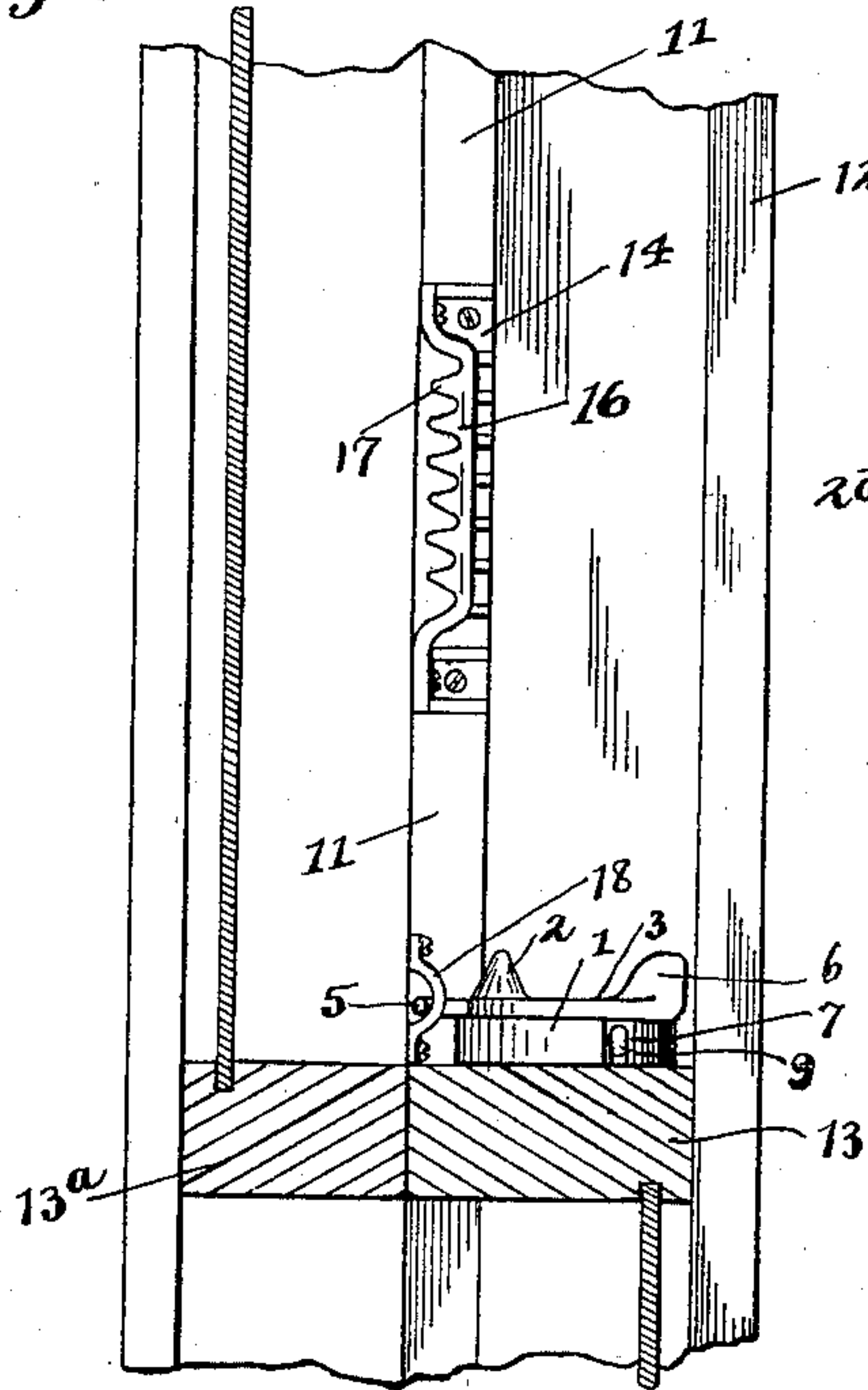


Fig. 3

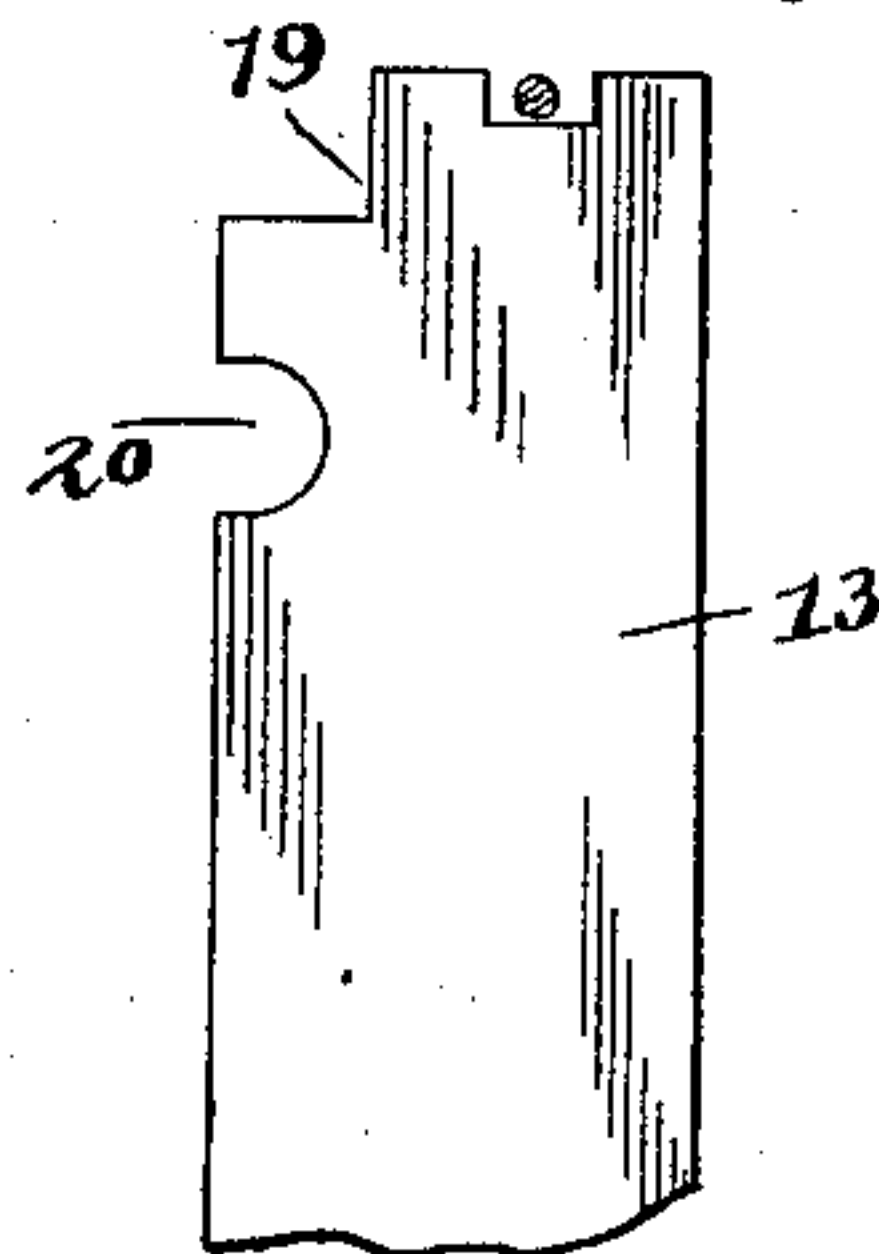
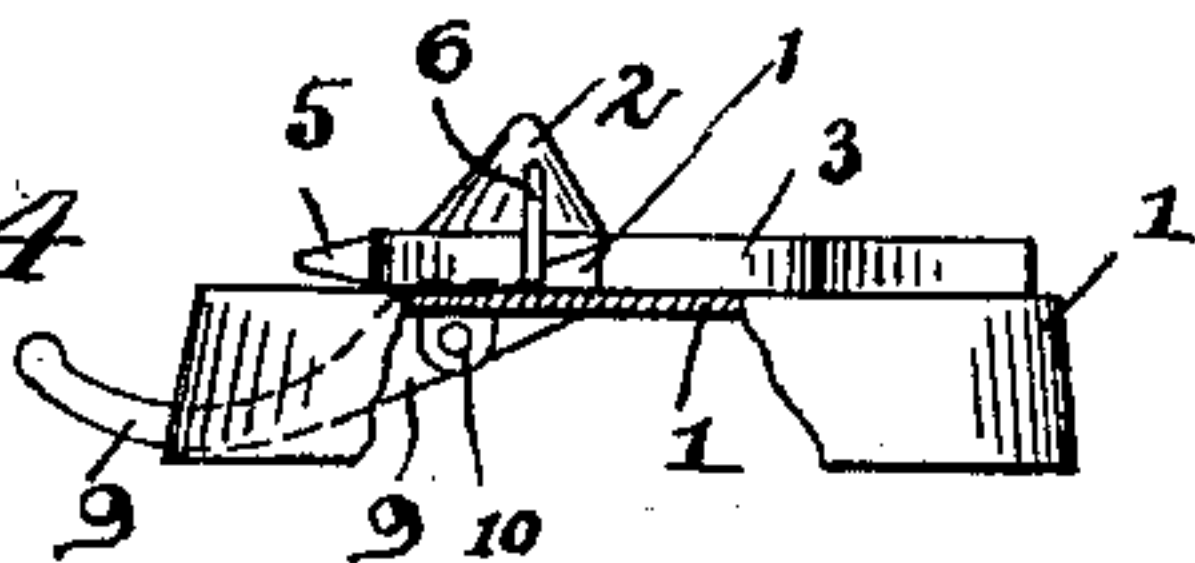


Fig. 4



WITNESSES:

J. H. Frawley
A. L. Phelps

INVENTOR

David L. Long

BY

C. C. Shepherd

ATTORNEY

UNITED STATES PATENT OFFICE.

DAVID L. LONG, OF COLUMBUS, OHIO.

SASH-LOCKING DEVICE.

SPECIFICATION forming part of Letters Patent No. 630,462, dated August 8, 1899.

Application filed August 19, 1898. Serial No. 688,979. (No model.)

To all whom it may concern:

Be it known that I, DAVID L. LONG, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Sash-Locking Devices, of which the following is a specification.

My invention relates to the improvement of window-fasteners; and the objects of my invention are to provide an improved construction of window fasteners or locks whereby the sashes may be locked in their closed or open positions and to produce certain improvements in details of construction and arrangement of parts, which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective of a portion of an upper and lower window-sash, showing the same locked together in open positions. Fig. 2 is a central vertical section taken through the upper end of the lower sash and lower end of the upper sash when the windows are locked in the closed position. Fig. 3 is a detail plan view of a portion of the lower sash; and Fig. 4 is a view in elevation of the lock, showing a portion of the front wall thereof broken away.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention I employ a casing consisting of a vertically-flanged plate 1, which is adapted, as indicated in the drawings, to be secured upon the upper side of the lower sash, adjacent to the window-casing. In constructing said casing I pivot or fulcrum thereon, at a point 2, a catch-plate 3, said catch-plate being formed with a substantially crescent-shaped extension 4, one end of which is shaped to the hook form indicated at 5. At a point on the outer side of the pivot I provide the catch-plate 3 with a projecting finger-piece 6. Through the plate or casing top 1 I provide a transverse slotted opening 7, which is on the outer side of the inner end portion of the catch-plate 3. In line with the slotted opening 7 and in the side wall of the casing 1 I provide a vertical slotted opening 8, through which extends the head or outer end portion of a catch-lever 9, the latter being fulcrumed within the casing 1, as indi-

cated in Fig. 4 at 10. The inner end and upwardly-inclined portion of the lever 9 is adapted, as shown, to be projected through the inner end of the slotted opening 7 when the outer end of said lever is depressed. 11 represents the central stop of the window-frame, and 12 the inner stop, between which the lower sash 13 is adapted to be moved in the usual manner. As indicated in the drawings, the stop 11 has its corner portion which is adjacent to the inner sash cut away at desirable intervals to receive vertical lock-bars 14, each of which is provided at intervals on its front face with outwardly-projecting teeth 15, which are preferably pointed, as indicated. To the inner face of the upper sash 13^a I secure at desirable points keepers 16, with each of which are formed a vertical row of teeth or projections 17, which extend toward the outer sash. On the lower portion of the outer sash and inner face thereof I secure, as indicated at 18, a single loop-keeper, with which the hook portion 5 of the latch-plate 3 is adapted to engage when the sashes are in their closed positions.

As indicated in Fig. 3 of the drawings, the lower sash may be cut away at the outer corners, as shown at 19, to provide ways for the central stops, while the outer face of said inner sash may be provided with a groove or recess 20 to admit of the free passage of the keepers 16 and 18 when the sashes are moved. In order to illustrate the operation of my device, I will assume that the latch-plate 3 has been swung on its pivot until its finger-piece 6 is projecting substantially in the direction of the length of the lower-sash top or width of the window, in which position it is obvious that the lower sash may be raised or the upper sash lowered, as desired. The upper sash being thus lowered and the lower sash raised until one of the toothed keepers 16 is opposite one of the toothed plates 14, the latch-plate 3 is then rotated on its pivot until its hook portion 5 engages between two of the teeth of the keepers 16 and the curved outer edge portion of said latch-plate has moved between two of the teeth 15 of the plate 14. In this movement of the latch-plate 3 it will be seen that the latter will travel over the normally-upwardly-projecting inner end portion of the lever 9 until the head or

outer portion of said latch-plate has passed said lever, when the latter will assume its normal position and by contact with the outer edge of the latch-plate prevent the latter from
5 being rotated to disengage it from the teeth of the bar and keeper. By the means above described it will be seen that the locking action may be effected by lowering the outer sash or raising the inner sash, thus provid-
10 ing for the locking of the sashes against movement from the outside in either direction. It is obvious that any desired number of the toothed keepers and plates 14 may be employed and that the same may be arranged
15 at suitable intervals one from the other on their respective supports. In unlocking the sash it will be seen that the latch-plate 3 may be readily disconnected or rotated to its inner position by first depressing the upwardly-
20 projecting inner end of the lever 9.

It will be observed that the construction herein described is simple and inexpensive and does not necessitate the employment of springs or other devices having a tendency
25 toward easily getting out of order.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a sash-locking device, the combina-
30 tion with the upper and lower window-sashes and window-frame, of a casing secured upon the lower sash adjacent to one side thereof, a

latch or lock plate rotatably mounted on said casing and having a curved engaging portion as described, keepers 16 secured to and pro- 35
jecting from the inner face of the outer sash, said keepers provided with outwardly-pro-
jecting teeth and vertical plates 14 arranged at intervals in recesses of the central window-
frame stop, said plates having toothed pro- 40
jections as described and said latch-plate 3 adapted to engage both the teeth of said plates and said keepers, substantially as and for the purpose specified.

2. In a sash-locking device, the combina- 45
tion with upper and lower window-sashes and window-frame, of a casing supported upon said lower sash, said casing having a slotted opening in its upper side and a vertical slotted opening in its side wall, a lever fulcrumed 50
in said casing having its outer end projecting through said side-wall opening and its inner end normally projecting through the slot of the casing-top, a latch-plate having a curved engaging portion and rotatably 55
mounted on said casing and projections on the central window-stop and outer window-sash adapted to be engaged by said latch-plate, substantially as and for the purpose specified.

DAVID L. LONG.

In presence of—

EDWARD M. TAYLOR,
C. C. SHEPHERD.