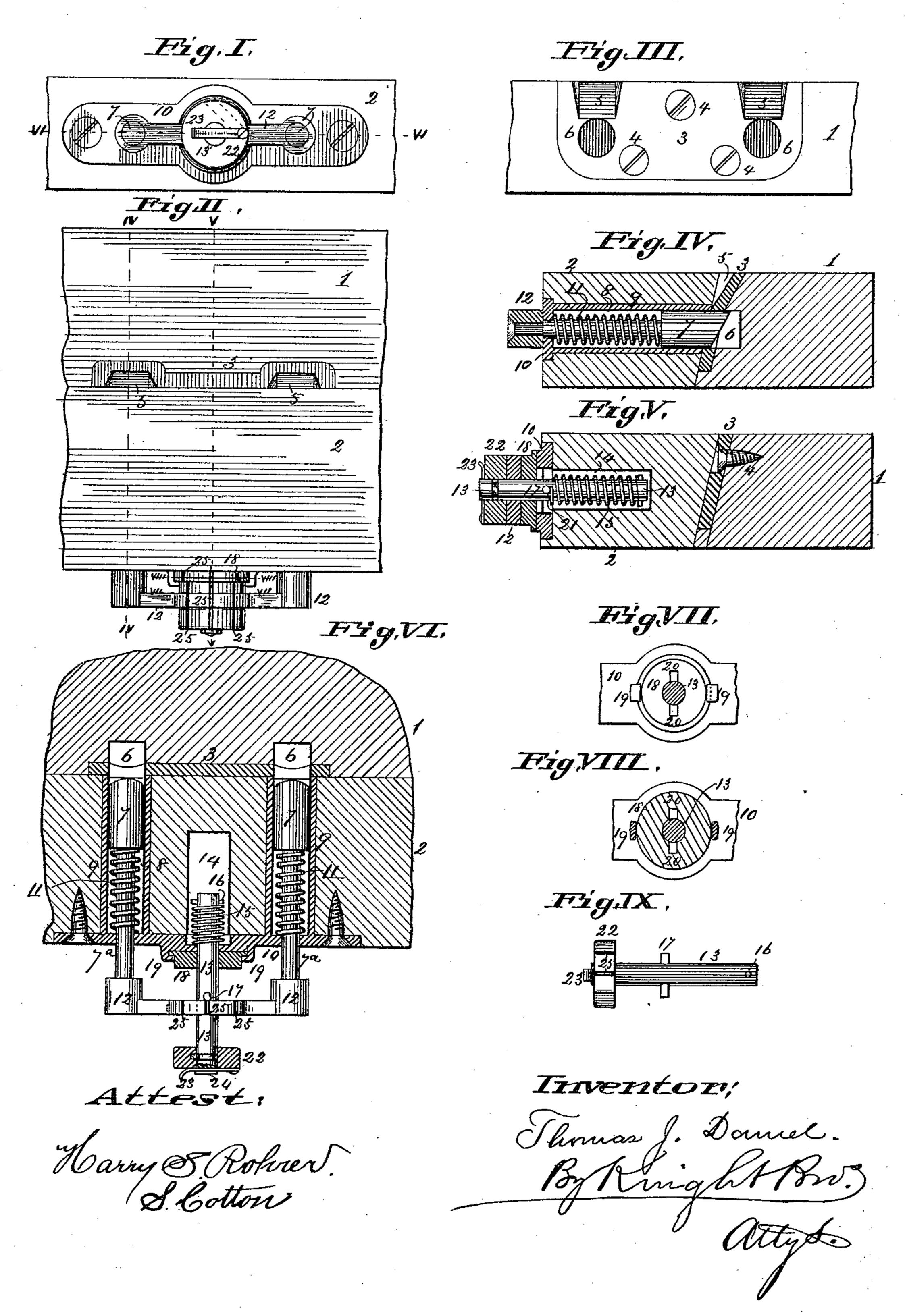
T. J. DANIEL.

FASTENER FOR THE MEETING RAILS OF SASHES.

No. 459,676.

Patented Sept. 15, 1891.



United States Patent Office.

THOMAS J. DANIEL, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO LOUIS C. DIEKMANN, OF SAME PLACE.

FASTENER FOR THE MEETING-RAILS OF SASHES.

SPECIFICATION forming part of Letters Patent No. 459,676, dated September 15, 1891.

Application filed February 13, 1891. Serial No. 381,304. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. DANIEL, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Im-5 provement in Window-Sash Locks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This is a device for locking the sashes by the act of closing them. A combination-tumbler device is used to prevent the unlocking of the sashes by any one unacquainted with the device.

The novel features are set forth in the claims.

Figure I is a front view of the device. Fig. inner side of the outer meeting-bar. Fig. IV 20 is a transverse section taken at IV IV, Fig. II. Fig. V is a transverse section taken at V V, Fig. II. Fig. VI is a longitudinal horizontal section taken at VI VI, Fig. I. Fig. VII is a longitudinal vertical section taken at 25 VII VII, Fig. II. Fig. VIII is a longitudinal vertical section taken at VIII, VIII, Fig. II. Fig. IX is a side view of the locking-pin.

1 is the outer meeting-rail, forming the lower bar of the upper sash.

2 is the inner meeting-rail, forming the upper bar of the lower sash.

3 is a metal plate let into the inner face of the bar 1 and secured in place by screws 4.

The plate has inclined recesses 5, down the 35 inclined sides of which the ends of the springbolts pass as the sashes are closed. Directly below the inclined recesses are the bolt-holes 6, entered by the ends of the bolts as the sashes close. (See Figs. III and IV.)

through the rail 2, the sockets being prefer-

ably lined with a metal bushing 9.

10 is the face-plate, sunk in the front of the rail. The bolts have reduced shanks 7a, ex-45 tending through holes in the face-plate. Surrounding the shanks of the bolts are spiral springs 11, whose ends bear, respectively, against the heads of the bolts and the inner side of the face-plate and whose office is to 50 push the bolts forward. The bolts are connected outside the face-plate by a cross-head 12, through which passes a spindle 13, that is between the bolts and parallel with them. The spindle works in a socket 14, and is drawn inward by a spring 15, which surrounds it, and 55 whose inner end bears against a cross-pin 16 at the inner end of the spindle. The outer end of the spring bears against the inner side of the face-plate. The spindle 13 has a crosspin that engages the cross-head as the spin- 60 dle 13 is drawn outward and draws out with it the cross-head and the bolts to withdraw the heads of the latter from the holes 6 and

allow the opening of the sashes.

18 is a tumbler-wheel, which turns on the 65 spindle 13 as an axis and which is held to the face-plate by hooked lugs 19, that engage the edges of the tumbler, so as to hold it to the His a top view. Fig. III is a front view of the | face-plate while allowing its free rotary movement. The tumbler has slots 20, extending 70 radially from its central orifice, through which the ends of the cross-pin 17 may be passed when the pin and tumbler are in the proper relative position. The face-plate has similar slots 21 to allow the pin 17 to pass. 75 The spindle has a head 22, that may turn freely thereon, but which may be locked thereto by a spring-catch 23, that is pivoted to the head and which is adapted to occupy a diametric recess 24 in the end of the spin- 80 dle. The top of the face-plate has a mark or marks 25, and the head 22 and tumbler 18 have also marks by which the spindle and tumbler may be set in the position to allow the pin 17 to pass through the slots 21 and 20 85 of the face-plate and the tumbler, in which case the spindle cross-head and bolts may be drawn outward into the position seen in Fig. VI, in which case the sashes are unlocked. When the sashes are locked together, the 90 The bolts 7 work in sockets 8, extending | cross-pin 17 is inside the face-plate and the spindle cannot be drawn outward unless the pin 17 is in line with the slots 21 and also the slots 20 of the tumbler.

The spindle and tumbler may be left in the 95 position they have when the bolts are thrown forward in the act of locking the sashes. In this case the bolts may be drawn outward by a simple pull upon the head 22; but when it is desired to make the fastening more secure 100 either the spindle or tumbler is turned, or both of them, and then the bolts cannot be

retracted until the parts are returned to proper position, as set forth. When the spindle is out of position for retraction, the spring-catch 23 may be lifted from its recess 5 25 in the end of the spindle and turned to one side, as shown by dotted lines in Fig. I, and then the head will turn freely on the spindle and the latter will remain at rest and cannot be set in position for retraction until the ro spring-catch has been again placed in the recess of the spindle.

I claim as my invention—

1. In a sash-lock, two spring-bolts 7, connected by a cross-head 12, a spindle 3, pass-15 ing through the cross-head and turning therein, a face-plate traversed by the spindle and slotted at 21, and a pin 17, projecting from the spindle and adapted to pass through the slot 21 only in certain positions of the spindle, 2c substantially as set forth.

2. The combination of spring-bolts 7, working in one sash and engaging in both holes 6 in the other sash, a cross-head connecting the bolts, and a spindle turning in the cross-head 25 and adapted to lock the bolts, substantially

as and for the purpose set forth.

3. The combination, in a sash-lock, of bolts 7 and spindle 13, working in one sash and entering the other, the bolts being rigidly at-30 tached to a cross-head 12 and the spindle turning therein, the face-plate 10, traversed by the l

spindle and having slots 21, the tumbler 18, turning on the spindle and in bearings on the face-plate and having slots 20, pin 17 on the spindle, and springs 11 on the bolts, substan- 35

tially as and for the purpose set forth.

4. The combination, in a sash-lock, of the plate 3, secured to one sash and having the inclines 5 and bolt-holes 6, the face-plate 10, secured to the other sash and traversed by 40 bolts 7, and a spindle 13, connected, as described, to the cross-head 12, tumbler turning on the spindle and in bearings 19 on the faceplate, pin 17 on the spindle, the face-plate and tumbler being slotted at 21 and 20 for the pas- 45 sage of the pin, and springs 11 and 15, adapted to force the bolts and spindle inward, substantially as and for the purposes set forth.

5. The combination, in a sash-lock, of the plate 3, with inclines 5 and bolt-holes 6, the 50 face-plate 10, the spring-bolts 7, the cross-head 12, with slot 21, the spindle 13, with head 22 and locking-spring 23, the spindle provided with a recess 24 and a pin 17, the tumbler having slot 20 and turning on the spindle and 55 in bearings 19 on the face-plate, and springs 11 on the bolts, all constructed and adapted

to operate substantially as set forth. THOMAS J. DANIEL.

In presence of— SAML. KNIGHT, J. M. MAROT.