

No. 881,694.

PATENTED MAR. 10, 1908.

C. N. KALSTROM.
COMBINED SASH AND BLIND LOCK.
APPLICATION FILED JULY 18, 1907.

Fig. 1.

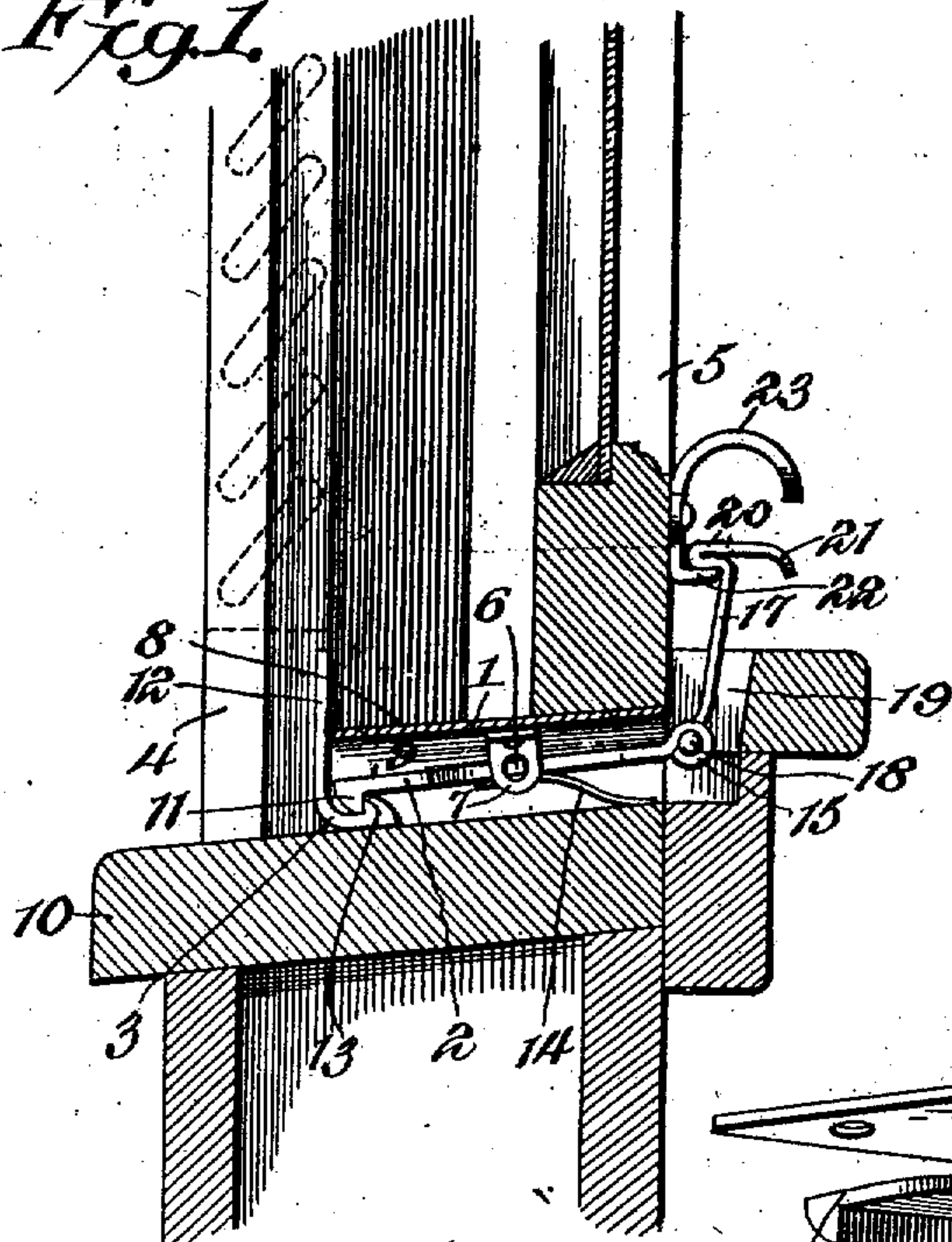


Fig. 4.

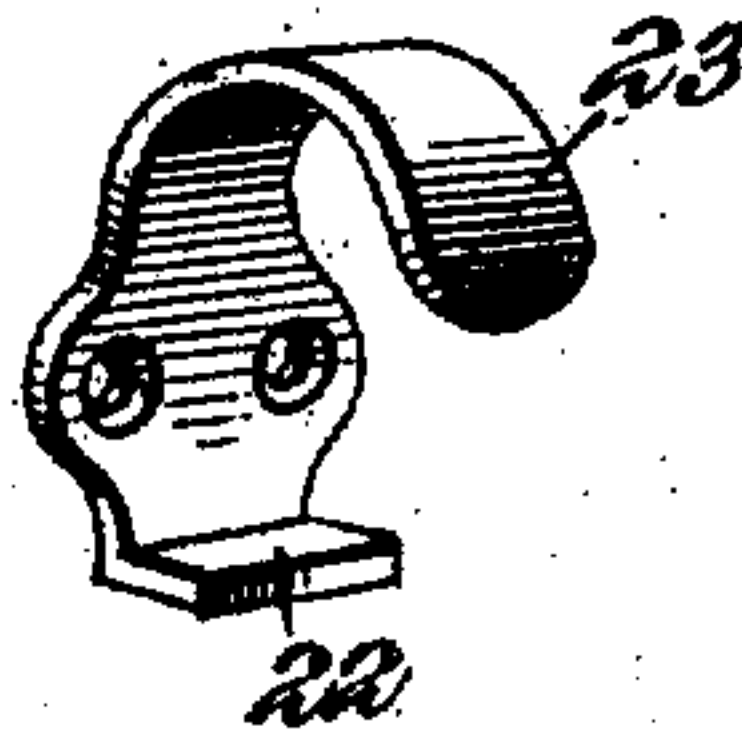


Fig. 3.

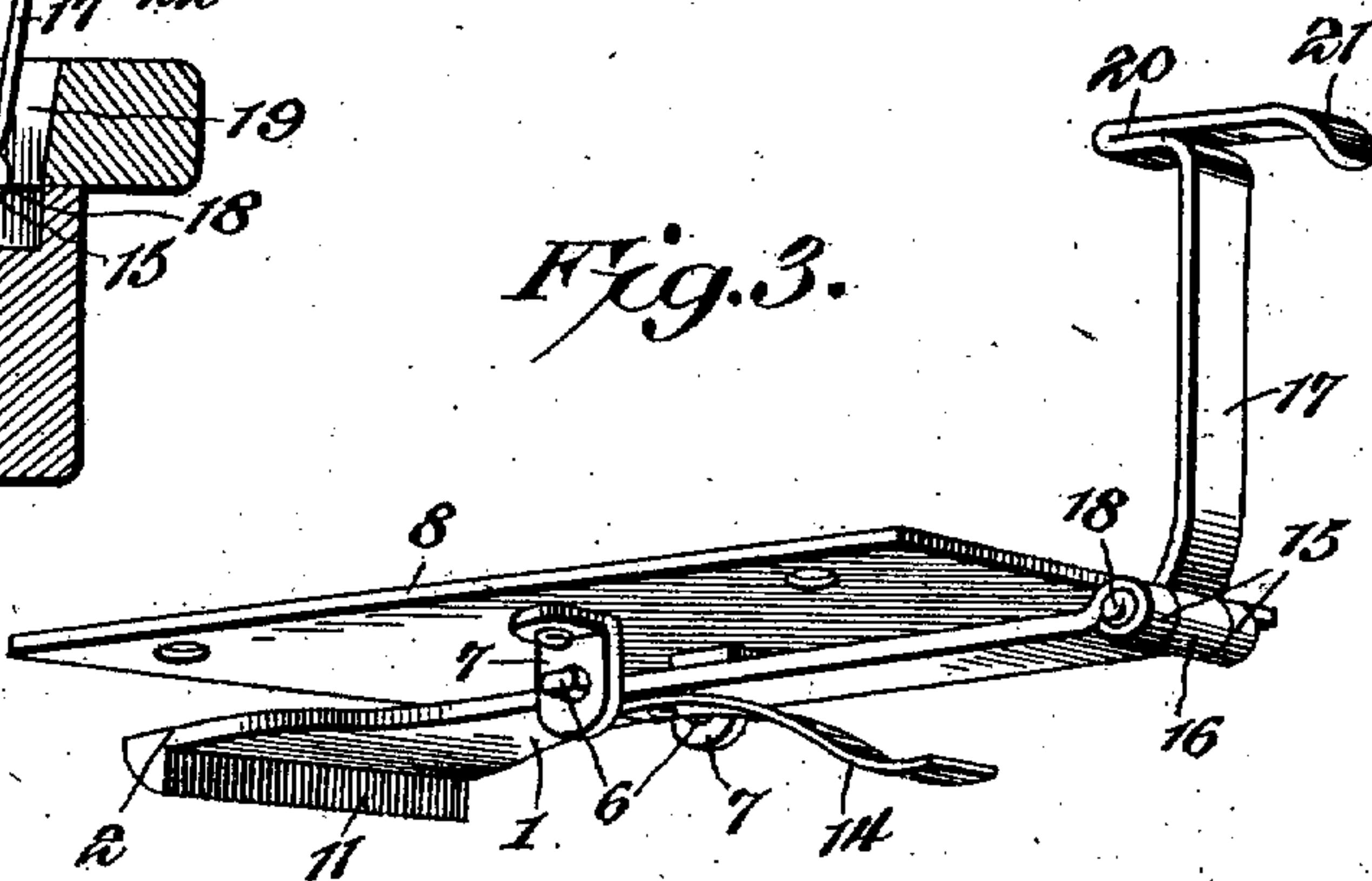


Fig. 2.

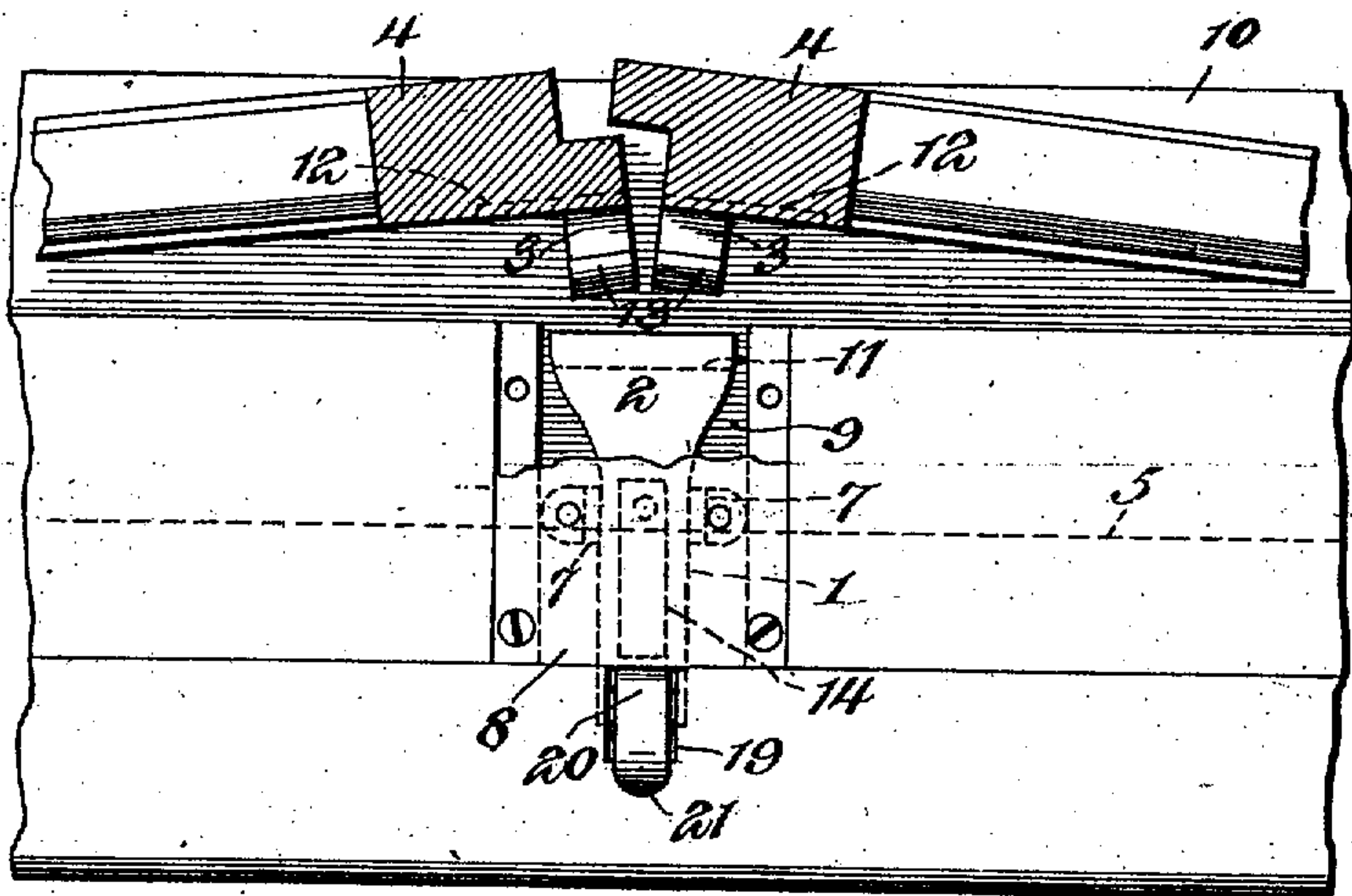
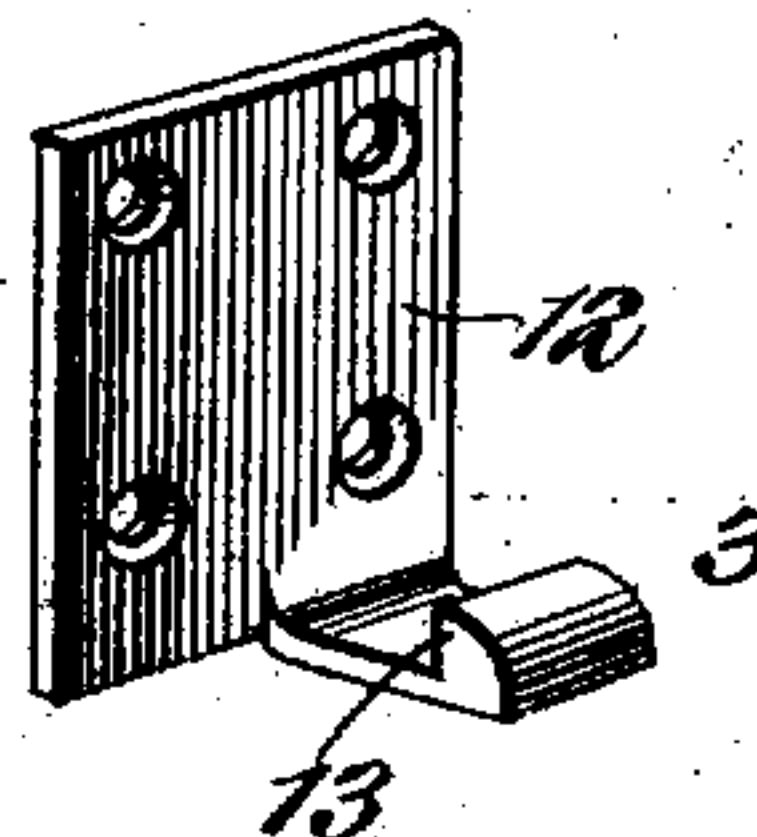


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES NICKLAS KALSTROM, OF MANSON, NORTH CAROLINA.

COMBINED SASH AND BLIND LOCK.

No. 881,694.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed July 16, 1907. Serial No. 384,030.

To all whom it may concern:

Be it known that I, CHARLES NICKLAS KALSTROM, a citizen of the United States, residing at Manson, in the county of Warren and State of North Carolina, have invented a new and useful Combined Sash and Blind Lock, of which the following is a specification.

The invention relates to improvements in combined sash and blind locks.

The object of the present invention is to improve the construction of combined sash and blind locks, and to provide a simple, inexpensive and efficient device of great strength and durability, and adapted to be readily applied to a window, and capable of securely fastening both the shutters and the lower sash and of effectually preventing the same from being surreptitiously unfastened without making sufficient noise to alarm the occupants of a house.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a vertical sectional view of the lower portion of a window, provided with a combined sash and blind lock constructed in accordance with this invention. Fig. 2 is a detail plan view partly in section, the shutters being partly open to illustrate more clearly the rigid catches or engaging members carried by the same. Fig. 3 is a detail perspective view of the spring actuated lever and the swinging catch, and the means for mounting the former. Fig. 4 is a detail perspective view of the fixed catch of the sash. Fig. 5 is a detail perspective view of one of the rigid shutter catches.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

1 designates a spring actuated locking lever, having an enlarged head 2 for engaging a pair of rigid catches or members 3 of a pair of shutters or blinds 4. The locking lever, which is located beneath the sash 5, extends from a point beyond the outer face

of the same to the inner face thereof, as clearly illustrated in Fig. 1 of the drawing, and it is provided between its ends with suitable pivots or trunnions 6, extending from the side edges of the locking lever and arranged in suitable bearing openings in ears 7. The ears 7 depend from a plate 8, which covers a recess 9 in the window sill 10. The plate 8 is arranged flush with the upper face of the window sill, and the lever, which is suspended by the ears from the lower face of the plate, operates the said recess 9. The outer end of the plate extends to the outer end of the locking lever, so that the latter is not exposed, but is entirely concealed, when the shutters are closed and locked, as illustrated in Fig. 1 of the drawing. The head 2 is laterally enlarged and is beveled at the front and provided with an engaging shoulder 11. The engaging members or catches 3 of the shutters are arranged in substantially a horizontal position and they are formed integral with plates 12, which are secured by screws, or other suitable fastening devices to the inner faces of the shutters, as clearly illustrated in Figs. 1 and 2 of the drawing. The said engaging portions or catches are provided with heads, having beveled end faces and provided with shoulders 13 for engaging the shoulder 11 of the locking lever. When the shutters are closed, the catches 3, which are rigid with them, are automatically engaged by the locking lever, which is pushed upwardly by the beveled faces of the said catches 3, and as the catches 3 and the locking lever are concealed, the locking device cannot be operated from the exterior. The plates 12, which are arranged at the meeting edges of the blinds, prevent an instrument from reaching the locking lever and form a metallic end wall for protecting the locking device, when the shutters are closed.

The locking lever is maintained in its engaging position by means of a spring 14, secured at one end to the lower face of the lever below the center thereof and extending inwardly or rearwardly therefrom. The spring 14 is arranged at an angle to the inner arm of the locking lever, and the free end bears against the window sill at the bottom of the recess 9.

The inner arm of the locking lever is slotted or bifurcated, and the sides of the slots or bifurcations are partially coiled or rolled to form spaced eyes 15 between which

is arranged an eye 16 of a hinged catch 17. The catch 17 is connected with the inner arm of the locking lever by means of a pivot or pintle 18, which is arranged in the eyes 15 and 16. The catch 17, which is adapted to swing toward and from the sash 5, operates in an extension 19 of the recess 9, and it is provided at its upper end with an engaging portion or head 20, and it has a finger piece 21. The head 20 extends inwardly, or in the direction of the sash 5, and the finger piece extends upwardly, or in the opposite direction from the head. The head 20 of the catch 17 engages a fixed catch 22 of the sash 5, whereby the latter is locked in its closed position. The fixed catch 22 consists of a lip or flange, formed integral with a lift 23, which is secured to the sash 5 at the bottom thereof, as clearly shown in Fig. 1 of the drawing. The lip or flange of the lift 23 forms an upper recess or seat, with which the engaging portion 20 of the swinging catch 17 is interlocked. The swinging catch besides forming a lock for the lower sash, constitutes operating means for actuating the locking lever to reach the shutters. By depressing the swinging catch 17, the outer arm of the locking lever is lifted out of engagement with the catches of the shutters. The shutters, when closed, are automatically locked by the lever, which may be readily swung into and out of engagement with the catch of the sash. When the shutters and the sash are locked, they cannot be unfastened from the outside of the window, and it will be necessary to cut the slats of the shutters and break the glass of the window in order to reach the swinging catch from the outside. When the swinging catch is in engagement with the sash, it rigidly maintains the locking lever in engagement with the shutters, and prevents the outer end of the arm of the lever from swinging upward out of engagement with the rigid catches of the shutters.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In a device of the class described, the combination with a pair of shutters provided with catches; and a sash, of a pivotally mounted lever extending beneath the sash and provided at its outer end with means for engaging the shutter catches, said lever being arranged to swing on its pivot to engage and release the said catches, and a movable catch connected with the inner end of the lever and arranged to move toward and from the sash

and provided with means for engaging the latter to lock the same and for holding the lever in engagement with the shutter catches.

2. In a device of the class described, the combination with a pair of shutters provided with a rigid shutter catch, and a sash, of a locking lever extending beneath the sash and provided at its outer end with means for engaging the shutter catch, said lever being arranged to swing on its pivot to engage and release the said catch, and a catch pivotally connected with the inner end of the locking lever and arranged to swing on its pivot toward and from the sash and provided with means for engaging the latter to lock the same and to hold the lever in engagement with the rigid shutter catch.

3. In a device of the class described, the combination with a shutter, and a sash, of a catch mounted on the shutter, a lift secured to the sash and provided with a projecting lip or flange forming a rigid catch, a locking lever extending beneath the sash and provided with means for engaging the shutter catch, and a movable catch connected with the inner end of the lever and arranged to engage the lip or flange of the said lift.

4. In a device of the class described, the combination with a shutter, and a sash, of a catch mounted on the shutter, a projecting lip or flange projecting from the sash and forming a rigid catch, a locking lever extending beneath the sash and provided with means for engaging the shutter catch, and a movable catch connected with the inner end of the lever and provided with a head projecting inwardly towards the sash for engaging the lip or flange of the lift and having a finger piece extending outwardly in the opposite direction from the head.

5. A device of the class described comprising a plate, a locking lever pivotally connected at an intermediate point with the plate and arranged beneath the same and provided at its outer end with a head, a rigid shutter catch for interlocking with the outer end of the lever, a spring for holding the lever in engagement with the said catch, a movable catch connected with the inner end of the lever, and means carried by the sash for engagement with the movable catch.

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

CHARLES NICKLAS KALSTROM.

Witnesses:

W. L. BURRUSS,
CHAS. C. RUSSELL.