

No. 682,998.

Patented Sept. 17, 1901.

F. W. RAUEN.
SEPARABLE HINGE.

(Application filed Jan. 7, 1901.)

(No Model.)

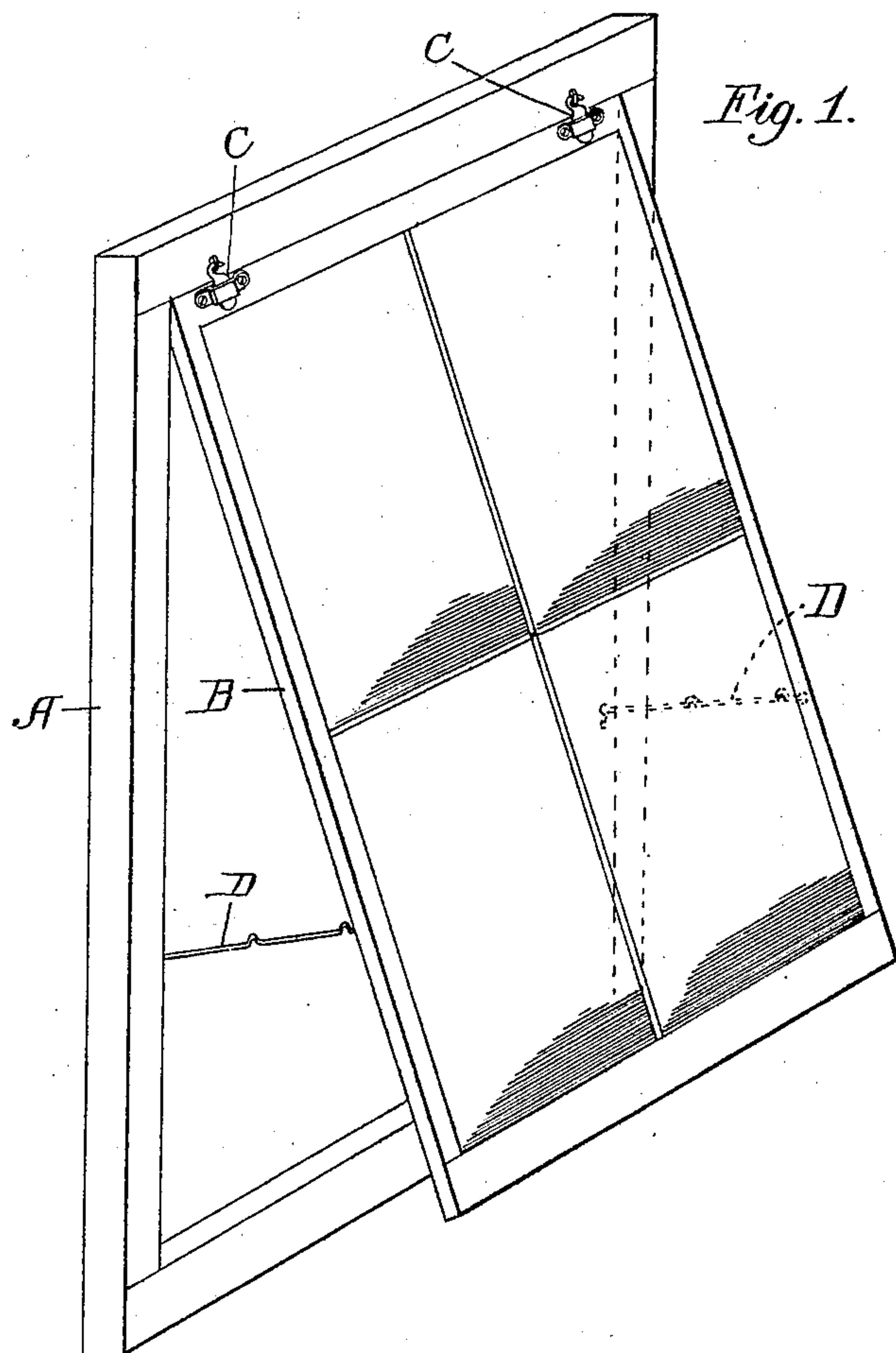


Fig. 1.

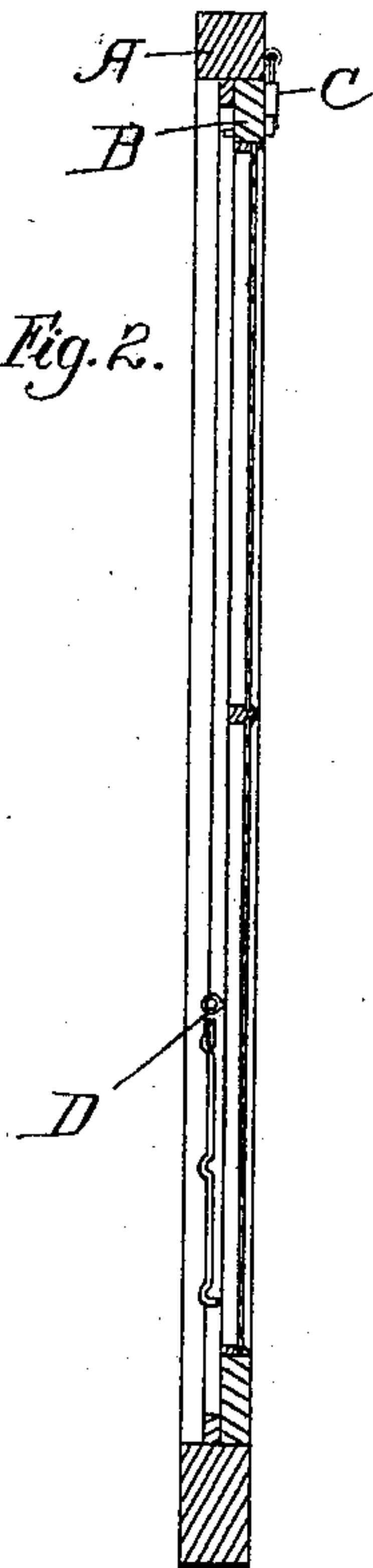


Fig. 2.

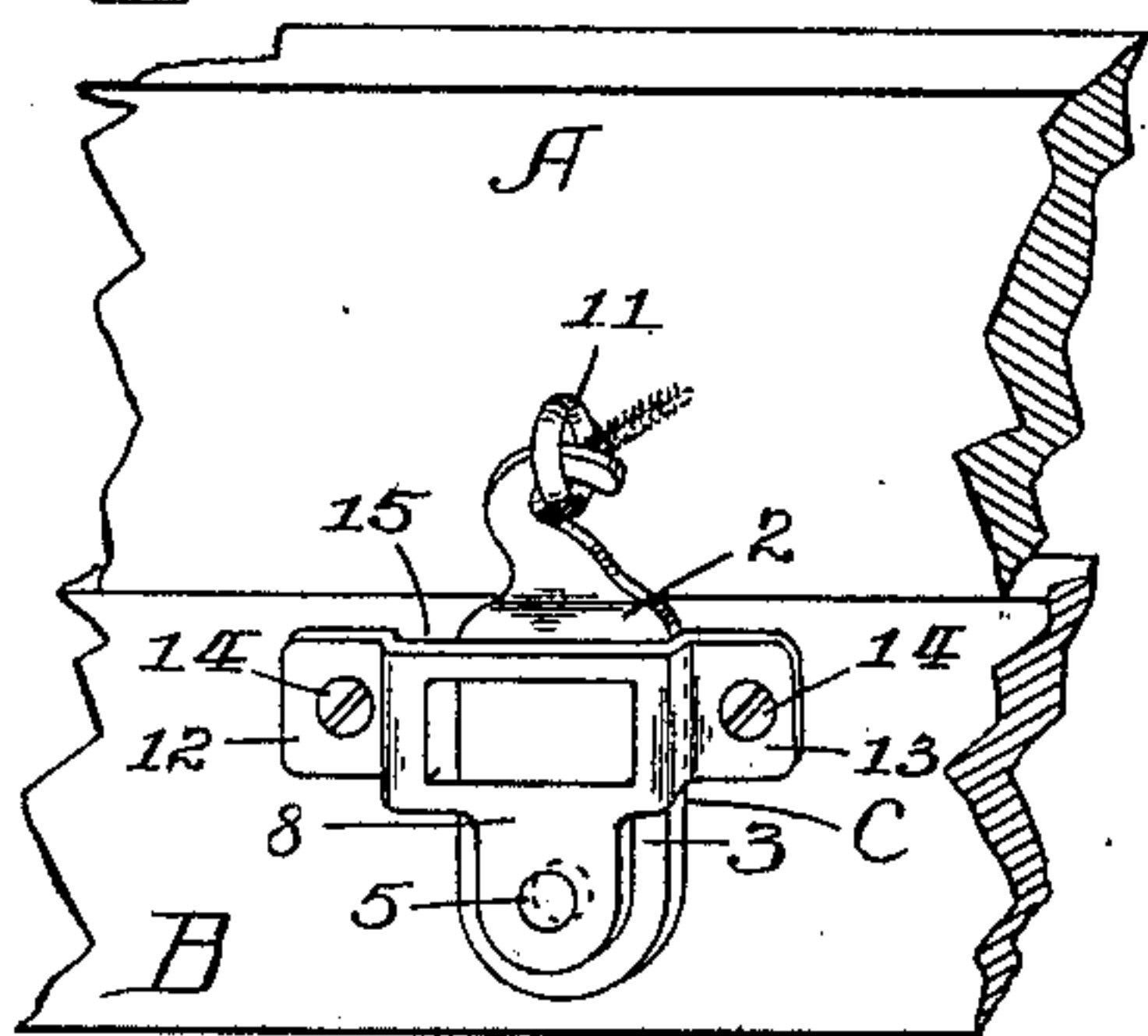


Fig. 3.

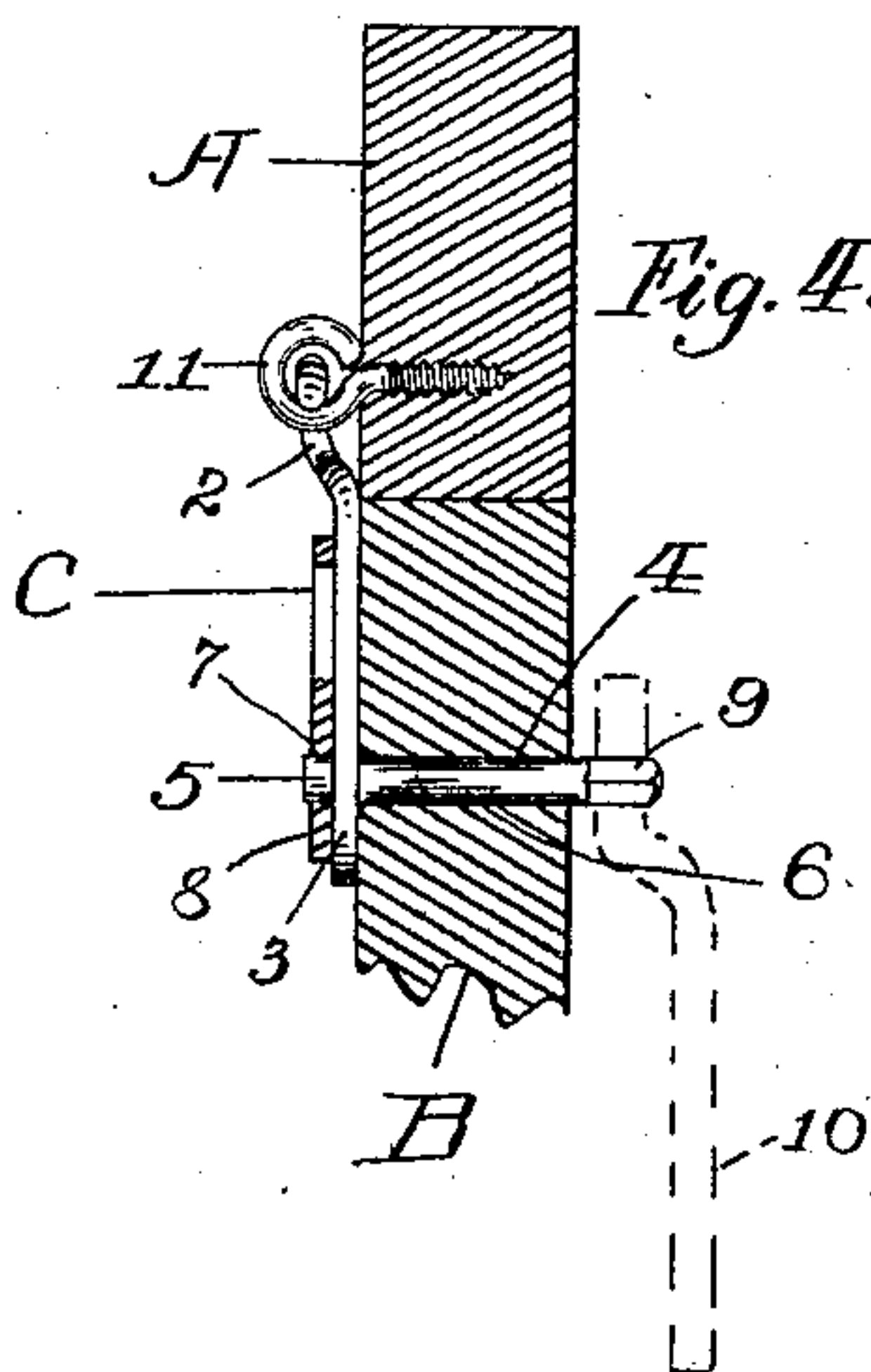


Fig. 4.

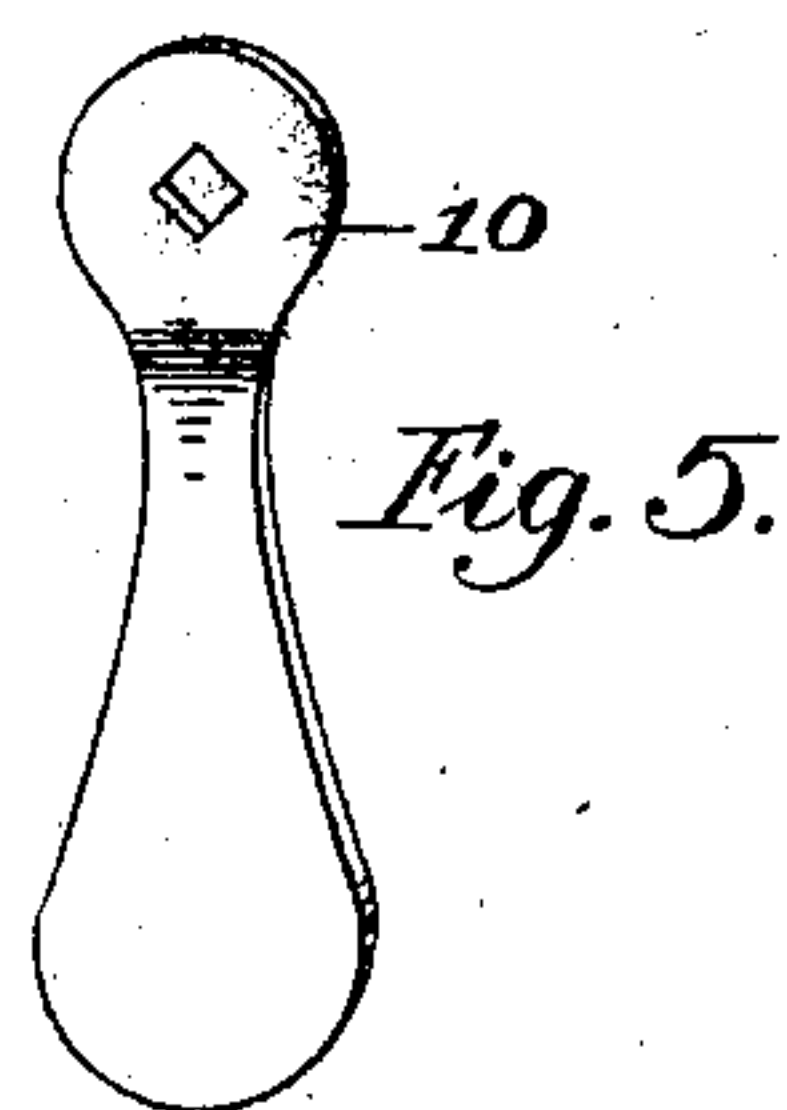


Fig. 5.

Witnesses:-

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UNITED STATES PATENT OFFICE.

FREDERICK W. RAUEN, OF ST. PAUL, MINNESOTA.

SEPARABLE HINGE.

SPECIFICATION forming part of Letters Patent No. 682,998, dated September 17, 1901.

Application filed January 7, 1901. Serial No. 42,276. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. RAUEN, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented new and useful Improvements in Separable Hinges, of which the following is a specification.

My invention relates to improvements in separable hinges. Its object is to provide means for attaching storm-sashes or window-screens so that they may be easily and quickly hung or detached from a window-frame.

A further object is to produce a separable hinge that is operative upon any shaped window frame and sash. This device consists of a journaled hook carried by the window-sash, having a key-shaft penetrating the sash, by which the hook may be turned from inside the window to engage or disengage an eye fixed on the window-frame.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a window-frame, showing a storm-sash attached by my improved separable hinge, the sash being open. Fig. 2 is a vertical section of the window frame and sash, showing the sash closed. Fig. 3 is a detail perspective view of the separable hinge in position upon the sash and window-frame. Fig. 4 is a vertical section of Fig. 3, and Fig. 5 is a perspective view of the key used to operate the hook from inside the sash.

In the drawings let A represent the window-frame, B the storm-sash, and C the separable hinge. This hinge consists of the hook 2, formed on the flat body 3, which carries a shaft 4 on one face. The stud 5 is formed on the opposite face and is substantially a prolongation of the shaft. The shaft and stud are adapted to journal, respectively, at 6 in the sash and in the bearing-seat 7 of the keeper 8. The shaft is provided with the square head 9, which projects beyond the inner face of the sash. The key 10 (shown in Fig. 5) is adapted to fit the square head and turn the hook to engage or disengage the eye-screw 11, which is fastened to the window-frame above the sash. The keeper may be stamped and pressed from thin sheet metal and is provided with the ears 12 and 13, through which the screws 14 fasten the sup-

porting-frame over the shaft and hook. The ears are offset from the body of the supporting-frame, so as to form a channel 15 for receiving the hook when turned by its key. The keeper prevents outward movement of the hook from the sash.

When attaching a storm-sash to the window-frame, the sash is placed in the frame in the position shown in Fig. 2, where it is held by any suitable attachment, such as the catch D. The hooks are then turned by the key from inside the sash to engage the eyes on the window-frame. The sash may be swung to open or close without becoming detached. To remove the sash, the hooks are turned to disengage from the eyes and the sash lifted from the frame.

To attach the separable hinge to the sash and frame, the hole 6 is first bored through the sash and the shaft of the hook projected through the hole, as shown in Fig. 4. The keeper is then fastened by the screws over the body of the hook with the stud resting in the bearing-seat 7. The eye 11 is screwed into the window-frame, so that the hook enters the eye when the hook is turned to the position shown in Fig. 3.

It is obvious that this separable hinge may be applied to a screen, sash, or door, &c., and I do not wish to confine myself to the specific construction shown. I mean by referring throughout the specification and claims to the hook as journaled in the sash that the hook is journaled in the sash proper or in a frame, such as the keeper 8, carried by the sash.

Having described my invention, what I claim as new, and desire to protect by Letters Patent, is—

1. The combination with a window-sash and its frame of a hook journaled in said sash, a keeper therefor, an eye secured in said frame, and means for rotating said hook on its journal within the limits of its keeper, whereby the same is caused to engage or disengage said eye, substantially as described.

2. In a separable hinge, the combination with a window-sash and its frame of a hook having a shaft disposed at right angles thereto and adapted to be rotatively seated in said sash and project therethrough, a keeper for

said hook to limit its movement, an eye secured to the window and adapted to be engaged by the hook, and means for rotating the shaft, whereby the hook is caused to engage or disengage said eye, substantially as described.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

FREDERICK W. RAUEN.

Witnesses:

JOSEPH W. RAUEN,
I. G. BRADBURY.