

No. 850,369.

PATENTED APR. 16, 1907.

H. B. HIGGINS.
SCREEN HANGER.
APPLICATION FILED MAY 21, 1906.

Fig. 1.

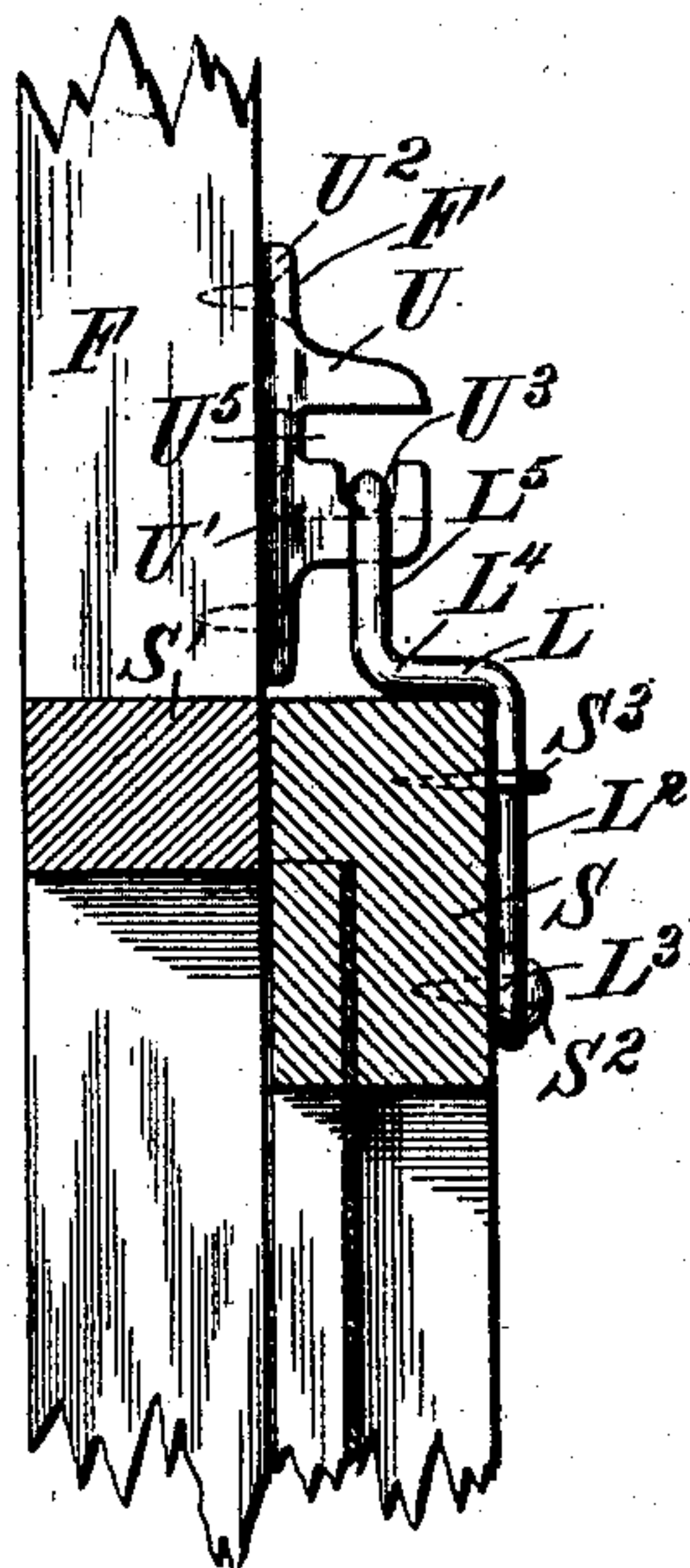


Fig. 2.

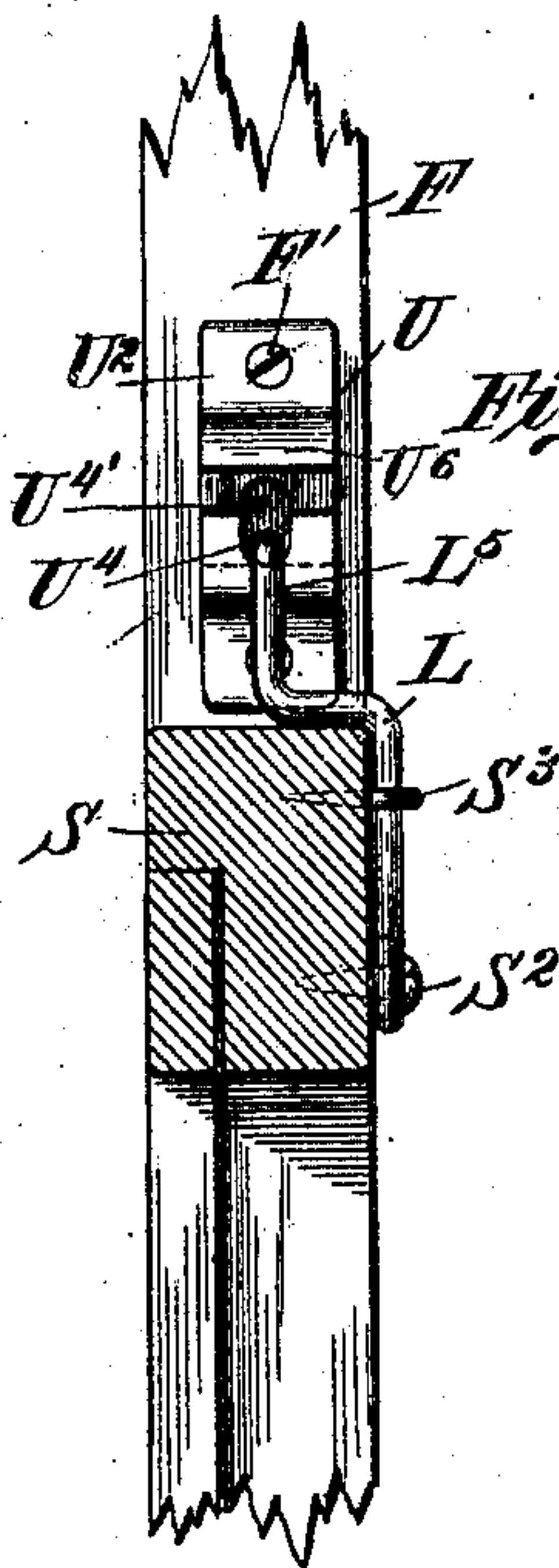


Fig. 3.

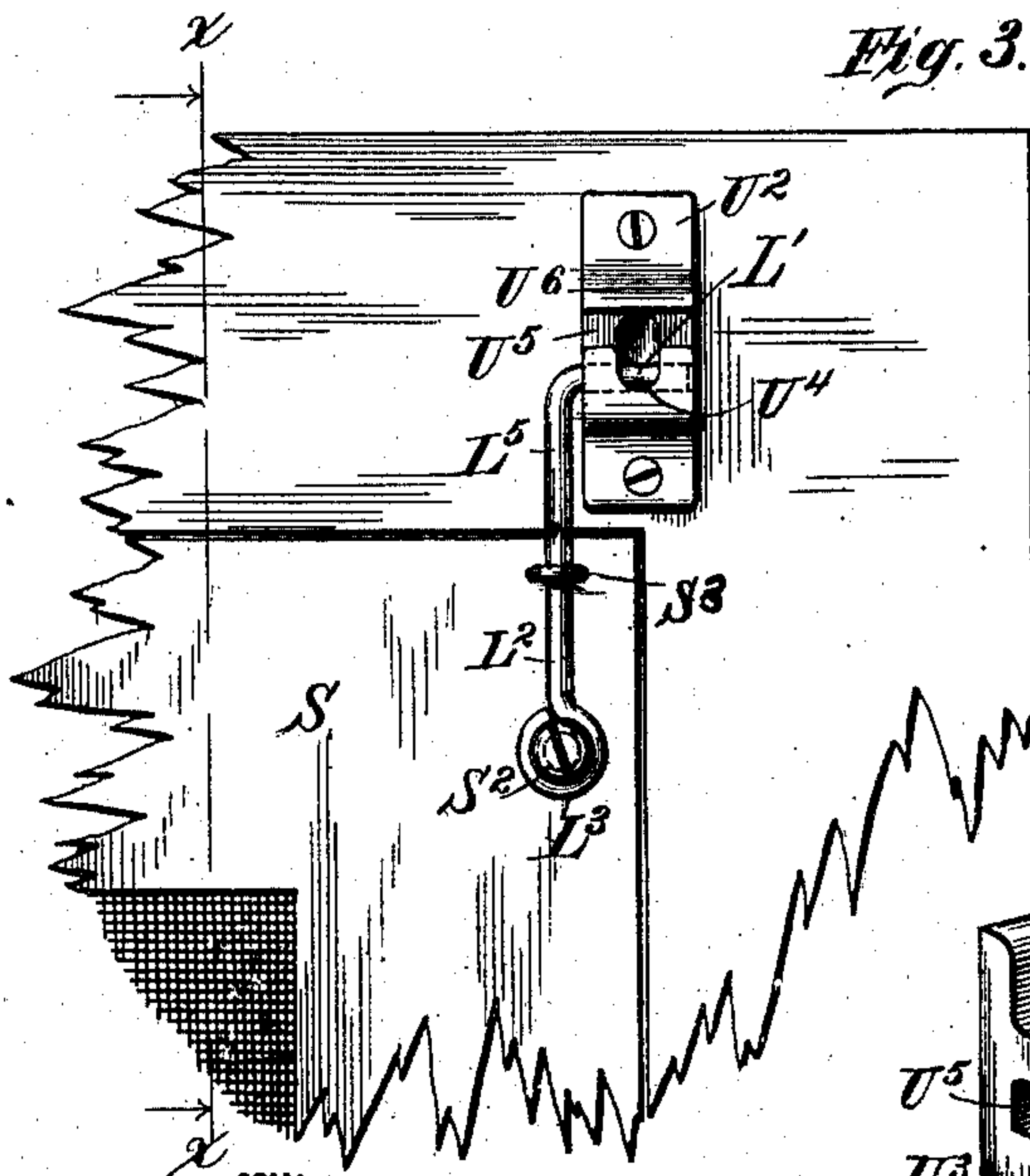


Fig. 4.

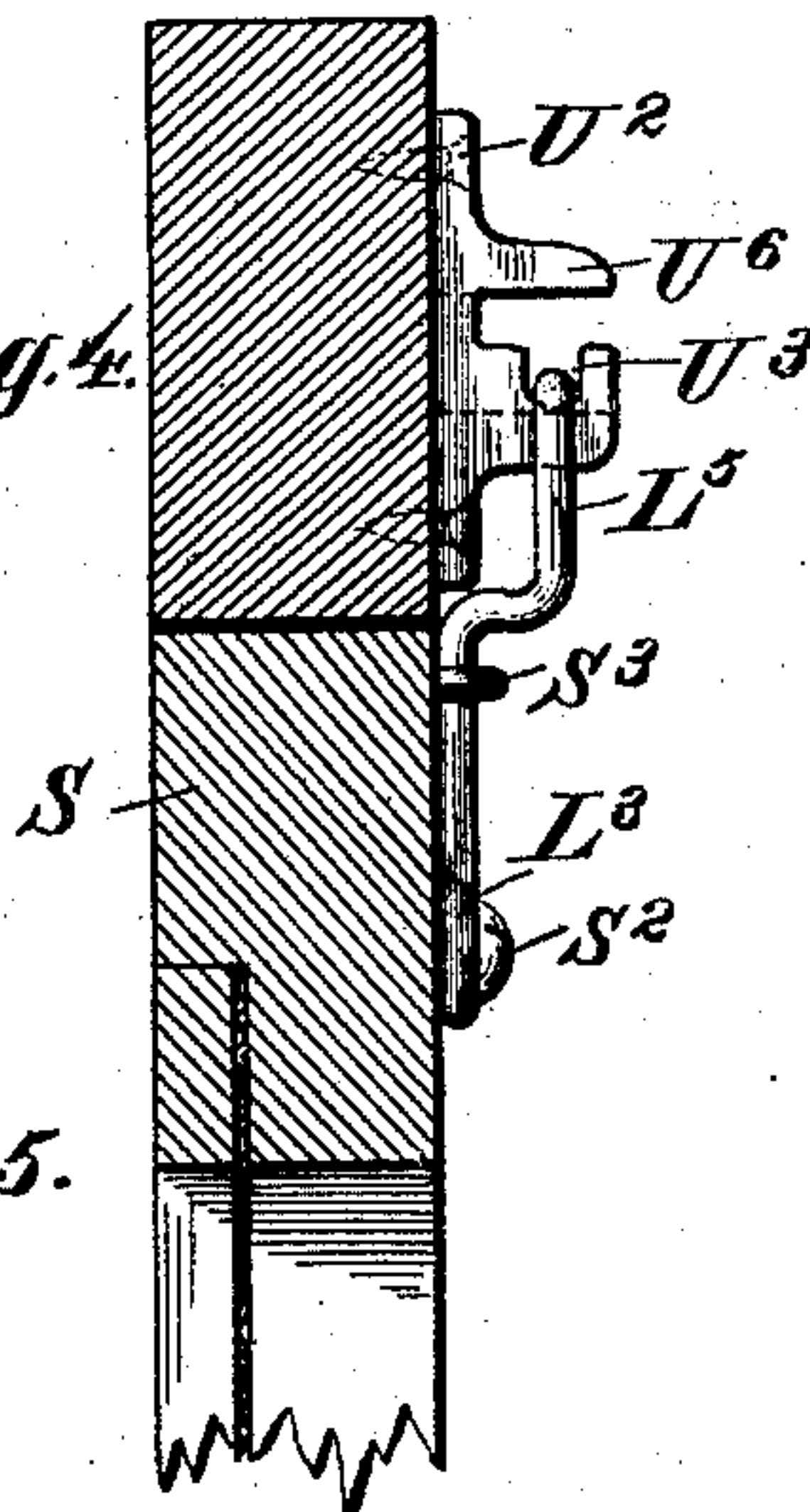
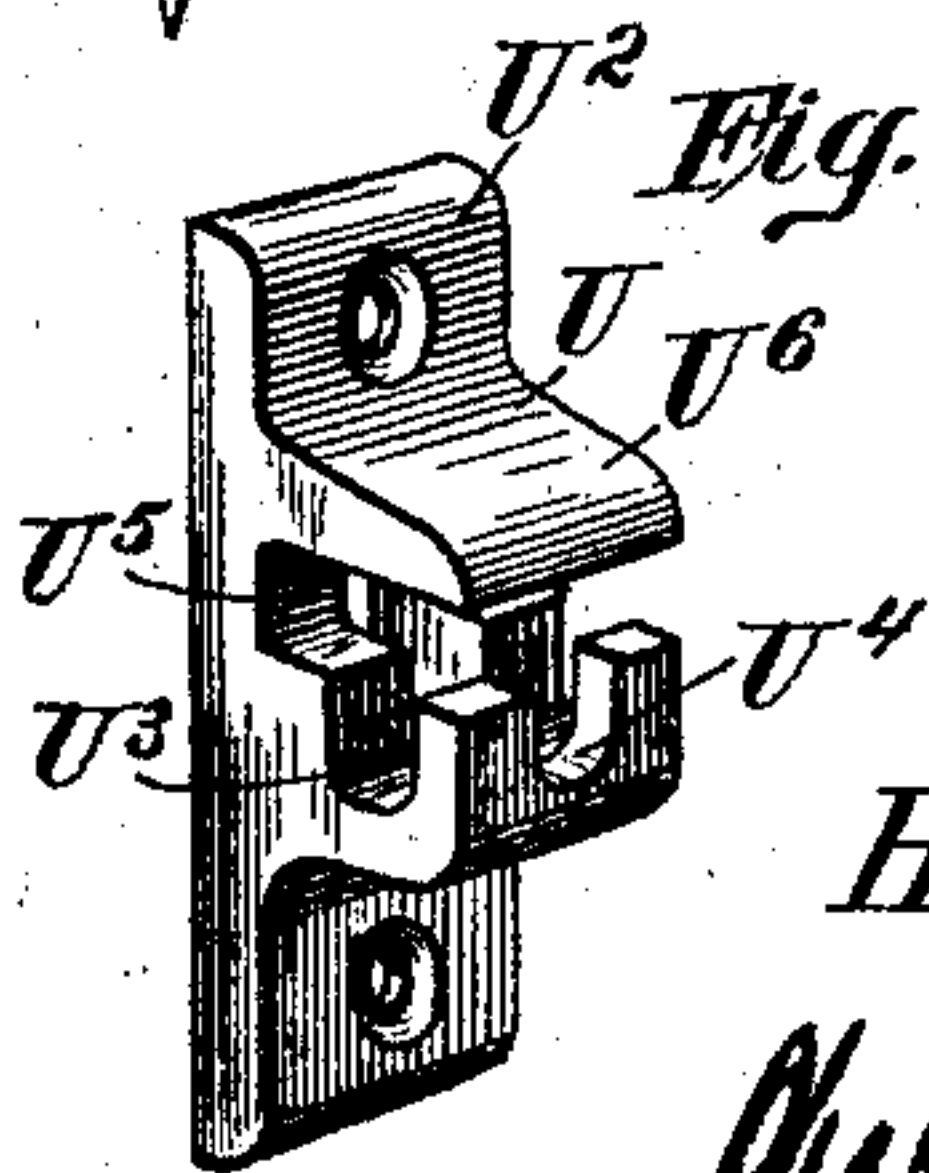


Fig. 5.



Witnesses:

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SCREEN-HANGER.

No. 850,369.

Specification of Letters Patent.

Patented April 16, 1907.

Application filed May 21, 1906. Serial No. 317,975.

To all whom it may concern:

Be it known that I, HENRY B. HIGGINS, a citizen of the United States, residing at the city of Denver, county of Denver, State of Colorado, have invented certain new and useful Improvements in Screen-Hangers, of which the following is a full, true, and exact specification.

My invention relates to improvements in means for securing screens and storm-sashes in window-frames, and has special reference to improvements in pivotal hangers or supports for half and full size screens and sashes.

It has become the custom to pivot screens and sashes at the top, so that they may be swung out at the bottom, instead of arranging them to slide in the window-frames or to swing from the sides thereof; and the object of this invention is to provide a simple, cheap, durable, and efficient pivotal hanger or separable hinge adapted for ready application to screens, sashes, and frames.

The particular object of the invention is to provide an improved separable hinge or hanger for screens and the like, which hanger shall be convertible or interchangeable—that is, adapted for use in all desired positions upon screens and window-frames.

Still another object of my invention is to provide a separable hinge or hanger of such form that when applied it will not only provide a pivotal support for the screen or sash, but will also serve to lock the screen against vertical movement while in its normal position in the window-frame.

Another special object of the invention is to simplify the construction of devices of the class named and to greatly lessen the cost of manufacturing the same.

A further and specific object of this invention is to improve the form, construction, and operation of the separable hinge which is shown and described in my Letters Patent No. 754,770, granted March 15, 1904.

My invention consists generally in a screen-hanger or separable hinge comprising two members, one for attachment to the screen or storm-sash and provided with a pintle portion, which is preferably circular in cross-section, and the other adapted for attachment to the window-frame at a point adjacent to the corner of the screen or sash and so constructed that it may be attached to the window-frame in any required position.

My invention also consists in various details of construction and in combinations of

parts, all as hereinafter described, and particularly pointed out in the claims.

The invention will be more readily understood by reference to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a sectional detail of a window-frame and screen equipped with a hanger or separable hinge embodying my invention, the screen in this case being set against the blind-stops of the window. Fig. 2 is another view of my device, showing the manner of using the same when the screen is placed between the blind-stops. Fig. 3 shows the manner of using the hanger at the top of a full-length screen or storm-sash. Fig. 4 is a sectional view on the line *xx* of Fig. 3, and Fig. 5 is an enlarged perspective view of the upper member of the hanger or hinge.

In the drawings, *F* represents the blind-stop of a window-frame, and *S* the frame of a screen. As shown in Fig. 1, the screen is set against the outer face of the blind-stop. In such cases it is usual to employ a filler-strip *S'*, attached to the screen and extending between the two blind-stops. The device by which I pivotally suspend the screen comprises the lower member *L* and the upper member *U*. Said lower member *L* is composed of a single piece of metal, preferably of wire, and its essential portions are the round pintle portion *L'* and the portion *L²*, by which the latter member is attached to the screen. The portion *L²* is preferably provided with an eye *L³* to receive a nail or screw *S²*, and the member is additionally secured to the screen by a staple *S³*, which straddles the upper part of *L²*. The intermediate part of the member *L²* comprises the horizontal or pintle-offsetting portion *L⁴* and the vertical or riser portion *L⁵*, of which latter the pintle *L'* is an extension.

It will be observed that when the member *L* is attached to a half-sized screen the pintle is made to occupy a middle or central position over the top of the screen in a plane that is parallel with the face of the screen—in other words, parallel with the eye *L³*, but offset with relation thereto. In using the members *L* on half-sized screens I prefer that they shall always be applied to the outer side thereof, whether the screen sets against the blind or between them, as shown in Fig. 2. It will be obvious, however, that the members *L* under these differing conditions have different relations to the blind-stops.

In the case of Fig. 1 the pintle lies parallel to the face of the blind-stop, whereas in Fig. 2 the end of the pintle is presented toward the side of the blind-stop. As I desire that the lower member of my separable hanger shall be usable upon screens in both the positions stated I have made the upper member U of such form as to readily adapt itself to the different positions of the member L. This upper member U is essentially box-like in form. It is a single casting or a piece of stamped sheet metal, but may be described as comprising a box or block U', having an elongated base U², which contains holes for the screws F', by which the device is secured to the window-frame. The middle or box portion U' contains an irregular opening, in the making of which two relatively perpendicular pintle-seats U³ and U⁴ are formed in the block. It is obvious that provided with these seats the block is adapted to receive the pintle in either of two positions, as shown in Figs. 1 and 2. The opening is, in effect, formed by three slots, one horizontal slot or notch U⁵ and two vertical slots merging therewith. The slot whose bottom forms the seat U⁴ preferably extends through the block, (see U^{4'}.) In one sense the block may be said to be provided with two hooks arranged at right angles to one another to receive the pintle in whatever position the block is presented thereto. The top U⁶ of the block may be notched or slotted to the depth of the slot U⁵; but I prefer that it shall be solid, as shown in the drawings. When made as shown, the top of the block serves as an upper stop for the pintle and aids in preventing vertical movement of the screen. On the other hand, it is obvious that when the screen is swung out at the bottom, so that it no longer interferes with the bottom of the block, the pintle may be readily lifted out of the box to detach the screen from the window.

A special advantage of my separable hanger is that it may be used at the top of a window frame or casing as a support for a full-length screen or storm-sash. In such cases the block is secured to the face of the window-frame, and the member L is reversed, so that its pintle will take proper position in the box.

It will thus be seen that I provide a separable hanger whose members as related to screens and window-frames are convertible or interchangeable throughout—that is, may be attached to any screen or sash whatever its position in the window-frame.

I find that this separable hinge or hanger is much cheaper to manufacture, more efficient, and easier to apply than any other with which I am familiar.

As various modifications of my invention will readily suggest themselves to one skilled in the art I do not confine the invention to the specific constructions herein shown and described.

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

1. A hanger or separable hinge for screens and the like, comprising a box or block, provided with relatively perpendicular pintle-seats, in combination with a member for attachment to a screen and having a pintle, substantially as described.

2. A separable hinge or hanger for screens and the like, comprising a member or block which contains two relatively perpendicular pintle-seats, in combination with another member, comprising a pintle portion, a riser portion, an offset portion and an attaching portion formed, substantially as described.

3. In a separable hinge or hanger for screens and the like, a box-like member adapted to be secured to a window-frame or its blind-stops and containing a notch or opening of irregular form providing two relatively perpendicular pintle-seats, substantially as described.

4. In a window-screen hanger, a block adapted to be secured to a window-frame or its blind-stops, provided with relatively perpendicular vertical and horizontal slots, forming two pintle-seats, and providing openings for the entrance of a pintle through either side or front of the block, substantially as described.

5. A window separable hinge member for attachment to a window-screen or storm-sash, composed of wire and comprising an attaching portion L², an offset horizontal portion L⁴, a riser portion, L⁵, and a pintle-portion, L', the latter being perpendicular to the plane which includes the other portions, substantially as described.

6. In the combination of a window-frame with a screen or sash, a hinge member comprising a block containing relatively perpendicular pintle-seats and provided with a horizontal slot or notch to admit a pintle to either of said seats, means securing said block to a window-frame or its blind-stops, and a second hinge member attached to the top of said screen or sash and having a horizontal pintle pivoted in one of the seats of said block, substantially as described.

In testimony whereof I have hereunto set my hand, this 26th day of April, 1906, in the presence of two subscribing witnesses.

HENRY B. HIGGINS.

Witnesses:

J. D. CUMMINGS,

WILLIAM H. STEWART.