

A. C. SOULE.  
WINDOW.

APPLICATION FILED SEPT. 13, 1910.

Patented Sept. 10, 1912.

2 SHEETS—SHEET 1.

1,038,224.

Fig. 1.

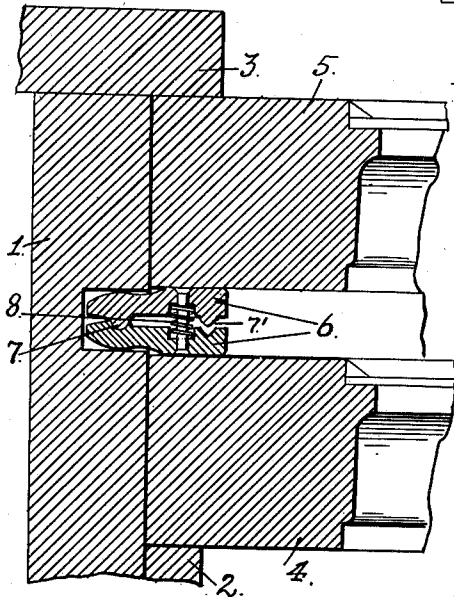


Fig. 2.

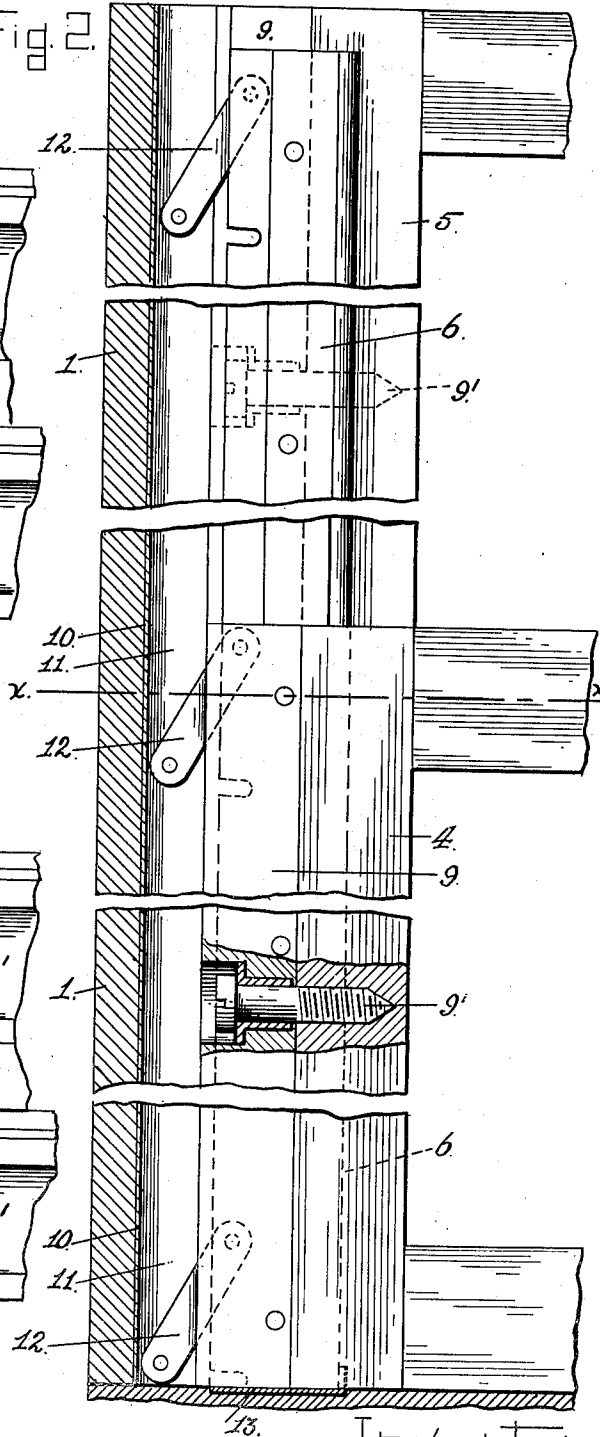
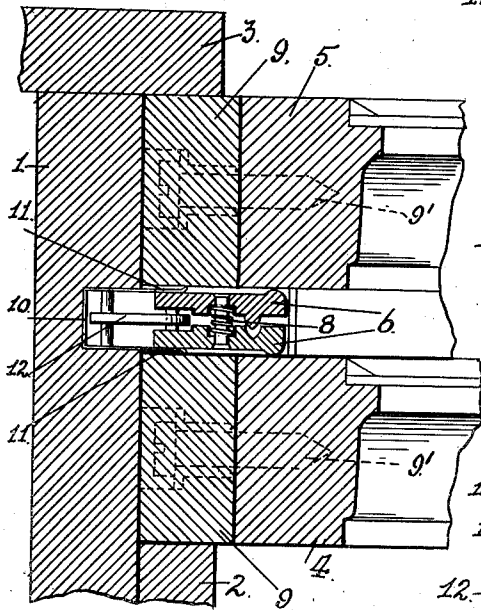


Fig. 3.



Witnesses

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Arthur C. Soule  
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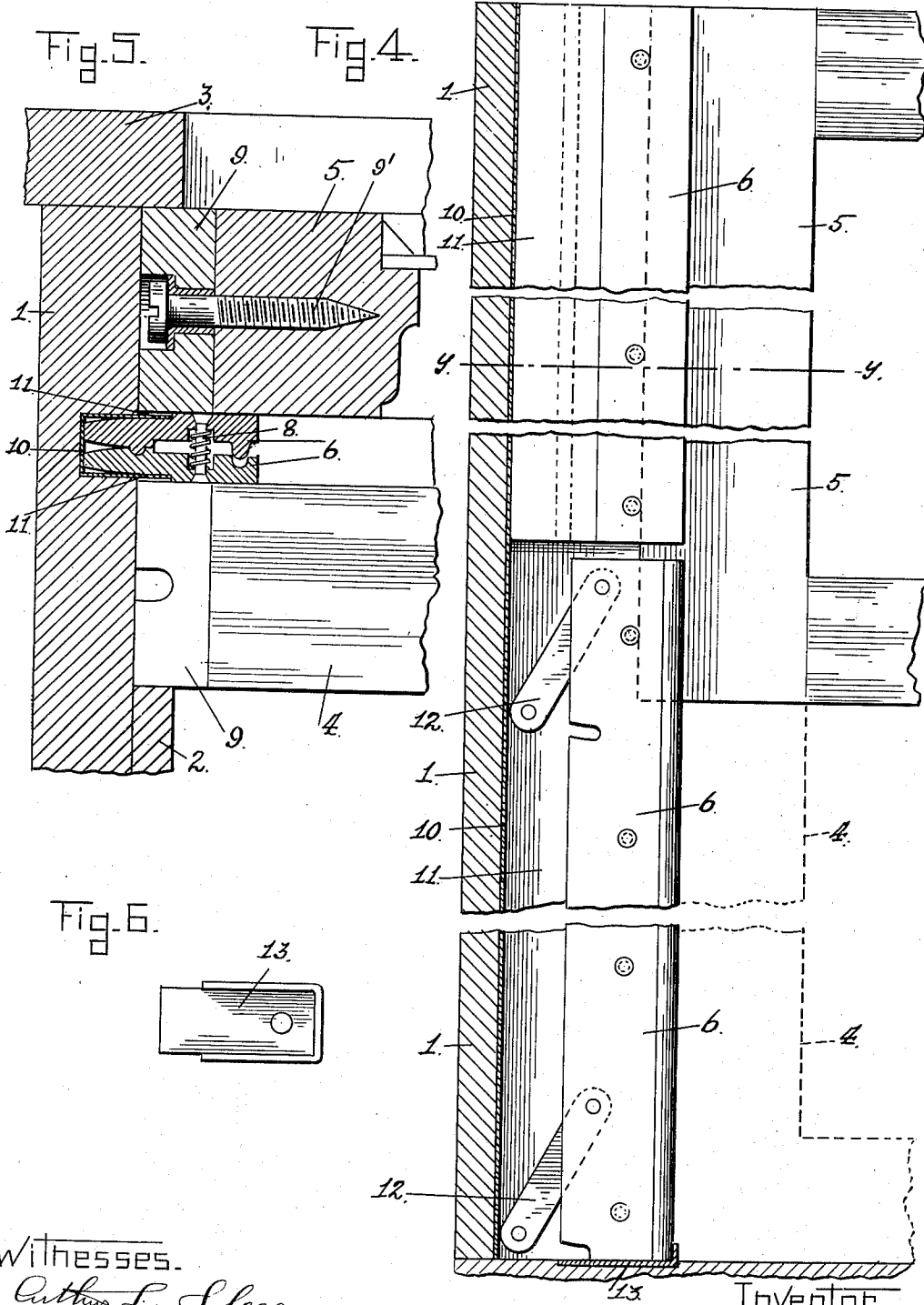
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# UNITED STATES PATENT OFFICE.

ARTHUR C. SOULE, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO SOULE REVERSIBLE WINDOW CO., OF SAN FRANCISCO, CALIFORNIA, A CORPORATION OF CALIFORNIA.

## WINDOW.

1,038,224.

Specification of Letters Patent.

Patented Sept. 10, 1912.

Application filed September 13, 1910. Serial No. 581,841.

### *To all whom it may concern:*

Be it known that I, ARTHUR C. SOULE, a citizen of the United States, residing in the city and county of San Francisco and State of California, have invented certain new and useful Improvements in Windows, of which the following is a specification.

My invention relates to the class of windows, and more particularly to those windows the sashes of which are reversible.

My invention consists in connection with the sash and the window casing, of the novel parting-bead as I shall hereinafter fully describe and claim.

The object of my invention is to provide for window sashes a simple and effective parting-bead which under all conditions will afford just that degree of pressure which, while permitting the easy movement of the sash, will still hold it closely, and give an effective weather tight joint.

A further object of my invention, as applied to reversible sashes, is to provide a parting-bead which, while serving the purposes above mentioned, will serve the additional purpose of locking the sash against its reversing movement and releasing it to permit such movement.

Referring to the accompanying drawings:—Figure 1 is a horizontal cross section through one side of the casing and one side of the window sashes, showing my parting-bead in its simplest form, as applied to ordinary sashes. Fig. 2 is an elevation, partly broken, of one side of a window casing, showing one side of an upper and a lower sash of the reversible type, and showing the parting-bead adapted for such sashes, said bead extending approximately the full length of the window casing. Fig. 3 is a cross section on the line  $x-x$  of Fig. 2. Fig. 4 is an elevation showing the parting-bead of the shiftable form of Fig. 2 extending only part way up, and a parting-bead of a non-shiftable form extending upwardly for the remainder of the distance; the lower sash in this figure being indicated in dotted lines. Fig. 5 is a cross section on line  $y-y$  of Fig. 4, showing the upper or non-shiftable portion of said parting-bead. Fig. 6 is a plan view of the flanged guide in the sill, for the lower end of the parting-bead.

In the drawings only one side of the window is shown, it being understood that the

other side is similarly constructed and equipped.

In Fig. 1, the window casing 1 has an inside stop 2 and an outside stop 3. 4 is the stile of one sash and 5 is the stile of the other sash. The parting-bead 6 is a sectional expansible one, consisting of two strips of wood or other material. The inner portions of these strips are so cut or fashioned as to enable them to have a slight play in their seat in the pulley stile of the window casing, and their inner faces are tongued and grooved to form a rounded joint at 7 so that they may rock upon each other. The outer portions of the strips bear on the stiles of the sashes, and are held to their bearing under resilient pressure, by a coil spring 8 seated between them. A tongue and groove at 7' serve to steady them. Thus the sections of the parting-bead resiliently yield under the pressure of the sash stiles against which they bear. This bearing of the bead sections on the sashes is such that under the action of the spring the sashes are held true and close in their seats and yet shrinkage and swelling are provided for by the compensating effect of the resilient yielding of the strips. Thus a continuously close joint is made, with a minimum of friction and tight enough to be weather proof, so that no separate weather strip is needed.

In Figs. 2 and 3, the sashes are reversible, being of the type which are horizontally pivoted to counterweighted carrier-bars or slides. These slides, designated by 9, fit in the grooves of the window-casing formed by the stops and the parting bead and are suitably suspended. To the slides the sashes are pivoted by suitable pins 9', and said sashes are clear of the inner and outer stops so that, if free to swing, they may be reversed about their pivots. To lock them, however, for normal use, against such swinging movement and to free them for such movement, I make the parting-bead shiftable so that it may retreat within its seat and thereby free the sashes, and emerge again to lock them. In this case also, said parting-bead is a sectional expansible one of a springy nature as before described, but instead of being fixed in its seat in the pulley stile of the casing it is movable in said seat, being best fitted in a sheath member 10, the arms 11 of which project and overlap the slides. This sheath

member is best made of resilient sheet metal bent at its inner portion and having its arms bearing with yielding pressure on the slides. Thus on both the slides and the sash stiles there is such a bearing as will compensate for pressure as I have already described. The sheath also serves to guide the bead into the recess, when moved inwardly, preventing the inner end of the bead from engaging the edges of the frame at the recess. The fit of the movable parting-bead 6 within the sheath member 10 is such that the former may telescope or retreat within the latter a distance sufficient to cause the bead to wholly withdraw from its bearing on the sash stiles, and when so moved, the sashes are free to be turned upon their pivotal connections. When projected again said bead resumes its bearing on the sash stiles and the sashes are again locked against swinging movement. Any suitable connection may be made between this parting-bead and its sheath which will enable the one to disappear or retreat within the other. I have here shown links 12 pivotally connecting the two, the arrangement of the links being such that pressure applied to the bead will cause it to move into the sheath and from this position it may be pulled out again. A flanged guide 13 on the sill of the window casing serves to steady the movable parting-bead. In Fig. 2 I show this parting-bead as extending the length of the window, as the same bead will do for both sashes, freeing and locking both simultaneously. This extent of the bead is not essential however, and if, for the sake of greater stiffness of the bead and easier manipulation, or for any other reason, it be desirable to shorten said retreating or disappearing bead, it may be only of half length and occupy the lower half of the window casing. In Figs. 4 and 5 I show the construction for such cases. Here the retreating parting-bead is similarly designated by 6 as in Figs. 2 and 3, but extends from below only to about half the length of the casing. Above this the parting-bead is not composed of relatively movable members but both are fixed, though they are otherwise constructed as before, that is with expansible strips which fill completely the sheath member and is not mov-

able therein, as is seen in Fig. 5. In this arrangement of Figs. 4 and 5, either sash when pulled down may be freed for its reversing movement by causing the retreat of the lower portion of the parting-bead, and either sash when pushed up will be locked against swinging movement by the non-shiftable upper portion of the bead. This is really all that is required, for one sash only need be reversed at one time, and it has the advantage of always having the other sash closed and locked, thereby preventing undue exposure to drafts.

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

1. The combination with a window casing, slides fitted to grooves of the casing, sashes horizontally pivoted to the slides, said casing having a longitudinally extending recess at a point intermediate the slides, of a longitudinally extending parting bead adapted to be moved laterally into and out of said recess, and into and out of the space between the swinging sashes, said bead comprising opposed members, an expanding spring between the members, and guide pins extending between the members, and links each of which is connected at one end with one of the guide pins and at its opposite end to the wall of the recess.

2. The combination with a window casing, slides fitted to grooves of the casing, sashes horizontally pivoted to the slides, said casing having a longitudinally extending recess at a point intermediate the slides, of a metal sheath in the recess and extending without the same and overlapping the joint between the slides and casing, and a parting bead adapted to extend between the sashes to lock the sashes against swinging movement, said parting bead being shiftable into the sheath to withdraw it from between the swinging sashes.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ARTHUR C. SOULE.

Witnesses:

WM. F. BOOTH,  
D. B. RICHARDS.