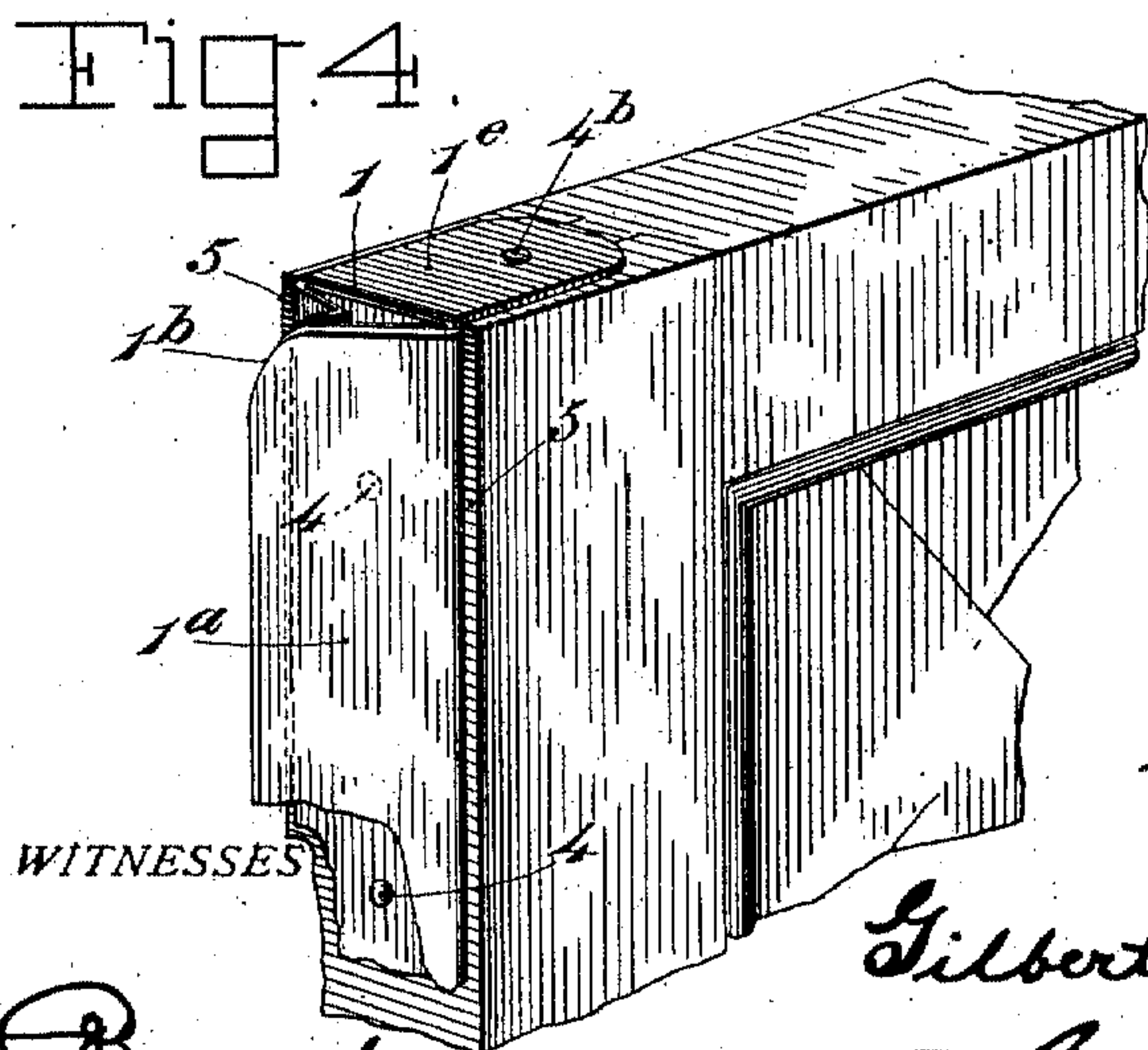
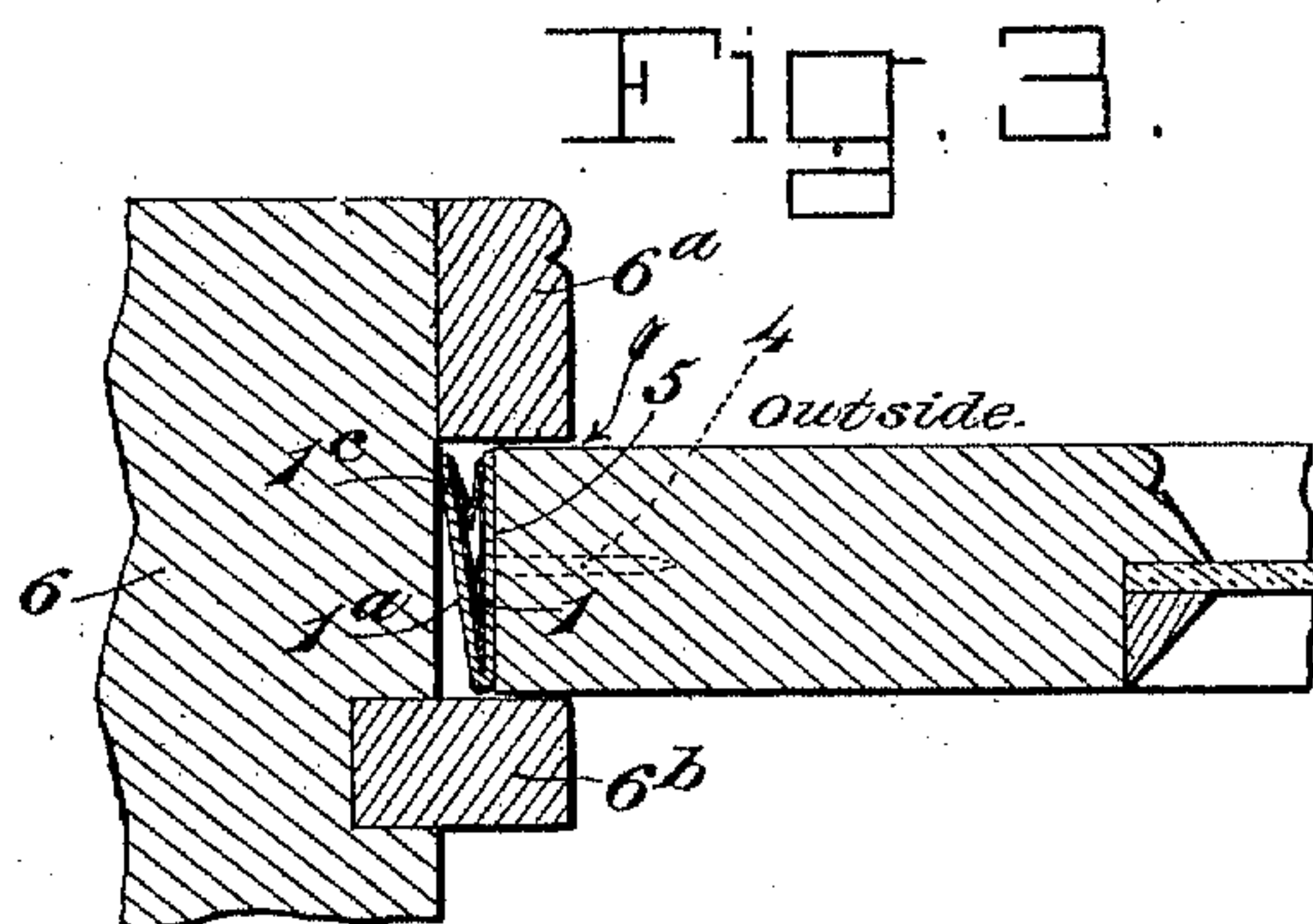
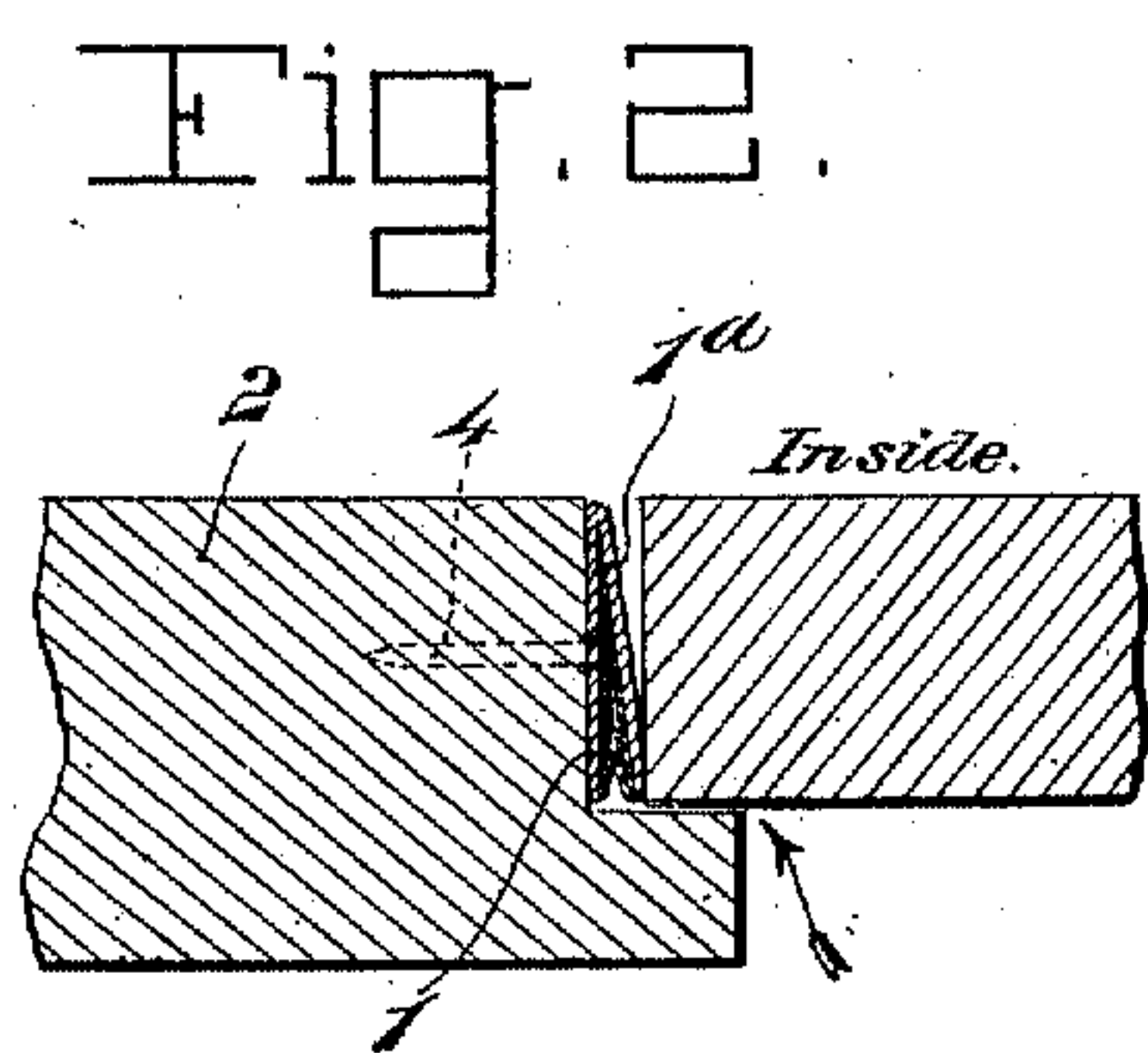
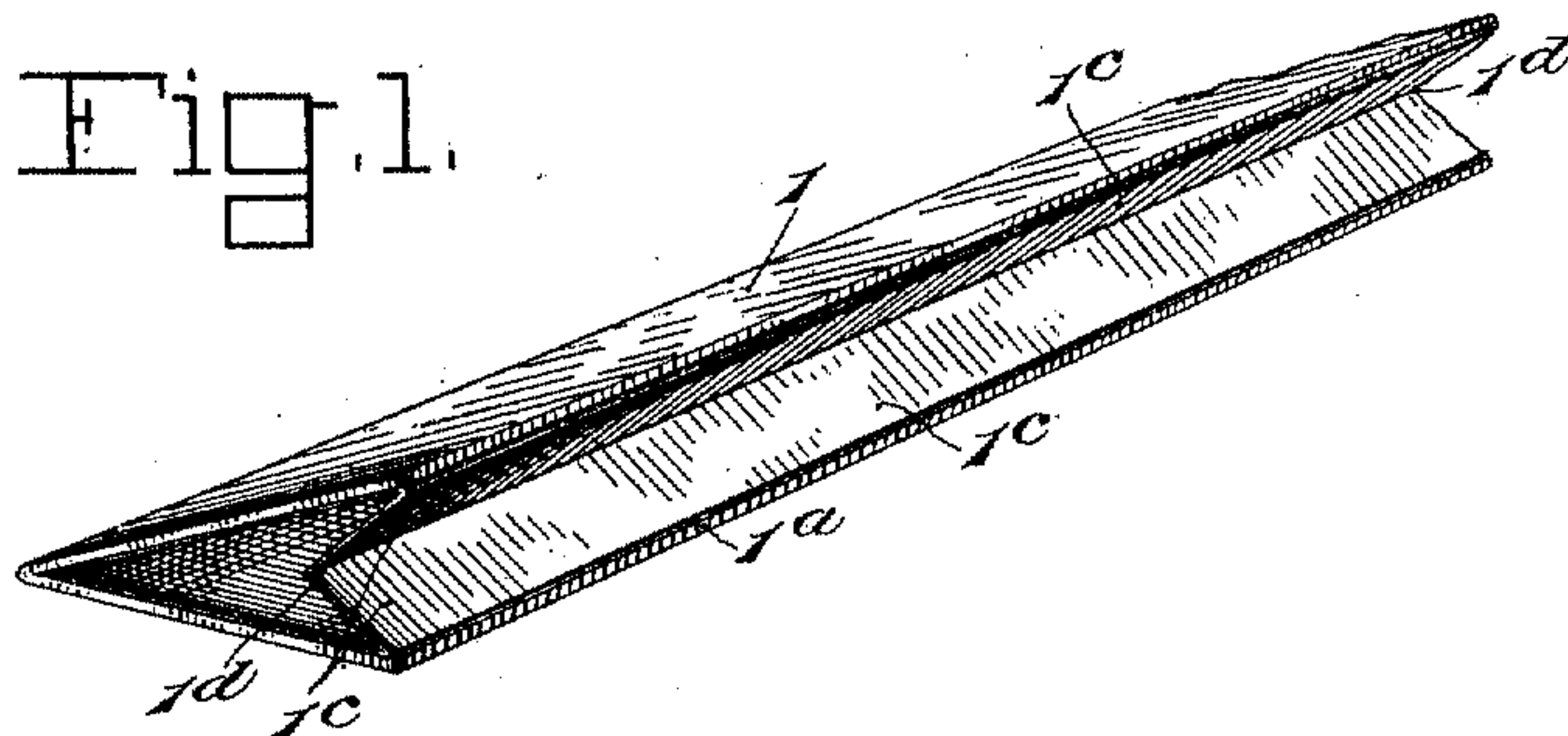


G. K. MONROE.  
 WINDOW AND DOOR WEATHER STRIP.  
 APPLICATION FILED AUG. 30, 1909.

984,232.

Patented Feb. 14, 1911.



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# UNITED STATES PATENT OFFICE.

GILBERT K. MONROE, OF PEMBERTON, OHIO.

WINDOW AND DOOR WEATHER-STRIP.

984,232.

Specification of Letters Patent.

Patented Feb. 14, 1911.

Application filed August 30, 1909. Serial No. 515,285.

*To all whom it may concern:*

Be it known that I, GILBERT K. MONROE, of Pemberton, in the county of Shelby and State of Ohio, have invented certain new and useful Improvements in Window and Door Weather-Strips; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention is a novel weather strip, and consists in a strip of suitable material, preferably composite material such as indurated fiber, felt and the like, bent longitudinally upon itself so as to be approximately V-shaped in cross section, one side of this strip being attached to the frame or sash in such position that the free side of the strip will contact with the adjacent edge of the sash or door frame, and in such manner that any air or dust attempting to pass through the crevice between these parts will be pocketed between the members of the strip and separate them so as to expand the strip and automatically close such crevice, said strip being provided with a collapsible binder connected to the inner faces of its sides, in such manner as to prevent undue expansion of the strip, and always keep it in condition to properly close the crevice between the sash and frame or door and frame when the latter are closed.

I will describe the invention in connection with the accompanying drawings in which—

Figure 1 is an enlarged view of a section of the strip detached. Fig. 2 is a detail sectional view of part of a door and frame showing the strip applied thereto. Fig. 3 is a sectional view of a window sash and frame with the strip in position. Fig. 4 is a detail view showing the preferred manner of applying the strip to a sash.

The weather strip is formed of a ribbon or strap of suitable material which is bent longitudinally upon itself until it is V-shaped in cross section; the width of the longitudinal members 1, 1<sup>a</sup>, of the strip may be varied to suit the width of the sash or door to which the device is to be applied. The bending of the strip practically hinges one part to the other, such hinge connection being continuous and at the same time so resilient that the outer edges of the members tend to spring apart at all times. One member of the strip may be attached to the

door or frame so that the V-mouth of the strip shall point outwardly, and the apex of the V shall point inwardly

When used with an inwardly opening door, as indicated in Fig. 2, the member 1 of the strip is attached to the frame 2 by tacks 4, or other suitable means, so as to hold the apex of the strip closely against the jamb of the door frame, while the free member of the strip swings outward but is protected by the bead or rabbet in the frame. When the door closes it engages the free member 1<sup>a</sup> of the strip, as indicated in Fig. 2 and the natural resiliency of the strip causes the free edge of such member to bind closely against the edge of the door when the latter is closed, but in no way interferes with the free opening and closing of the door. Any air blowing inward, as indicated by the arrow in Fig. 2, between the edge of the door and the frame would enter the V-strip and tend to bind the movable member 1<sup>a</sup> the more tightly against the edge of the door.

When applied to a window one member of the strip is preferably attached to the side of the sash 5, as indicated in Fig. 3 by tacks 4, or other suitable means, while the free member 1<sup>a</sup> of the strip bears against the frame 6 between the beads 6<sup>a</sup> 6<sup>b</sup> and any air tending to enter between the sash and frame as indicated by the arrow will simply expand the strip and press the free member 1<sup>a</sup> thereof more closely against the frame.

From the foregoing the application of the strip in other places will be obvious; it should always be applied so that the entrance of air or dust, which it is desired to exclude, will be prevented and such air attempting to enter will simply press the strip more tightly in closing position.

In order to prevent the strip at any time opening so widely that the free member might be broken, or turned back, when applied to the door frame as in Fig. 2, the strip may be provided with a flexible binder 1<sup>c</sup> of any suitable material such as paper or fabric, having its side edge pasted or otherwise secured to the inner faces of the members 1, 1<sup>a</sup>, of the strip, and preferably provided with a longitudinal crease 1<sup>d</sup> so that it will not interfere with the collapsing of the strip but will limit the expansion thereof.

As indicated in Fig. 4 the ends of member 1 of the strip might be provided with extensions 1<sup>e</sup> which could be bent over the upper and lower corners of the sash frame



or other body to which the strip is applied, and attached thereto by tacks 4<sup>b</sup>, or other suitable means; and the ends of the free member 1<sup>a</sup> could be rounded, as shown at 1<sup>b</sup>, 5 so as to prevent the corners of such member being curled or caught when the sash or frame to which the strip is attached, is raised or lowered. I prefer to make the strip of indurated fiber, which is sufficiently 10 pliable and resilient to insure close joints between the window and frame; is weather proof; can easily be applied; and is cheaper than metal. Very light metal could be used for the strip, but I do not wish to be limited 15 to any particular material.

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

1. A weather strip approximately V-shaped in cross section, and a flexible binder interposed between the members of the strip.
2. A weather strip composed of a strip of

suitable material bent longitudinally upon itself, and a flexible binder interposed between the members of the bent strip. 25

3. A weather strip composed of a strip of suitable material bent longitudinally upon itself and approximately V-shaped in cross section, and a longitudinal binder of flexible material interposed between the members of 30 the strip and adapted to limit the separation thereof, one member of the strip being attachable to a frame or sash and the other member being free to engage the edge of a sash or frame, the V opening outwardly 35 so that incoming air will tend to expand the strip.

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

GILBERT K. MONROE.

Witnesses:

C. W. McMILLAN,  
R. B. LEEDOM.