

(No Model.)

B. B. CHANDLER.

GLAZIER'S POINT.

No. 360,656.

Patented Apr. 5, 1887.

Fig. 3.

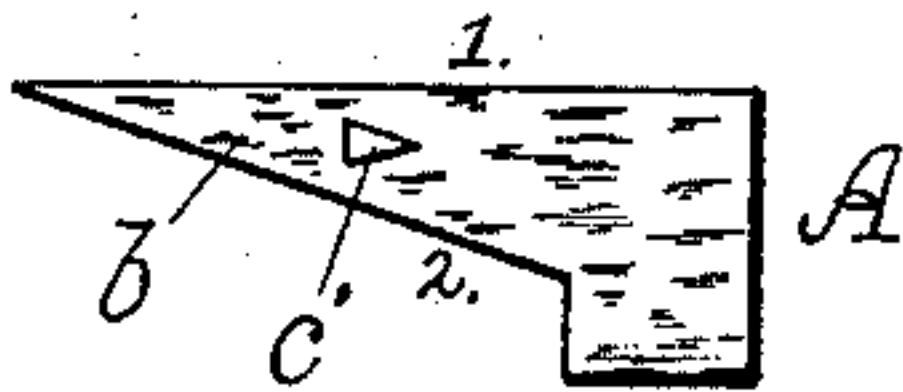


Fig. 1.

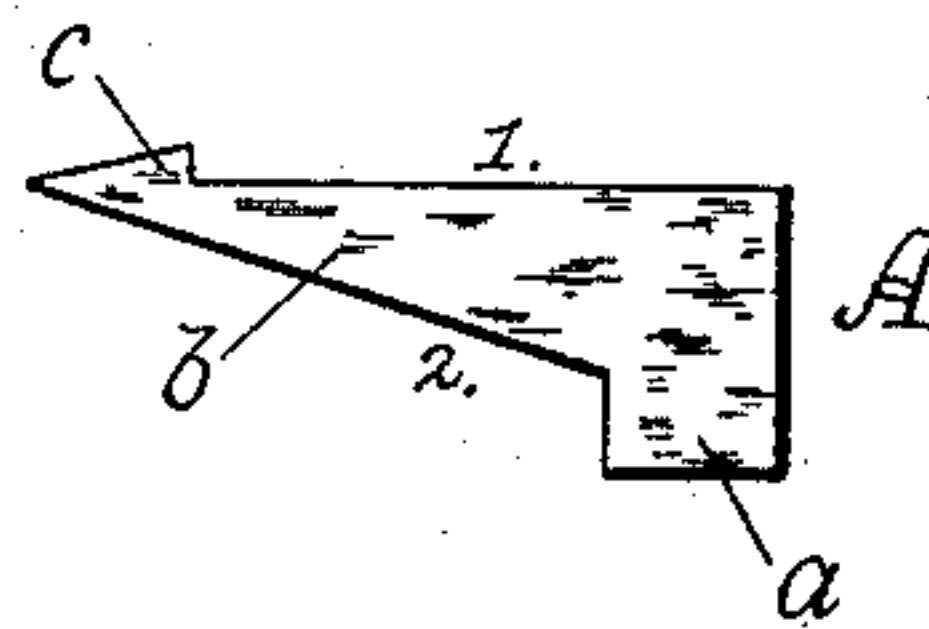


Fig. 4.

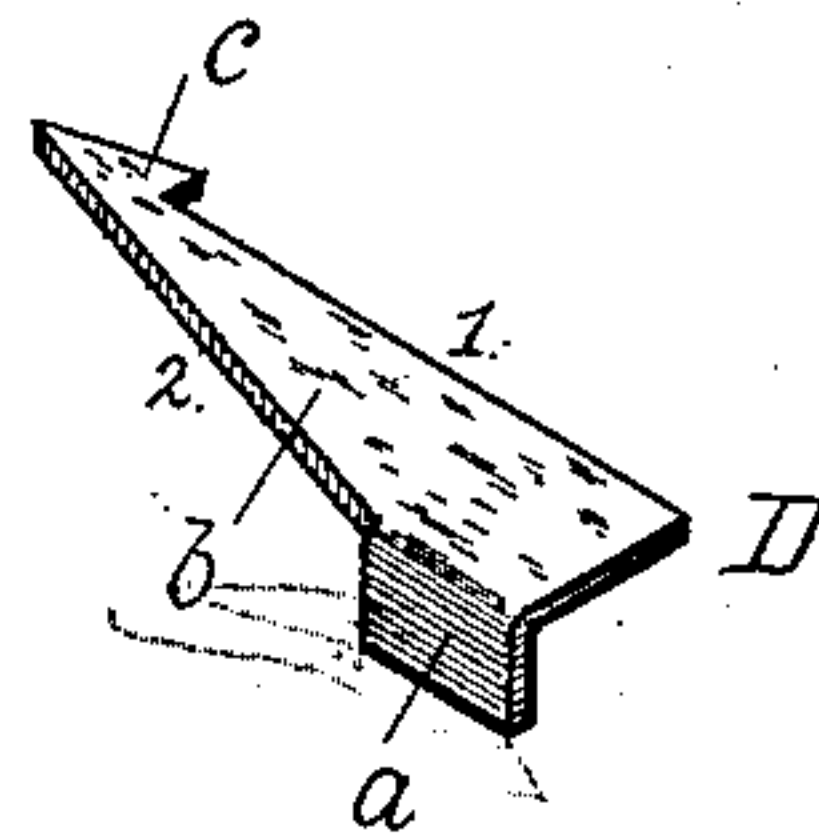
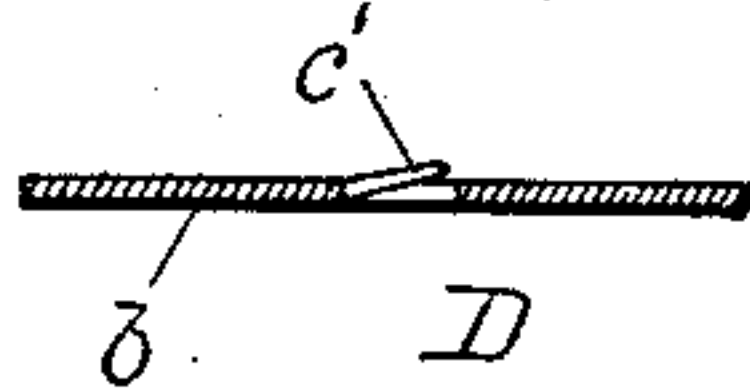


Fig. 2.

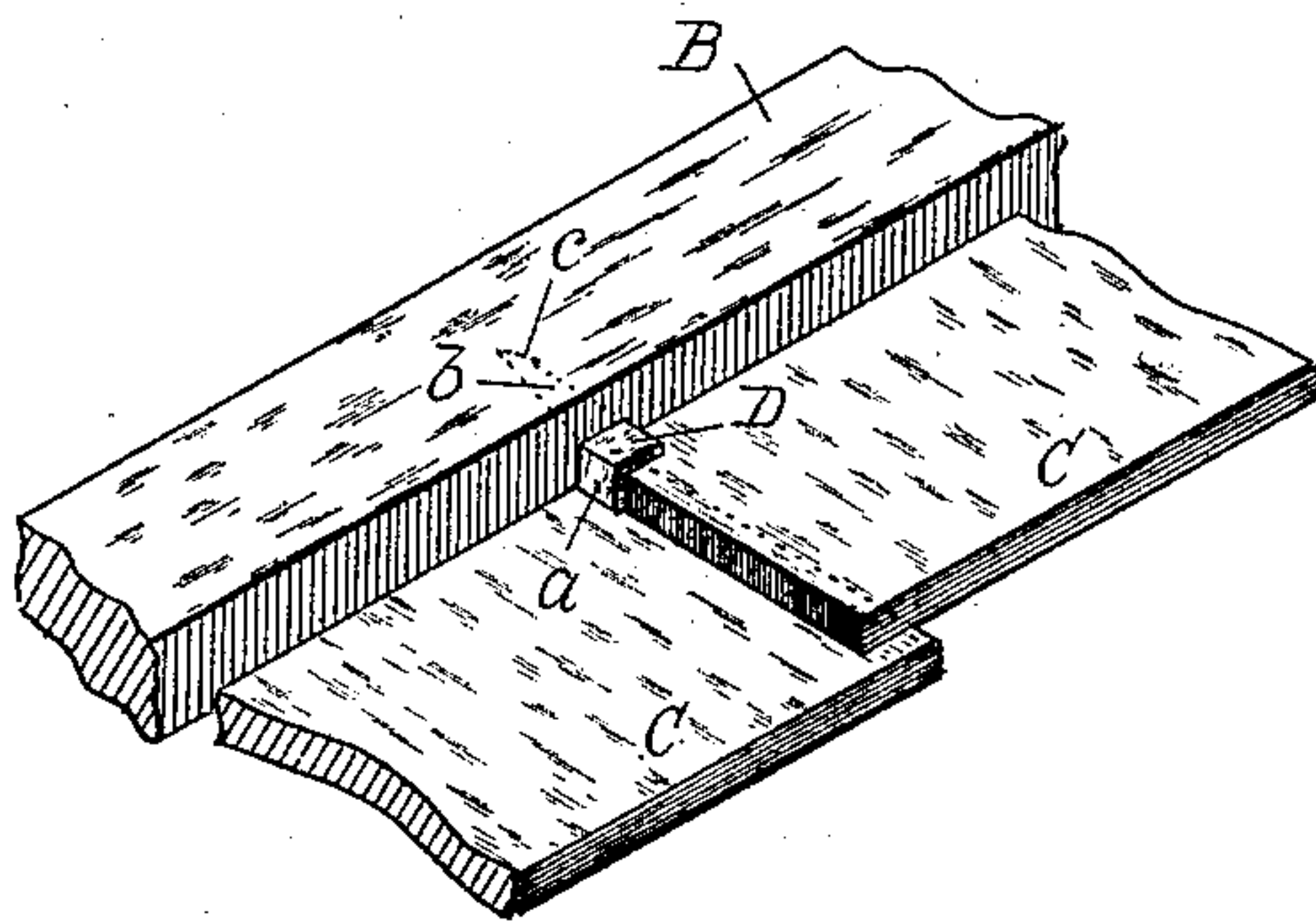


Fig. 5.

Witnesses.

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BARTLETT B. CHANDLER, OF HYDE PARK, MASSACHUSETTS.

GLAZIER'S POINT.

SPECIFICATION forming part of Letters Patent No. 360,656, dated April 5, 1887.

Application filed September 30, 1886. Serial No. 214,990. (No model.)

To all whom it may concern:

Be it known that I, BARTLETT B. CHANDLER, a citizen of the United States, residing at Hyde Park, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Glaziers' Points; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in "glaziers' points" and their mode of construction, by which they are prevented from becoming displaced and gradually drawing out, consequent upon the changes in the frame due to varying atmospheric conditions.

The drawings represent, in Figure 1, a plan of a blank, and Fig. 2 a perspective view of a glazier's point embodying my invention. Fig. 3 is a plan showing a modified form in the construction, while Fig. 4 is a vertical section of the same. Fig. 5 represents the application of the point to a sash. All the above-mentioned drawings, with the exception of Fig. 5, are much enlarged for convenience of illustration.

In the above drawings I have represented a glazier's point more especially adapted to green-houses, hot-bed frames, and other similarly-arranged sashes, or series of sashes, in which the panes of glass are disposed in rows with the lower edge of each light of glass overlapping the top of the glass next adjacent, but below. In such frames the points, due to the arrangement of the glass, have a tendency to work out. To prevent this is one object of my invention.

Fig. 1 of the accompanying drawings represents a blank, A, formed from some suitable sheet metal of a thickness adapted for the finished article. This blank I have formed with a portion, *a*, to be hereinafter explained, and with its entering tongue *b* provided with a spur, *c*. This entering tongue *b*, it will be observed, differs somewhat from those usually made, and in lieu of having the sides converge toward the longitudinal axis of the point as an entirety I dispense with one-half of this entering tongue, as shown. Hence, in driving the

article into the sash, one side of the tongue will be approximately normal to the sash, while the other is obliquely disposed thereto, in lieu of both sides being oblique to the sash and with the obvious tendency to work out. In the further description of this article I will term the side marked 1 "normal" and the side marked 2 "oblique." Moreover, to insure a permanent position for each point after being driven into the sash and prevent their gradual displacement, I have formed a spur or shoulder, *c*, upon the normal side of the tongue *b*. A modification is represented in Figs. 3 and 4, wherein a retaining-spur, *c'*, is formed interiorly in the said tongue, V-shaped and with its point, which is to project slightly from the surface thereof, directed toward the head of the tongue. Thus it will yield and pass readily in when the entirety is inserted, but will oppose its withdrawal.

In the application of this glazier's point to green-house and hot-bed sashes, and to prevent the downward movement of the lights of glass upon each other, I have formed a lip, *a*, upon the blank A, which is intended to overlap and engage the bottom edge of each pane of glass.

The application of this glazier's point is shown in Fig. 5, wherein B is the sash, while C C represent two consecutive panes of glass, the uppermost one of which is in contact with and held in position by the point shown at D as an entirety. Herein it is seen that the lip *a*, which fits against the edge of one of the panes, as shown in said figure, is approximately of a length to suit the thickness of glass used; or it may be somewhat less, as circumstances dictate.

From the construction of the entering tongue *b*, in which the normal side 1 is provided with the spur *c*, and the oblique side 2 is adjacent to the retaining-lip *a*, it is obvious that any pull or thrust upon the latter, due from the glass or other cause, will be checked by the opposite upward movement of the tongue with its spur, which will engage the material of the sash and stop its withdrawal. Moreover, the obvious tendency of the oblique side is to push and crowd the normal side with its spur into the material in which it is buried.

I claim—

1. A glazier's point formed with an entering tongue, *b*, having a spur, and a lip, *a*, on

the side of said point, turned down to fit the edge of a pane of glass, substantially as herein set forth.

2. A glazier's point having a lip, *a*, and the
5 entering tongue *b*, the latter formed with an oblique side, 2, adjacent to the lip, and with a normal side, 1, provided with a spur, for purposes herein described.

In testimony whereof I affix my signature in presence of two witnesses.

BARTLETT B. CHANDLER.

Witnesses:

F. CURTIS,

H. E. LODGE.