

H. K. HITCHCOCK.
ALARM GLASS.
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1,223,583.

Patented Apr. 24, 1917.

Fig. 1

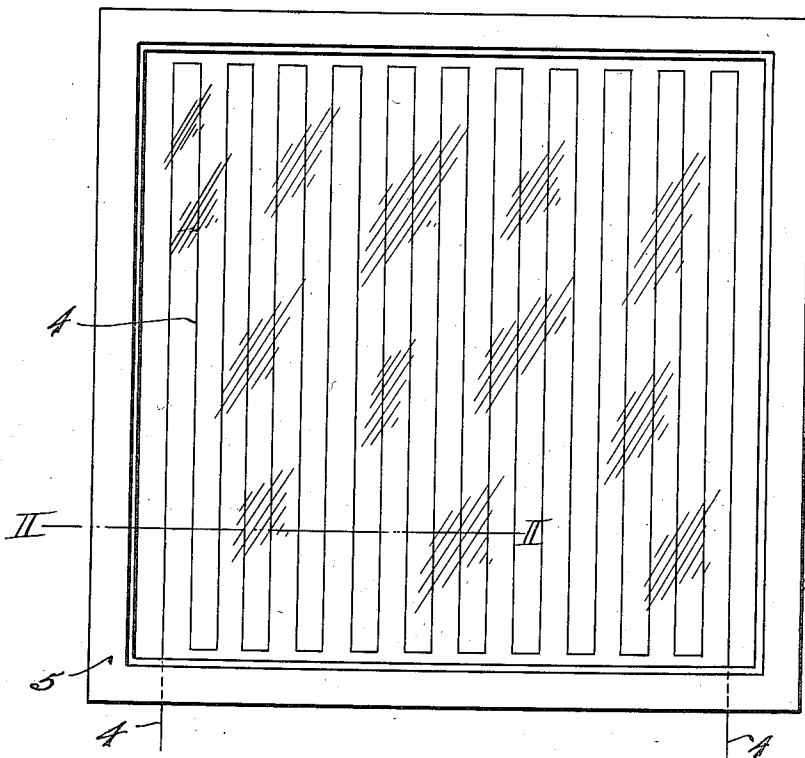
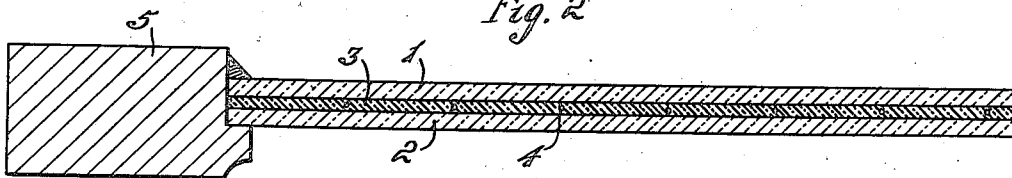


Fig. 2



WITNESS

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ALARM-GLASS.

1,223,583.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HALBERT K. HITCHCOCK, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Alarm-Glass, of which the following is a specification.

The invention relates to what may be termed alarm glass, that is glass which can not be cut or broken without causing the actuation of a signal of some kind, such as a bell. The glass is designed primarily for use in jewelers' windows and cases, but may be used in other relations where it is desired to guard a window against unlawful entrance. The invention has for its primary objects the provision of a window or sheet of glass of the character specified in which a very fine wire may be employed and which can be cheaply fabricated from ordinary glass sheets, and the provision of a glass sheet of the character specified and carrying a single wire, which at the same time affords a very considerable resistance to breakage, so that a quick shattering and rapid removal of the merchandise back of the window is prevented. One embodiment of the invention is illustrated in the accompanying drawings wherein—

Figure 1 is a face view of a window embodying my invention, and Fig. 2 is an enlarged section on the line II of Fig. 1.

The transparent plate comprising my invention consists of a pair of glass sheets 1 and 2, preferably plate glass, with an interposed tough resistant sheet or layer 3, preferably celluloid. The sheet 3 is securely attached to both sheets of glass, either by cementing or some other means, and carries the signal wire 4 extending back and forth through the glass and connected to an alarm mechanism (not shown) so constructed to give an alarm when the wire is broken. This wire is preferably of very small diameter so that it may be readily broken when the window is fractured or cut. The compound plate is shown as supported in a window sash 5, but it will be understood that the glass is of general application.

The wire 4 may be embedded in the celluloid during the formation of the celluloid sheet or by placing it between two layers

which are subsequently cemented or welded together. In some cases this sheet may be made only thick enough to carry the wire, while in other cases, where additional strength is desired, this sheet may be made relatively thick. Celluloid is preferred because of its strength, but in some cases it may be desired to use a layer of some other material such as balsam or of thin colorless cement of just sufficient thickness to carry the wire.

It will be seen that the compound sheet constructed in accordance with my invention has certain advantages over constructions heretofore employed in which the signal wire was embedded in the glass itself, since such sheets must be specially cast and the fine wire which it is desirable to use has a tendency to cut or burn off in the operation. The compound sheet is much stronger than a single sheet of glass because of the celluloid so that the window resists entrance even after the inner and outer glass sheets are shattered, thus preventing any quick entrance through the window and removal of merchandise from the space behind it. Ordinary glass can be used in the construction of the window and no cutting of its surface to receive the wire is necessary such as would be the case if the interposed transparent layer carrying the wire were not employed. Other advantages incident to the invention will be readily apparent to those skilled in the art.

What I claim is:

1. In combination a compound alarm plate comprising two sheets of glass with an interposed transparent layer of tough resistant material in which is embedded a signal wire extending back and forth through the layer.

2. In combination a compound alarm plate comprising two sheets of glass with an interposed transparent layer of material attached to the sheets, and in which is embedded a signal wire extending back and forth through the layer.

3. In combination a compound alarm plate comprising two sheets of glass with an interposed transparent layer of celluloid attached to the sheets and in which is embedded a signal wire extending back and forth through the layer.

4. In combination a compound alarm plate

comprising a sheet of glass to one side of which is attached a transparent sheet of tough resistant material other than glass in which is embedded a signal wire extending
5 back and forth through the sheet.

5. In combination a compound alarm plate

comprising a sheet of glass to one side of which is attached a transparent layer of insulating material other than glass having embedded therein a signal wire extending
10 back and forth through the layer.

HALBERT K. HITCHCOCK.