

A. PACKSCHER.
IRON FRAME WINDOW.
APPLICATION FILED MAY 18, 1908.

899,610.

Patented Sept. 29, 1908.

Fig. 1.

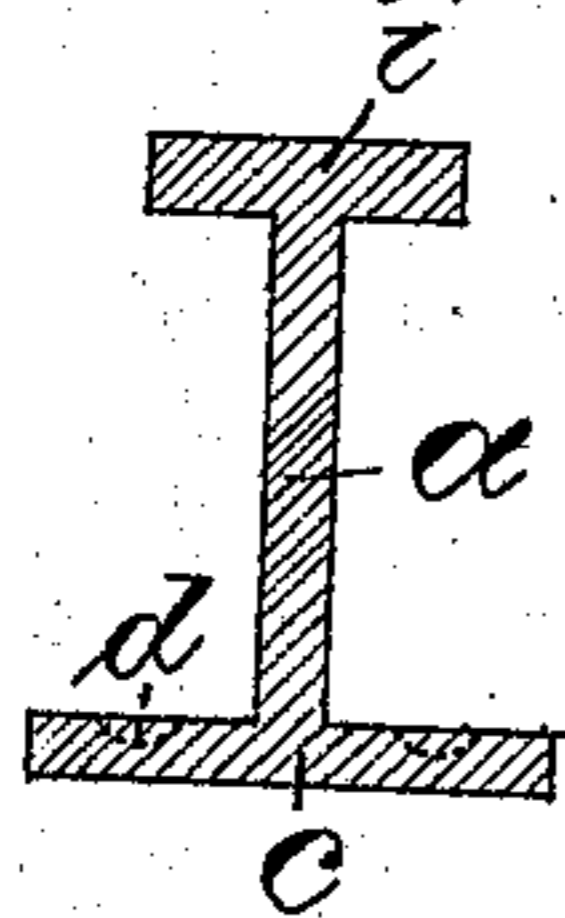


Fig. 2.

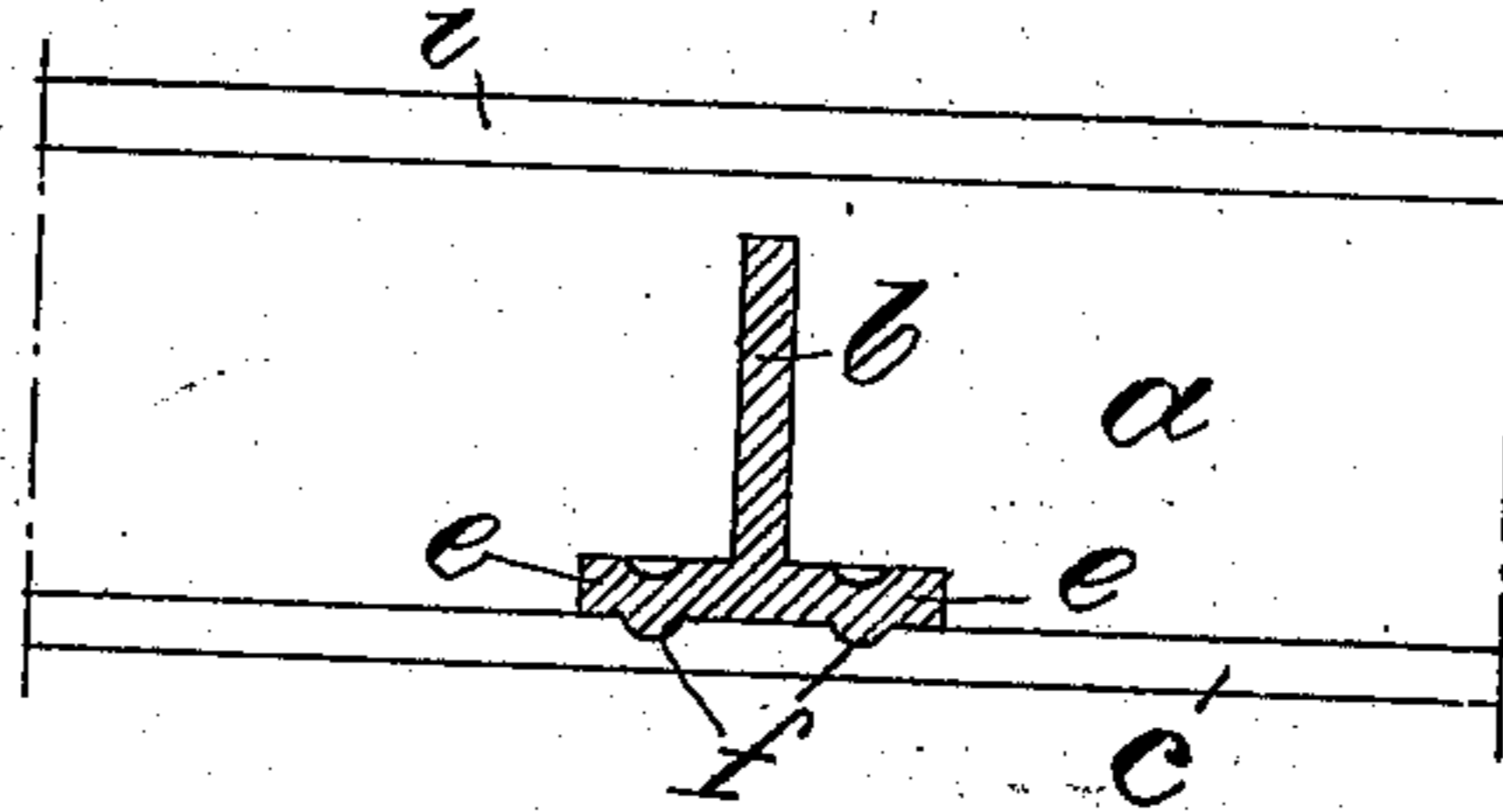


Fig. 3.

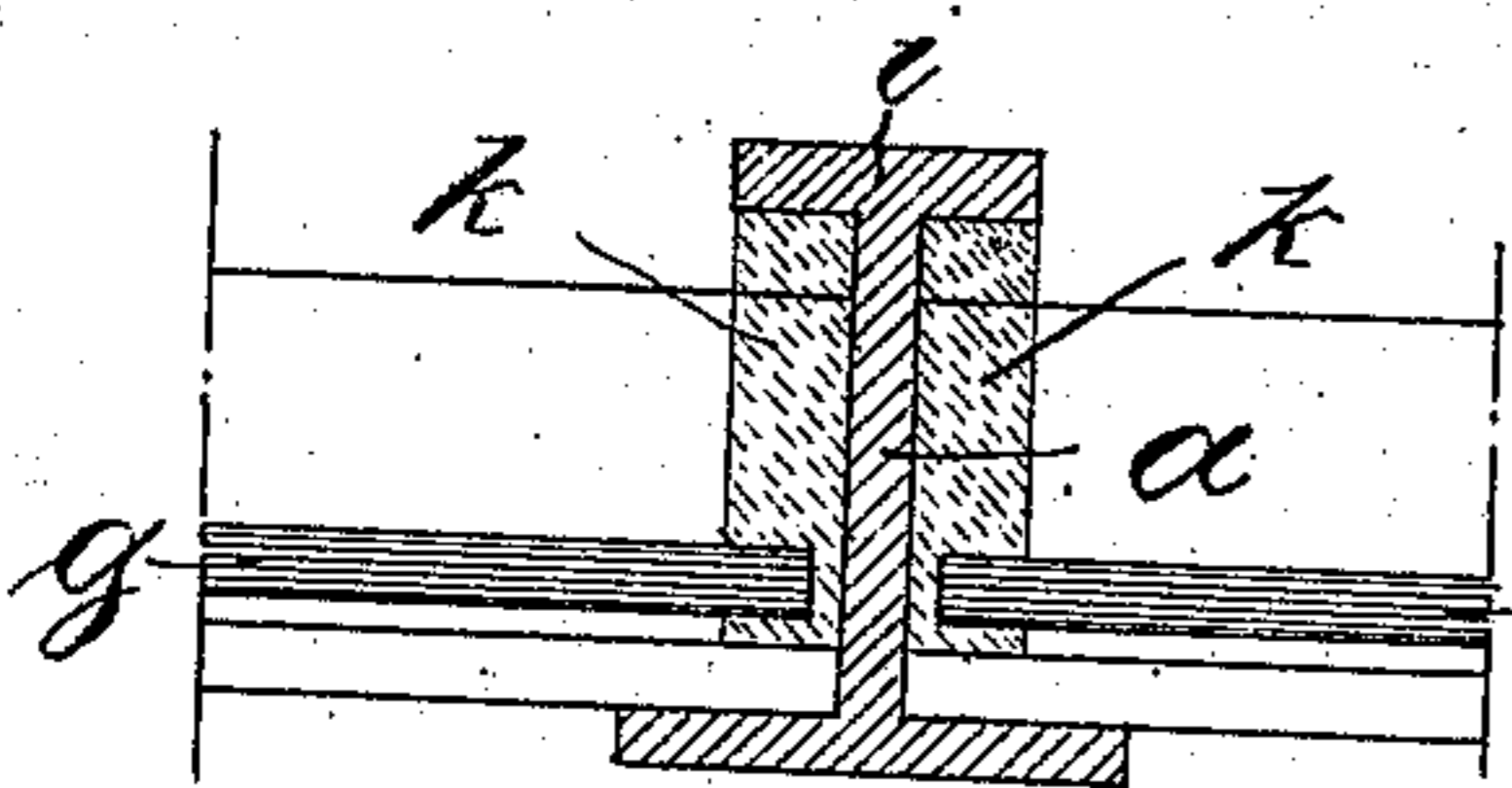


Fig. 4.

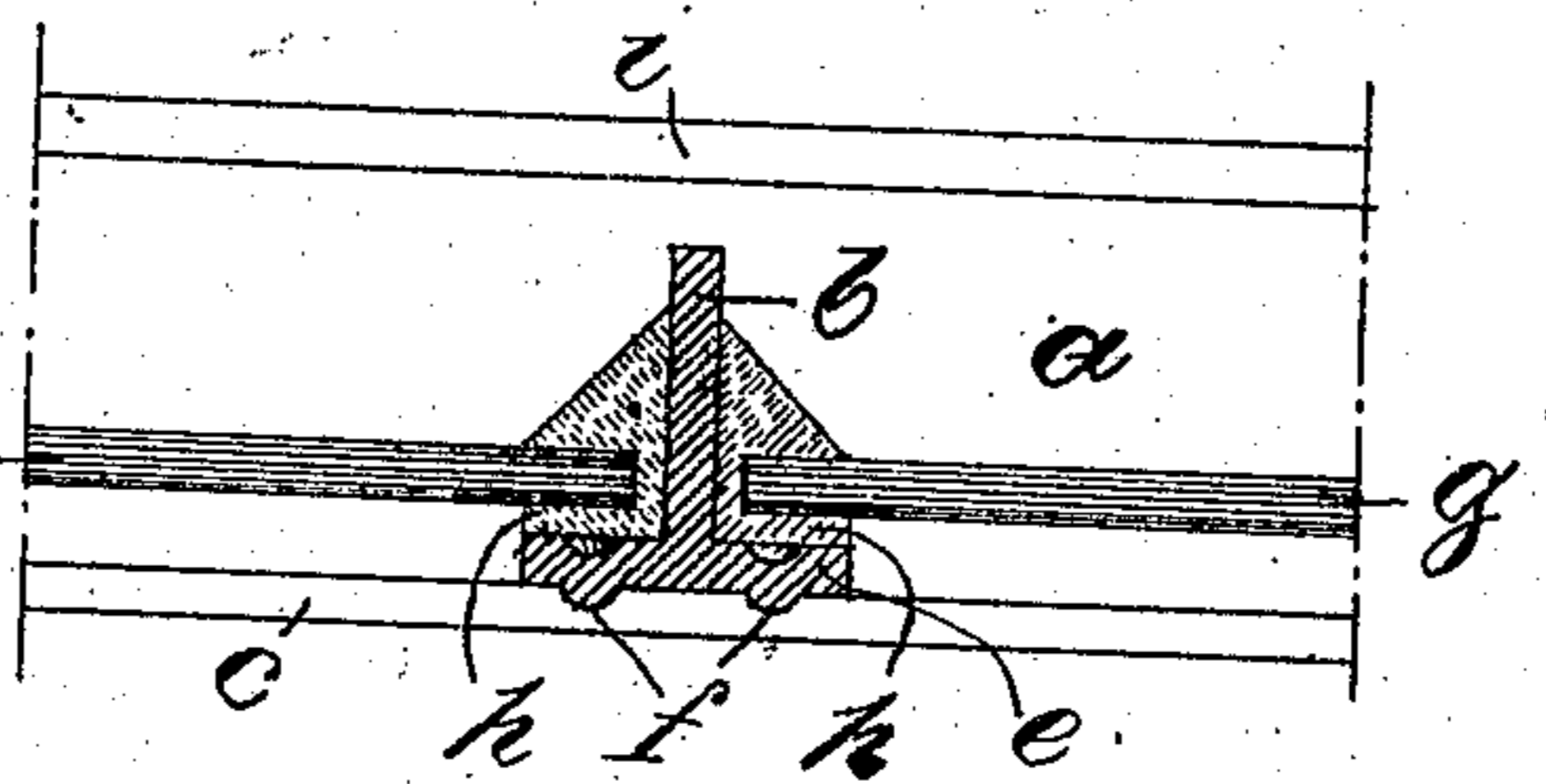
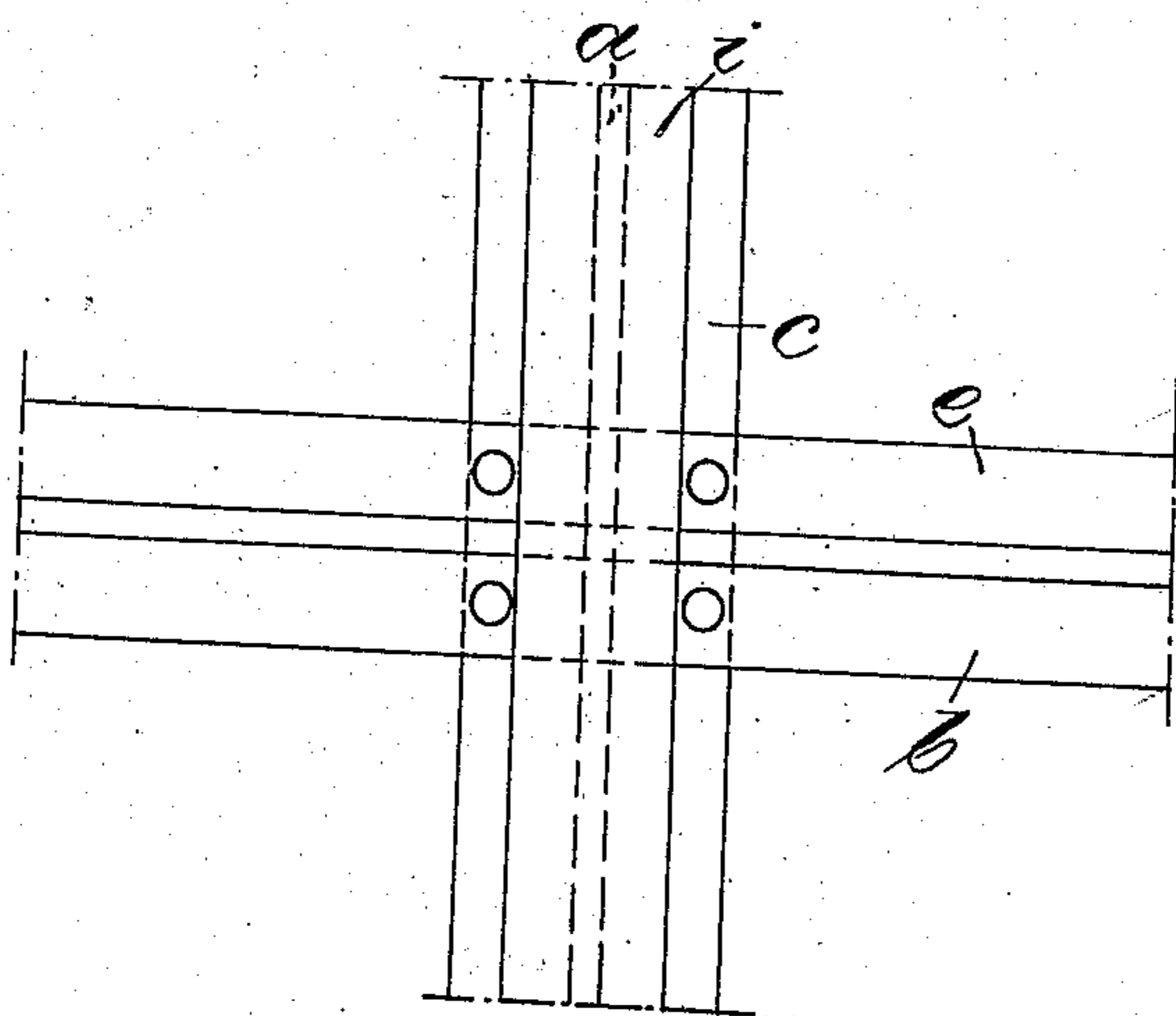


Fig. 5.



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UNITED STATES PATENT OFFICE.

ARTHUR PACKSCHER, OF BERLIN, GERMANY, ASSIGNOR TO THE FIRM OF DR. HIRSCH, OF LICHTENBERG, NEAR BERLIN, GERMANY.

IRON-FRAME WINDOW.

No. 899,610.

Specification of Letters Patent.

Patented Sept. 29, 1908.

Application filed May 18, 1908. Serial No. 433,565.

To all whom it may concern:

Be it known that I, ARTHUR PACKSCHER, a subject of the German Emperor, and resident of 13 Frankfurter Allee, Berlin, German Empire, have invented certain new and useful Improvements in Iron-Frame Windows, of which the following is an exact specification. This invention relates to the construction of windows and the like with iron frames for holding the glazing. In such window frames the cross bars of the frame have been passed through longitudinal bars and the glass pane has been inserted by providing a thin layer of putty or glazing cement on the frame and then laying the window pane on this layer and then holding the pane in place by means of pins or screws passing through holes in the ledge of the frame while the usual outer cement, putty or the like was setting hard. The glass and the thin layer of putty are not, however, always of even thickness so that in places the pins did not properly hold the pane and wind pressure caused the pane to work itself loose. The frames also were not absolutely immovable and the small beginnings soon commenced to grow into a decided looseness and objectionable rattling in the frame and glass.

The object of the present invention is to avoid these difficulties and this is effected by the construction illustrated in the accompanying drawings in which

Figure 1 is a cross section of the longitudinal frame irons which are employed, Fig. 2 is a side view of the longitudinal frame irons and a section through the cross frame irons, Fig. 3 is a section through the longitudinal joint of the glass with the frame, Fig. 4 is a section through a horizontal joint, Fig. 5 illustrates the arrangement of the frame.

In carrying the invention into effect according to the form shown the longitudinal frames *a* are of I-cross section, the flange *i* of which is smaller than the flange *c* so as to enable the insertion of the glass pane *g*. The central web *a* is pierced so as to effect the passage therethrough of the cross inverted T-

frame piece *b*, the flange *e* of which comes against the flange *c* of the longitudinal frame. The flange *e* is provided with depressions *f* which engage in notches *d* provided in the flange *c*. When inserting a pane of glass in this form of window frame, a thin coating of putty or other suitable cement is first laid on the face of the flange *e* and on the flange *c*. It will be understood of course that the layer of putty *h* on the flange *c* is sufficiently thick to make up for the thickness of the flange *e*. The holding putty *k* is then inserted between the glass pane *g* and the smaller of the parallel flanges of the longitudinal frame irons. In this way the putty or other cement is given a backing which prevents loosening of the pane *g* during the time in which the putty is setting hard. At the same time it will be seen that owing to the depressions *f* engaging in the notches in the flange *c*, motion of the longitudinal and cross frames relatively to one another is positively prevented and a firm, simple and durable structure of window frame is secured. The depressions and notches *f* and *d* may be arranged on the flange *c* on both sides of the central web *a* as shown on the left of Fig. 5 or only on one side.

I claim:—

An iron framed window having I-section longitudinal frame irons with flanges of different sizes, the largest flange being provided with notches, cross frame irons passing through the web of said longitudinal frame irons and having depressions taking into said notches on the flange of said longitudinal frame irons, glazing inserted in the frame so formed from the side at which the smaller flange on the longitudinal frame irons is arranged, putty inserted between the glass and the smaller flange, substantially as and for the purpose described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

ARTHUR PACKSCHER.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.