Oct. 10, 1933. C. P. GIFFORD 1,929,634

FRAME FOR BUILDING OPENINGS

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Fig. 1.

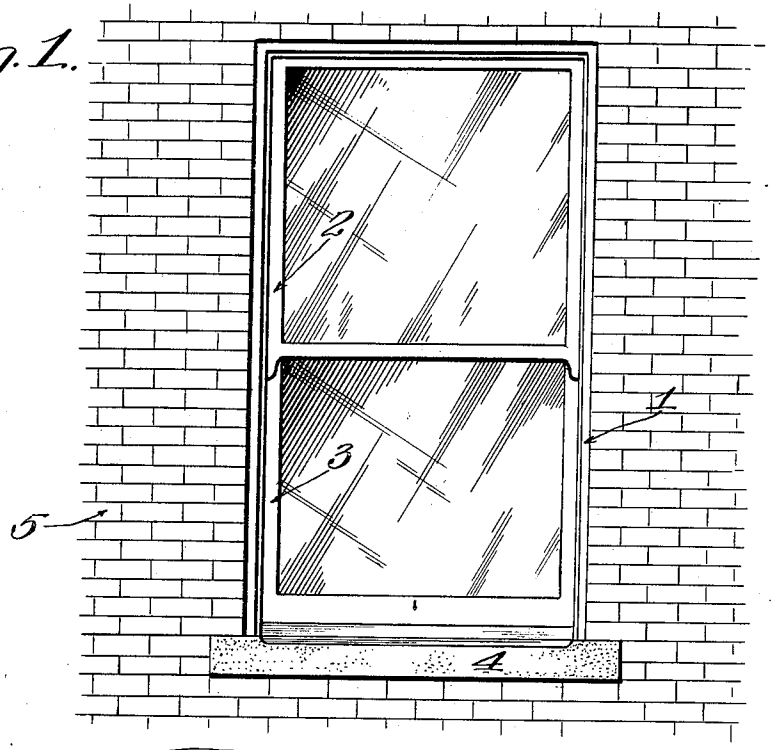
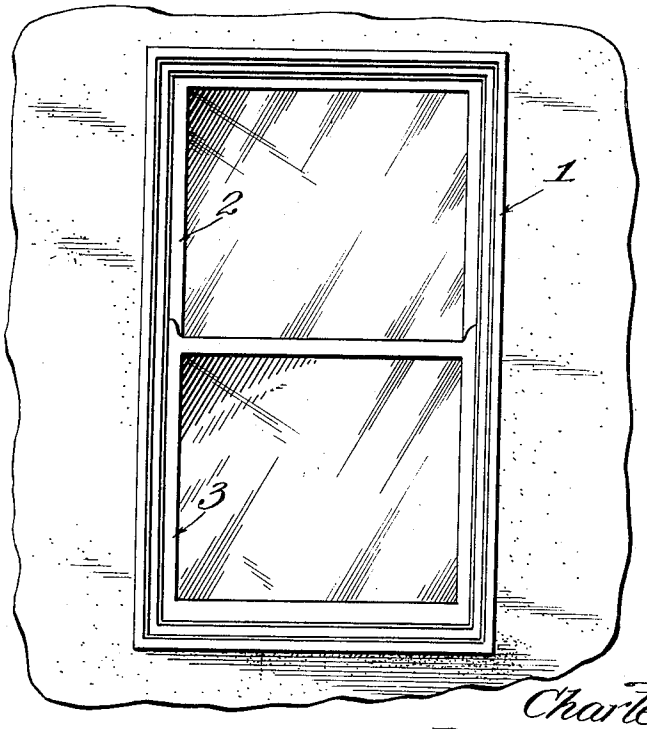


Fig. 2.



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Fig. 3.

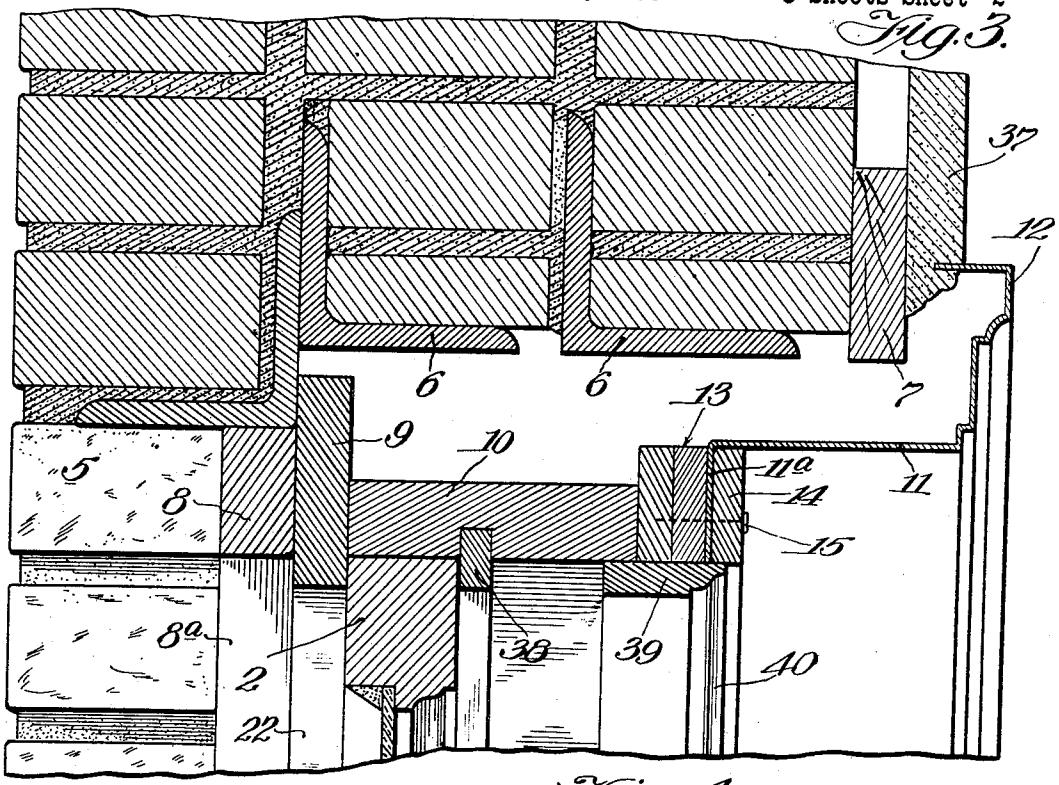
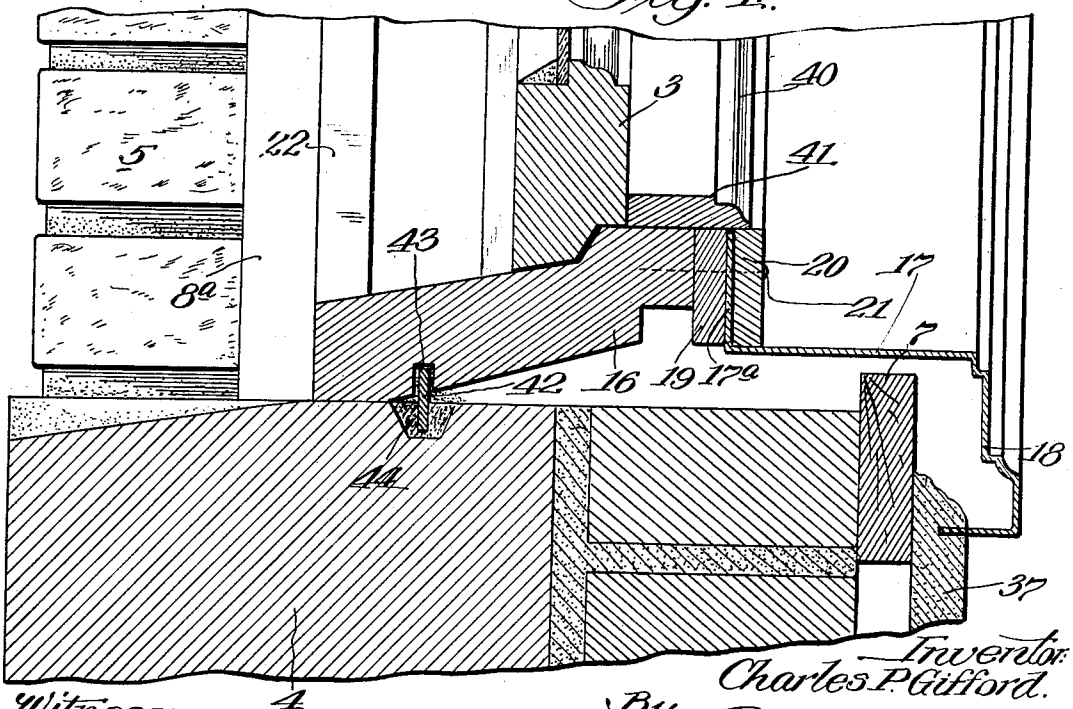


Fig. 4.



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Fig. 5.

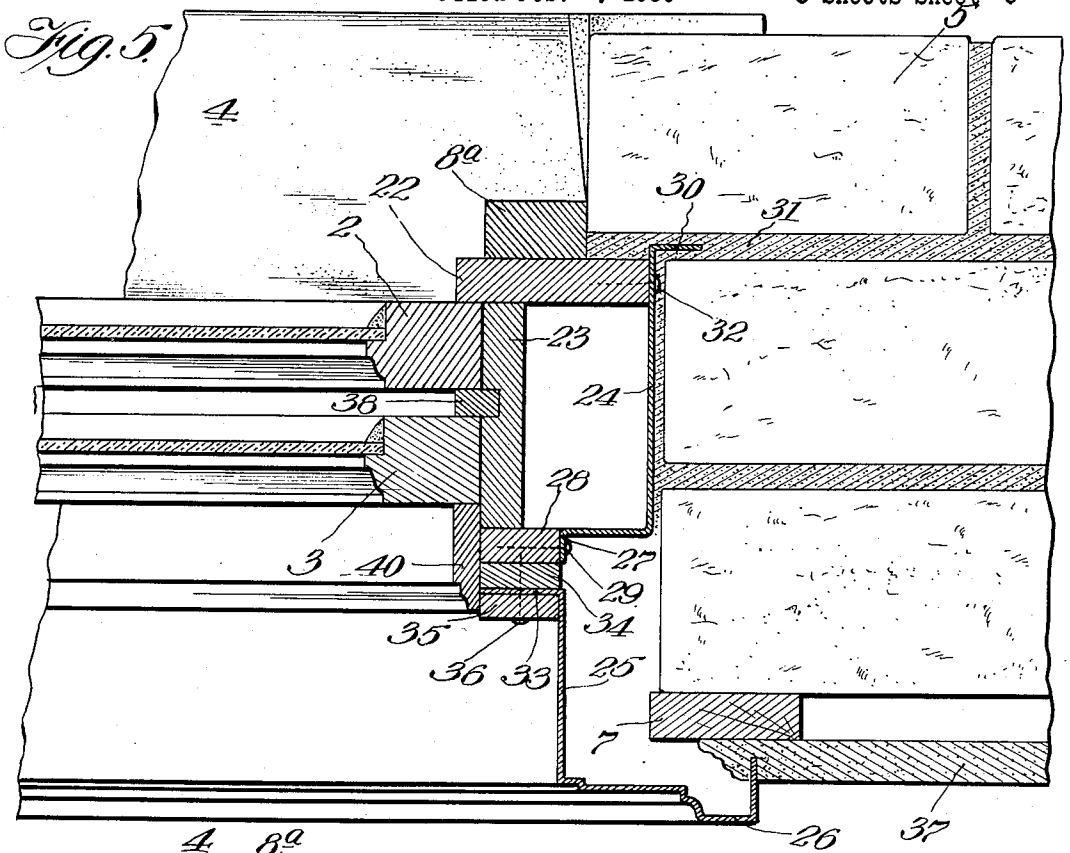
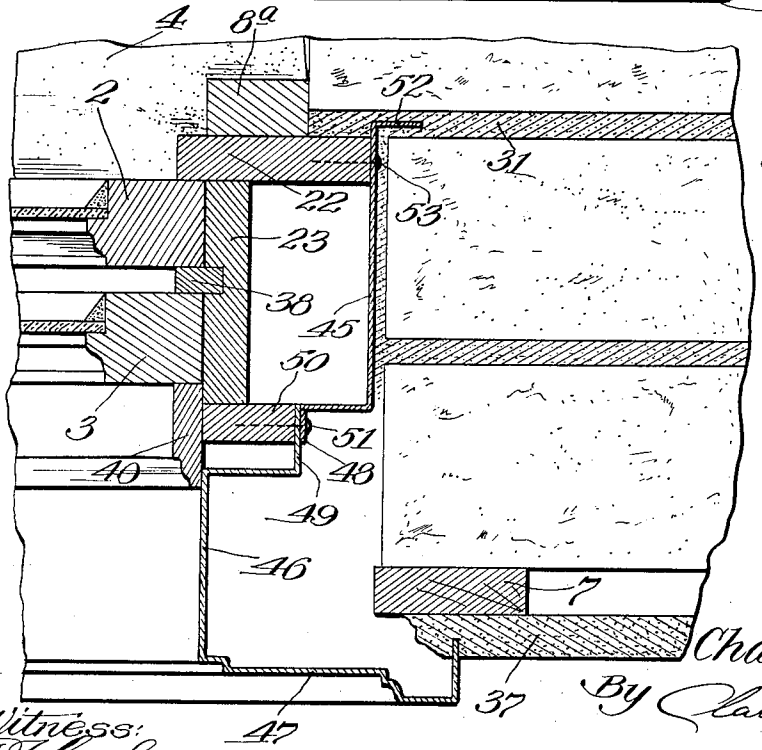


Fig. 6.



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Patented Oct. 10, 1933 1,929,634

UNITED STATES PATENT OFFICE

1,929,634

FRAME FOR BUILDING OPENINGS

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Application February 1, 1930. Serial No. 425,089

7 Claims. (Cl. 20—11)

The present invention relates to frames for building openings, and more in particular to a novel frame construction adapted for use in building openings, such as windows or the like.

Among the objects of the present invention are to provide a novel frame construction adapted to be inserted and anchored in a building opening, the same being provided with a metal casing and trim portion, thereby eliminating the use of a wooden inside casing and back lining, and making a more rigid and substantial construction.

Another object of the invention is to provide a window frame construction which can be assembled at the factory and set into the building opening as a unitary structure, and there bricked into the wall. By reason of this construction, no additional carpenter labor is required to set the usual wood jamb, lining, casing, stool and apron, and as soon as the wall is plastered, the sash can be fitted and hung with the stops. A considerable gain in labor and time is made by reason of this construction, thus speeding the completion of the building. This is a tremendous factor in present day building, since time and cost are of the utmost importance.

Another object of the invention is the provision of a window frame comprising the advantages of both wood and metal construction, and the disadvantages of neither.

Further objects are to provide a construction of maximum simplicity, efficiency, economy and ease of assembly, and such further objects, advantages and capabilities as will later more fully appear and are inherently possessed thereby.

The invention further resides in the combination, construction and arrangements of parts illustrated in the accompanying drawings, and while I have shown therein a preferred embodiment, it is to be understood that the same is susceptible of modifications and change, and comprehends other details, arrangements of parts, features and construction, without departing from the spirit of my invention.

Referring to the drawings:

Fig. 1 is a view in outside elevation of my novel construction of frame, and Fig. 2 is a view in inside elevation thereof, both views disclosing the frame and sashes in assembled position.

Fig. 3 is a fragmentary view in vertical cross section through the head section of the frame.

Fig. 4 is a fragmentary view in vertical cross section taken through the sill section of the frame.

Fig. 5 is a fragmentary view in horizontal cross section taken through a side jamb of the frame.

Fig. 6 is a view similar to Fig. 5 disclosing an alternate construction of the metal casing and trim of the frame construction.

Referring more particularly to the drawings, the embodiment selected to illustrate the invention is shown as comprising a frame 1 provided with an upper sash 2 and a lower sash 3, the frame and sashes being mounted above a stone sill or the like 4 in a building structure. This window frame is set in the opening and bricked therein, the bricks and masonry being designated generally as 5. Lintles 6 are embedded in the walls of the building, while grounds 7 are mounted around the inner periphery of the opening. These grounds are generally of wood or the like, and are adapted to straighten the wall and help line up the frame parts.

As shown more clearly in Figs. 3, 4 and 5, my novel frame construction incorporates the use of both wood and metal, thereby making a more rigid and permanent construction. As shown, the head section of the frame includes a hanging stile 8, an outside casing 9, yoke or head jamb 10, and trim section 11 provided with a flange 11a and trim or face portion 12 of any desired design or configuration. As clearly disclosed, the hanging stile, outside casing and yoke or head jamb, as well as the blocking 13, are all constructed of wood or the like, while the trim section is constructed of metal or the like and connected to the blocking by means of a wood facing 14 and attaching members 15, such as nails or the like.

The base or sill section of the frame comprises a sill member 16 of wood or the like, and a trim section 17 having a flange 17a and trim or face 18, this section being constructed of metal or the like and connected to a blocking 19 and the sill by means of a wood facing 20 and attaching members 21, such as nails or the like.

The side jambs of the window frame are clearly disclosed in Fig. 5 of the drawings, and comprise a hanging stile 8a, outside casing 22, and pulley stile 23, constructed of wood or the like, and a metal back lining and inside casing 24 and jamb lining 25 provided with a trim portion 26. The metal inside casing is provided with an inner flange 27 adapted to seat on and connected to a block 28 by suitable attaching means 29, such as nails or the like. The metal back lining and inside casing is also provided with an outer flange 30 adapted to be embedded in the mortar 31 of the permanent building construction, the

back lining being also secured to the outside casing 22 by attaching means 32. The metal jamb lining 25 is provided with an inwardly extending flange 33 adapted to seat against a blocking 34 and secured to this blocking by means of a wood facing 35 and suitable attaching means 36. The trim portion 12, 18 and 26, become embedded in the plaster 37, it being understood that the frame member 1 is placed in position in the building opening and bricked into the wall, and also the plastering is done after the window frame has been set. By this construction, the window frame is rigidly anchored in position, the metal parts of the frame adding immensely to the efficiency and durability of the construction, as well as lessening the cost of manufacture and installation. In order to prevent damage to the metal trim, the jamb lining and trim portions are ordinarily not assembled with the remainder of the frame at the factory, but may be attached before or after the remainder of the frame has been mounted in the building opening.

After the frame has been mounted in position, the upper sash 2 and lower sash 3 are placed in their operative relation in the frame. Parting beads 38 and stops 39, 40 and 41 hold the sash members in operative relation. A water bar 42 running longitudinal of the sills and extending into openings 43 in the sill 16, and 44 in the stone sill 4, and embedded therein by means of cement or the like prevents drainage of water from the outside.

The blocking 13, 19 and 34, may be of any desired thickness, the blocking space being available for taking care of, or allowing for, wall variations.

In Fig. 6 is disclosed an alternate construction in which the metal back lining and inside casing 45 and jamb lining 46 having the trim 47, are provided wtih flanges or overlapping portions 48 and 49 respectively, these overlapping portions being welded together to provide a more rigid and substantially permanent construction. These overlapping portions are attached to the block 50 by means of suitable attaching means 51. As clearly shown, the metal back lining is provided with a flange or extension 52 adapted to be embedded in the mortar 31 and secured by attaching means 53, while the trim portions are adapted to become embedded in the plaster 37. In this construction, the entire frame is constructed and assembled at the factory, and when delivered, is ready to be mounted into the building opening and there anchored in position. In the construction shown in Figures 3, 4 and 5, the jamb lining and trim may be mounted in position at a later date, as for instance, after the frame has been set in position. In that construction, the means for attaching the jam lining is readily accessible and easily accomplished.

In order to permit the attaching means, such as nails or the like, to pass through the metallic members, these members are provided with openings or cut-out portions, suitably spaced along the full length thereof.

From the above disclosure, it will be readily seen that I have provided an improved construction of frame having the advantages of both the wood and metal frame and the disadvantages of neither. By my construction of back lining, inside casing, jamb lining and trim, all constructed of metal, it will be appreciated that I have provided a construction of maximum efficiency, durability, ease of assembly, and at a minimum cost.

Having thus disclosed my invention, I claim:

1. An assembled window frame construction for building openings, comprising a head and sill for said frame, a metal casing attached to said head and sill and provided with metal trim portions forming the interior surface of the frame and side jambs for said frame and including a metal section providing a back lining and inside casing, and a second metal section connected to the first mentioned metal section and forming an integral jamb lining and trim portion.

2. An assembled window frame construction for building openings, comprising a head and sill for said frame, a metal casing attached to said head and sill and provided with integral trim portions adapted to be embedded in the interior finish of said building and forming the interior, exposed surface of the frame, and side jambs for said frame and including a metal section providing a back lining and inside casing, and a second metal section forming a jamb lining and trim portion.

3, An assembled window frame construction for building openings, comprising a head and sill for said frame, a metal casing attached to said head and sill and provided with metal trim portions adapted to be embedded in the interior finish of said building, and side jambs for said frame and including a metal section providing a back lining and inside casing, and a second metal section forming a jamb lining and trim portion, means on said first section for anchoring the same in the masonry of the building, and means on said second section for anchoring the same in the interior finish of the building.

4. An assembled window frame construction for building openings, comprising a head and sill for said frame, a metal casing attached to said head and sill and provided with metal trim portions adapted to be embedded in the interior finish of said building, and side jambs for said frame and including a metal section providing a back lining and inside casing, and a second metal section forming a jamb lining and integral trim portion, a flange on said first mentioned section for anchoring the same in the masonry of the building, and a flange on the trim portion of said second section for anchoring the same in the interior finish of the building.

5. An assembled window frame construction for building openings, comprising a head and sill for said frame, a metal casing attached to said head and sill and provided with integral trim portions adapted to be embedded in the interior finish of said building, side jambs for said frame and including a metal section providing a back lining and inside casing, and a second metal section forming a jamb lining and metal trim portion, and means for connecting said sections.

6. An assembled window frame construction for building openings, comprising a head and sill for said frame, and side jambs for said frame and including a metal section providing a back lining and inside casing, and a second metal section connected to the first mentioned metal section and forming an integral jamb lining and trim portion.

7. An assembled window frame construction for building openings, comprising a head and sill for said frame, and side jambs for said frame and including a metal section providing a back lining and inside casing, and a second metal section connected to the first mentioned metal section and forming an integral jamb lining and trim portion, and means for connecting said sections.

CHARLES P. GIFFORD.