July 11, 1950 M. JOYCE 2,514,397

TEMPORARY SUPPORT FOR WINDOW FRAMES

Filed Dec. 29, 1947

Fig. 1.

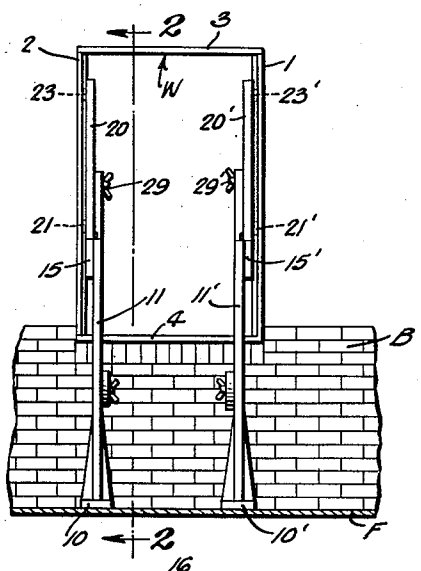


Fig. 2.

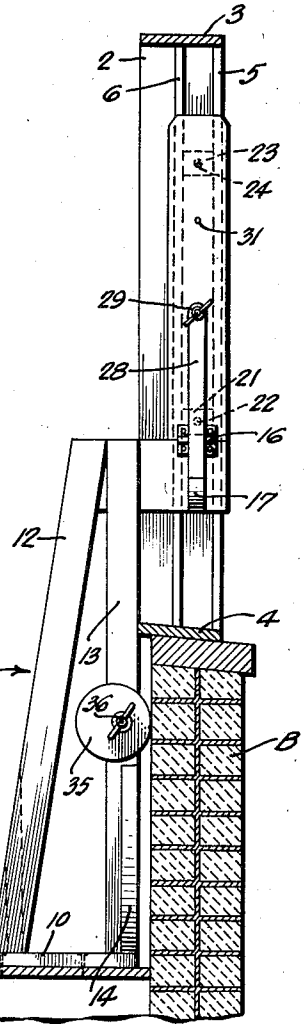


Fig. 3.

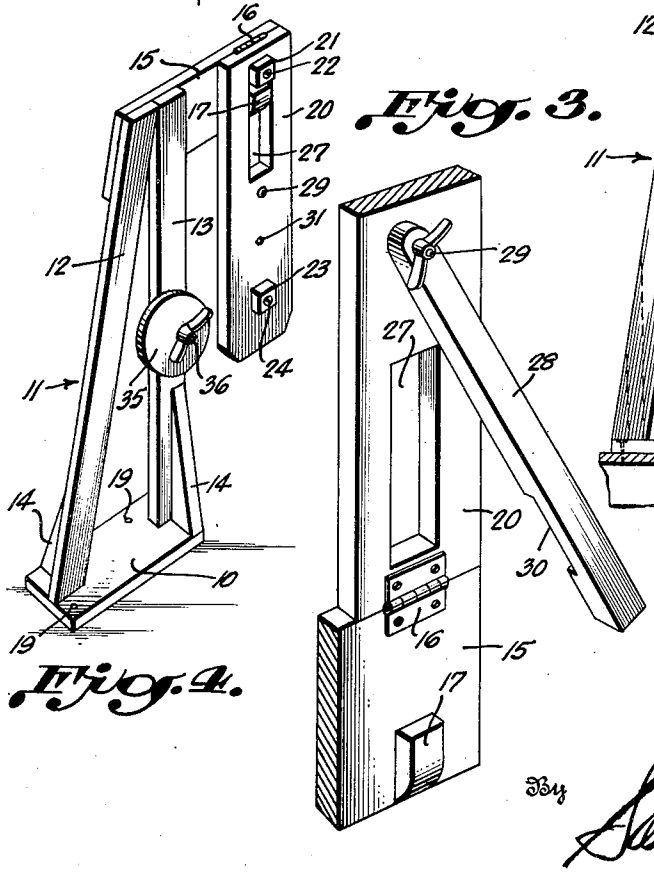


Fig. 4.

Inventor

MAURICE JOYCE

By Samuel Silowitz

ATTORNEY

Patented July 11, 1950

2,514,397

UNITED STATES PATENT OFFICE

2,514,397

TEMPORARY SUPPORT FOR WINDOW FRAMES

Maurice Joyce, Washington, D. C.

Application December 29, 1947, Serial No. 794,340

6 Claims. (Cl. 20—0.5)

1

This invention relates to temporary supports for window frames in the course of the erection of buildings.

It is the object of the present invention to provide a rugged window frame support which may be mounted conveniently on the floor construction of a building undergoing erection in position to support a window frame in true vertical alignment, and to maintain this proper positioning while diverse constructional steps are executed around the window frame.

It is the object of the present invention to provide a window frame support which is stable in its mounting in operative position and which occupies a minimum amount of space in such position in order to present no substantial interference to the building operations in the immediate vicinity of the window frame support and the window supported thereby.

It is another object of the invention to provide a window frame support offering features of adjustability with respect to the lateral displacement of the support from the wall in which the window frame is mounted, as well as capabilities of adjustment for supporting window frames of different sizes.

It is another object of the invention to provide an adjustable frame support which may be extended into operative position and which is capable of having a part thereof collapsed in inoperative position so that such frames may be conveniently hauled from place to place and take up the least amount of space in storage when they are not in use.

The invention proceeds upon the principle of providing a support for each side of a window frame, each support embodying a base which is adapted to be fixed to a floor or subfloor adjacent to a wall which is to have a window opening. Each base has a vertical frame extending upwardly therefrom and a structural member is offset horizontally from the upper end of the frame to extend into the window opening. A structural unit in the form of a panel having spacer blocks extends upwardly from the free end of the structural member and is adapted to extend between a pair of parting beads of the window frame in order to support the frame in fixed position, which retaining action may be supplemented by the driving of a nail through the structural panel into the window frame.

An eccentric disc, in a plane normal to the wall, is mounted on the vertical frame extending upwardly from the base, and serves to adjust the spacing of the frame and consequently

2

the alignment of the window frame with respect to the inner wall so that a predetermined amount of space can be left for the finishing layers of the interior wall such as firring, rough plaster, finish plaster, etc. Once the supporting frame is set plumb in proper relation to the wall in which the window frame is to be mounted, the positioning of the window frame remains fixed while the additional building operations, such as the final bricklaying, caulking, insulating and plastering operations are executed.

Other objects and purposes will appear from the detailed description of the invention following hereinafter, taken in conjunction with the accompanying drawing, wherein

Fig. 1 is a front elevation of a pair of window frame supports in operative position for supporting a window frame in the course of building a brick wall therearound;

Fig. 2 is a vertical sectional view along line 2—2 of Fig. 1;

Fig. 3 is a perspective view of the window support as the same is swung into the position shown in Fig. 2; and

Fig. 4 is a perspective view of the support in its knocked-down or collapsed position.

In Fig. 1 is shown a building construction having a floor F and a brick wall B which has been carried up to a point for receiving a window frame W, consisting essentially of vertical stiles 1 and 2, upper strip 3 and sill 4. The frame is also provided with beading strips such as 5 and 6.

The window frame W must be set in plumb position in proper alignment in the wall while the workmen perform their various building operations therearound such as the bricklaying, caulking, plastering, insulating, etc. The invention serves to maintain the frame in proper position without need of bulky boards, timbers or bracing lumber extending from the floor or joists of other parts of the structure which hinder the building operations and which are easily knocked out of place. The present invention attains a proper setting of the window by means of a pair of adjustable supports which are shown in operative position in Figs. 1 and 2. Only the left support in Fig. 1 will be described, since the one on the right corresponds to the one on the left, the elements of which have been designated by identical reference characters but which have been primed in view of the obverse relationship of the parts.

The base 10 of the support is provided with holes 19 for the purpose of nailing or screwing the base to the floor F at a predetermined dis-

placement from the wall. A frame 11, which is formed of a vertical upright 13 and inclined upright 12, extends upwardly from the base 10 and to the upper end of frame 11 is attached a horizontal structural member 15 extending beyond the base 10 and into the wall opening or window frame. Braces 14 extend between the base 10 and uprights 12 and 13 to strengthen the structure.

An eccentric disc 35, disposed normally to the plane of the wall, is pivotally mounted on the upright 13 and is loosened and tightened by means of wing nut 36 to adjust the chordal extension of the disc beyond the frame and thereby to vary the displacement of the base 10 from the inner face of the wall in order to allow for the finishing layers to be applied to the inside of the wall B. Thus, when an unfirred wall is to be constructed, the displacement between the wall and the frame may be ¾", while in the case of a firred wall construction, the displacement which must be allowed is 1½" to take care of the firring.

To the free end of the horizontal member 15 is pivotally mounted, at hinge 16, a structural unit in the form of an elongated panel 20 which may be swung from its inoperative position, shown in Fig. 4, to its operative position, shown in Figs. 1 and 3. A pair of rectangular spacer lugs 21 and 23 are mounted on one face of the panel 20 and are designed to fit closely between the outside window bead 5 and the parting bead 6 on the vertical stile 2 of the window frame W. The engagement of these spacer blocks at widely displaced points of the window frame serve to maintain the window in set position once the frame has been aligned in plumb relation. In order to make certain that no shifting of the parts will take place, additional security for the mounting may be provided by a nail opening 31 in the panel through which a nail may be driven to hold the frame in place and in interengagement with the window frame support.

In order to enable the frame to be used for window frames of different sizes, in which case the spacing between the beads 5 and 6 may be different, the blocks 21 and 23 are of rectangular cross-section, for example 1⅜" x 1¾" so that by loosening the mounting screws 22 and 24 for the blocks 21 and 23, respectively, these blocks can be rotated 90° to vary the effective horizontal dimension of these blocks in order to fit within the gaps of predetermined sizes between the beads. Of course, these spacer blocks may also be interchangeable with other blocks of varying dimensions.

Preferably, the window frame supports in accordance with the invention are collapsible to minimize the space occupied by these supports when they are not in use, wherefore the units 20 are hinged to the structural member 15 at hinge 16, as described above. To set these panels 20 into operative position, a bar 28 is pivoted at wing nut and bolt assembly 29 to the panel 20 on the side opposite the spacer blocks (Fig. 3) and this bar is designed to be swung from an upper position to a lower position as seen in Fig. 2, to rigidify the connection between members 15 and 20 when the bar 28 becomes aligned with a lug 17 mounted on the member 15. A recess 30 is provided in the underface of the bar 28 to clear the hinge 16 (Fig. 3). To collapse the assembly, the bar 28 is swung back from the position shown in Fig. 2 to a position coaxial with the panel 20 around the pivotal wing nut and bolt 29, thereby uncovering recess 27 which accommodates the lug 17 when the panel 20 is swung down into the position shown in Fig. 4.

By the arrangement described above, a rigid, upstanding support for the window frame is afforded in the operative position of the support, while a compact unit of small height is had for the purpose of storage of the unit when it is not in use, as shown in Fig. 4.

While I have described my invention as embodied in a specific form and as operating in a specific manner for purpose of illustration, it should be understood that I do not limit my invention thereto, since various modifications will suggest themselves to those skilled in the art without departing from the spirit of my invention, the scope of which is set forth in the annexed claims.

I claim:

1. A window frame support comprising a base adapted to be affixed to a floor adjacent to the wall in which the window frame is to be mounted, a frame extending upwardly from said base including a member above the level of the window frame opening extending into said opening, a structural unit extending vertically from said member for supporting a side of the window frame in a true vertical line, and a disc mounted eccentrically on said frame adjacent to the wall normal thereto and below said window opening for varying the spacing of said frame from said wall to allow for the desired finishing layers to be applied to said wall following the setting of the window frame therein.

2. A window frame support comprising a base adapted to be affixed to a floor adjacent to the wall in which the window frame is to be mounted, a frame extending upwardly from said base including a member above the level of the window frame opening extending into said opening, a structural unit extending vertically from said member for supporting a side of the window frame in a true vertical line comprising an elongated panel pivoted to said member around a horizontal axis, and means for fixing said panel in upstanding position.

3. A window frame support comprising a base adapted to be affixed to a floor adjacent to the wall in which the window frame is to be mounted, a frame extending upwardly from said base including a member above the level of the window frame opening extending into said opening, a structural unit extending vertically from said member for supporting a side of the window frame in a true vertical line comprising an elongated panel pivoted to said member around a horizontal axis, means for fixing said panel in upstanding position, and spacer blocks on said panel near the opposite ends thereof adapted to engage the inside of the window frame at displaced points therealong.

4. A support for a window frame embodying beading strips on the inside thereof, comprising a base adapted to be affixed to a floor adjacent to the wall in which the window frame is to be mounted, a frame extending upwardly from said base including a member above the level of the window frame opening extending into said opening, a structural unit extending vertically from said member for supporting a side of the window frame in a true vertical line comprising an elongated panel pivoted to said member around a horizontal axis, means for fixing said panel in upstanding position, and spacer blocks on said panel near the opposite ends thereof adapted to

engage the inside of the window frame at displaced points therealong between a pair of said beading strips.

5. An apparatus as set forth in claim 4 wherein said spacer blocks are of rectangular dimensions of different length and width and are adjustable on the panel with either dimension in alignment to enable the mounting of window frames with two different spacings between a pair of the beading strips.

6. A window frame support comprising a base adapted to be affixed to a floor adjacent to the wall in which the window frame is to be mounted, a frame extending upwardly from said base including a member above the level of the window frame opening extending into said opening, a structural unit extending vertically from said member for supporting a side of the window frame in a true vertical line comprising an elongated panel pivoted to said member around a horizontal axis, and means for fixing said panel in upstanding position comprising a lug on said member and a lever pivoted to the adjacent side of said panel for selectively swinging said lever across said pivotal axis into alignment with said lug to rigidify the connection between said member and panel or swinging said lever in the other direction to permit the dropping of the panel adjacent to said frame support for more compact storage and handling.

MAURICE JOYCE.

REFERENCES CITED

The following references are of record in the file of this patent:

"House Construction Details," Second edition, page 124, Simmons-Boardman Pub. Corp. (Copyright 1939, 1942.)