March 26, 1935. J. A. BOHNSACK 1,995,764

HOLLOW METAL DOOR BUCK

Filed Feb. 11, 1931

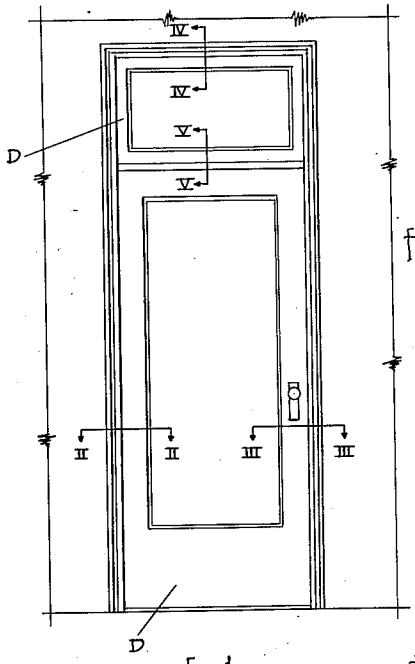

FIG. 1.

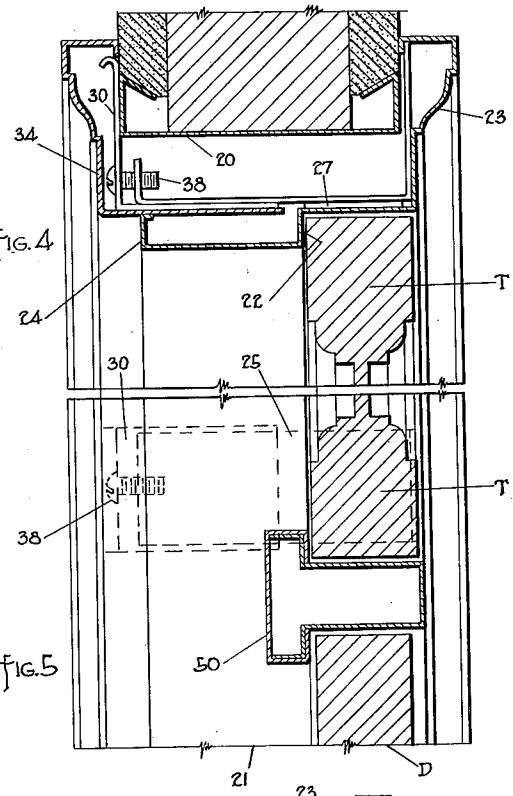

FIG. 4

FIG. 5

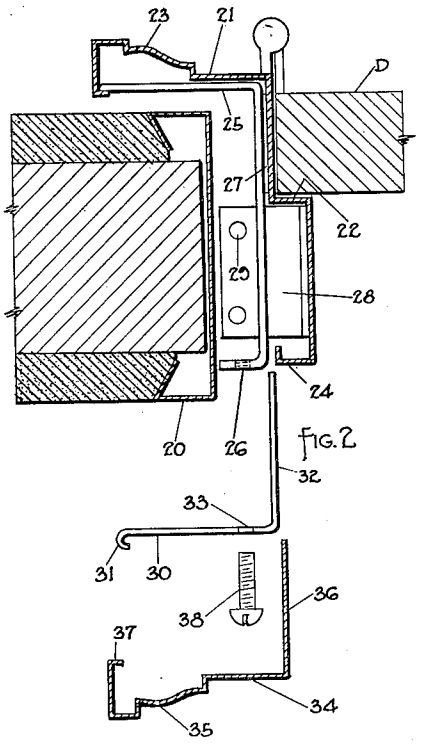

FIG. 2

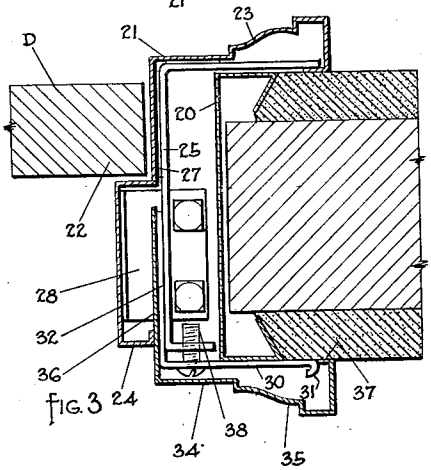

FIG. 3

INVENTOR.
JOHN·A·BOHNSACK

BY
Fay Oberlin & Fay
ATTORNEYS

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HOLLOW METAL DOOR BUCK

John A. Bohnsack, Cleveland Heights, Ohio, assignor to The E. F. Hauserman Company, Cleveland, Ohio, a corporation of Ohio

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7 Claims. (Cl. 189—46)

This invention relates to door bucks for installation in walls and more particularly in walls of the masonry and plaster type. Hollow metal door bucks are customarily made in either of two types. These types are generally termed the unit or combination type and the cabinet type. The unit or combination type is manufactured in one piece and is erected before the masonry or plastering, the masonry being built into and around the buck. The damage occasioned to bucks of this type by mortar, plaster, and ensuing painting renders it inadvisable to furnish such bucks with a full factory finish, as field painting is almost invariably necessary. The cabinet type of bucks generally comprises a rough buck of wood or steel which is erected at the time of erecting the masonry and serves as a lintel support and a plaster screed. The finished buck is made up of 3 or 4 pieces to permit of insertion in the opening and may be erected after the wall is completely plastered and painted by installing the two side jambs, the top jamb and the cross-rail or transom rail separately. After erection of the jambs trim members may be applied on either side of the wall by means of clips or other securing devices. The cabinet buck while much more expensive than the unit buck permits of the application of a full factory finish as it may be erected after plastering and painting is completed. Both the unit buck and the cabinet buck must be manufactured for and used in a specific thickness of wall. It is highly desirable that a door buck be adapted to use in walls of various thicknesses in order that one buck may be standardized for use throughout a given building. It is among the objects of this invention to provide a door buck which is readily adjustable for walls of various thicknesses, which permits of erection after plastering and painting is complete, which may be readily installed by merely cutting an opening in an existing wall, and which is economical to construct and erect. Other objects and advantages will appear hereinafter.

To the accomplishment of the foregoing and related ends, the invention, then, consists of the features hereinafter fully described and particularly pointed out in the claims, the following description and the annexed drawing setting forth in detail but one of the various ways in which the principle of the invention may be applied.

In said annexed drawing:—

Fig. I is a front elevational view of a portion of a wall illustrating a door and door buck made in accordance with this invention.

Fig. II is a horizontal section along the line II—II of Fig. I, except that the various parts which make up the assembly are shown separated from each other.

Fig. III is a horizontal section along the line III—III of Fig. I, and Figs. IV and V are vertical sections along the lines IV—IV and V—V respectively.

In the form illustrated a rough buck of steel, 20, is provided which is set up at the location of the proposed door opening. This rough buck serves as a lintel to support the masonry above the opening as well as a screed or guide for smoothing off the plaster. The buck and trim is furnished in two portions or two three sided frames. These are the jamb portion to which is assembled the necessary hardware reinforcement, hardware, and the door leaf, and the trim portion which is adjustably secured to the jamb portion.

The jamb portion, 21, is a three-sided frame made up of hollow sheet metal including a strike lip, 22, a moulding finish, 23, and an overlapping portion, 24. This jamb portion is made up into a three-sided frame by welding or otherwise securing the side jambs and top jamb together at the upper corners. Where a transom is desired above the door a horizontal member, 50, is provided in the jamb frame. Such horizontal member may conveniently be made up of two hollow metal members telescopically engaged to form a tubular section which may be welded or bolted to the side jambs. The jamb frame may be introduced into the rough buck or opening in the wall with the moulding finish overlying the margin of the opening to present a neat and finished appearance.

The jamb frame is provided with a series of clip brackets, 25, which are preferably of sheet metal 3" or 4" long and of channel form having one long flange and one short flange. These clip brackets are welded or otherwise secured to the jamb frame at intervals of about 18". The short flange of these clip brackets is provided with a tapped hole, 26, to receive a screw threaded member. These clip brackets are so contoured and positioned as to leave a slight aperture between the web of the clip bracket and the overlapping portion, 24, of the jamb frame, and to serve this purpose a spacer plate 27 may be employed.

Floor brackets, 28, are provided at the lower extremities of the jamb frame. These are preferably of angle shaped sheet metal and provided with holes, 29, for the insertion of clamping

screws. This floor bracket is welded or otherwise secured to the jamb frame.

Suitable reinforcements for hardware are provided in the jamb frame including reinforcements for butts, lock keeper and door check and the door leaf, D, and transom, T, or transom frame may be mounted in the jamb frame at the factory. A temporary spacer is applied to tie the lower ends of the jamb together in shipping.

Clips 30, are provided of sheet metal several inches long having a rounded end portion 31 at one edge and an extending flange 32, at the other end. These clips are further provided with a hole 33.

The trim portion, 34, of the buck is a three-sided frame made up of sheet metal sections having a moulding, 35, and an extending leg 36. The outer edge of the frame is provided with an inbent flange 37. The vertical and horizontal portions may be welded or otherwise secured at the upper corners to constitute this frame.

This construction permits of erection in any opening in a wall whether such opening be prepared at the time of constructing the original wall or be later cut into the wall.

The jamb portion of the buck is set into the opening complete including the door and all hardware. Holes are drilled in the floor and clamping screws inserted, by means of a convenient tool, such as a suitable socket wrench, thru the holes, 29, in the floor brackets, 28, thereby securely anchoring the lower extremities of the jamb frame. The clips, 30, are then inserted with the extending leg portion, 32, entering the aperture between the clip bracket and the overlapping portion, 24, of the jamb frame. Screws, 38, are inserted to secure the jamb frame to the wall. It will be seen that this construction permits of clamping the same jamb frame into walls of different thickness. The trim frame is now applied with the extending portion 36 behind the overlapping portion, 24, of the jamb frame and may conveniently be secured by resilient engagement of the flange 37 with the rounded portion 31 of the clips. The extending leg, 36, of the trim frame permits of considerable variation in the thickness of the wall.

This construction as a whole presents a versatility of wide scope, as the door may be mounted in the jamb frame at the factory and the whole erected at one time as one operation. Also the same buck and trim is suitable for use in walls of various thickness. Moreover the construction permits of erection after plastering and decorating and yet is extremely simple and economical to manufacture and requires no field fitting.

Other modes of applying the principle of the invention may be employed, change being made as regards the details disclosed, provided the means stated by any of the following claims, or the equivalent of such be employed.

I therefore particularly point out and distinctly claim as my invention:—

1. A door buck comprising a jamb frame having a door mounted therein and insertable in an opening with a portion overlying the edge of such opening; a trim frame insertable from the opposite side of said opening; means for adjustably and removably securing such jamb frame, and snap-on means for securing said trim frame.

2. A door buck for erection in a finished wall comprising a jamb frame and a trim frame each insertable in an opening in such wall and having a portion to overlie the perimeter of such opening; a door hung in said jamb frame; clips removably clamping such jamb frame to the wall; and resilient means for securing the trim frame.

3. A door buck for erection in a finished wall comprising a jamb frame and a trim frame, each insertable in an opening in such wall from opposite sides and having a portion to overlie the perimeter of such opening; a door hung in the jamb frame; and adjustable clips clamping such jamb frame to the wall and resiliently securing said trim frame.

4. A door buck for erection in a finished wall comprising a jamb frame and a trim frame each insertable in an opening in such wall and having a portion to overlie the perimeter of such opening; a door hung in such jamb frame; means for securing such jamb frame to the floor; adjustable clamping clips removably securing such jamb frame to such wall; and a resilient flange on said trim frame for securing the same to said clips.

5. A door buck for erection in a finished wall comprising a jamb frame and a trim frame telescopically engaging each other and each removably insertable from opposite sides of the wall in an opening in such wall; means for securing the jamb frame to the wall, said means including a rounded projection; and means on said trim frame for holding on such rounded projection.

6. A door buck for a plastered wall comprising a jamb frame and a trim frame telescopically engaging each other and each insertable from opposite sides of such wall in an opening therethrough; clamping clips for securing such jamb frame to said wall; and means on said clamping clips for resiliently securing the trim frame.

7. A door buck for erection in a finished wall comprising a jamb frame and a trim frame telescopically engaging each other and each insertable and removable from opposite sides of said wall in an opening therethrough; a floor anchorage for such jamb frame; means on said trim frame permitting slidable engagement with such jamb frame; clamping means for securing said jamb frame to said wall including clips with rounded projections; and resilient flange means on said trim frame for securing the same to the projections of said clips.

JOHN A. BOHNSACK.