

T. BUCHHOLZ.

DOOR FRAME.

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1,015,989.

Patented Jan. 30, 1912.

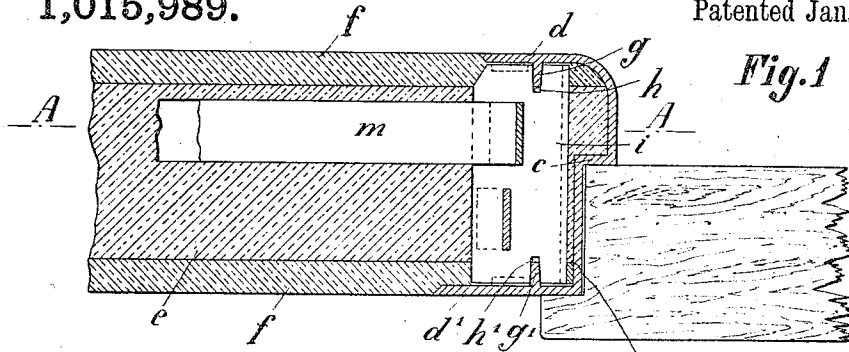


Fig. 2

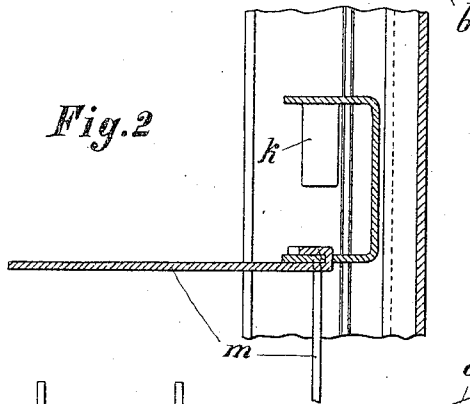


Fig. 3

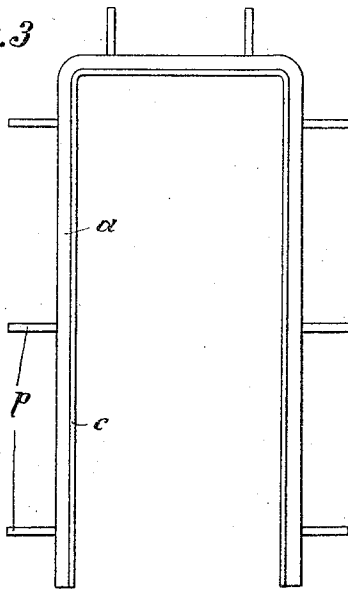
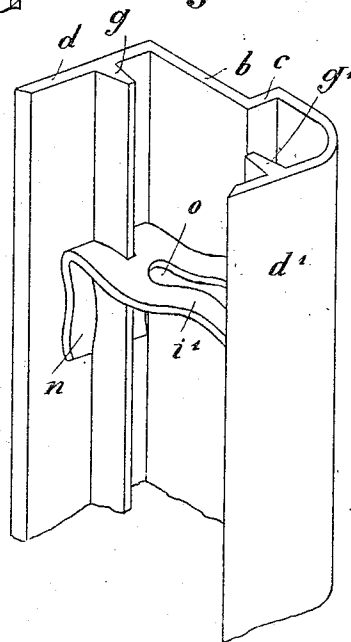


Fig. 4



Witnesses:

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DOOR-FRAME.

1,015,989.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, THEODOR BUCHHOLZ, a citizen of the German Empire, residing at Berlin, Germany, have invented certain new and useful Improvements in Door-Frames, of which the following is a specification.

My invention relates to improvements in door framings and its object is to provide a door frame made up of rolled iron or steel of suitable section bent into proper shape and offering certain advantages, as herein below referred to.

In describing my invention I refer to the drawing herewith in which—

Figure 1 is a transverse section through a bar of rolled iron or steel bent into a frame, as herein described, showing at the same time part of a wall to which it is attached. Fig. 2 is a section on the line A—A of Fig. 1. Fig. 3 is a front view of a door frame, as herein referred to, having members emanating therefrom to give a holdfast in the wall; and Fig. 4 is a perspective view upon a portion of a frame showing a cross-piece, as herein below referred to, of modified shape.

While the frame *a* may, of course, be composed of any number of parts, I prefer it to be of one piece of iron or steel bent into the shape of a door frame, as illustrated in Fig. 3. The section of the said rolled piece *a* I prefer to be substantially a U having a shoulder *c* in its web *b* to form a rabbet for the edge of the door wing. The sides *d*, *d'* may be parallel to each other to embrace the wall *e* and the plastering *f* thereon and may be ribbed on the inside, one rib, throughout, *g*, *g'* being ordinarily sufficient. A brace or cross-piece *i*, or any number thereof, may be provided, having in each end a notch, recess groove or slot *h*, *h'*, adapted to fit on the contiguous vertical ribs *g* and *g'* of said frame and to be moved up and down in the latter without separation therefrom or lateral displacement of either end, for the purpose of bracing said frame at any vertical point desired, said braces being provided with slots *k* and *k'* engaging said rib for such purpose. In Figs. 1 and 2 the said brace or cross-piece *i* is of U-section and is provided with leaves *l* bearing against the sides of the frame, acting as springs to prevent any unintended slipping of the former. The said cross-piece or brace may be slotted to admit the hooking-in and subsequent fold-

ing around of the free ends of any armoring or other supports *m* that may be embedded in the wall. The said cross-piece or pieces, or any of them, I do not wish to restrict to the particular shape and construction as just set forth, but there may be modifications as circumstances may require. Fig. 4, for instance, shows a U-shaped cross piece *i'* which is slightly corrugated or otherwise, extensible and so placed on the ribs *g*, *g'* that the sides *n*, *n'* bear against the sides of the frame. A slot *o* is provided to receive the hooked end of any of the supports *m* embedded in the wall. Whenever a cross piece of this modified construction has been put in at the proper place and brought into its proper position it may be made straight and by this way tightly clamped within the door-frame.

Members *p* may be, as above referred to, provided in the door frame, emanating therefrom, to be used as holdfasts in the wall (see Fig. 3).

The arrangement of parts, as described, secures a considerable strengthening of the door frame, so that any shocks or the like acting against one side are taken up by the other side and thus reduced in action, so that the door frame is securely kept in place and position even in case of excessive strain. Moreover, the movable arrangement of the cross pieces *i*, *i'* offers the advantage that the supports for the connection of the masonry with the door frame may be embedded quite independently for themselves, the cross-pieces being then adjusted by sliding movements on the rib *g*, *g'* and brought in proper position to the said supports. This may be of importance, for instance, in the insertion of door frames of the kind described in armored, thin walls, as frequently used in modern buildings and where it is necessary to fasten the iron or steel insertions, of whatever section they may be, in the proper place.

I claim:

1. A metallic door frame provided with a pair of vertical ribs, in combination with a bracing cross-bar of solid construction, extending transversely from one jamb of said door frame to the other, recessed in its ends to permit adjusting said bar up or down in said frame on said ribs without separation, thus varying the point at which said frame will be braced.

2. A metal bar of door frame form and U-shape in cross section provided with vertical ribs, in combination with bracing cross-pieces of solid construction, extending transversely from one jamb of said frame to the other, recessed to fit said ribs and adapted to be raised and lowered in said frame while engaging said ribs.

3. In a door-frame consisting of a bar of metal of U-section, bent into door-frame shape and having a continuous rib inside, a cross-piece of U-section having slots engaged by said rib to guide said piece and provided with leaves bearing against the sides of the inside of the said frame.

4. In a door-frame consisting of a bar of metal of U-section, bent into a door frame shape and having a continuous rib inside, a cross-piece of U-section having leaves adapt-

ed to bear against the sides of the inside of the frame and slots adapted to receive the ends of holdfasts projecting into the same from the wall intended for receiving the door.

5. In a door frame consisting of a bar of metal of U-section, bent into door frame shape and having a continuous rib inside, an extensible cross-piece of U-section having a slot adapted to receive the end of a holdfast projecting into the same from the wall intended for receiving the door.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

THEODOR BUCHHOLZ.

Witnesses:

HENRY HASPER,
WOLDEMAR HAUPT.