H. R. GOGAY.

HOLLOW METAL DOOR FRAME.

APPLICATION FILED OCT. 24, 1917.

1,323,758.

Patented Dec. 2, 1919.

Fig. 1.

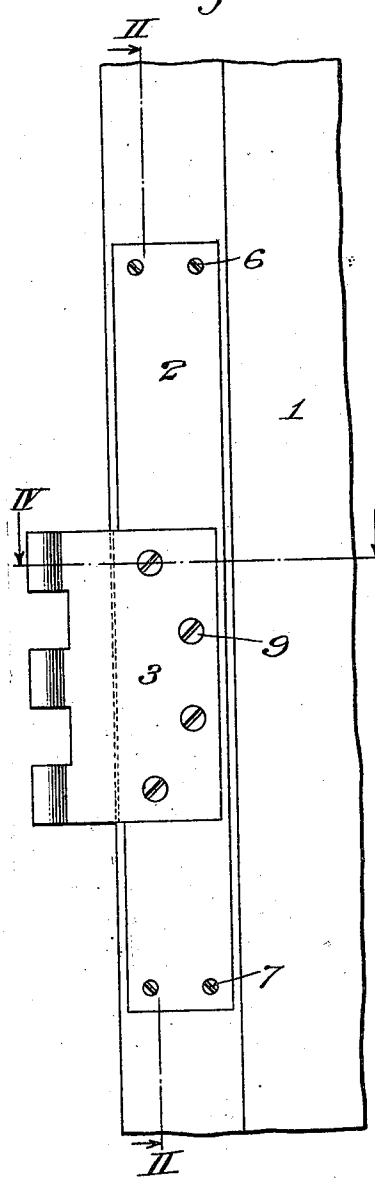


Fig. 2.

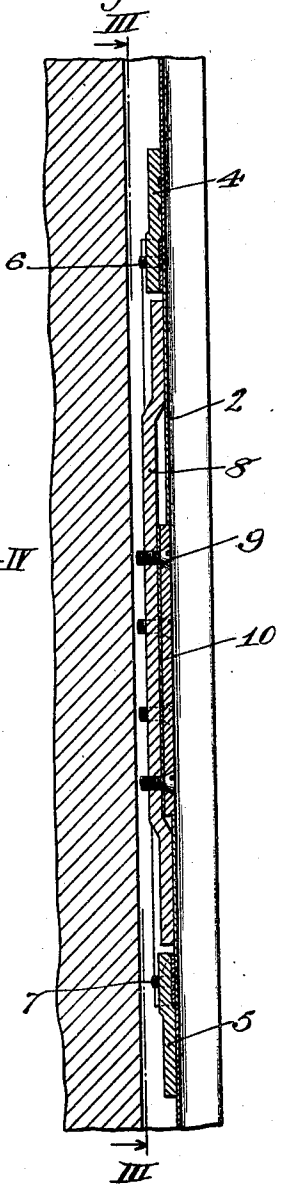


Fig. 3.

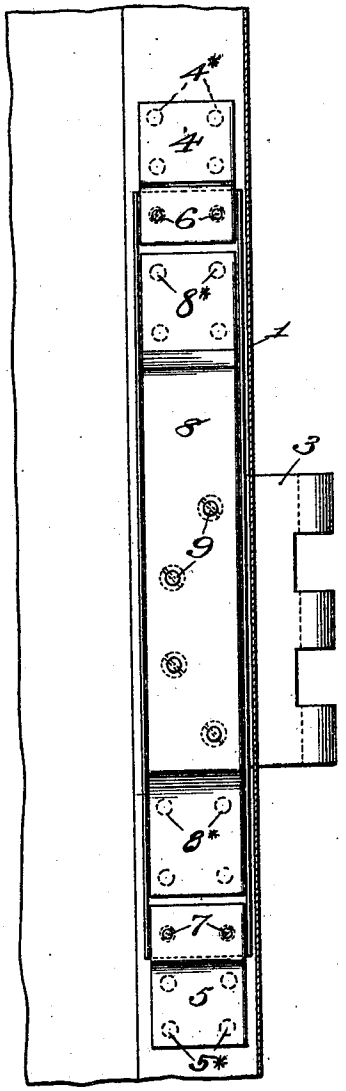
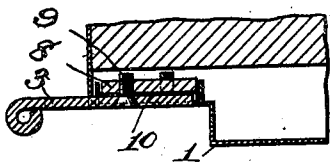


Fig. 4.



Inventor:

Henry R. Gogay

by attorneys

Brown & Durand

UNITED STATES PATENT OFFICE.

HENRY R. GOGAY, OF COLUMBUS, OHIO, ASSIGNOR TO SOLAR METAL PRODUCTS COMPANY, INC.

HOLLOW METAL DOOR-FRAME.

1,323,758. Specification of Letters Patent. Patented Dec. 2, 1919.

Application filed October 24, 1917. Serial No. 198,269.

To all whom it may concern:

Be it known that I, HENRY R. GOGAY, a subject of the Crown of Great Britain, and resident of Columbus, in the county of Franklin and State of Ohio, have invented a new and useful Improvement in Hollow Metal Door-Frames, of which the following is a specification.

In the manufacture of hollow metal door frames it has heretofore been impractical to complete the door frame until the hinge to be used in connection therewith was known, thus preventing the stocking up of a large supply of door frames and also requiring a special set of dies and tools for each particular size and style of hinge.

The object of my invention is to produce a type of hollow metal door frame which may be completed in large quantities irrespective of the size and style of hinge to be used, thus materially reducing the cost of manufacture and also permitting the rapid filling of orders from stock.

These results are accomplished by blanking out the door jamb to fit a standard size sub-holder, the sub-holder in turn being blanked out to fit the particular hinge to be used, a backing being carried by the sub-holder to which the hinge wing is secured with its face flush with the face of the sub-holder and the edge of the door jamb.

A practical embodiment of my invention is represented in the accompanying drawings in which:

Figure 1 represents in face view, a portion of a door frame with my invention applied.

Fig. 2 is a section taken in the plane of the line II—II of Fig. 1.

Fig. 3 is a section taken in the plane of the line III—III of Fig. 2, and

Fig. 4 is a section taken in the plane of the line IV—IV of Fig. 1.

The door jamb 1 is blanked out to fit a sub-holder 2 of sufficient size to fit any required hinge wing within reasonable limits, and the sub-holder itself is in turn blanked out to fit the particular hinge wing 3 intended for use with its particular door frame. The sub-holder 2 is preferably of channel form and it is secured to the door jamb by providing upper and lower clips 4, 5, which may be welded as indicated by the dotted circles 4*, 5*, or otherwise permanently secured to the door jamb, which clips have portions overlapping the top and bottom of the sub-holder. Screws 6, 7 are provided for securing the top and bottom of the sub-holder to the said clips 4, 5, with the face of the sub-holder flush with the face of the door jamb.

A backing 8 extends across the blanked out portion of the sub-holder and is spaced therefrom for a considerable distance to accommodate hinge wings of various sizes. This backing 8 may be secured to the sub-holder at the top and bottom of the backing as by being spot-welded as indicated by the dotted circles 8* to the said sub-holder. The hinge wing is secured to the backing 8 by screws 9, with the face of the hinge wing flush with the face of the sub-holder. If necessary, shims 10 may be interposed between the hinge wing 2 and the backing 8, to accommodate wings of different thicknesses.

While I have shown my invention as applied to the attachment of a hinge to a door frame, it is obvious that the same means may be employed in any hollow metal structure where a hinge is to be used, without departing from the spirit and scope of my invention.

What I claim is:

1. In a hollow metal door frame arranged to receive hinges of various sizes and styles, a sub-holder blanked out to fit a particular hinge wing, a backing carried by the sub-holder extending across its blanked out portion, a door jamb blanked out to fit the sub-holder, and means for securing the hinge wing to the backing.

2. In a hollow metal door frame arranged to receive hinges of various sizes and styles, a sub-holder blanked out to fit a particular hinge wing, a backing carried by the sub-holder extending across its blanked out portion, a door jamb blanked out to fit the sub-holder, and means for securing the sub-holder to the jamb.

3. In a hollow metal door frame arranged to receive hinges of various sizes and styles, a sub-holder blanked out to fit a particular hinge wing, a backing carried by the sub-holder extending across its blanked out portion, a door jamb blanked out to fit the sub-holder, means for securing the hinge wing to the backing, and means for securing the sub-holder to the jamb.

4. In a hollow metal door frame arranged

to receive hinges of various sizes and styles, a channel-shaped sub-holder blanked out to fit a particular hinge wing, a backing carried by the sub-holder extending across its blanked out portion, a door jamb blanked out to fit the sub-holder, and means for securing the hinge wing to the backing.

5. In a hollow metal door frame arranged to receive hinges of various sizes and styles, a channel-shaped sub-holder blanked out to fit a particular hinge wing, a backing carried by the sub-holder extending across its blanked out portion, a door jamb blanked out to fit the sub-holder, and means for securing the sub-holder to the jamb.

6. In a hollow metal door frame arranged to receive hinges of various sizes and styles, a channel-shaped sub-holder blanked out to fit a particular hinge wing, a backing carried by the sub-holder extending across its blanked out portion, a door jamb blanked out to fit the sub-holder, means for securing the hinge wing to the backing, and means for securing the sub-holder to the jamb.

7. In a hollow metal door frame arranged to receive hinges of various sizes and styles, a sub-holder blanked out to fit a particular hinge wing, a backing carried by the sub-holder extending across its blanked out portion and spaced from the sub-holder for a sufficient distance to accommodate hinge wings of various sizes and styles, a door jamb blanked out to fit the sub-holder, clips carried by the jamb overlapping the top and bottom of the sub-holder, and screws engaging the sub-holder and clips for securing the sub-holder to the jamb.

In testimony that I claim the foregoing as my invention I have signed my name this 29th day of September, 1917.

HENRY R. GOGAY.