H. R. GOGAY.

HOLLOW METAL DOOR.

APPLICATION FILED OCT. 24, 1917.

1,323,754.

Patented Dec. 2, 1919.

Fig. 1.

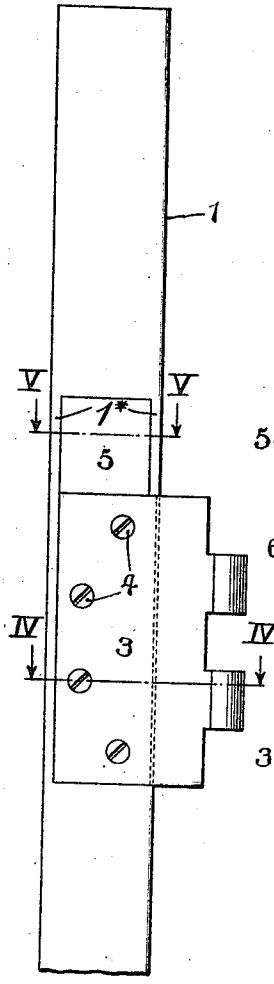


Fig. 2.

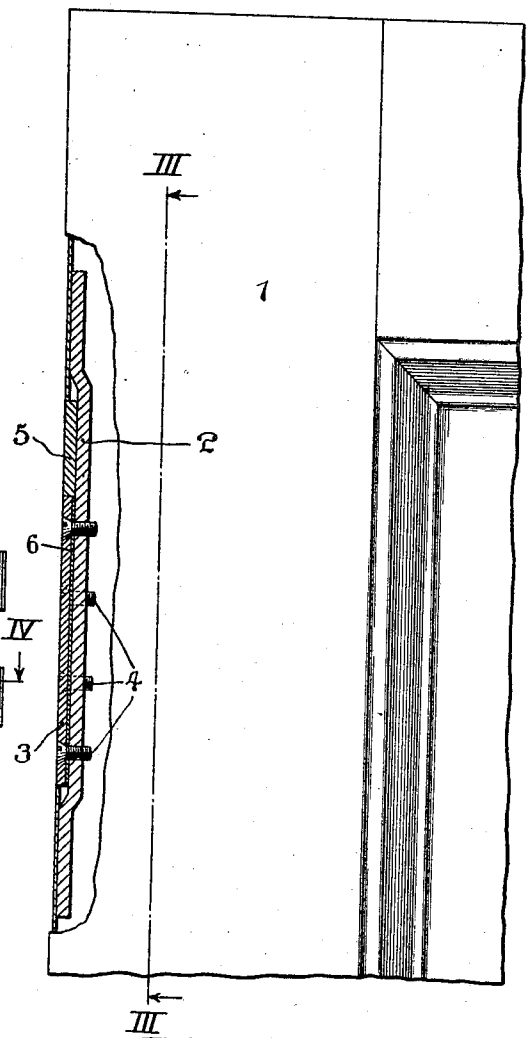


Fig. 3.

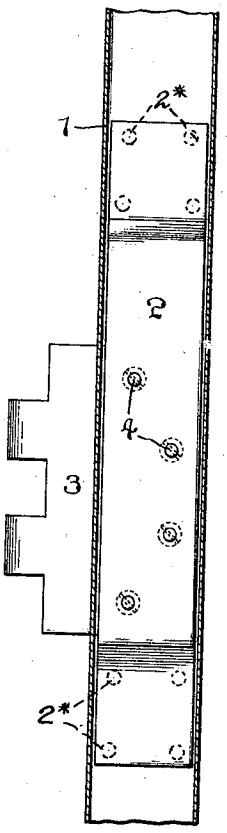


Fig. 4.

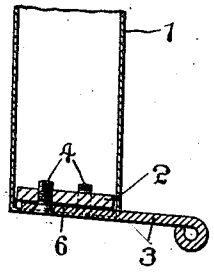
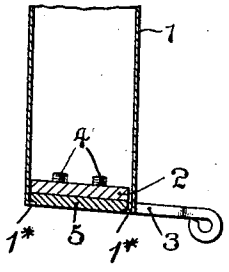


Fig. 5.



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UNITED STATES PATENT OFFICE.

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HOLLOW METAL DOOR.

1,323,754. Specification of Letters Patent. Patented Dec. 2, 1919.

Application filed October 24, 1917. Serial No. 198,265.

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 Doors, of which the following is a specification.

In the manufacture of hollow metal doors it has heretofore been impracticable to complete the door until the hinge to be used in connection therewith was known, thus preventing the stocking up of a large supply of doors 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 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 edge of the hinge stile of the door to receive any size or style of hinge and providing a sub-holder to which the hinge may be secured and also providing a filling piece to fill the space remaining in the blanked out portion of the edge of the hinge stile not filled by the particular size or style of hinge to be used with that particular door.

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

Figure 1 represents a portion of a door in edge elevation with my invention applied thereto,

Fig. 2 is a side view of the same, partly in section,

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

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

Fig. 5 is a section taken in the plane of the line V—V of Fig. 1.

The edge of the hinge stile 1 is blanked out to receive any size or style of hinge within reasonable limits. A sub-holder 2 may be secured at its top and bottom to the edge of the hinge stile, beyond the top and bottom of the blanked out portion, as for instance, by welding it at certain points as indicated by the dotted circles 2*. The hinge wing 3 is secured by screws 4, to the sub-holder 2, and a filler piece 5 is provided for filling the remaining part of the blanked out portion in the edge of the hinge stile. This filler piece 5 may be secured in position, as for instance, by causing its laterally turned side edges to overlap the side edges 1 of the blanked out portion. In this manner of attachment of the filler piece, the filler piece is slipped into position before the hinge wing 3 is secured to the sub-holder. The sub-holder is depressed so that the hinge wing and the filler piece will have their faces flush with the edge of the hinge stile.

If necessary, shims 6 may be interposed between the hinge wing 3 and the sub-holder 2 to accommodate wings of different thicknesses to bring the face of the wing flush with the edge of the hinge stile.

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

It is evident also that instead of interlocking the filler piece between the hinge stile and sub-holder, the filler piece may be secured in position in any other suitable manner.

What I claim is:

1. In a hollow metal door, a hinge stile blanked out along its edge to receive hinges of various sizes and styles, a filler piece for the unfilled space of the blanked out portion and a sub-holder located within the stile back of the filler piece and engaging the filler piece and stile to hold the filler piece in position, and means for securing the sub-holder to the stile.

2. In a hollow metal door, a hinge stile blanked out along its edge to receive hinges of various sizes and styles, a filler piece for the unfilled space of the blanked out portion, a sub-holder located within the stile back of the filler piece and engaging the filler piece and stile, to hold the filler piece in position, means for securing the sub-holder to the stile, and means for securing the hinge wing to the sub-holder.

In testimony that I claim the foregoing as my invention I have signed my name this 10th day of August, 1917.

HENRY R. GOGAY.