

H. M. LEONARD.
DOUBLE DOOR.

APPLICATION FILED FEB. 26, 1912.

1,123,767.

Patented Jan. 5, 1915.

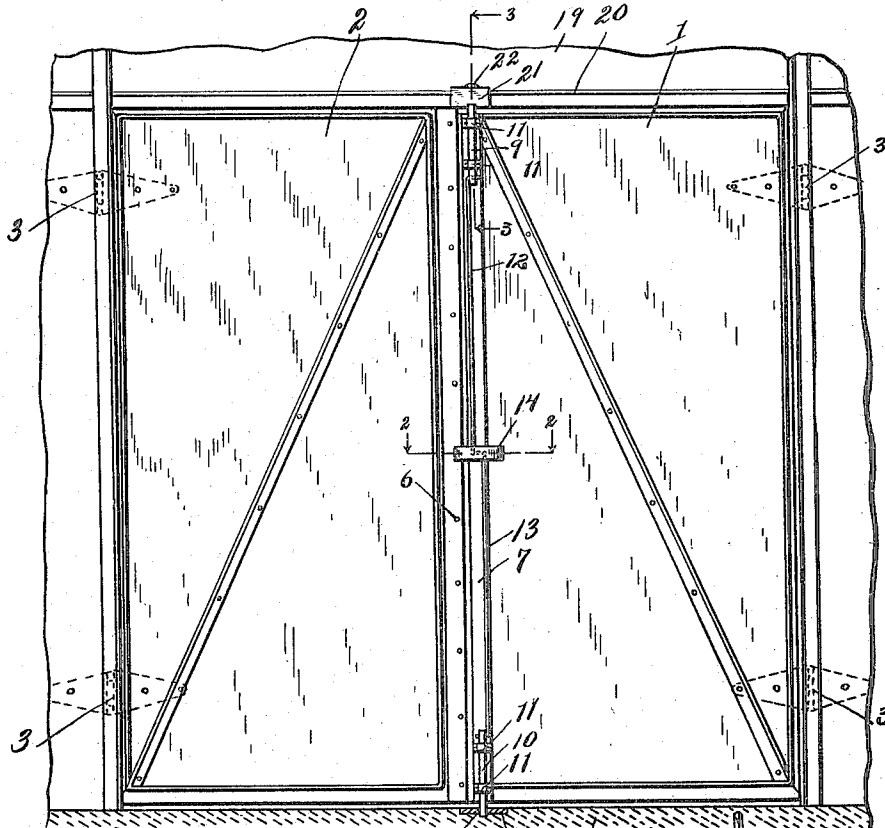


Fig. I.

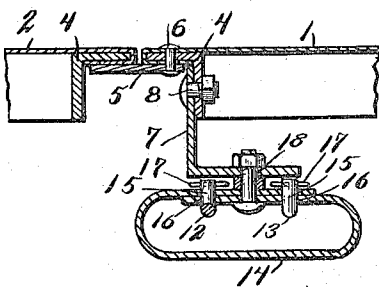


Fig. II.

Witnesses

L. S. Greenfield
M. L. Glasgow

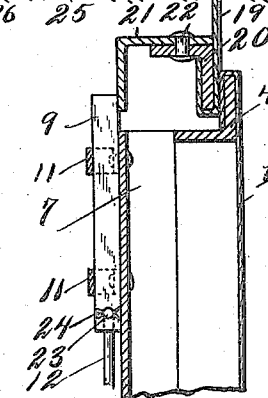


Fig. III.

Inventor

By

Howard M. Leonard
Chappell & Earl
Attorneys

UNITED STATES PATENT OFFICE.

HOWARD M. LEONARD, OF JACKSON, MICHIGAN, ASSIGNOR TO RUBY MANUFACTURING COMPANY, OF JACKSON, MICHIGAN.

DOUBLE DOOR.

1,123,767.

Specification of Letters Patent.

Patented Jan. 5, 1915.

Application filed February 26, 1912. Serial No. 680,105.

To all whom it may concern:

Be it known that I, HOWARD M. LEONARD, a citizen of the United States, residing at the city of Jackson, county of Jackson, and State of Michigan, have invented certain new and useful Improvements in Double Doors, of which the following is a specification.

This invention relates to improvements in double doors.

The improvements are more especially adapted to doors for garages, or for barns or similar purposes.

The objects of the invention are to provide a simple and effective metallic double door structure in which one of the doors can be locked at the middle of the doorway and serve as a jamb or support for the other.

Objects of the invention pertaining to details and economies of construction will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A structure constituting a preferred embodiment of my invention is fully illustrated in the accompanying drawing, forming a part of this specification, in which:

Figure I is an interior elevation view of a double door embodying the features of my invention. Fig. II is an enlarged detail transverse horizontal sectional view on lines 2—2 of Fig. I looking down, showing the handle construction and the connection for manipulating the lock bolts at top and bottom. Fig. III is an enlarged detail sectional view on line 3—3 of Fig. I, looking toward the left, showing details of the bolt construction and the means of locking the door at the top.

In the drawing, similar numerals of reference refer to similar parts throughout the several views.

The doors 1 and 2 are carried by suitable hinges 3—3 on the general frame work in the side of a building 19. Each door is made up of a sheet metal plate carried on a suitable angle iron frame 4, over which the edges of the metal plate are folded, as seen in details in Figs. I and II. One limb of the angle iron projects outwardly in the plane of the door to form the outer edge of the

door and the other projecting inwardly at right angles serves as a supporting frame therefor.

To the door 1 is secured a stop strip 5 by suitable rivets 6. The doors may be provided with any suitable hook or latch not here illustrated, as it does not pertain to my invention. A vertical angle bar 7 is secured by bolts 8 to the outer edge of door 1 through its outward-projecting limb to the inward-projecting limb of the angle frame 4 of the door. The inner limb of the angle bar 7 is disposed parallel with the face of the door and I provide a bolt 9 at the top and a bolt 10 at the bottom, which are supported in suitable guides 11—11 for the purpose of locking the door. The bolt 10 at the bottom engages a plate 26 which is perforated at 27 to receive the same. The cross piece 21 is secured by a bolt 22 to the top bar 20 of the door frame, as clearly seen in Fig. III. These bolts are manipulated from the handle 14, which is carried on the pivot bolt 18. Connecting rods 12 and 13 are offset at 15—15 and journaled at 16—16 on opposite sides of the pivot 18 of the handle. They are retained in place by cotter pins 17—17, see particularly Fig. II. The rod 12 is engaged in the bolt 9 by an offset end portion 23, which is retained in a suitable perforation in the lower end of the bolt 9 by a cotter pin 24, details of which clearly appear in Fig. III. From this description it will be seen that a heavy vertical post is provided at the inner edge of the door 1, which is readily locked in place by the manipulation of the pivoted door handle 14. With this effective means for locking the door 1, a hasp or any suitable lock on the door 2 will retain the double doors in place. This structure is especially adapted to the style of metal door shown. However, an angle bar of this character with locking devices is available on doors generally.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a sheet metal door structure, the combination of an angle bar frame for said door, one limb of said frame extending in the plane of said door and the other limb of said frame extending at right angles to the plane of said door, a stop strip at one side of said frame carried by said first men-

tioned limb, and an angle bar at said side of said frame and carried by the last mentioned limb of said frame and having a portion extending parallel to the door and adapted to carry suitable locking mechanism, all coacting substantially as described for the purpose specified.

2. In a sheet metal door structure, the combination of a door provided with an angle bar frame, one limb of said angle bar frame projecting at right angles to the plane of the door, an angle bar secured to

said limb and having a portion extending parallel to the plane of the door and adapted to carry suitable locking mechanism, all coacting substantially as described for the purpose specified. 15

In witness whereof, I have hereunto set my hand and seal, in the presence of two witnesses.

HOWARD M. LEONARD. [L. s.]

Witnesses:

VERNE W. BADGLEY,
MABEL ALLENSTON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."