

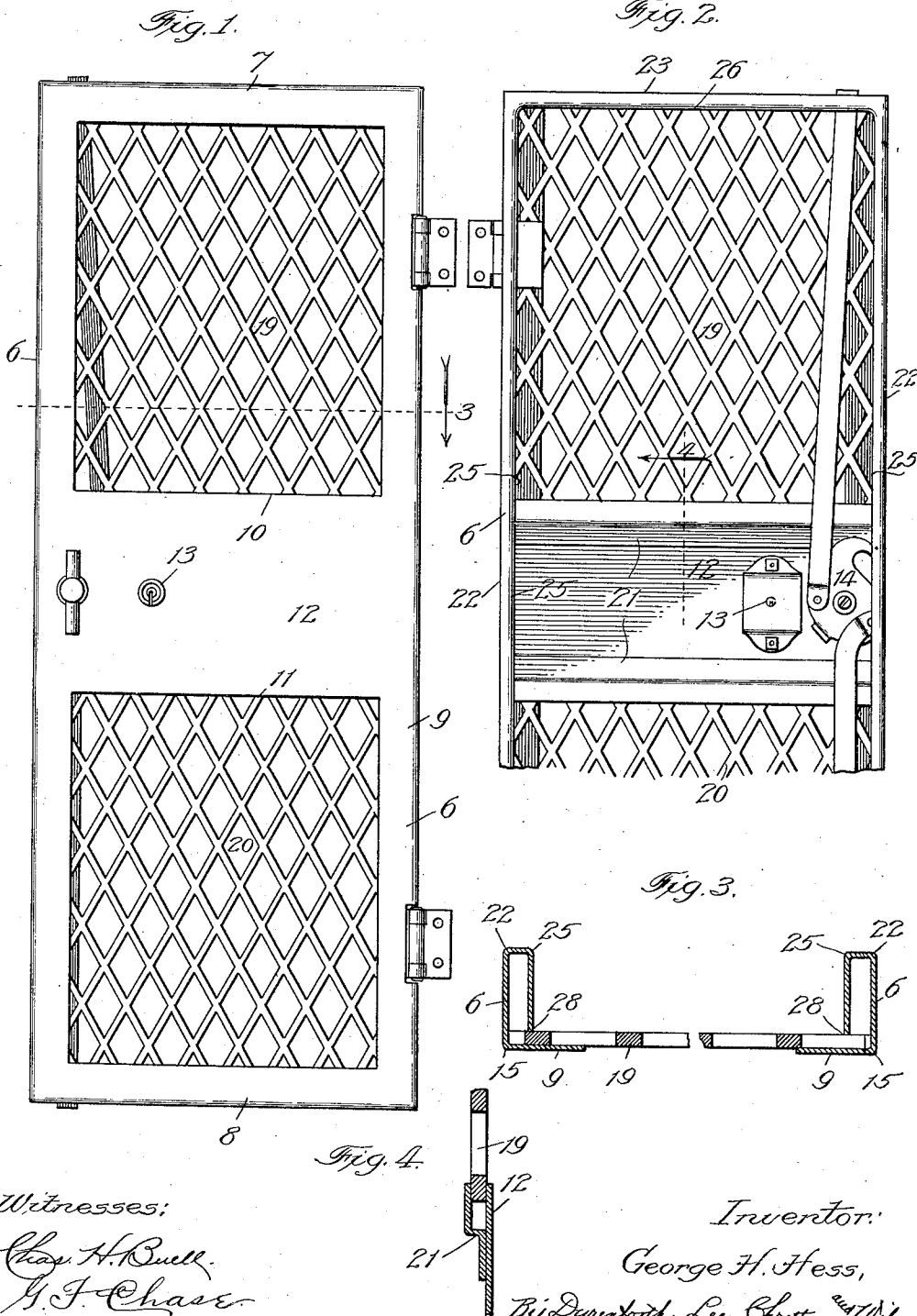
G. H. HESS.
DOOR.

APPLICATION FILED AUG. 28, 1911.

1,056,541.

Patented Mar. 18, 1913.

2 SHEETS—SHEET 1.



Witnesses:

Chas. H. Buell.
H. F. Chase

Inventor:

George H. Hess,
By Dyreforth, Lee, Chittenden & Wilson
Attys. #

G. H. HESS.

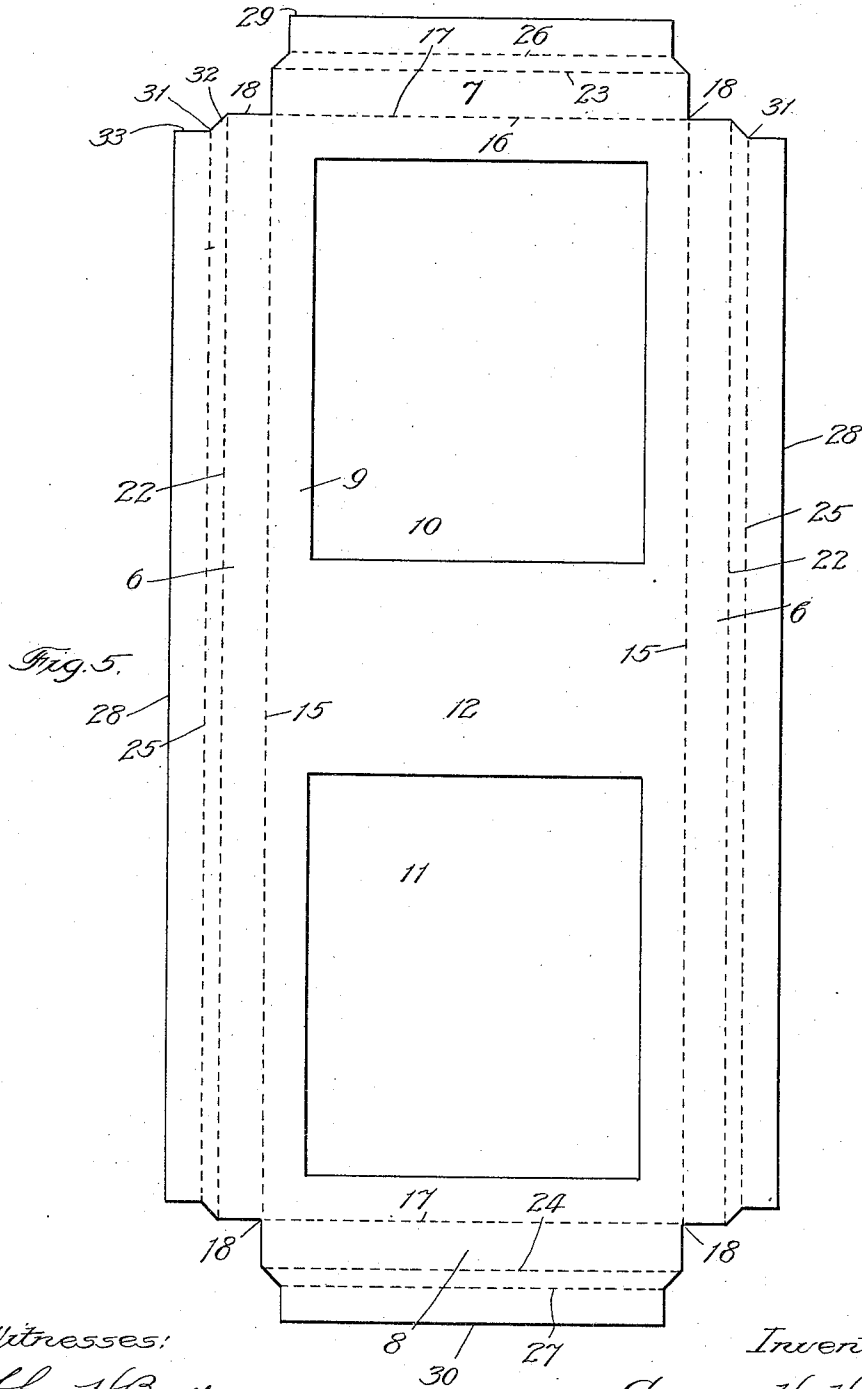
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2 SHEETS—SHEET 2.



Witnesses:

Chas. H. Bull.
G. F. Chase.

Inventor:

George H. Hess,
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UNITED STATES PATENT OFFICE.

GEORGE H. HESS, OF LA GRANGE PARK, ILLINOIS.

DOOR.

1,056,541.

Specification of Letters Patent.

Patented Mar. 18, 1913.

Application filed August 28, 1911. Serial No. 646,505.

To all whom it may concern:

Be it known that I, GEORGE H. HESS, a citizen of the United States, residing at La Grange Park, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Doors, of which the following is a specification.

My invention relates, more particularly, to metal doors for lockers, and the like structures, of the type involving a metal frame-work and open-work metal sections, as for example of expanded metal, secured in the openings in the frame-work, whereby provision is made for the proper ventilation of the locker or other structure equipped with the door; and my object is to provide a door of this type which may be economically manufactured, be strong and durable, and present the desired ornamental appearance.

Referring to the accompanying drawings—Figure 1 is a front view of a door constructed in accordance with my invention. Fig. 2 is a broken rear view thereof. Figs. 3 and 4 are sections taken at the lines 3 and 4 on Figs. 1 and 2 respectively, and viewed in the directions of the arrows; and Fig. 5, a view of a blank from which the door forming the preferred embodiment of my invention is formed.

The blank illustrated in Fig. 5 is of general rectangular form, constructed from a single sheet of metal, and in practice will be stamped to shape. It is formed with lateral and upper and lower sections 6, 7 and 8 respectively, which are integral with the central section 9 of the blank, the latter containing upper and lower openings 10 and 11 with an interposed transverse section 12 to which the lock devices 13 and 14, usually employed in constructions of this type, may be secured, the openings 10 and 11, when the door is completed, as hereinafter described, being filled with open metal work, as for instance expanded metal.

The door is formed from the blank illustrated by bending the sections 6, 7 and 8 rearwardly along the dotted lines 15, 16 and 17, respectively, to cause them to extend at right-angles to the central section 9 of the blank, the metal at the corners of the blank being notched, as represented at 18 to form right-angled recesses, whereby the adjacent ends of the sections 6, 7 and 8 are caused to abut when these sections are bent as described. The open metal-work

sections represented at 19 and 20, for filling in the openings 10 and 11, respectively, and which are of greater dimensions than those of such openings, are then assembled with the metal frame of the door by applying them against the rear side of the latter at the opposite ends of the door to cause them to lie within the flanges provided by bending the sections 6, 7 and 8 as described. Sheet metal strips 21, preferably of Z-shape in cross-section, are then applied to the rear side of the section 12, to overlap the lower and upper edges of the sections 19 and 20, respectively, and in such position these angle strips are preferably secured in place on the transverse section 12 as by electrically spot-welding them thereto. The sections 19 and 20 being thus held in proper position on the frame-work of the door, the sections 6, 7 and 8 of the blank are then bent to a position in which they overlap those edges of the sections 19 and 20 which are not engaged by the strips 21, for holding the sections in place and forming the blank to final shape for completing the door. This operation involves the bending of the sections 6, 7 and 8 inwardly along dotted lines 22, 23 and 24 and forwardly along dotted lines 25, 26 and 27, the extreme edges 28, 29 and 30 of the sections 6, 7 and 8, respectively, when the latter are bent as described, bearing against the rear sides of the open-work sections 19 and 20 and thus serve to securely hold the latter in place. To permit of the bending of the sections 6, 7 and 8 as described, and to obtain the desired close joint between the adjacent ends of the bent portions of the blank, the corners of the latter are notched at 18 and the ends of these sections, beyond the notched portions 18 and intermediate the lines 22, 23 and 24 and the extreme edges 28, 29 and 30, respectively, of these sections, are notched as indicated at 31 to provide the beveled and straight edges 32 and 33. After bending the blank to form the door as described, the metal at the corners is preferably welded to make a finished joint.

By constructing the door, as described, it is caused to present a frame-work, the rearwardly-extending sides of which may be as wide as desired, thus affording to the door, by the employment of a relatively small amount of metal, a massive appearance, as in the case of the common form of wooden doors; and by turning the edges of the

blank inwardly and forwardly as described, the frame-work of the door is rendered strong and highly resistant to torsional strains, the metal which serves the last referred to purpose also serving as a means for holding the sections 19 and 20 in position on the frame of the door.

While I prefer that the frame-work of the door be integral as by forming it from a single blank of sheet-metal, it will be readily understood that this is not essential in carrying out my invention, as the upper, lower and side portions of the frame may be formed of separate pieces and secured together in any desirable manner, as by welding, brazing or riveting.

What I claim as new, and desire to secure by Letters Patent, is—

1. A door formed of a metal frame-section containing panel openings, and provided with integral flanges at its outer edges bent to extend at an angle to the body of the door, a transverse central section, a panel seated in the flanges surrounding the door,

means on the flanges for confining the panel, and means overlapping the edges of said transverse central section and said panel and extending across the door and beyond the panel opening and adapted to secure the panel in place.

2. A door formed of a metal frame-section containing panel openings, and provided at its outer edges with integral flanges bent to extend at an angle to the body of the door the free edge of said flanges terminating short of the frame-section, a transverse central section, a panel seated between the frame-section and the free edge of said flanges, and means overlapping the edges of said transverse central section and said panel and extending across the door and beyond the panel opening and adapted to secure the panel in place.

GEORGE H. HESS.

Witnesses:

ALICE MASLEY,
K. R. YOUNGSTROM.

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