

L. W. MULFORD.
SIDEWALK DOOR.
APPLICATION FILED SEPT. 1, 1911.

1,051,617.

Patented Jan. 28, 1913.

FIG. 1.

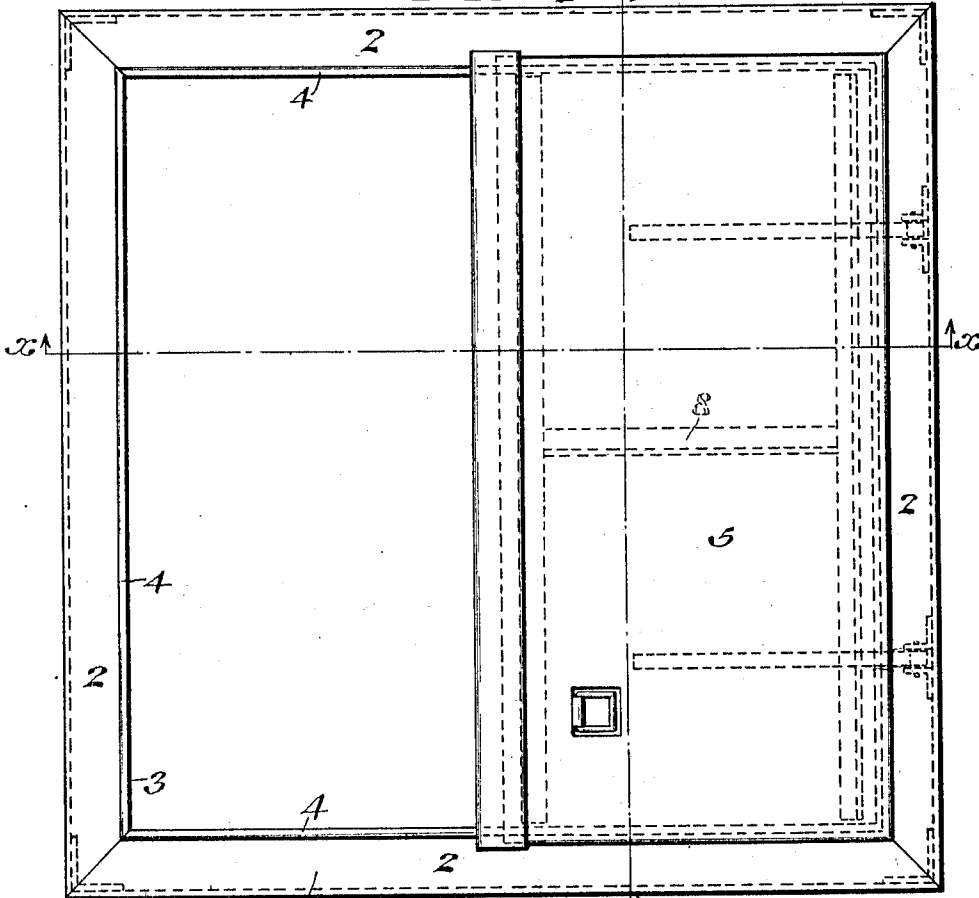


FIG. 2.

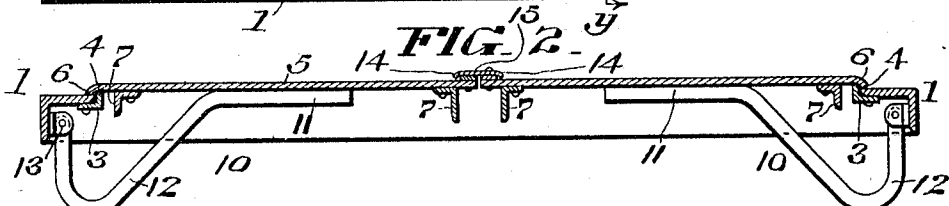
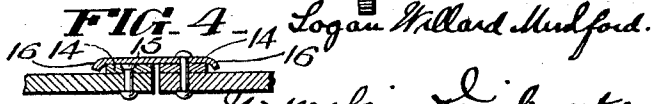


FIG. 3.



FIG. 4.



WITNESSES
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SIDEWALK-DOOR.

1,051,617.

Specification of Letters Patent.

Patented Jan. 28, 1913.

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To all whom it may concern:

Be it known that I, LOGAN W. MULFORD, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Sidewalk-Door, of which the following is a specification.

My invention consists of an improved sidewalk door in which the edges of the door are provided with overlapping flanges to prevent leakage at the joints.

It further consists of improved means for covering the space between meeting edges of the door-leaves.

It further consists of other novel features of construction, all as will be hereinafter fully set forth.

The annexed drawings and the following description set forth in detail, one mechanical form embodying the invention, such detail construction being but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawings: Figure 1 represents a plan view of my improved sidewalk door, showing one of the door-leaves removed. Fig. 2 represents a section on the line $x-x$ in Fig. 1. Fig. 3 represents a section on the line $y-y$ in Fig. 1. Fig. 4 represents a sectional detail view of the protecting strips for the meeting edges of the door-leaves.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings, the numeral 1 indicates the door-frame which is adapted to be set in the sidewalk and is preferably formed from bars L-shaped in cross-section. The inner edges of the horizontal flanges, 2, of the frame-bar have strips, 3, L-shaped in section, secured to them to form projecting beads, 4. The door-leaves, 5, have their hinge and end edges curved over to form flanges, 6, which overlap the beads on the edges of the frame, and said leaves are braced by L-bars, 7, at their hinge and meeting edges and by L-bars, 8, at their middles. Hinge-brackets, 10, have straight portions, 11, secured to the under side of the door-leaves and extending to near the hinge edges to form reinforcing braces for the leaves.

The inner portions, 12, of said brackets are bent at an acute angle to form inclined braces, and the ends of the brackets are pivoted between ears, 13, upon the depending flanges of the door-frame. The leaves will be braced, both when closed or open, by the inclined portions of the brackets, and the angular shape of the brackets permits of the latter spanning the horizontal flanges of the door-frame. Narrow strips, 14, are secured to the upper sides of the door-leaves at their meeting edges, and a wide strip, 15, is secured to one of said narrow strips to form flanges 16.

All joints between the edges of the door-leaves and the frame and between the meeting edges of the leaves are overlapped and rounded, so that said joints will not offer any perceptible impediment or obstruction to traffic over the door, and the joints will be covered against leakage of rain or other liquid falling upon the door. The leaves will be supported at their edges upon the beads upon the door-frame, and the curved flanges engaging said beads will prevent displacement of the leaves.

The entire structure is made from ordinary commercial shapes of material. The bars forming the frame are ordinary commercial L-bars, the strips secured to the horizontal flanges of the frame-bars are ordinary L-strips, the doors are formed from ordinary commercial plates, and the strips at the meeting edges of the doors are plain commercial strips. With the exception of the drop-hinges, all parts of the structure are formed from ordinary commercial iron or steel found in stock at the mills and at dealers in commercial shapes, and no special shapes are required in the construction of the door, which is an important feature in the question of economy and convenience of manufacture.

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

In a sidewalk door, a frame formed from L-bars, strips L-shaped in cross-section and secured to the under sides of the horizontal flanges of said L-bars to have their vertical flanges project above the same, door leaves

having their hinge and end edges curved to form flanges curving over said projecting flanges, drop-hinges pivoted beneath the horizontal flanges of the L-bars and secured
5 to the under side of the door leaves, narrow strips secured at the meeting edges of said leaves, and a strip secured to one of said strips and having its edges curved to engage over the edges of the narrow strips.

LOGAN WILLARD MULFORD.

Witnesses:

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