

H. C. SEIPP.
CELLAR DOOR CONSTRUCTION.
APPLICATION FILED MAR. 18, 1910.

984,034.

Patented Feb. 14, 1911.

Fig. 1.

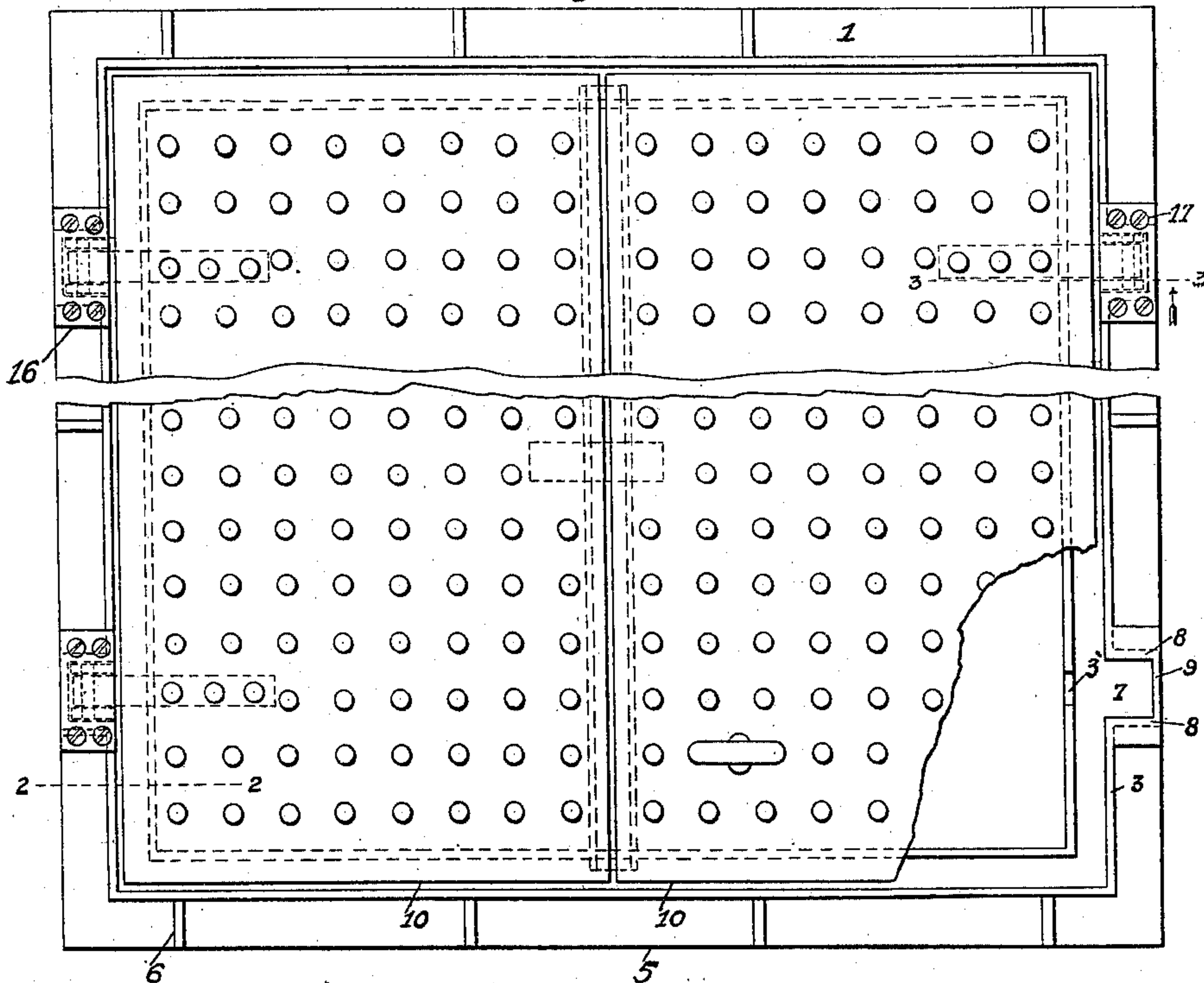


Fig. 2.

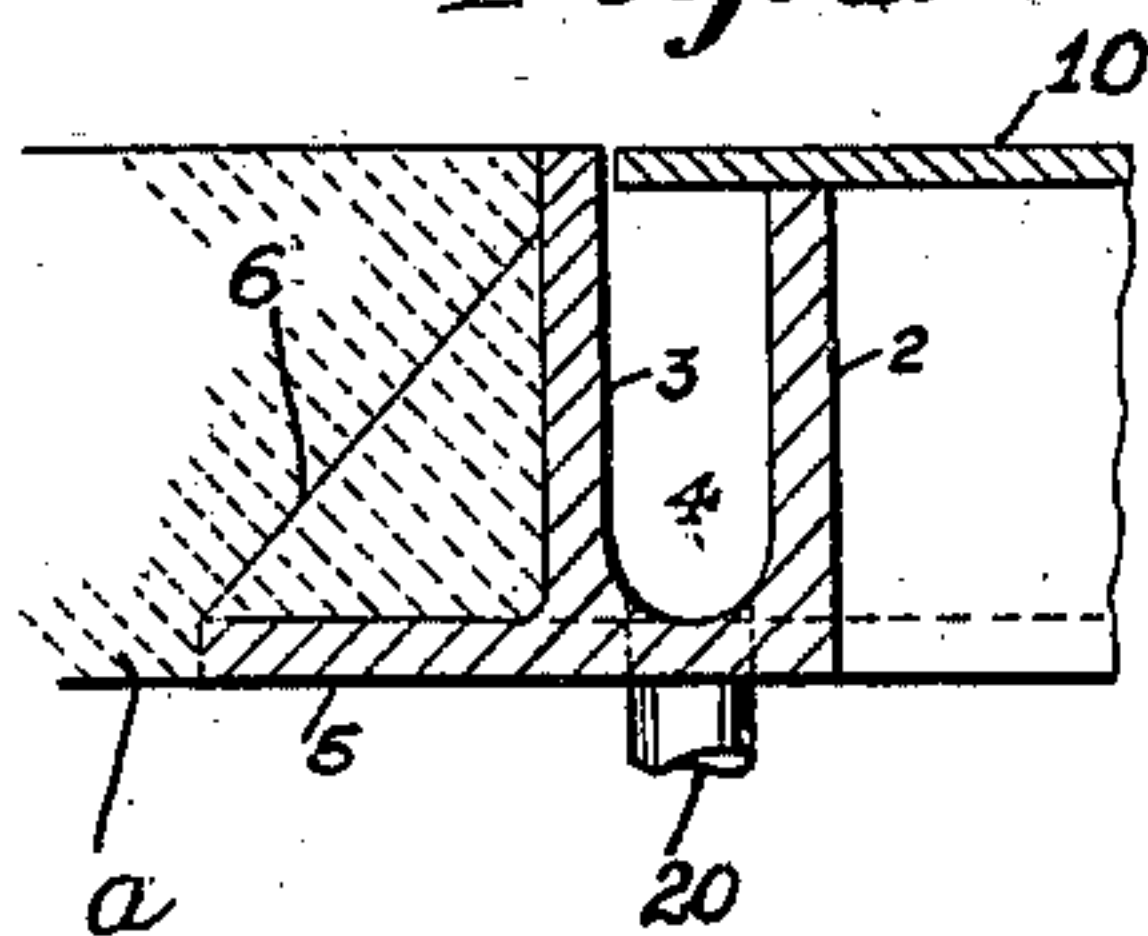


Fig. 3.

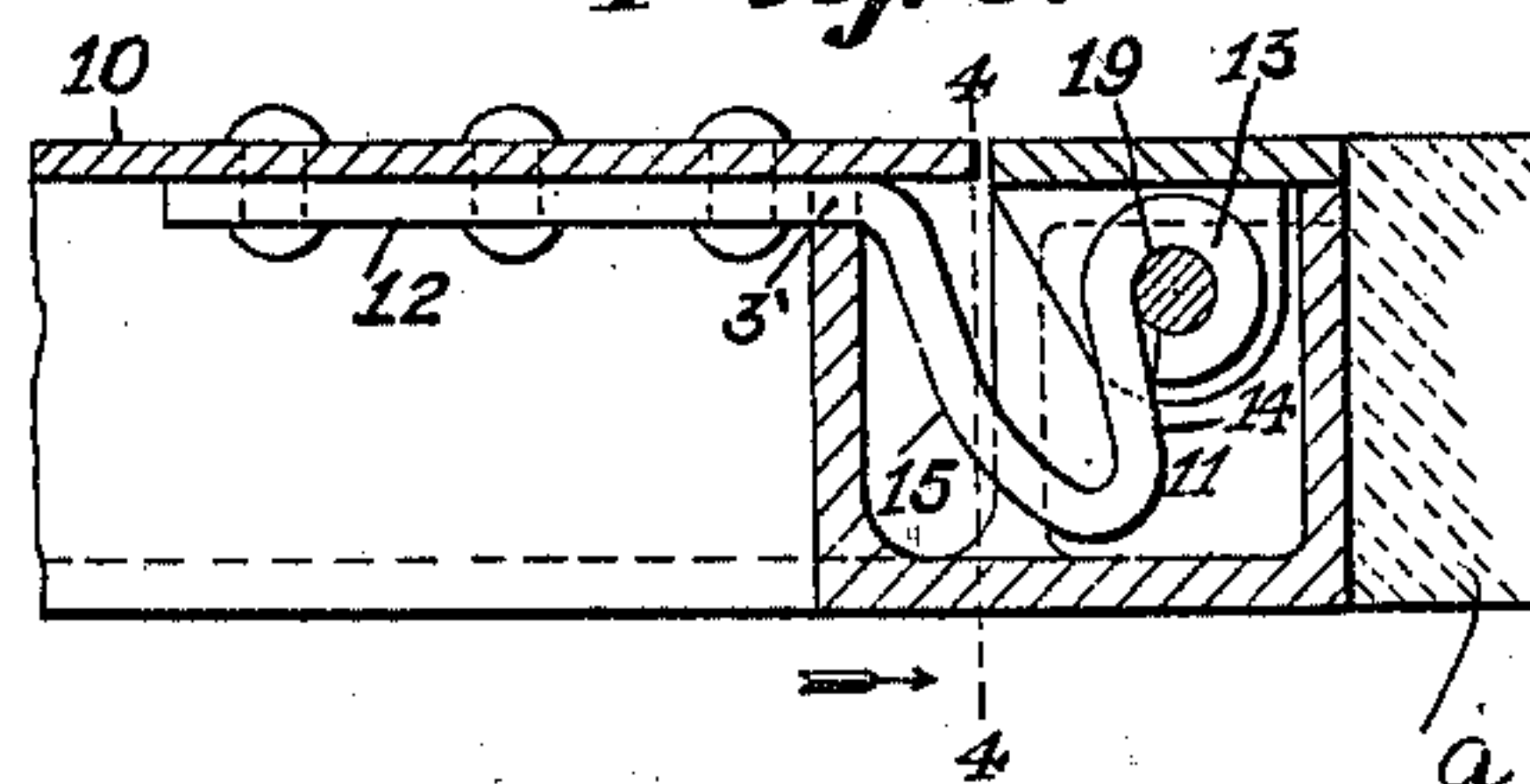
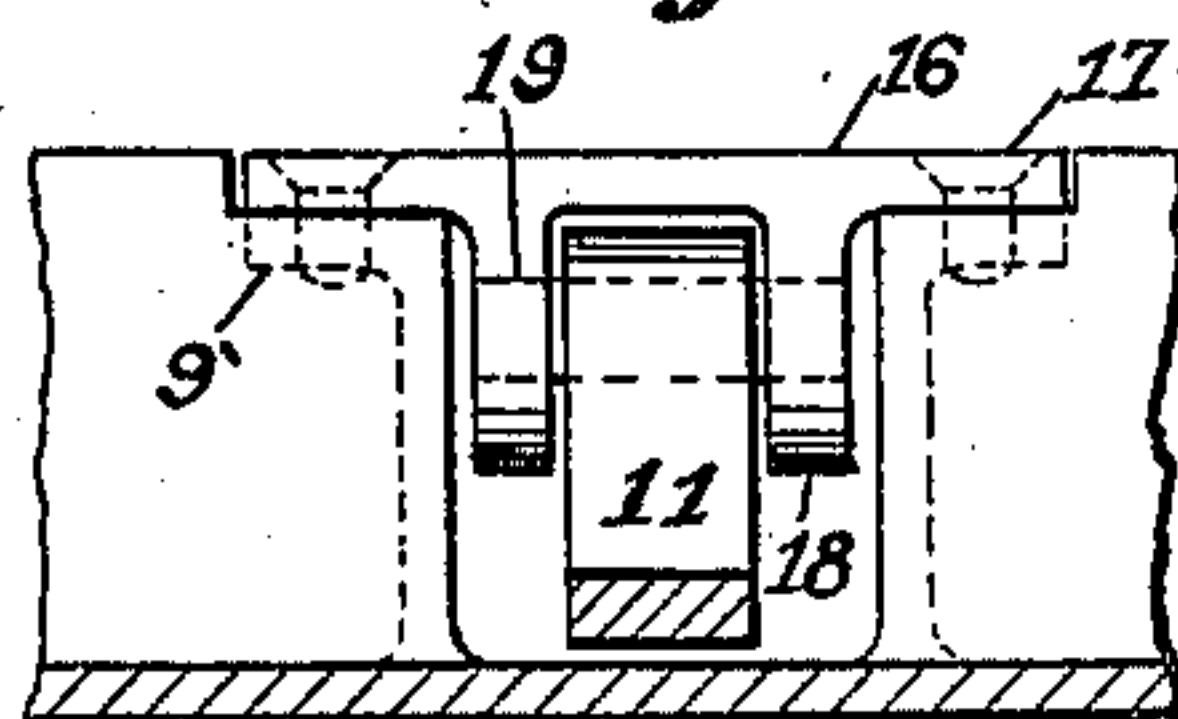


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY C. SEIPP, OF CORAOPOLIS, PENNSYLVANIA.

CELLAR-DOOR CONSTRUCTION.

984,034.

Specification of Letters Patent.

Patented Feb. 14, 1911.

Application filed March 18, 1910. Serial No. 550,214.

To all whom it may concern:

Be it known that I, HENRY C. SEIPP, a resident of Coraopolis, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Cellar-Door Constructions; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to cellar door constructions, and has special reference to that class of such doors which are generally placed in sidewalks.

The object of my invention is to provide a cheap, simple and efficient cellar door construction, in which the parts for connecting the doors to the frame are completely inclosed within such frame, as well as a frame which can be formed with an exterior drain for moisture, dirt, etc., which will not interfere with the operation of swinging the doors, and will enable such doors when in their closed positions to completely cover such drain.

To these ends my invention consists, generally stated, in the novel arrangement, construction and combination of parts, as hereinafter more specifically set forth and described and particularly pointed out in the claims.

To enable others skilled in the art to which my invention appertains to construct and use my improved cellar door construction, I will describe the same more fully, referring to the accompanying drawing, in which—

Figure 1 shows a plan view of my improved cellar door construction, showing the doors in their closed positions and one door partly broken away. Fig. 2 is a cross-section of a portion of the same on the line 2—2 Fig. 1. Fig. 3 is a like view on the line 3—3 Fig. 1, looking in the direction of the arrow. Fig. 4 is a section on the line 4—4 Fig. 3, looking in the direction of the arrow.

Like symbols of reference herein indicate like parts in each of the figures of the drawing.

As illustrated in the drawing, 1 represents the frame, which is formed of metal, and preferably of cast iron or cast steel. This frame 1 is of the usual rectangular shape and is provided with the inner and outer vertical walls 2 and 3 around the same,

which form the outer drain 4 between the same, while extending out from the bottom 55 of said outer wall 3 is the flange or base portion 5 to form a ledge, and connecting said wall with said ledge are a series of strengthening ribs 6. On opposite sides of the frame 1 are the two pockets 7, which extend 60 out from the outer wall 3, and are each formed by the vertical walls 8 connecting with said wall 3 at right angles thereto, and with the vertical wall 9 at right angles to the walls 8 and at the margin of the 65 ledge 5.

Two doors 10 are shown as being connected to the frame 1, which doors are preferably formed of metal sheets or plates and preferably of wrought metal, such as iron or 70 steel. These doors 10 when in their closed positions are adapted to rest at their outer edge portions on the upper edges of the walls 2 around the frame 1, and the outer portions of said door on the four sides of 75 the same only extend adjacent to said wall 3. The outer portions of the doors 10 adjacent to the pockets 7 are provided with the hinging bars 11, which have the straight portions 12 at the inner ends of the same for 80 being secured to the under side of such doors in any suitable manner and are seated in recesses 3' formed in the upper edges of the wall 2, while the outer ends of such bars have the eye portions 13, which connect with said 85 straight portions 12 by the angular portions 14 leading from said eye portions and connecting with the curved portions 15 leading from said straight portions. A cover plate 16 fits over each of the pockets 7 and rests 90 upon the outer wall 9 of said pockets, as well as upon the flanges 9' at the upper ends of the walls 8, to which said plate is removably secured by means of the screws 17. Extending down from the under side of the plate 95 16 and within the pockets 7 are the brackets 18, which are adapted to have the eye portion 13 on one of the hinging bars 11 between the same and pivotally hung therein by means of a pin 19 passing through said 100 brackets and through said eye portion.

When my improved cellar door construction is in place within a sidewalk such as is shown at *a*, the ledge 5 on the frame 1 will be embedded under the material for forming 105 such sidewalk, such as is shown in Figs.

2 and 3, which will hold said frame in a rigid position in said sidewalk and make it flush with the same, and when the doors 10 are raised to their open position, such as is shown in dotted lines in Fig. 2, the curved portions 15 on the hinging bars 11 will swing on a line from the center of the pivotal pins 19 in the eye portions 13 on said bars, and the angular portions 14 on said bars will strike against the bottom of the cover plates 16 and thereby prevent any further opening or undue backward movement of said doors. With the doors 10 in place on the frame 1 and in their closed positions on said frame, all moisture, water and dirt are prevented from coming in contact with the hinged joints in such frame for such doors, by the inclosing of said joints through the covering over the same, and the outer portions of said doors coming in close proximity to said covering, so that such doors will be enabled to be raised and lowered in a free and easy manner at all times. The water, moisture or dirt will also thus be prevented from entering to any great extent the pockets in the frame for confining the hinged joints for the doors at such joints, while the outer marginal drain on the frame will also collect any such water, moisture and dirt that should slip or enter into the frame around such doors and thereby prevent the same from entering into the cellar or cellar-way. A suitable drain pipe 20 can be connected to the bottom of the drain 4 for carrying off to any suitable place any water or other matter collected in said drain. It will thus be seen that my improved cellar-door construction is strong and durable and will not be liable to get out of order, as the accumulation of water and the freezing of the same around the hinging joints being prevented, the doors will not stick in the frame, which will therefore avoid the necessity of thawing such doors out before the same can be opened. It will also be seen that by preventing the water from entering the hinging joints of the doors that all rusting of such joints is overcome, and thereby renders such doors free to operate at any time. The construction of the frame will also provide for a minimum amount of metal being used for the upper surface of the same, thereby overcoming any waste of metal for such surface and preventing all liability of pedestrians slipping on the same in wintry or wet weather.

It will be evident that one or more doors can be used in my improved sidewalk construction, and when more than one door is used they can be connected together in any suitable way at their meeting edges and can be provided with the ordinary overlapping and draining devices for preventing the

entrance of dirt, water, etc., in the cellar or cellar-way at their meeting edges, while any suitable devices can be connected to said doors for raising and lowering the same, and various other modifications and changes in the design and construction, as well as other uses of my improved cellar door construction may be resorted to, without departing from the spirit of the invention or sacrificing any of its advantages.

What I claim as my invention and desire to secure by Letters Patent is—

1. In a cellar-door construction, the combination of the door-frame having an outer drain, and doors connected to said frame by inclosed hinged joints which joints are beyond the outer line of said drain.

2. In a cellar-door construction, the combination of the door-frame having an outer drain provided with pockets beyond the outer line of said drain, and doors connected to said frame by inclosed hinged joints in said pockets.

3. In a cellar-door construction, the combination of the door-frame having an outer drain, and doors connected to said frame by inclosed hinged joints hung from the top of the same beyond the outer line of said drain.

4. In a cellar-door construction, the combination of the door-frame having an outer drain provided with pockets beyond the outer line of said drain, and doors connected to said frame by inclosed hinged joints in said pockets and hung from the top of the same.

5. In a cellar-door construction, the combination of the door-frame having an outer drain, and doors hinged to said frame by inclosed joints beyond the outer line of said drain and through curved eye bars connected to said doors.

6. In a cellar-door construction, the combination of the door-frame having an outer drain provided with pockets beyond the outer line of said drain, a removable cover plate fitting over said pockets for covering the same, and doors connected to said frame by inclosed hinged joints in said pockets and hung from said plate.

7. In a cellar-door construction, the combination of the door-frame having an outer drain provided with pockets beyond the outer line of said drain, a removable cover plate fitting over said pockets for covering the same, and doors hinged to said frame by inclosed joints in said pockets and hung from said plate by curved eye bars connected to said doors.

8. In a cellar-door construction, the combination of the door-frame having an outer drain provided with pockets beyond the outer line of said drain, a removable cover plate fitting over said pockets for covering the same, and doors hinged to said frame by

inclosed joints in said pockets and hung from said plate by curved eye bars connected to said doors, said bars having angular portions thereon.

5 9. As a new article of manufacture, a frame for cellar-door constructions having a drain at the outer margin of the same and provided with pockets beyond the outer line

of said drain for the reception of the door hinges.

In testimony whereof, I, the said HENRY C. SEIPP, have hereunto set my hand.

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HENRY C. SEIPP.

Witnesses:

JAMES L. WEHN,
J. N. COOKE.