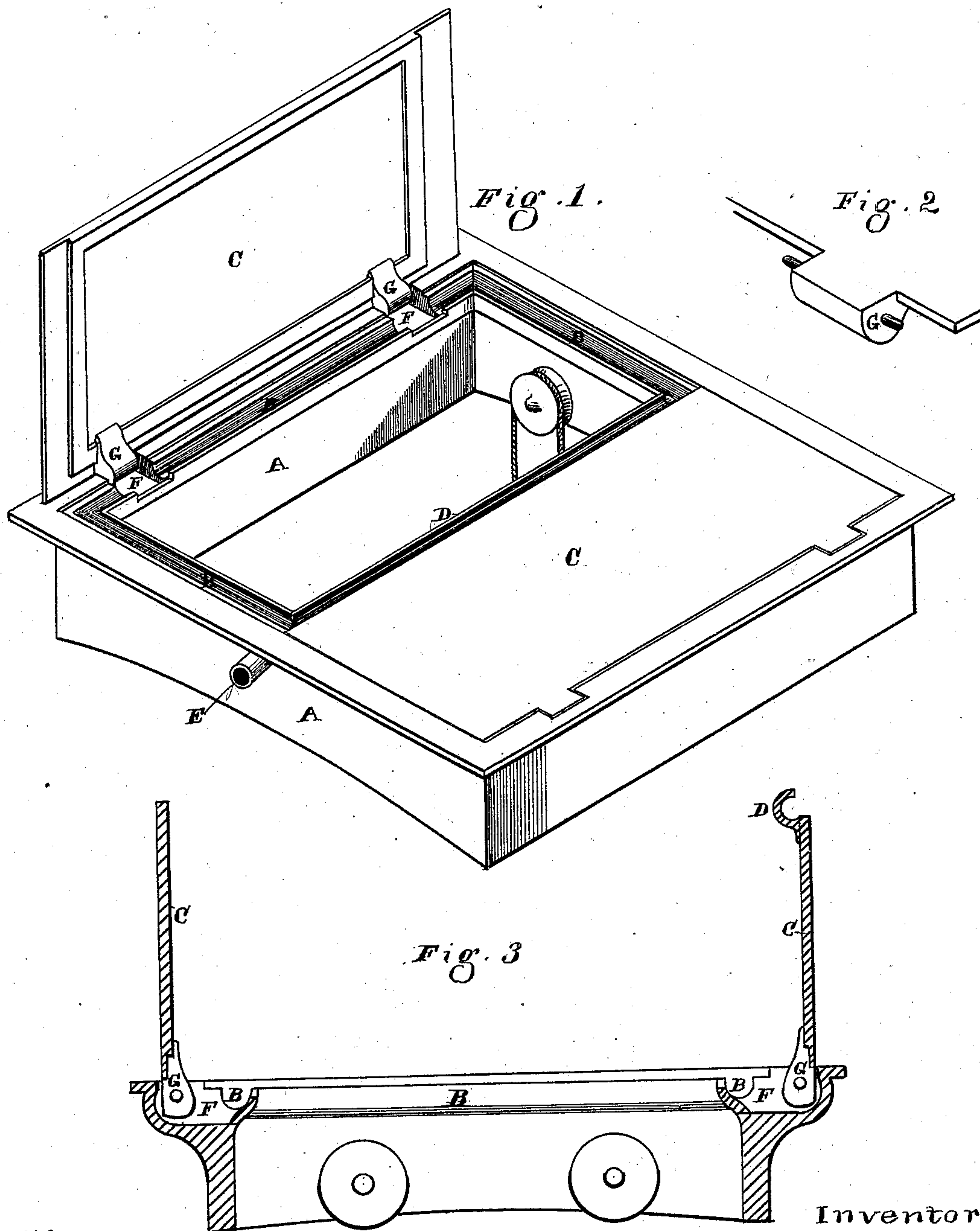


P. H. JACKSON.
Sidewalk Hatchway and Door.

No. 203,343.

Patented May 7, 1878.



Witnesses

L. K. Evans
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UNITED STATES PATENT OFFICE.

PETER H. JACKSON, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN SIDEWALK HATCHWAY AND DOOR.

Specification forming part of Letters Patent No. **203,343**, dated May 7, 1878; application filed April 10, 1878.

To all whom it may concern:

Be it known that I, PETER H. JACKSON, of the city and county of San Francisco, and State of California, have invented a Sidewalk Hatchway and Door; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings.

My invention relates to certain improvements in that class of doors which are employed to close openings in sidewalks and other places where it is desired to have a door which shall be perfectly water-tight when closed, and also level and flush, without any external projection; and it consists in a novel construction of hinges, and also in the employment, in combination with the doors and frame, of a series of grooves or gutters so placed as to catch any water which may enter through the joints around the outside or meeting edges, and convey it off without allowing it to fall into the area or space below; and, lastly, in combining with the doors and their meeting edges a combined bearing-bar and gutter, the whole of which will be more fully described by reference to the accompanying drawings, in which—

Figure 1 is a view of my invention. Fig. 2 is a view of the hinge.

A is the frame of a hatchway or opening made in the sidewalk or other surface where it may be desired to place my invention. Around the inside edges of the four sides of this opening I form grooves or gutters B, which may be slightly inclined toward one side or corner, where they connect with a suitably-placed discharge-pipe, E, that serves to carry off all the water which may leak through the joints between the frame and edges of the doors.

The doors C C are hinged, in the present case, to the sides of the opening, so as to open outward and meet in the center. At this point it has been usual to support these meeting edges by a bar, upon which the doors rest; but in my construction I secure an arched strip of metal, D, to the edge of one of the doors, so that it projects beyond the edge, as shown, just the thickness of the doors below the surface of the same.

The arched strip thus strengthens the door

to which it is secured, and at the same time serves as a support upon which the opposite door closes. Its shape forms a gutter to receive any water which may enter through the space formed by the meeting edges, and it extends over the edges of the gutter B, so as to discharge into them, and thus through the common outlet-pipe E.

The construction of the hinges is peculiar, they being very strong, and presenting no protuberances or projections above the surface.

The frame-work A has depression F made in it at the points where the hinges are to be placed, and stout lugs G are formed upon the back edges of the doors. These lugs are carried out so as to form a square corner at the back, as shown, and by this construction their upper surfaces will be flush with the surface of the doors, while the material of the lugs extends downward, so that when the doors are closed these lugs lie in the depressions formed in the frame. The pintles of these hinges are so placed that when the doors are opened the lugs turn in the depressions, their rear edges moving downward; but when the doors are closed they present a perfectly smooth and flush top, with no projections of any kind. By this construction I am enabled to make the hinges of any size desired and of great strength, without any unusual projection.

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

1. The frame A, with its doors C C, in combination with the receiving gutters or grooves B and a discharge-opening, substantially as shown, and for the purpose herein described.

2. The doors C C, meeting at the center, and having the combined gutter and bearing-bar D, forming a part of one door and supporting the other, substantially as shown, and for the purpose herein described.

In witness whereof I hereunto set my hand and seal.

PETER H. JACKSON. [L. S.]

Witnesses:

FRANK A. BROOKS,
M. A. NEAL.