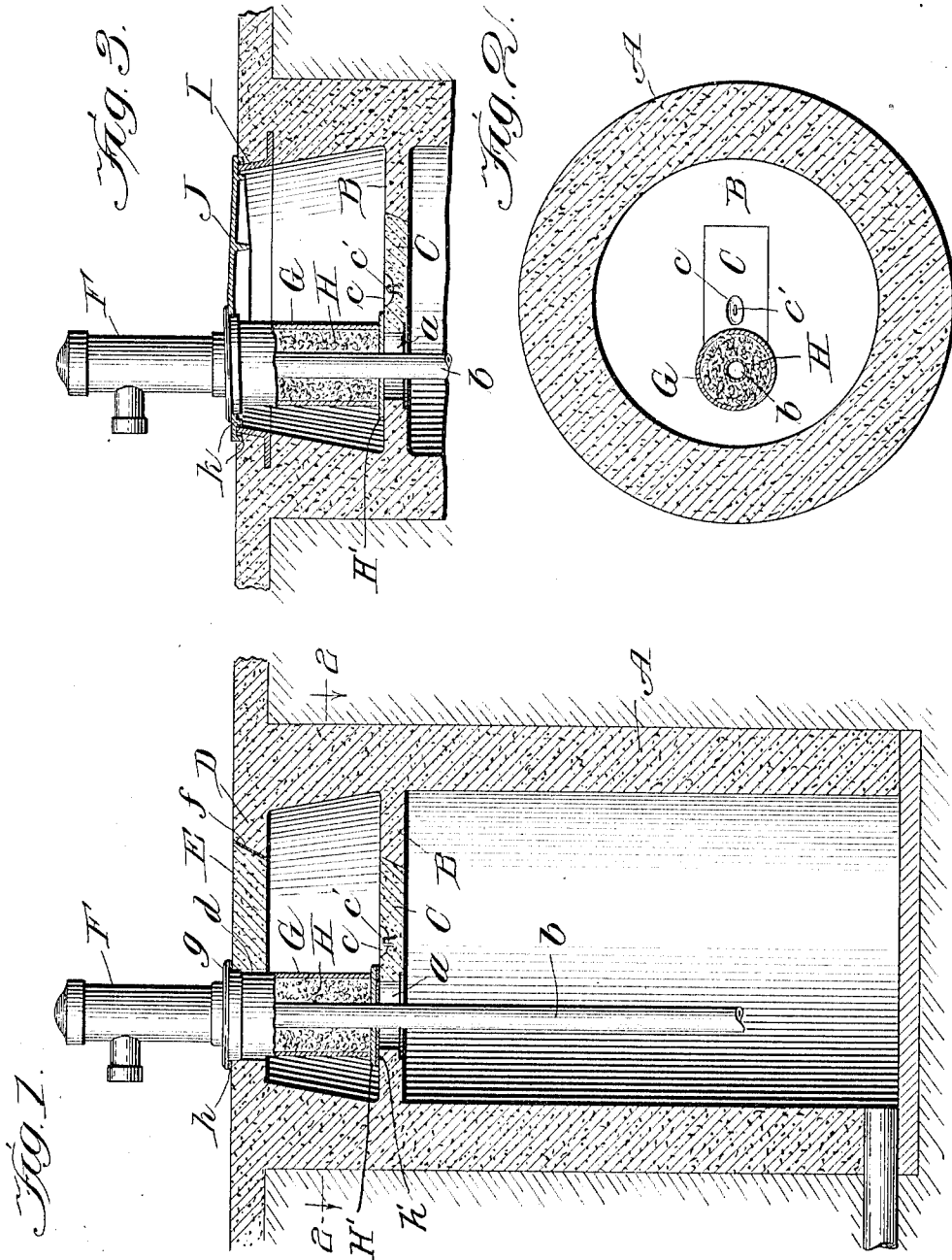


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FIRE HYDRANT CATCH BASIN.
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1,040,621.

Patented Oct. 8, 1912.



Witnesses:

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UNITED STATES PATENT OFFICE.

MICHAEL CLARKSON, OF CHICAGO, ILLINOIS.

FIRE-HYDRANT CATCH-BASIN.

1,040,621.

Specification of Letters Patent.

Patented Oct. 8, 1912.

Application filed April 24, 1909. Serial No. 492,046.

To all whom it may concern:

Be it known that I, MICHAEL CLARKSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Fire-Hydrant Catch-Basins, of which the following is a full, clear, and exact description.

My invention relates to fire-hydrant basins and particularly those that are extensively used in larger cities. Heretofore it has been customary to fill these basins with manure during the colder seasons of the year to prevent the underground pipe connections of the hydrant from freezing.

The object of my invention is to avoid the necessity of doing this, and to improve the construction of the hydrant-basin; reduce the cost of construction and maintenance of the same; and to obtain better structural results than have heretofore been accomplished; substantially as hereinafter fully described and as particularly pointed out in the claim.

In the drawings:—Figure 1 is a vertical section of a hydrant-basin embodying my invention. Fig. 2 is a horizontal section thereof taken on dotted line 2—2 Fig. 1. Fig. 3 is a vertical section of the upper portion of a hydrant-basin embodying a modification of my invention.

Referring to Figs. 1 and 2 A represents a well or basin for a fire-hydrant or plug, which is, preferably, circular in cross section and is made of concrete composition in which cement is used. The inner circumference of the wall of this basin is the same in diameter from the bottom of the basin to a point approximately two and a half to three feet below the surface, where it is provided with an integral concrete platform or floor B. Near one side of the basin this platform is provided with an opening *a* down through which the supply-pipe *b* of the hydrant extends, and it is also provided with a hatchway that is closed by a trap-door or cover C. This hatchway extends from opening *a* in a direction parallel to the vertical plane intersecting the centers of pipe *b* and said basin and is made rectangular, or elliptical or other suitable shape and of such length and width as to permit of the passage of a workman therethrough. The trap-door C is, preferably, made of the same concrete composition as the remainder of the platform B, and its edges are given an under-

cut bevel and is seated and rests on the oppositely beveled edges of the hatchway and is thereby prevented from falling down through the same. Near pipe *b*, the trap-door C is provided with a depression *c* in its upper surface, and in molding this door a staple *c'* is inserted in the material of the door and projects up from the bottom of said depression sufficiently to afford a hand-grasp or purchase for the hooked end of a suitable lifter (not shown) for raising said door.

Above platform B the inner surface of the wall of the basin is inclined inward and contracts as it extends to the top of the same, which latter is closed by a stone floor D, that is, preferably, made of the same concrete material as the lower portion of the basin. The upper surface of this floor D is level with the surface of the surrounding pavement or street, and it is provided with an opening *d*, in alinement with opening *a*, which it slightly exceeds in diameter. This floor D is also provided with a hatchway, which is located above the hatchway in platform B with which it corresponds in dimensions. The hatchway in floor D is closed by a cover E, that is, preferably, made of the same concrete material as the rest of the basin, and the sides of said cover are given an undercut bevel, and are seated and rest upon the oppositely beveled edges of its hatchway, and are supported thereby. I prefer to use tarred paper or other suitable waterproof packing *f* between the edges of cover E and its seat, to prevent moisture from seeping therethrough into the basin below.

The hydrant F, used in connection with my invention, is provided with a basal flange whose diameter is greater than opening *d*, and said hydrant is placed so that the pipe *b* depending therefrom will extend down through the center of said opening *d*, and so that its basal flanges *g* will overlap and rest upon the marginal edge of the opening. I prefer to interpose a ring *h* of tarred paper or other waterproof material between said flanges and the edges of the opening, and, between the basal flanges of the hydrant and platform B, I surround pipe *b* with a cylindrical casing or jacket G. The lower end of jacket G rests upon a plate H' which latter surrounds and is concentric to pipe *b*, and rests upon and overlaps the upper edges of opening *a*,

which it is designed to close. The space between sleeve G and pipe *b* is, preferably, filled with asbestos or suitable non-conducting material H, and in order to still further guard against moisture from above dripping down into the lower chamber of the hydrant basin, I prefer to place a disk *h'* of tarred paper or water proof material under plate H'.

In operation, when it is desired to get into the lower chamber of the basin or well to fix the valve (not shown) of the hydrant pipe, all that it is necessary to do is to lift the cover E and the trap-door C, and lower the body down through the hatchways, and when the workman desires to climb out of the well, all he has to do is to replace trap-door C and cover E in order to form an airtight compartment or chamber in the lower part of the well or basin, the temperature of which, even in the coldest weather will be above the freezing point and absolutely protect the valve from being affected by the moisture or water that may remain therein or in the connections thereof with the water-main. My improvement absolutely prevents the necessity of filling the hydrant well or basin with manure or other material designed to keep the hydrant-pipe and its valve connections from injury by reason of the cold.

In Fig. 3 I show a modified form of the upper part of the hydrant well or basin. In this modification the hydrant and its depending pipes, platform B, trap-door C, jacket G and the insulating material surrounding said pipe *b* correspond to the same parts named in Figs. 1 and 2 of the draw-

ings. The upper end of the well or basin at the street level is, however, originally left open and a cast metal angle iron seat I embedded in the surrounding concrete structure and forms the mouth of the well. This mouth is closed by a metallic cover J, the edges of which overlap the edges of seat I and the underside of this metallic cover is provided with concentric flanges *l*, *l'*, that form an annular channel, between which the upper edge of the seat I enters. Cover J has an opening therein for the downward passage of pipe *b*, and this part of said cover J and the relation of the basal flanges of the hydrant, are the same as in the preferred form of my invention as shown in Figs. 1 and 2 of the drawings.

What I claim as new is:—

A hydrant basin comprising side-walls, a platform between its upper and lower ends that divides the basin into an upper and lower chamber, a cover for the top of said basin having an opening therein, an opening in said platform alining with said first-mentioned opening through both of which the depending hydrant pipe passes, a cylindrical casing connecting said openings and surrounding said pipe, a filling of non-conducting material inclosed in said casing and surrounding said pipe in the upper chamber, and means for closing the ends of said casing.

In witness whereof I have hereunto set my hand this 19th day of April, 1909.

MICHAEL CLARKSON.

Witnesses:

FRANK D. THOMASON,
E. K. LUNDY.