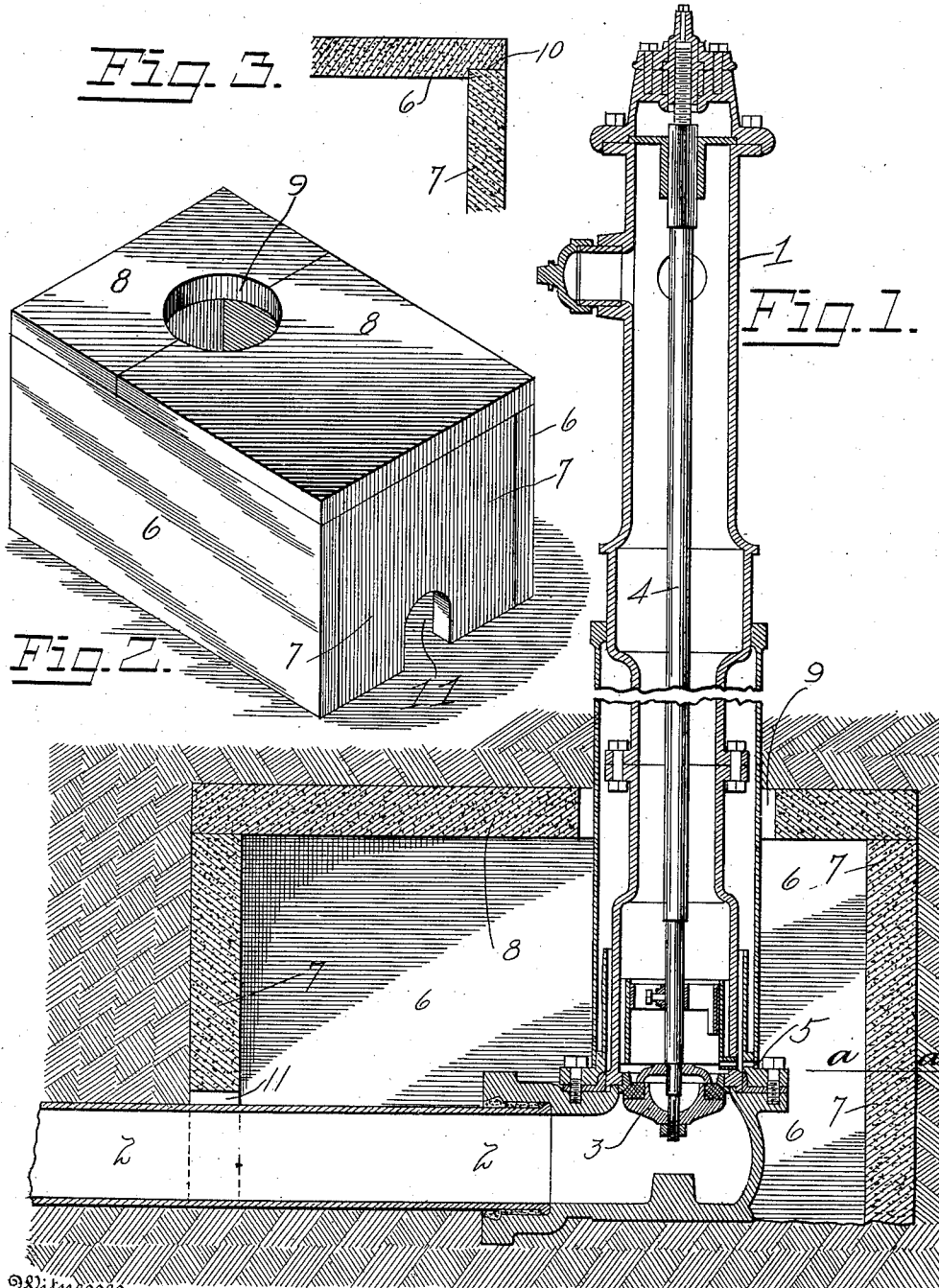


H. P. JAMES.
HYDRANT CASING.
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964,784.

Patented July 19, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

HARRY P. JAMES, OF DAYTON, OHIO.

HYDRANT-CASING.

964,784.

Specification of Letters Patent.

Patented July 19, 1910.

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To all whom it may concern:

Be it known that I, HARRY P. JAMES, citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Hydrant-Casings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the numerals of reference marked thereon, which form a part of this specification.

This invention relates to a special form of concrete housing for the underground portion of fire hydrants which are already installed, to prevent the same from caving or the valve mechanism being interfered with.

The object of the invention is to provide a concrete housing for the valve or lower end of the hydrant, which may be placed in position upon hydrants already installed, and without disturbing any parts of the hydrant. To this end, the end and side walls of the box or casing are constructed with a view to their being dropped into the excavation and made to assume upright positions with little effort, and after which the earth around the outer sides of said parts maintain them in such position. The top or cover is placed in position with the same facility and is essentially constructed in two parts.

Referring to the accompanying drawings, Figure 1 is a vertical sectional elevation of a fire-plug, showing my improved underground casing in position. Fig. 2 is a perspective view of the underground casing removed from the excavation. Fig. 3 is a detail sectional view of one of the corner joints of the casing.

In a detail description of the invention, similar reference characters indicate corresponding parts.

The fire-plug or hydrant 1 is of the well known type commonly employed in various cities having public water-works systems. The underground portion of the hydrant usually extends from 4 to 5 feet below the surface of the earth and is fed by a supply water pipe 2 leading from the main (not shown). The valve 3 is interposed at the junction of the supply pipe 2 and the hydrant, and is operated by a valve rod 4 extending vertically throughout the length

of the hydrant. The lower portion of the hydrant immediately above the valve 3 is provided with a drainage opening 5 through which the water above the valve empties from the hydrant after the valve is elevated against its seat, which occurs after a fire has been extinguished or after the hydrant has for any reason been opened and closed. Heretofore this drainage opening 5 has been subject to stoppage from a variety of causes, principally among which may be mentioned rust or corrosion due to dampness caused by the immediate contact with the earth, or by the small roots of trees entering said opening and partially or wholly closing the same so as to prevent the drainage. As a consequence of this stoppage of said opening, the water remaining within the hydrant is subject to freezing thus rendering the hydrant inoperative at a time when its use is most urgently required. Describing now the present invention which prevents these occurrences, 6, 7 and 8 indicate respectively the sides, ends and top of a concrete box or casing, preferably of rectangular shape. This concrete box or casing is placed within the ground a suitable distance from the surface and forms an inclosed space which surrounds the portions of the hydrant below the ground and thus prevents dampness from rusting or corroding the drain opening 5 and also the roots of trees from finding their way to the lower portion of the hydrant. The casing so constructed is open at its bottom, the earth being the bottom of the casing, and the sides and ends are placed together by suitable rabbets 10. One of the ends of said casing is provided with a suitable opening 11 which extends to the edge of said portion and through which the supply pipe 2 extends to the coupling on the lower end of the hydrant. The top of the casing or box consists of two members with openings therein which, when placed in position, provide a suitable opening 9 through which the hydrant extends above the ground. This box or casing lies a suitable distance below the surface of the ground to be sufficiently protected. In placing it in position the sides and ends are placed in the excavation in upright positions and the cover members 8 are laid thereon. The earth is then placed around said portions and tamped. The inside dimensions of the casing are preferably three feet long by two wide by one and one-

half high. This provides substantially nine cubic feet of air space surrounding the bottom of the hydrant.

Having described my invention, I claim:

- 5 A concrete casing for the underground portion of fire hydrants, consisting of side and end walls the abutting edges of which are rabbeted to maintain said walls in upright positions against inward pressure, one
10 of said end walls being provided with an opening extending through the lower edge thereof to receive the water supply pipe leading to the hydrant, and a cover consisting of two parts the upper and lower sur-

faces of which are in planes coinciding 15 with the top edges of the side and end walls which are engaged thereby, and the abutting edges of said cover portions being provided with semi-circular recesses which, when said edges abut, form a circular opening 20 which surrounds the body of the hydrant, substantially as shown and described.

In testimony whereof I affix my signature, in presence of two witnesses.

HARRY P. JAMES.

Witnesses:

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