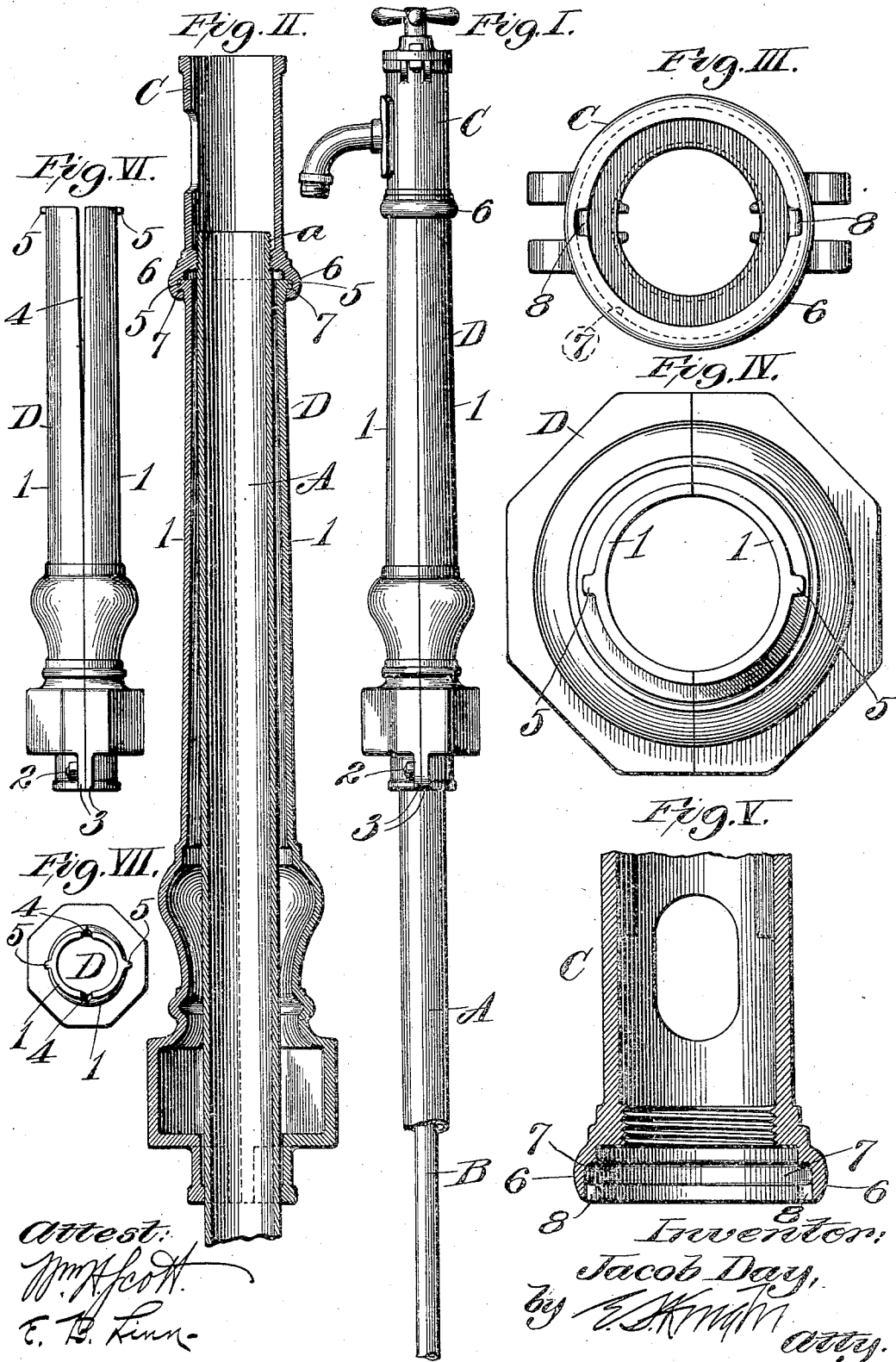


J. DAY.
HYDRANT CASING.
APPLICATION FILED MAR. 17, 1909.

935,471.

Patented Sept. 28, 1909.



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UNITED STATES PATENT OFFICE.

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HYDRANT-CASING.

935,471.

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To all whom it may concern:

Be it known that I, JACOB DAY, a citizen of the United States of America, residing at the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Hydrant-Casings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a casing for hydrants and it has for its object the construction of a casing of this description in which the nozzle section of the casing may act as a support for the casing beneath it, surrounding the waste pipe and service pipe, and to the former of which the nozzle section is secured.

It has heretofore been a universal practice, in so far as I am aware, in the construction of hydrant casings to attach the nozzle section to the waste pipe of the hydrant and to provide for the support of the casing beneath this nozzle section by clamping the casing to the waste pipe without there being any direct connection between the casing and the nozzle section, and in such practice there has been no adequate means for the support of the casing which frequently becomes loosened to such a degree from the waste pipe as to permit of its descent around the waste pipe and away from the nozzle section. By my improvement I obviate all liability of downward movement of the casing due to provision of a construction whereby the casing is expansible and is compressibly locked to the nozzle section of the hydrant.

In the accompanying drawings: Figure I is a side elevation of a hydrant, constructed in accordance with my invention. Fig. II is an enlarged vertical section, taken through the waste pipe, nozzle section and casing of the hydrant. Fig. III is an enlarged inverted plan view of the nozzle section. Fig. IV is a top or plan view of the hydrant casing in the compressed condition in which it appears when it is to be connected to the nozzle section. Fig. V is an enlarged vertical section through the lower portion of the nozzle section. Fig. VI is an elevation of the hydrant casing as it appears in expanded condition previous to being placed in a position for application to the nozzle section.

Fig. VII is a top or plan view of the casing as shown in Fig. VI.

In the accompanying drawings: A designates the waste pipe of the hydrant provided at its upper end with a screw thread *a*.

B is a service pipe extending through the waste pipe, as usual, and concentric therewith.

C is the nozzle section which is screw-threaded internally near its lower end to provide for the attachment of said nozzle section to the waste pipe A.

The parts thus far specifically described are of common construction, and no invention *per se* is herewith claimed for them.

D designates my expansible and compressible hydrant casing that is placed around the waste pipe A beneath the nozzle section C and which preferably comprises a pair of sections 1 of semi-cylindrical shape in cross section. These sections are united at their lower ends, only, by connecting bolts 2 that pass through ears 3 at the exterior of the sections, as seen in Figs. I and VI. The edges of the sections bear against each other throughout the lower portion of the casing but are separated from each other throughout the upper portion of the casing, this separation being provided for by tapering the sections, as illustrated in Figs. VI and VII, whereby longitudinal V-shaped slots 4 are provided between the edges of the sections. Each casing section 1 is provided at its upper end with an outwardly projecting lug 5, the lugs being preferably located diametrically opposite each other, as seen most clearly in Figs. IV, VI and VII.

The nozzle section C that is designed as a support for the casing D is provided at its lower end, beneath the point at which it is secured to the waste pipe A, with a cylindrical enlargement 6. Within the enlargement 6 of the nozzle section is an annular groove 7 that is interrupted at two or more points by longitudinal notches 8 that extend downwardly from said annular groove to the lower end of the enlargement of the section. When the nozzle section C and the casing D, constructed in accordance with my invention, have been fitted to the waste pipe of a hydrant, the nozzle section being secured to said waste pipe in the usual manner and the casing being arranged loosely upon the pipe beneath the nozzle section, I

connect the casing to the nozzle section by the following procedure. I first grasp the upper portion of the casing and squeeze the upper portions of the sections of this casing toward each other as permitted, due to the existence of the slots between the sections. The upper end of the casing, which is, in a spread condition, of too great a diameter to enter the enlargement at the lower end of the nozzle section C, is by the contraction of the upper end of the casing rendered of such diameter as to permit of its passage into the enlargement of the nozzle section. I then elevate the casing around the waste pipe so that the lugs 5 of the casing will pass through the notches 8 in the enlargement of the nozzle section and enter into the groove 7 in said enlargement. The casing is then rotated around the waste pipe with the result of causing the lugs 5 to be moved in the groove 7 away from the notches through which they entered said groove. When the casing has been rotated to the desired degree, the grasp thereon is released and as a consequence the upper portion of the casing spreads outwardly with the result of the upper end of the casing being tightly bound within the enlargement of the nozzle section of the casing, and being prevented from descent around the waste pipe due to the support therefor furnished by the lugs 5 permanently held in the groove 7.

I claim:

1. In a hydrant casing, the combination with a pipe and a supporting section attached to said pipe, of an expansible and compressible casing having interlocking engagement with said supporting section.
2. In a hydrant casing, the combination with a pipe and a supporting section attached to said pipe, of an expansible and compressible sectional casing surrounding said pipe and having interlocking engagement with said supporting section.
3. In a hydrant casing, the combination with a pipe and a supporting section attached to said pipe, of a casing surrounding said pipe and having a compressible and expansible upper portion having interlocking engagement with said supporting section.

4. In a hydrant casing, the combination with a pipe and a supporting section attached to said pipe, of an expansible and compressible casing surrounding said pipe and comprising a pair of sections separated throughout their upper portions, and arranged for interlocking engagement with said supporting section.

5. In a hydrant, the combination with a pipe and a supporting section attached to said pipe, of an expansible and compressible casing surrounding said pipe and having lugs at its upper end engaging said supporting section.

6. In a hydrant casing, the combination of a supporting section provided near its lower end with an internal groove and notches extending longitudinally thereof into said groove, and an expansible and compressible casing having lugs adapted to enter said groove through said notches and to be rotated within said groove to connect the casing to the supporting section.

7. In a hydrant casing, the combination of a supporting section having an internal annular groove located near its lower end and provided with notches extending from the lower end of the section to said groove, and a sectional expansible and compressible casing having external lugs adapted to enter said groove through said notches.

8. In a hydrant casing, the combination of a supporting section having an internal annular groove located near its lower end and provided with notches extending from the lower end of the section to said groove, and a sectional casing having external lugs adapted to enter said casing through said notches, the upper portion of said casing being compressible to permit the entrance of the casing into said supporting section, and expansible to provide for the spreading of the casing into firm engagement with the supporting section after the casing has been entered into said section.

JACOB DAY.

In presence of—
E. B. LINN,
E. M. HARRINGTON.