J. Regester,

Hydrant,

No. 55,711. Patented June 19, 1866.

Fig. 4.

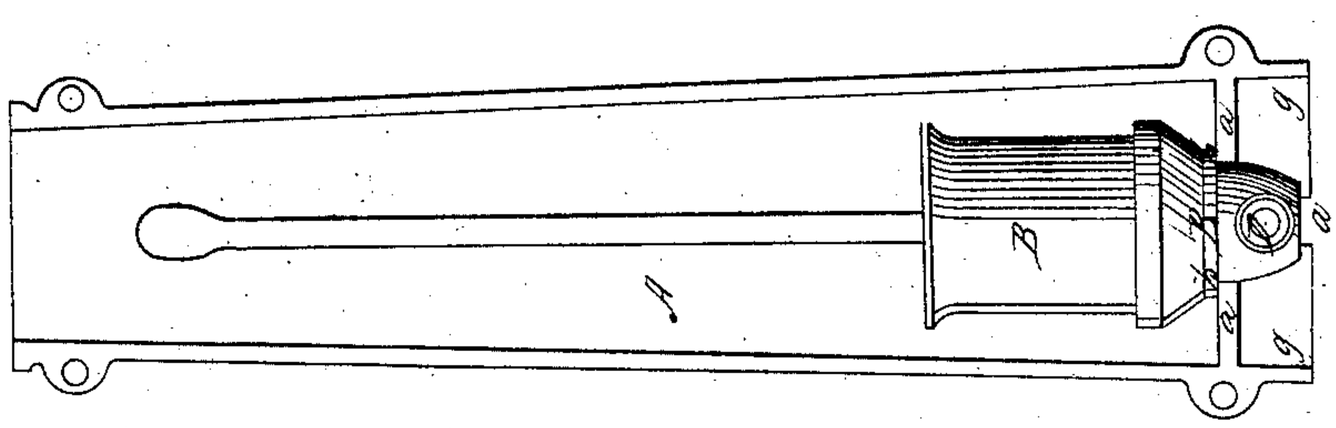


Fig. 3.

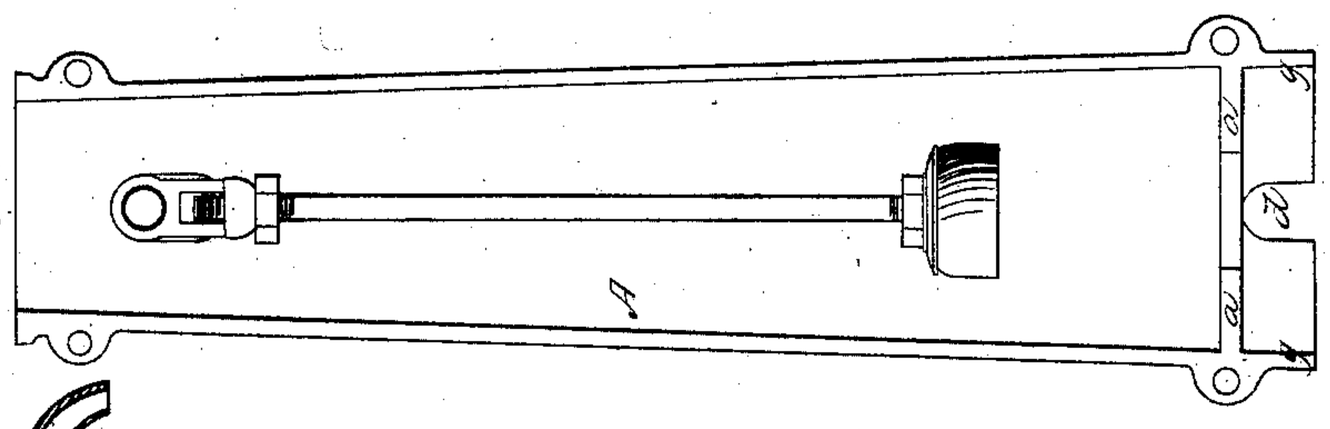


Fig. 2.

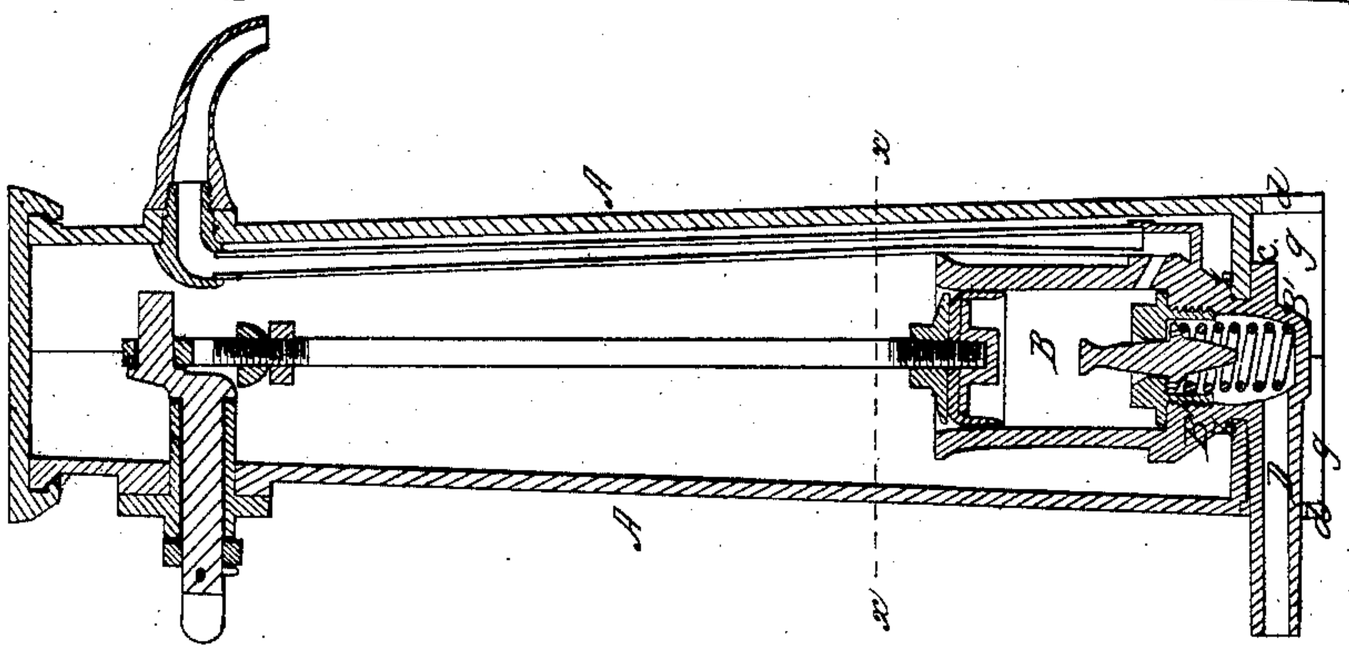
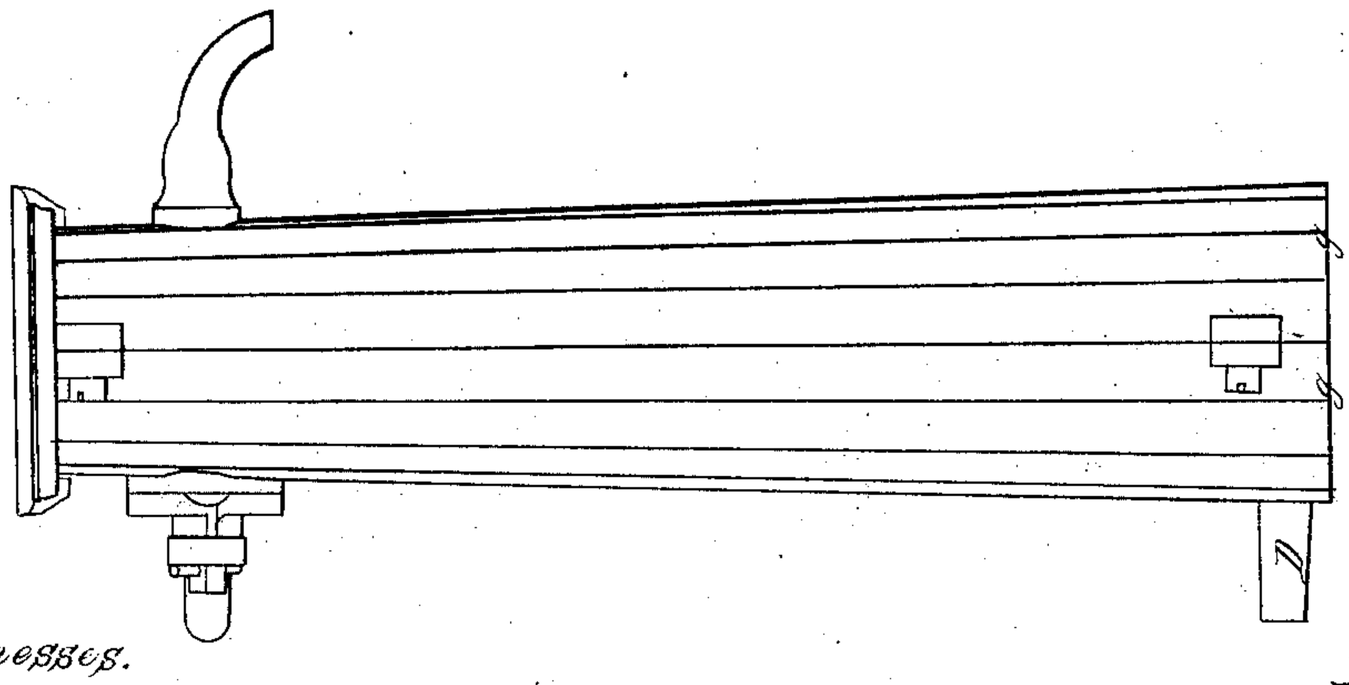


Fig. 1.



Witnesses.
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UNITED STATES PATENT OFFICE.

JOSHUA REGESTER, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN HYDRANTS.

Specification forming part of Letters Patent No. **55,711**, dated June 19, 1866.

To all whom it may concern:

Be it known that I, JOSHUA REGESTER, of the city and county of Baltimore, in the State of Maryland, have invented an Improvement in Hydrants; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, Sheet 1, is a side view of the improved hydrant. Fig. 2 is a vertical central section through the hydrant. Fig. 3 is a view of one half of the hydrant-case, having a plunger applied to it. Fig. 4 is a view of the opposite half of the case. Fig. 5, Sheet 2, is an enlarged central section of the lower portion of the hydrant. Fig. 6 is a horizontal section through the case above the cylinder. Fig. 7 is a bottom view of the hydrant.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improvement on that class of hydrants which are provided with an interior cylinder having a plunger working within it, said plunger being used for opening the induction-valve in drawing water, and also for removing the water from the delivery-pipe when the induction-valve is closed, so as to prevent any danger from freezing.

When such a contrivance is used in hydrants for drawing water, the great pressure which is brought to act below the plunger when the induction-valve is open requires to be resisted by some substantial means for securing the cylinder to the hydrant-case; otherwise this cylinder and its devices will be broken away from the case and thrust out of a proper working position. It is important to have said cylinder secured firmly down to the base of the inclosing-case in a central position therein, and in such manner that it cannot be moved either up or down, and at the same time to have the induction-pipe enter said cylinder at a point which is below the bottom support of the case, so that water and sand shall be excluded from the interior of the hydrant.

The nature of my invention consists in securing and centering a cylinder within which a plunger or its equivalent works within a case or shell which is divided longitudinally, and which is so constructed that the induction-pipe leading to said cylinder shall enter it at a point which is below the base support for this cylinder, as will be hereinafter described.

The case or shell which incloses the interior working parts of the hydrant may be made circular, elliptical, angular, or of any other suitable form. It is constructed of two half-sections, A A, and each section has a half-base support, *a*, formed in it near its lower end for the purpose of receiving the lower end of the cylinder-base, centering and confining the cylinder B in place.

The half-base pieces *a a* are formed so that when the two sections A A are brought together there will be a circular hole through these base-pieces which will fit snugly about a cylindrical neck that is formed on the base B′ of the cylinder B, as shown in Figs. 2, 4, 5, and 7. To prevent the cylinder B from having any vertical movement, shoulders *b b* are formed on the base B′, which rest upon the base portions *a a* and project beyond the inner edge of the central hole therethrough, and beneath these portions *a a* a strong lug, *c*, is cast on the neck of the cylinder-base B′, diametrically opposite which lug a pipe, D, projects from the neck, which, in conjunction with the lug, abuts against the bottom surfaces of the base-supports *a a*. Instead of having the lug *c*, an annular groove may be formed on the neck B′, for receiving the semicircular edges of the base-supports *a a*. The cylindrical neck on the base of the cylinder should be in the center of this cylinder, and the hole through the base of the case should be in or nearly in the center of this case. The neck B′ should project below the base *a a* of the case sufficiently far to receive the pipe-connection D, which projects out through slots *d d*, which are made in the bottom edges of the case-sections, below the base *a a*, as shown in Figs. 2, 5, and 7.

Hydrants hitherto made with a cylinder and plunger arranged within their cases for opening and shutting off the water have the induction-pipe, which connects with the service-pipe at the bottom of the hydrant, above the base-support. Consequently an opening must be made for it through the case. This plan is exceedingly objectionable, as water will get into the hydrant-case around said pipe and injure the interior working parts. By having the chambered base B′ of the cylinder of sufficient length to project through the base *a a* of

the case, as I have above described, it will not be necessary to make openings through the hydrant-case above said base for the pipe D.

By having the pipe D below the base *a a* and projecting through the bottom edge, *g*, of one of the case-sections, this pipe will not only serve to assist in holding the cylinder B down to its place, but it will also prevent the cylinder from wabbling and working loose; and while this is the case, I am enabled to center and secure the cylinder B rigidly in its place in the act of securing the two half-sections A A of the shell together.

The abutting edges of the sections A A should be made to fit snugly, in order that the joints may be made perfectly tight by rusting.

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

1. Constructing the base of the cylinder B in such manner that this cylinder will be held in a permanent position within a divided case, A A, between and upon base-supports or collars *a a*, substantially as described.

2. The combination of a divided case, A A, with a cylinder, B, which is constructed with a contracted neck, B′, and a pipe, D, leading to this neck below the base *a a*, all substantially as described.

3. The construction of the hydrant-case of two sections, A A, two half base-pieces, *a a*, and perforated portion *g d*, the said perforated portion being below the base *a a*, substantially as described.

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Witnesses:

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