(No Model.)

C. G. ETTE.

HYDRANT.

No. 382,642. Patented May 8, 1888.

Fig. 1

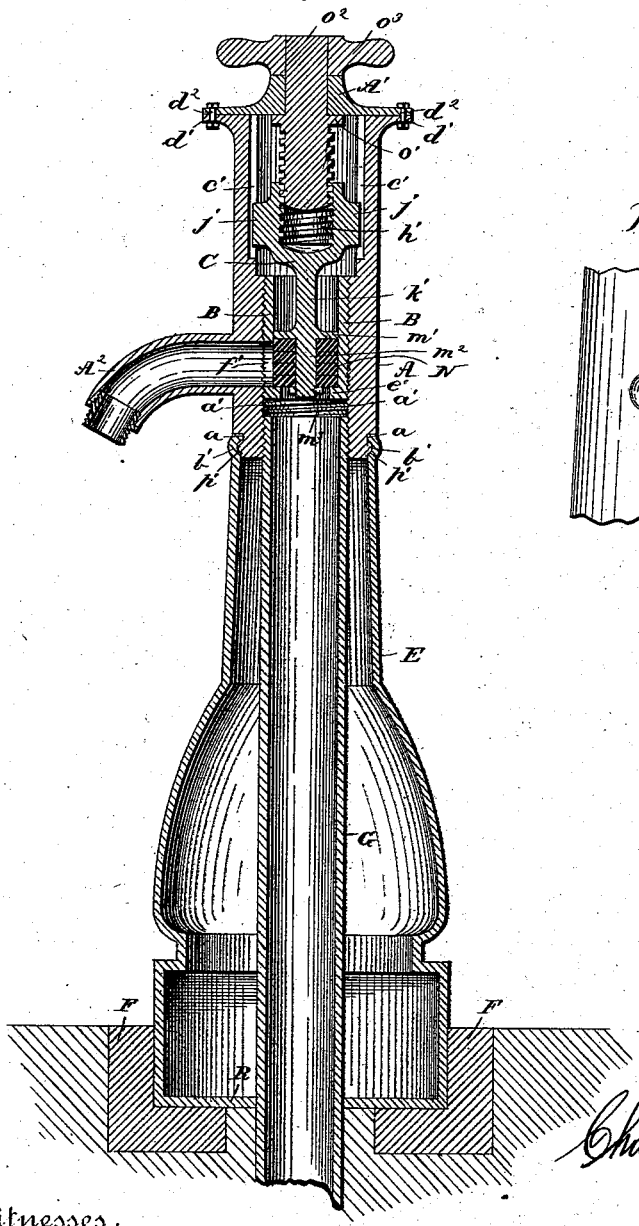
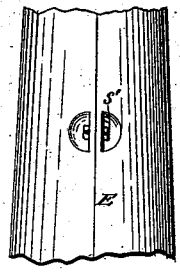


Fig. 2.



Witnesses.

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Inventor.

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By his Attorney in fact.

UNITED STATES PATENT OFFICE.

CHARLES G. ETTE, OF ST. LOUIS, MISSOURI.

HYDRANT.

SPECIFICATION forming part of Letters Patent No. 382,642, dated May 8, 1888.

Application filed August 8, 1887. Serial No. 246,439. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. ETTE, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Hydrants, of which the following is so full, clear, and exact a description as will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the appended drawings.

This invention relates to an improvement in hydrants, the object being to construct a hydrant especially adapted for use in hot or non-freezing climates, which, from its simplicity of construction and entire absence of any complicated parts liable to get out of order, will readily recommend itself to persons requiring such a device; and my invention consists, essentially, in situating the valve and all working parts of the device within the upper casing and above the ground-line, and connecting them with the supply-pipe.

My invention further consists in certain peculiarities in the construction, arrangement, and combination of parts, substantially as will be hereinafter described, and then particularly pointed out in the claim at the end of the specification.

In the accompanying drawings, illustrating my invention, Figure 1 is a sectional side elevation of my improved hydrant. Fig. 2 is a side elevation of a portion of the same, showing the bolts connecting the casings.

A represents the upper section of a hydrant-casing having a nozzle or vent, A^2, and E represents the lower casing. The upper casing, A, is recessed at *a*, which recessed portion is formed with a lug, *b'*, fitting within the correspondingly-formed groove *p'* in the upper extremity of the lower casing, E. The upper end of the upper casing, A, is formed with ears *d*,' adapted to receive bolts d^2, serving to secure to the said upper casing the top portion, A'. A portion of the interior of the upper casing, A, is screw-threaded at *a'*, and the balance is formed with a groove, *c'*, for the purpose to be hereinafter set forth.

B represents a valve-chamber, preferably made of brass and secured to the interior of the upper casing, A, preferably by screw-threading, as shown, which valve-chamber is formed at its lower extremity with inwardly-projecting lugs *e'*, having their tops situated on a line with the lower inner edge of the nozzle or vent and forming seats for the valve C, and with an opening, *f'*, corresponding with the entrance into the nozzle or vent A^2. This valve C is preferably made in the form shown in Fig. 1, and is internally threaded at *h'*, and is provided on its outer side with wings *j j*, which fit within the grooves *c'* of the upper casing, A, serving to keep the valve from accidental displacement when it is being raised or lowered. The valve is formed with a stem, *k'*, having at its lower extremity lugs or projections *m'*. This stem terminates in a screw, m^2.

N represents a packing or washers fitting around the lower portion of the valve-stem and holding it against the lugs *m'* by a nut, m^3, as shown. This packing fits tightly within the chamber B and rests upon the valve-seat *e'*, so that when the valve is open it will prevent the passage of any water higher than the nozzle-outlet.

Fitting within the upper portion of the valve is an externally-threaded screw having a shoulder, *o'*, which shoulder abuts against the inner side of the top A' of the hydrant-casing and prevents the valve from being raised too high. Above this shoulder *o'* is a cap, o^2, having a handle, o^3, by means of which the valve is operated.

The casing E is preferably formed in two parts secured together by bolts *s'*, as shown, and, as I have before stated, is provided on its interior with the groove *p'*, by which it is connected with the upper casing, A. At the extreme lower edge of this lower casing, E, is a lug or bridge, R, fitting closely or entirely encircling the supply-pipe G, in order to prevent water or gritty substances entering between the casings. The lower part of this casing A is also provided with a suitable number of wings, F, extending outwardly into the ground and holding the hydrant firmly and preventing it from being turned or shaken loose after it is set in the ground and in use. The bolts *s'* are situated within recesses formed in the casing, thus obviating the necessity of having any lugs or projections.

The supply-pipe G extends up through the lower casing, E, and is screw-threaded at its

upper extremity, by means of which it is secured to the lower part of the upper casing, A, and this supply-pipe is held from lateral or accidental displacement by means of the bridges or lugs R on the under side of the lower casing, E, as will be readily seen.

It will be seen that a hydrant constructed after the plan herein set forth is simple and compact in structure, has no complicated parts liable to get out of order, and has the valve and the working parts of the device entirely situated in the upper casing.

Having now described the construction, purpose, and advantages of my invention, and having described a preferred means of carrying the same into effect, what I believe to be new, and desire to secure by Letters Patent, and what I therefore claim, is—

In a hydrant, a nozzle-section having the valve-seat and all of the valve-working parts of the hydrant located within the nozzle-section, in combination with a main water-pipe and a lower outer casing made in sections, which lower outer casing strengthens and forms an enlarged bearing for the hydrant, and extends from the nozzle-section to and slightly below the ground-line, substantially as described.

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

CHARLES G. ETTE.

Witnesses:
JOHN D. HENGER,
HENRY MEHLIG.