

(No Model.)

B. CROWELL & W. E. HARRISON.

WATER PLUG.

No. 391,029.

Patented Oct. 16, 1888.

FIG. 1.

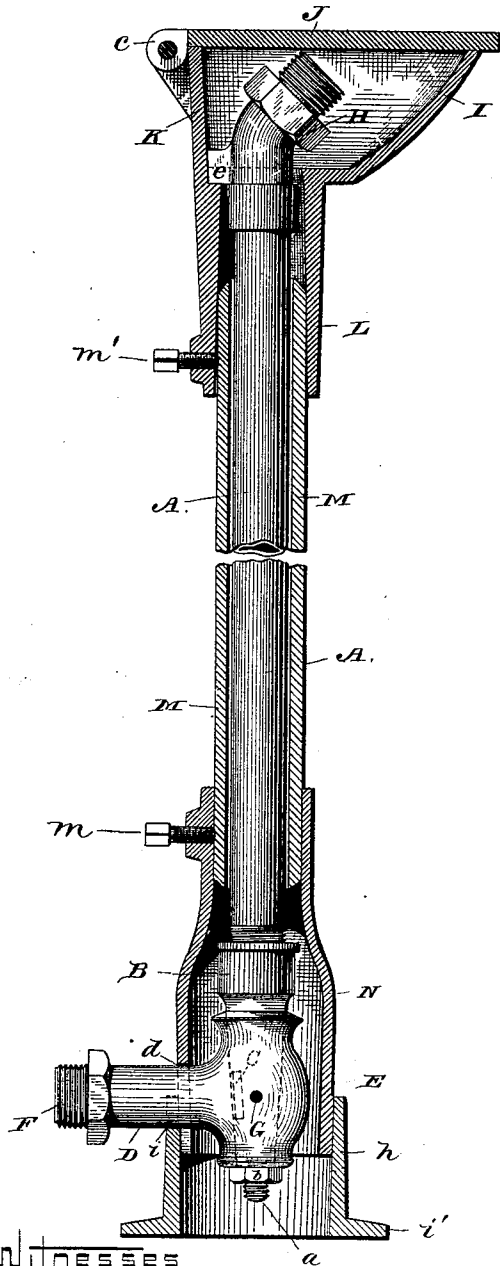


FIG. 2.

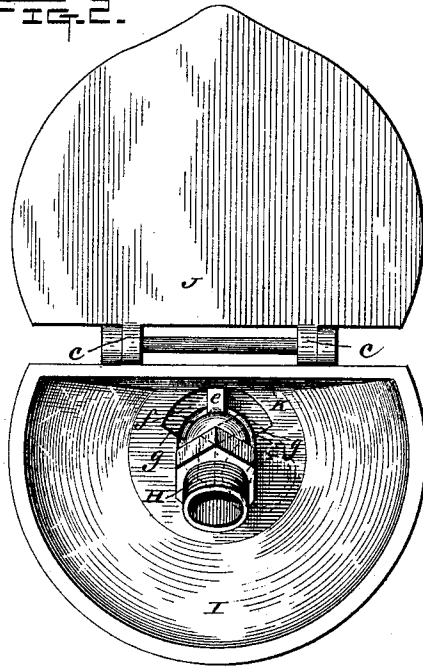
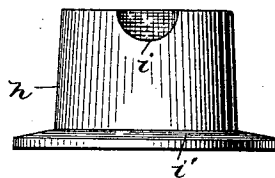


FIG. 3.



Witnesses

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per *R. L. O. Bois*
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UNITED STATES PATENT OFFICE.

BEVERLY CROWELL AND WILLIAM E. HARRISON, OF ASBURY PARK,
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WATER-PLUG.

SPECIFICATION forming part of Letters Patent No. 391,029, dated October 16, 1888.

Application filed December 5, 1887. Serial No. 256,978. (No model.)

To all whom it may concern:

Be it known that we, BEVERLY CROWELL and WILLIAM E. HARRISON, citizens of the United States, residing at Asbury Park, in the county of Monmouth and State of New Jersey, have invented certain new and useful Improvements in Water Plugs; and we do hereby 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.

Our invention relates to that class of water plugs or hydrants which are especially intended for street-washing purposes.

The object of our invention is to construct a simple, compact, and cheap water-plug for street-washing purposes.

With these ends in view our invention consists in certain novel features of construction and combinations of parts more fully described hereinafter, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a side elevation of our complete device, the casing or sheath being in cross-section; Fig. 2, a top view of the device, the cover of the bowl being thrown open—dotted lines represent the position of parts when the discharge-pipe is turned off; and Fig. 3, a detail of the separable base supporting the device when in position.

The reference-letter A indicates a vertical discharge-pipe, which is rigidly screwed into the top of the rotary valve B, forming part of an ordinary water-cock. This valve has a hollow core extending upward and communicating with the discharge-pipe, and it is also provided with a side outlet, C, which communicates with the bore of the neck D of the valve-seat E, said neck being provided with a threaded end, F, to connect with the main supply-pipe. The valve-seat E is also provided with a discharge-orifice, G, which registers with the valve-opening C, to drain the water from the main discharge-pipe A when the water is turned off.

The valve B is retained snugly in its seat by means of the screw *a* and nut *b*, and by which the wear occasioned by constant use may be taken up.

The upper extremity of the pipe A is pro-

vided with a discharge-nozzle, H, which extends obliquely upward at an angle of about forty-five degrees to the pipe A. This nozzle is surrounded by a catch basin or bowl, I, having its walls flaring outward to admit of the free rotation of the nozzle, which is used as a handle in turning the water off and on.

The basin is reduced in size by cutting off one side or segment thereof, which leaves a flat wall, K, whereby the cover J can be more strongly secured by double hinges *c c* and the area of the bowl or basin substantially reduced.

It will be observed that by having the oblique nozzle the catch-basin can be made much more shallow and of less diameter and thereby occupy less room, and yet it can be closely shut by a flat cover.

The bottom of the bowl or basin is provided with a sleeve, L, cast integral therewith and extending down over the upper end of the middle section M, of the casing. The lower end of the tubular section M is embraced by another section or sleeve, N, having its lower portion enlarged to cover the upper part of the water-cock. A semicircular recess, *d*, is cut out of the lower edge of the enlarged portion of said sleeve, within which fits the neck of the valve-seat, and when all the parts are connected prevents the casing from turning with the discharge-pipe when the same is rotated to let the water off or on.

The back of the discharge-nozzle is provided with a lug, *e*, cast integral therewith, and which moves in a curved recess, *f*, in the bottom of the catch-basin, and as this lug comes in contact with the end walls, *g*, of the recess, the rotation of the nozzle, and hence the valve, is limited to that amount actually necessary, and thus the nozzle is always kept pointing in the right direction.

The weight of the whole device is supported by the detachable base *h*, which is provided with a recess, *i*, in which the neck D of the valve-seat fits, and with an annular flange, *i'*, on its lower edge, which forms a firm bearing for the base, and the upper edge of the base fits over the lower enlarged portion of the sleeve N, and thereby serves to keep the operative parts of the cock raised clear of the

ground and completely protected from the surrounding earth.

The sleeves N and L are detachably secured to the middle tubular section of the casing by means of set-screws *m m'*.

The hydrant having been first connected with any suitable service-main and placed upon the detachable base *h*, the lower sleeve, N, is dropped down over the discharge-pipe. The middle section, M, is next placed over the discharge-pipe and secured to said lower sleeve, N, by the set-screw *m*. The catch-basin is next placed over the upper end of the middle section and allowed to slide down over the same until the discharge-nozzle is attached, after which it is lifted up to the proper adjustment and secured in place by the set screw *m'*, which passes through the sleeve L. The sections of the casing are made threadless and operate one within the other in a telescopic manner. By dispensing with the usual threads for holding the sections together the sections can be taken apart and the casing removed much more easily and quickly than when the sections are provided with threads and screwed together.

The preferred manner of constructing our device having been set forth, we will now proceed to describe its operation. After the hose has first been coupled to the mouth of the oblique nozzle the latter is rotated to the right until the lug upon the back of the nozzle comes in contact with one of the end walls of the curved recess *d*, and as the valve and discharge-nozzle are rigidly secured to the opposite ends of the discharge-pipe, this operation rotates the discharge pipe and valve and permits the water to flow freely out through the hose. In case the operator should wish to open the cock and allow the water to flow prior to attaching the hose, it will be observed that the oblique nozzle will direct the water

off away from the catch-basin and in the proper direction. In the old-style washers in most common use the water is directed straight upward and slops in every direction around the mouth of the discharge-pipe when the hose is not attached.

In turning off the water the operation just described is reversed, the lug upon the rear of the nozzle coming in contact with the opposite end wall, *g*, of the recess *d*, which leaves the side opening of the valve in communication with the outlet-orifice for draining the discharge-pipe.

It is evident that the details of construction of our device could be somewhat varied without departing from the spirit and scope of our invention. Therefore we wish it understood that we do not confine ourselves strictly to the precise construction herein shown, but consider ourselves entitled to all such variations as come within the spirit and scope of our invention.

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

The combination, in a water-plug, of a casing composed of adjustable sections provided with a detachable base portion, *h*, having a lateral flange, *i'*, and recess *i* in its upper edge, with the lower section, *n*, provided with a recess, *d*, registering with the recess in the base *i*, and a pipe, D, embraced by said lower section and base portion, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

BEVERLY CROWELL.
WILLIAM E. HARRISON.

Witnesses:

DAVID HARVEY, Jr.,
E. G. S. HARRISON.