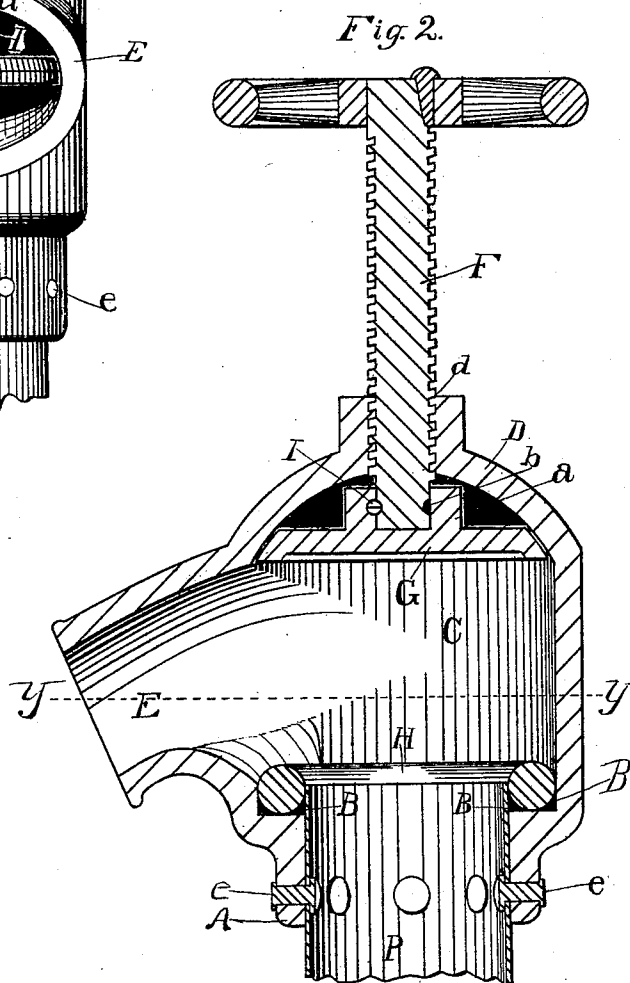
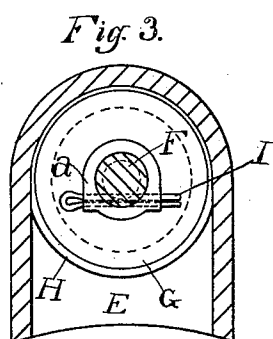
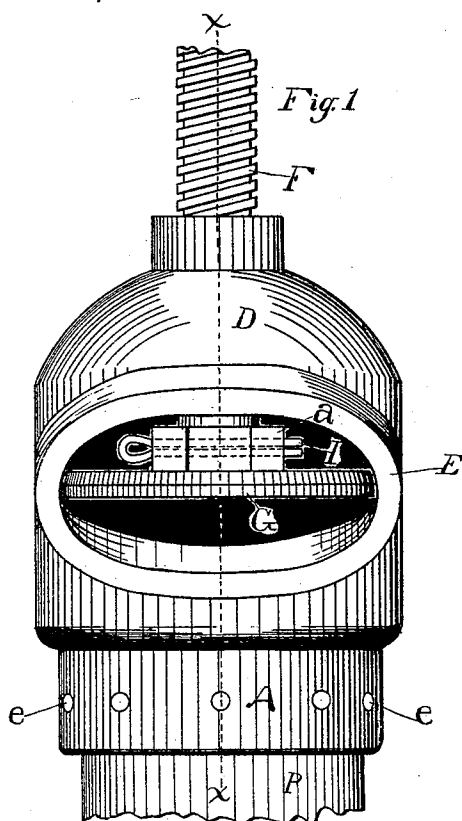


(No Model.)

W. LACY, Jr.
IRRIGATING HYDRANT.

No. 449,161.

Patented Mar. 31, 1891.



Witnesses
M. C. Sales
Alfred J. Townsend.

Inventor
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by
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UNITED STATES PATENT OFFICE.

WILLIAM LACY, JR., OF LOS ANGELES, CALIFORNIA.

IRRIGATING-HYDRANT.

SPECIFICATION forming part of Letters Patent No. 449,161, dated March 31, 1891.

Application filed June 10, 1890. Serial No. 354,920. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LACY, JR., a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Improvement in Irrigating-Hydrants, of which the following is a specification.

My invention is an improvement upon an irrigating-hydrant patented to me by Letters Patent No. 391,475, dated October 23, 1888.

My said patented hydrant is objectionable in that it is formed of two parts, which must be secured together by screw-bolts, and the cost of fitting it together is a considerable item of expense. It is further objectionable in that it discharges all around, thus necessitating the construction of an expensive catch-basin about the hydrant to receive the water and direct it into the proper irrigating-ditch.

The object of my invention is to so construct the hydrant that the head can be cast integral and afterward be supplied with the valve-stem and valve, and without further addition of parts can be attached to the common sheet-iron or other service-pipes ordinarily in use in surface-irrigation; also, to so construct the head that the water will be discharged only upon one side of the pipe, instead of all around, as in my former patent.

I am aware of the faucet patented to W. P. Clark, November 2, 1869, No. 96,394; but such faucet is not adapted for the purpose of my invention, for the reason that the internal cross-sectional area of the neck is larger than the face of the valve, in order that the valve may be introduced into the discharge-chamber through such neck. This necessitates the use of an additional and separate stem portion, in order to close the neck and form a seat for the valve. By my invention I avoid the necessity of such additional and separate stem-piece.

My invention comprises, essentially, the combination of the ordinary valve-stem, the ordinary valve-plate detachably secured thereto, and an integral head provided with the discharge-chamber larger in internal cross-sectional area than the valve-plate, the neck adapted for attachment to the hydrant service-pipe and smaller in internal cross-sectional area than the valve-plate, and the discharge-spout having its greatest internal

diameter parallel with and substantially equal to the diameter of the valve-plate.

The accompanying drawings illustrate my invention.

Figure 1 is a front elevation of my improved irrigating-hydrant secured to the upright hydrant service-pipe, the valve being raised into position to remove the valve-plate. The upper end of the valve-stem is broken away to contract the view. Fig. 2 is a vertical mid-section on line *xx*, Fig. 1. Fig. 3 is a cross-section on line *yy*, Fig. 2.

A B C D represent the main body of the hydrant-head.

A is the neck, adapted for attachment to the pipe P.

B is the shoulder formed at the junction of the neck and discharge-chamber C, to form a seat for the valve and valve-packing H, the same as in my former hydrant.

D is the dome, in which is the valve-stem seat *d*, the same as in my former hydrant.

E is the discharge-spout, which is slightly curved downward to give proper direction to the stream.

F is the valve-stem, and G the valve-plate detachably secured thereto by the pin I, inserted through the boss *a* of the plate into the annular groove *b* in the stem.

ee represent rivets securing the neck to the service-pipe.

In practice the hydrant-head is cast and the valve-stem seat is threaded to receive the stem F, which is then screwed therethrough. The valve-plate G is then inserted into the chamber C through the side spout E. The end of the stem is then inserted into the boss *a* and secured by the pin or key I. The head is then ready to be attached to the pipe P. In attaching it to the pipe I preferably allow the pipe to project above the shoulder B to form a seat for the rubber packing-ring H, as in my former hydrant. The ring H is then inserted through the spout and fitted into such seat. The hydrant is then ready for use. If the ring or valve-plate become damaged, they may be easily removed through such spout and may be replaced by new.

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

The irrigating-hydrant set forth, compris-

ing the combination of the ordinary valve-stem, the ordinary valve-plate detachably secured thereto, and an integral head provided with the discharge-chamber larger in internal
5 cross-sectional area than the valve-plate, the neck adapted for attachment to the hydrant service-pipe and smaller in internal cross-sectional area than the valve-plate, and the dis-

charge-spout having its greatest internal diameter parallel with and substantially equal to the diameter of the valve-plate.

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