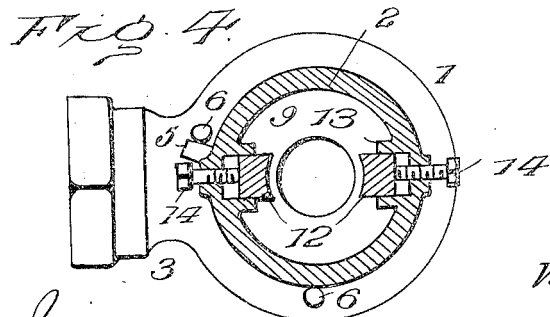
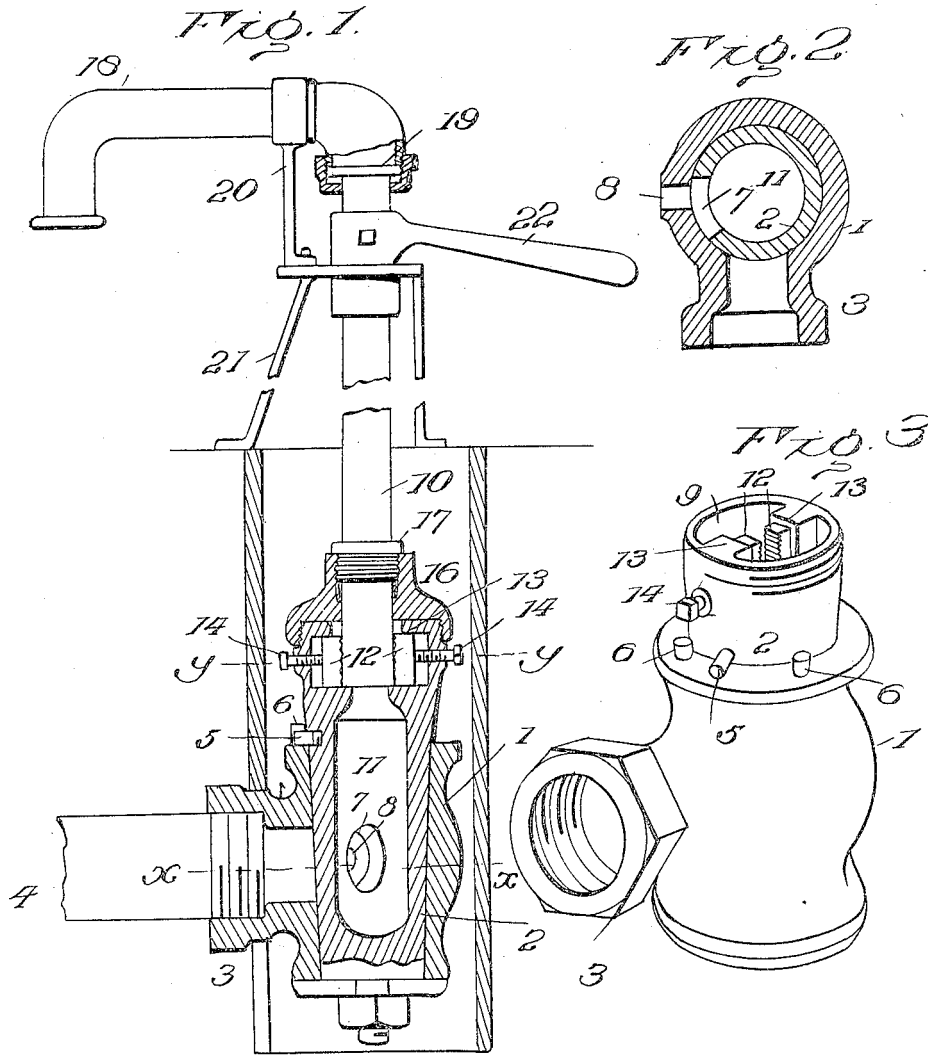


No. 808,859.

PATENTED JAN. 2, 1906.

V. H. MILLS.
HYDRANT.

APPLICATION FILED DEC. 14, 1904.



Inventor

V. H. Mills

Witnesses

W. N. Woodson

By

W. H. H. H. H. H.

Attorneys

UNITED STATES PATENT OFFICE.

VIRGIL H. MILLS, OF HUBBARD, TEXAS.

HYDRANT.

No. 808,859.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed December 14, 1904. Serial No. 236,833.

To all whom it may concern:

Be it known that I, VIRGIL H. MILLS, a citizen of the United States, residing at Hubbard, in the county of Hill and State of Texas, have invented certain new and useful Improvements in Hydrants, of which the following is a specification.

This invention relates to the type of yard-hydrants provided with a vent for automatically draining the pipe to prevent freezing in cold weather, and has for its object to devise a novel joint or coupling means between the spout or discharge-pipe and the plug of the cock, whereby ordinary piping and a waste-cock may be employed.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings.

While the invention may be adapted to different forms and conditions by changes in the structure and minor details without departing from the spirit or essential features thereof, still the preferred embodiment thereof is shown in the accompanying drawings, in which—

Figure 1 is a view, partly in elevation and partly in section, of a hydrant embodying the invention. Fig. 2 is a transverse section of the waste-cock on the line *x x* of Fig. 1. Fig. 3 is a perspective view of the waste-cock. Fig. 4 is a section of the hydrant on the line *y y* of Fig. 1.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The waste-cock is of ordinary construction and comprises the casing 1 and valve-plug 2, the casing being provided with an end 3 for coupling to the service-pipe 4. The plug 2 is limited in its movement by pin 5, projected laterally therefrom, and a pair of pins 6, extended upward from the casing 1. In one position of the plug 2 its opening 7 registers with the opening through the coupling end 3, and in another position the opening 7 registers with the waste 8, through which the water standing in the hydrant drains.

The upper end of the plug 2 is provided with a recess 9 to receive the lower end of the discharge-pipe 10, the latter being connected thereto in any manner, so as to turn therewith and maintain a tight joint. The re-

cess 9 is in communication with the space 11, formed within the plug 2, and with which the opening 7 communicates. In the preferable construction the recess 9 is of a size to receive approximately an inch and a quarter to an inch and a half pipe and smaller, thereby making provision for coupling to the plug any size of pipe within certain limits. Clamp-blocks 12 are provided at opposite sides of the recess 9 and are held in place by guides 13, the latter being in the form of boxes projected from the walls of the recess 9 and open upon their inner sides to receive the blocks 12. Set-screws 14, threaded into openings in the upper portion of the plug 2, have their inner ends in engagement with the blocks 12 to force the latter inward when it is required to clamp the pipe 10. To prevent slipping and to insure positive engagement between the blocks 12 and pipe 10, the inner or gripping faces of said blocks are toothed or serrated. A reducer-fitting 16 is threaded to the upper end of the plug and its upper end receives a packing-gland 17, by means of which a water-tight joint is maintained between the pipe 10 and the fitting, so as to prevent possible leaking at the joint.

While the construction illustrated admits of the employment of different styles of pipe, and for this reason is preferred, nevertheless any means may be resorted to for coupling the pipe 10 to the plug 2 which will admit of the employment of an ordinary waste-cock and water-pipe in the formation of a hydrant embodying the invention.

The bib or nozzle 18 at the end of the discharge-pipe 10 is connected to the latter by a swivel-joint 19 of any type, whereby provision is had for turning said pipe 10 for opening and closing the hydrant without changing the position of the bib 18. A bracket 20 receives the bib 18 and is connected to a stand 21, which may be a support of any kind, according to the make of hydrant. A handle 22 is secured to the upper portion of the pipe 10 for convenience of turning said pipe, according as it is required to open or close the hydrant.

Having thus described the invention, what is claimed as new is—

1. In a hydrant, the combination of a waste-cock having a turn-plug provided with a recess in its upper end in communication with the interior of said plug, a pipe having its lower end inserted in said recess, clamp-blocks at opposite sides of the recess, set-

screws threaded to the plug and adapted to force the clamp-blocks in engagement with the pipe to grip the latter, and a fitting for securing a tight joint between the pipe and
5 plug.

2. In a hydrant, the combination of a waste-cock provided with a turn-plug having a recess in its upper end provided with guides
10 at opposite points, clamp-blocks held in place by said guides, set-screws for forcing the clamp-blocks inward, a pipe having its lower

end inserted in said recess and held fast by the clamp-blocks, and means for maintaining a tight joint between said pipe and plug, substantially as set forth. 15

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

VIRGIL H. MILLS. [L. s.]

Witnesses:

P. A. WHITWORTH,
W. A. POTTS.