Feb. 9, 1926. 1,572,033

A. B. PARKER

FIRE HYDRANT

Filed June 15, 1925

Fig. 1.

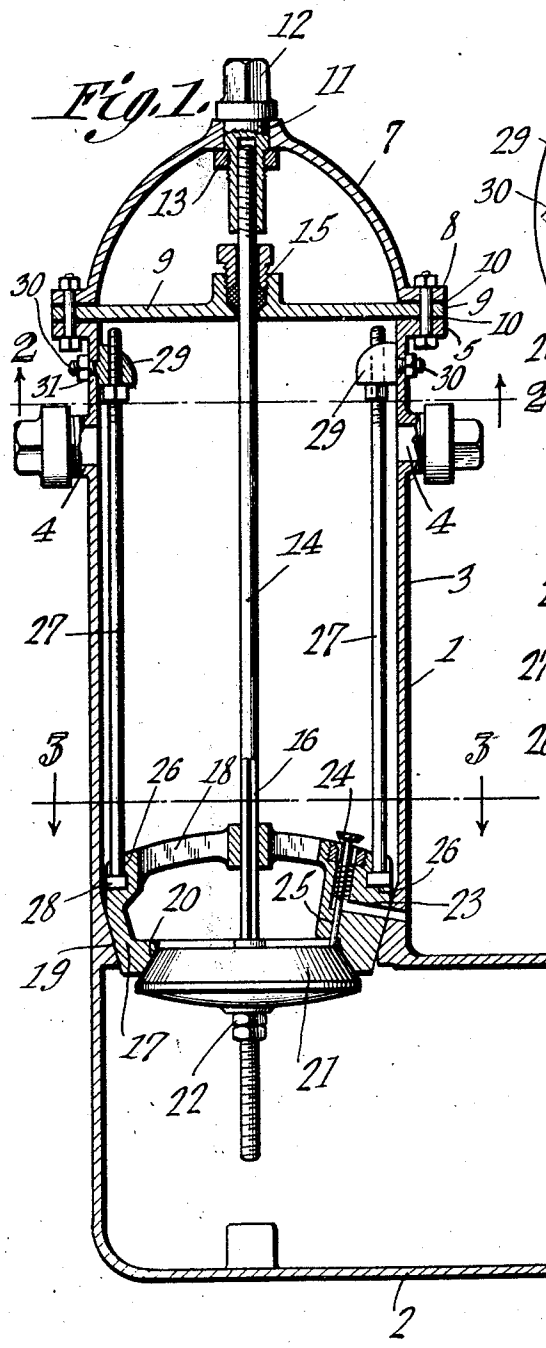


Fig. 2.

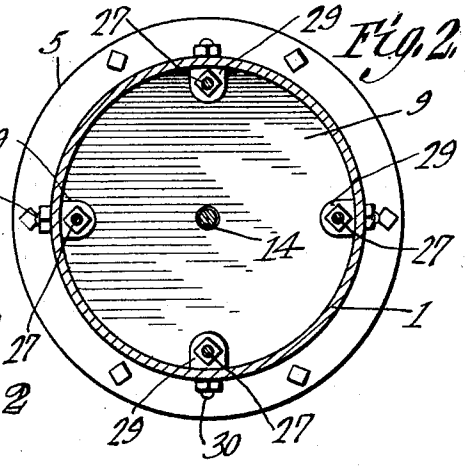
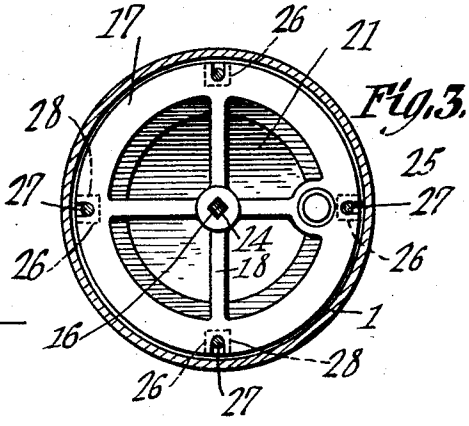


Fig. 3.



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UNITED STATES PATENT OFFICE.

ALONZO B. PARKER, OF SYLACAUGA, ALABAMA.

FIRE HYDRANT.

Application filed June 15, 1925. Serial No. 37,301.

To all whom it may concern:

Be it known that I, ALONZO B. PARKER, a citizen of the United States, residing at Sylacauga, in the county of Talladega and State of Alabama, have invented a new and useful Fire Hydrant, of which the following is a specification.

This invention relates to hydrants and more particularly to fire hydrants.

The object of the invention is to construct a hydrant of this character so that it may be repaired without digging up the street or sidewalk and without taking the hydrant apart down in the ground.

Another object is to provide a hydrant of this character equipped with a valve casing and valve-seat which may be securely held in operative position and readily removed when desired for repairs or otherwise.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings:—

Figure 1 represents a vertical section of a fire hydrant constructed in accordance with this invention and shown connected with a water main;

Fig. 2 is a transverse section taken on the line 2—2 of Fig. 1; and

Fig. 3 is a similar view taken on the line 3—3 of Fig. 1.

In the embodiment illustrated an L-shaped casing 1 is shown, the short arm 2 of which is designed to be secured to a water main M in any suitable manner. The long or upright arm 3 is equipped with the usual plug openings 4 and is divided at its upper end with a laterally extending flange 5 between which and a flange 8 on a cap 7 is clamped a plate 9, packing 10 being preferably arranged between these members to insure a water tight connection, the cap 7 has an opening in the top in which a plug 11 is swiveled and which has its outer end 12 made angular to receive a wrench, its inner end being threaded externally to receive a nut 13. This inner plug end is made hollow and internally threaded to receive the threaded end of a valve stem 14 which passes through a gland 15 in the plate 9. This valve stem 14 is made angular in cross section at its lower end as shown at 16 and passes through a correspondingly shaped opening in a spider 18 of a valve seat 17. This angular formation of the end 16 adapts the valve stem 14 to be reciprocated longitudinally without being turned within the valve cage.

The valve seat 17 is removably mounted on a seat 19 formed in the lower end of the casing arm 3 and is engaged by a beveled valve 21 carried by the stem 14 and secured in adjusted position on said stem by a lock nut 22.

The valve or seat 17 is provided with a drain conduit 23 normally closed by a spring pressed valve 24 a stem 25 of which projects into the path of valve 21 so that when the valve 21 is seated to close the casing 3 valve 24 is opened to permit any water which may be in said casing to drain out through the conduit 23.

The valve seat 17 is provided with a plurality of seats 26 four being here shown and which are designed to receive the heads 28 of rods 27 four of which are shown which have threaded engagement at their upper ends with lugs 29, said lugs being removably mounted in the side walls of the casing 3 adjacent plate 9. As shown these lugs 29 have laterally extending threaded studs 30 which extend through openings in the side walls of the casing 3 and the lugs in operative position. In the use of this hydrant the cap 7 having been removed together with plate 9 the valve seat 17 with the valve 21 connected therewith is mounted on the seat 19 in the casing as shown in Fig. 1. The rods 27 having their heads 28 mounted in undercut recesses or pockets 26 in the valve seat 17 are engaged with the lugs 29 and said lugs screwed into position. After this has been done the nuts on these rods are tightened up compressing the seat 17 tightly onto its seat. After the cap 7 and plate 9 have been replaced and screwed into position the valve 21 may be opened or closed by turning the plug 12. When valve 21 is drawn up tightly on to its seat as shown in Fig. 1 the valve stem 25 engages said valve 21 and opens the valve 24 against the tension of its spring and thus permits any water which may have collected in the casing 3 to drain out through the outlet 23.

When the hydrant is to be used the hose is connected with the outlets 4 in the usual manner and the valve 21 opened to permit the water to flow through the casing 3 and pass out of the outlets 4.

From the above description it will be obvious that the valve 21 and the seat 17 may be readily removed for repairs or otherwise without molesting the surrounding earth and by simply removing the cap 7 and plate 9 and after repairs have been made they may be quickly replaced ready for use.

A hydrant constructed as shown herein and described does away with all screws and threads in the casing and seat 17.

I claim:—

A fire hydrant comprising a substantially L-shaped casing, one arm arranged vertically and equipped at its upper end with a closure, a valve seat removably mounted at the junction of said arms and having a spider with a central angular aperture therein, a valve for engaging said valve seat and having a stem angular in cross section extending through said opening, said stem extending up into the closure, rotatable means for longitudinally moving said stem to open and close said valve, rods connected with said cage, lugs detachably mounted in the upper end of said casing and having apertures to receive said lugs, and means on the rod for forcing the cage onto its seat to provide a water tight joint.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

ALONZO B. PARKER.