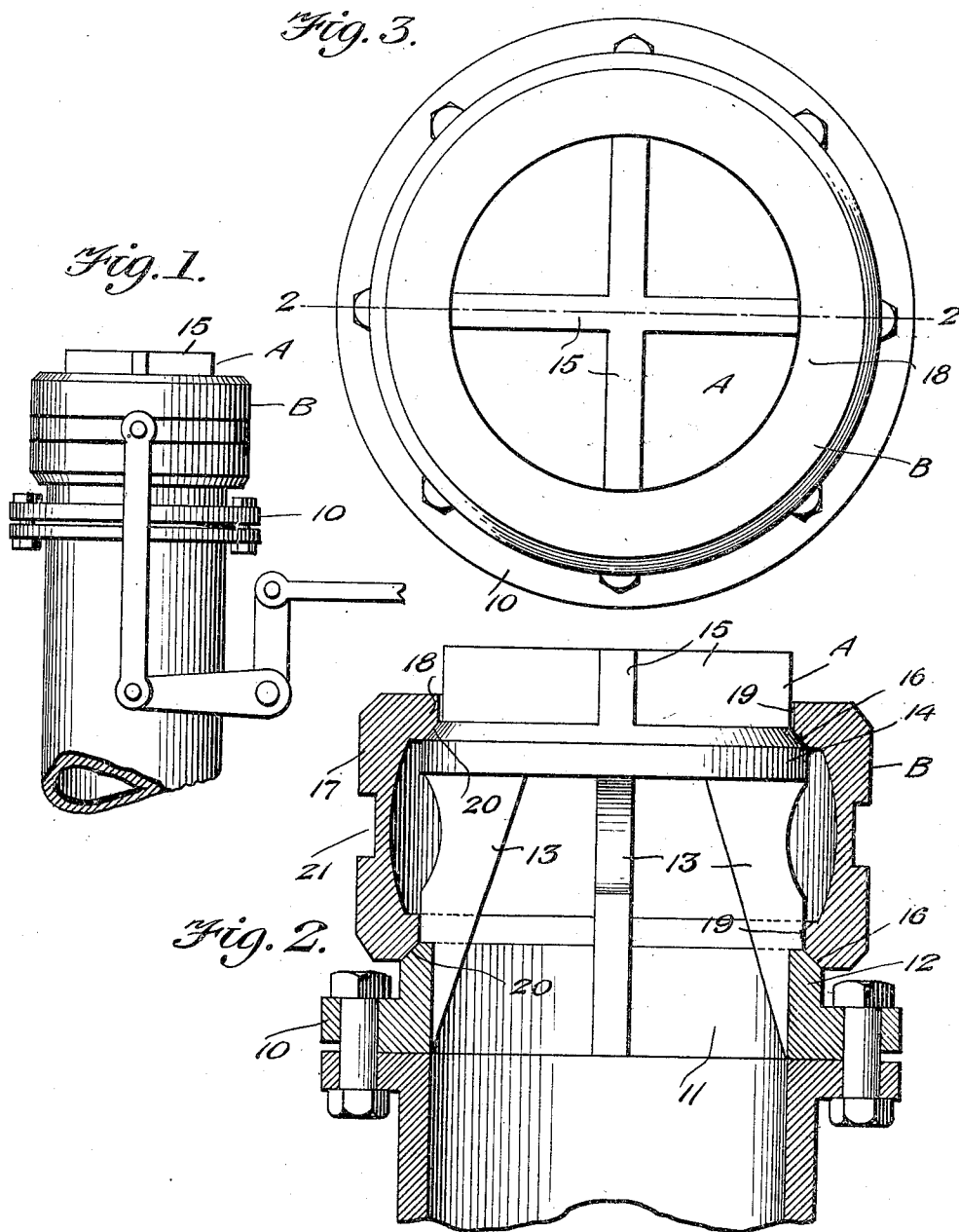


W. J. SHARKEY, DEC'D.
W. S. PETTIT, ADMINISTRATOR.
VALVE.

APPLICATION FILED JUNE 8, 1920.

Patented Mar. 29, 1921.
2 SHEETS—SHEET 1.

1,373,360.



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WITNESS:

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Fig. 4.

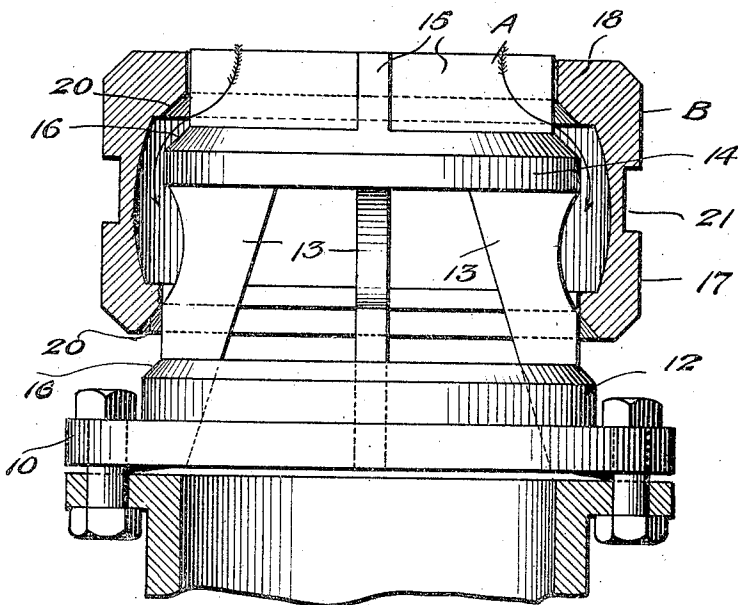
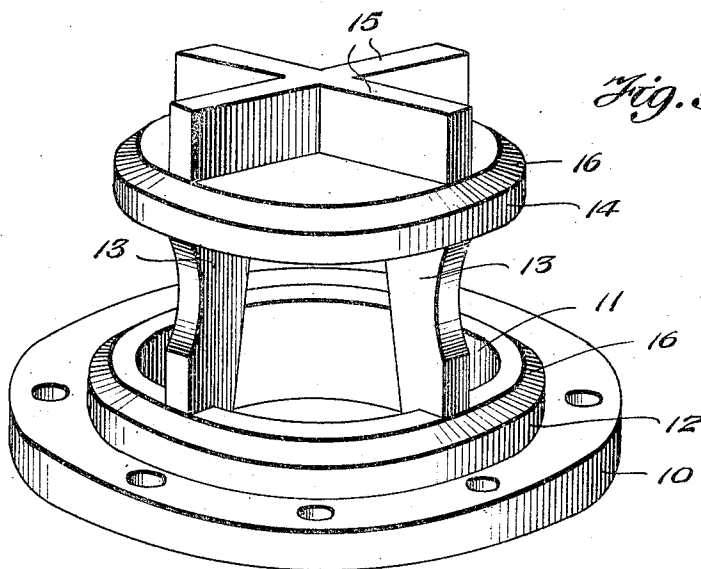


Fig. 5.



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UNITED STATES PATENT OFFICE.

WILLIAM J. SHARKEY, OF PINE BLUFF, ARKANSAS; W. S. PETTIT ADMINISTRATOR
OF SAID WILLIAM J. SHARKEY, DECEASED.

VALVE.

1,373,360.

Specification of Letters Patent. Patented Mar. 29, 1921.

Application filed June 8, 1920. Serial No. 387,417.

To all whom it may concern:

Be it known that I, WILLIAM J. SHARKEY, a citizen of United States of America, residing at Pine Bluff, in the county of Jefferson and State of Arkansas, have invented new and useful Improvements in Valves, of which the following is a specification.

This invention relates to locomotive throttle valves, and aims to provide a construction which is easy of manipulation, and one which need not be removed from the stand pipe to permit inspection of the boiler.

Valves for the above mentioned purpose with which I am familiar, include an elbow which must be removed from the steam dome to permit inspection of the boiler, and this obviously requires considerable time and labor. My purpose, is to construct a valve to eliminate this trouble.

An important object of the invention, resides in the simplicity of the construction of the valve, thus utilizing less material, and occupying less room when in position for use, than throttle valves in present day use.

The nature and advantages of the invention will be better understood when the following detail description is read in connection with the accompanying drawings, the invention residing in the construction, combination and arrangement of parts as claimed.

In the drawings forming part of this application, like numerals of reference indicate similar parts in the several views, and wherein:—

Figure 1 is a view in elevation of the valve constructed in accordance with my invention, showing the valve associated with the stand pipe of a locomotive.

Fig. 2 is a vertical sectional view taken on line 2—2 of Fig. 3.

Fig. 3 is a top plan view of the valve.

Fig. 4 is a view similar to Fig. 2 showing the opened position of the valve.

Fig. 5 is a perspective view of the valve cage.

The valve constructed in accordance with my invention, embodies but two parts, a valve cage indicated generally at A, and the valve B. The cage A includes a circular base 10 adapted to be secured in any suitable manner upon the upper end of a stand pipe, of the dry pipe of a locomotive, the

base having an enlarged central opening 11 about the edge of which rises a short annular flange 12. A plurality of standards 13 project upwardly and inwardly from the wall of the opening 11 of the base, and support on their upper ends, a top plate 14 which is of smaller diameter than the base 10, and spaced therefrom the desired distance. Arranged upon the plate 14 are crossed guide elements 15 for the valve B, these elements being secured to the top in any suitable manner and in the form of strips arranged edgewise, and of a length substantially equal to the diameter of the upper side of top plate 14. Both the flange 12 and the top plate 14, are beveled as at 16, thus providing an upper and lower valve seat of the valve B.

The valve B consists of a cylindrical member of a size to fit nicely over the cage A, the valve having inwardly directed upper and lower flanges 18. The inner periphery of each flange is provided with a straight portion or edge 19, and a beveled portion 20 so that the valve 17 readily accommodates itself to the valve seats 16. The straight edge or portions 19 coöperate with the standards 13 and with the guiding elements 15 to maintain a proper position with respect to the valve seat when the valve is moved to an open position. The valve 17 is also provided with an annular groove 21 arranged intermediate its ends, to accommodate the valve operating means of well known construction.

In practice, the valve 17 is raised and lowered to an opened and closed position in the usual well known manner, and when the valve is in an opened position as shown in Fig. 4, the steam enters the pipe at both the top and bottom of the valve, as indicated by the arrows in Fig. 4. When the valve is elevated to an open position, the straight edges 19 at the bottom of the valve contact the adjacent edges of the standards 13, while the straight edges of the upper end of the valve contact the adjacent edges of the guiding elements 15, and in this manner the valve is maintained in proper position with regard to the valve seats 16 so as to properly and effectively engage the seats when the valve is lowered. The construction obviously eliminates the elbow hereinabove referred to in connection with other valves of this type and could be readily substituted

for this type of valve without any change in the construction of the pipe with which it is associated. The simplicity of the construction is such that it occupies but a small amount of space, and also provides for inspection of the boiler without removing the valve from the pipe. I desire to have it understood that the valve can be varied in size and configuration without departing from the spirit of the invention.

While it is believed that from the foregoing description, the nature and advantages of the invention will be readily apparent, I desire to have it understood that I do not limit myself to the details herein shown and described and that such changes may be resorted to when desired as fall within the scope of what is claimed.

What I claim is:—

1. A valve of the class described comprising a cage having spaced upper and lower valve seats, and a cylindrical valve member movable on said cage and having beveled portions to engage said seats when the valve is in closed position.

2. A valve of the character described comprising a cage having spaced upper and lower valve seats, and a cylindrical shaped valve slidable on said cage and having beveled portions to normally engage said seats, and said valve having an annular groove intermediate its ends for the purpose specified.

3. A valve of the class described comprising a cage having spaced upper and lower valve seats; a cylindrical valve member surrounding said cage and having beveled portions to normally engage said seats, said cage comprising means on which said valve member is slidable for guiding the valve in its movements.

4. A valve of the class described comprising a cage having upper and lower valve

seats, a cylindrical valve member surrounding the cage and having beveled portions to normally engage said seats, said valve having an annular groove intermediate its ends, said cage comprising means on which said valve member is slidable for guiding the valve in its adjustments.

5. A valve of the class described comprising a cage, and a cylindrical valve member surrounding said cage, said cage including spaced valve seats, the valve having beveled portions for normally engaging said seats, and transversely disposed guiding elements arranged above the uppermost seat cooperating with said valve to guide the latter in its adjustments.

6. A valve of the class described comprising a cage, and a cylindrical valve surrounding the cage, said cage including upper and lower valve seats and standards interposed between said seats and connecting the latter, said valve having upper and lower inwardly directed flanges, transversely disposed guiding elements arranged above the uppermost valve seat, and cooperating with said standards, to guide the valve in its adjustment, and said flanges having beveled portions normally contacting said seats.

7. A valve of the class described comprising a cage, and a cylindrical valve surrounding the cage, said cage including a base, having an opening therein, a flange rising from the base about said opening, a top plate, and standards connecting the plate with said base, said flange and plate being beveled to provide valve seats, said valve having beveled portions and normally engaging said seats, and an annular groove arranged intermediate the ends of the valve, and means on said cage for guiding the valve in its adjustments.

In testimony whereof I affix my signature.

WILLIAM J. SHARKEY.