C. O. LANDGREBE.

VALVE FOR MOTORS AND THE LIKE.

APPLICATION FILED SEPT. 30, 1916.

1,400,488. Patented Dec. 13, 1921.

Fig. 1.

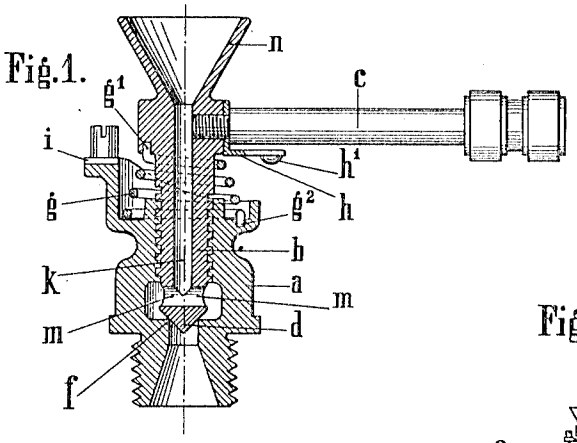


Fig. 2.

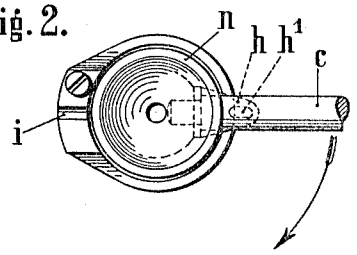
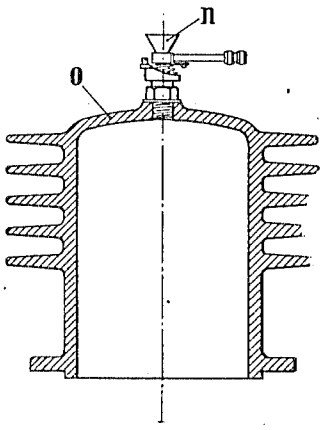


Fig. 3.



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UNITED STATES PATENT OFFICE.

CARL OTTO LANDGREBE, OF DRESDEN, GERMANY.

VALVE FOR MOTORS AND THE LIKE.

1,400,488. Specification of Letters Patent. Patented Dec. 13, 1921.

Application filed September 30, 1916. Serial No. 123,058.

(GRANTED UNDER THE PROVISIONS OF THE ACT OF MARCH 3, 1921, 41 STAT. L., 1313.)

To all whom it may concern:

Be it known that I, CARL OTTO LANDGREBE, subject of the King of Prussia, residing at Dresden—A., Saxony, Germany, have invented certain new and useful Improvements in Valves for Motors and the like, of which the following is a specification.

This invention relates to a valve for motors, tanks for liquids or gases, or for other purposes and, particularly, to a valve adapted to be used instead of compression cocks having ground in spigots used heretofore on motors. As is well known, these cocks very readily burn fast so that the spigot is destroyed when the cock is forced open; also, they readily leak and then have to be reground with the result that the bore holes generally do not register. In general, there is no guarantee that such faucets will remain permanently free from leaks.

A primary object of this invention is to obviate this defect.

According to the invention the valve spindle which is screwed into the casing terminates in a conical point which bears on the sharp edge of a seat and thus establishes a tight closure. In order that the valve may be automatically closed after it has been opened, a spring of a spiral shape is provided which automatically returns the spindle onto its seat.

Further, the spindle is provided in such a manner with a longitudinal hole and with transverse holes that it establishes a tight closure in its closed position, while in its open position it allows liquids or gases to enter into the tank in question or to escape therefrom.

A funnel is arranged on the outer end of the valve spindle for facilitating the introduction of liquid.

The invention consists in the construction, arrangement and combination of parts described hereinafter and pointed out in the claim.

One illustrative embodiment of the invention and modifications thereof are represented by way of example in the accompanying drawing, wherein:—

Figure 1 is a sectional elevation of a vertical valve according to the invention,

Fig. 2 is a top plan view thereof, and

Fig. 3 is a section of a motor cylinder carrying such a valve.

Referring to Figs. 1 and 2, the valve comprises the casing a in which the spindle b can be screwed up and down by means of the handle c. The spindle runs out into a conical point d which is seated on an annular sharp-edged seat f. In order that the valve spindle may be automatically returned into its closing position after the valve has been opened, a spiral spring g is arranged with its one end g^1 attached to the valve spindle and its other end g^2 to the valve casing. When the valve is being opened, thus when the spindle is turned clockwise as seen in Fig. 2, this spring g is tensioned and automatically returns the spindle into its closing position on release of the handle. Further, the handle c or the spindle b carries a plate spring h having a projection h^1 on its under side, while in the casing a is a notch i into which the projection h^1 snaps when the spindle is suitably turned into its open position, so that the valve spindle is thereby held. Lastly, the valve spindle b is provided with a longitudinal bore k, transverse holes m and with a funnel n at its outer end, so that liquids or the like can be supplied and compressed gases or the like can escape out of the cylinder.

Fig. 3 shows a valve like that shown in Fig. 1 mounted on the upper end of a cylinder o.

I claim:—

In a valve of the character described, the combination of a casing having a sharp edge seat, a threaded spindle provided with a longitudinal bore screwed into the casing and having a conical end adapted to be seated on said seat, a lateral handle for

turning said spindle to seat and unseat said conical end, a spring secured at one end to the spindle and at the other end to the casing for automatically moving said valve from the open to the closed position, and a flat spring secured to said spindle and having a projection adapted to snap into a notch in the casing when the valve is moved into its open position, and a funnel at the open end of said spindle communicating with said longitudinal bore.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CARL OTTO LANDGREBE.

Witnesses:

WALTHER LEYCUSETTER,

HANS KEITEL.