

No. 676,444.

Patented June 18, 1901.

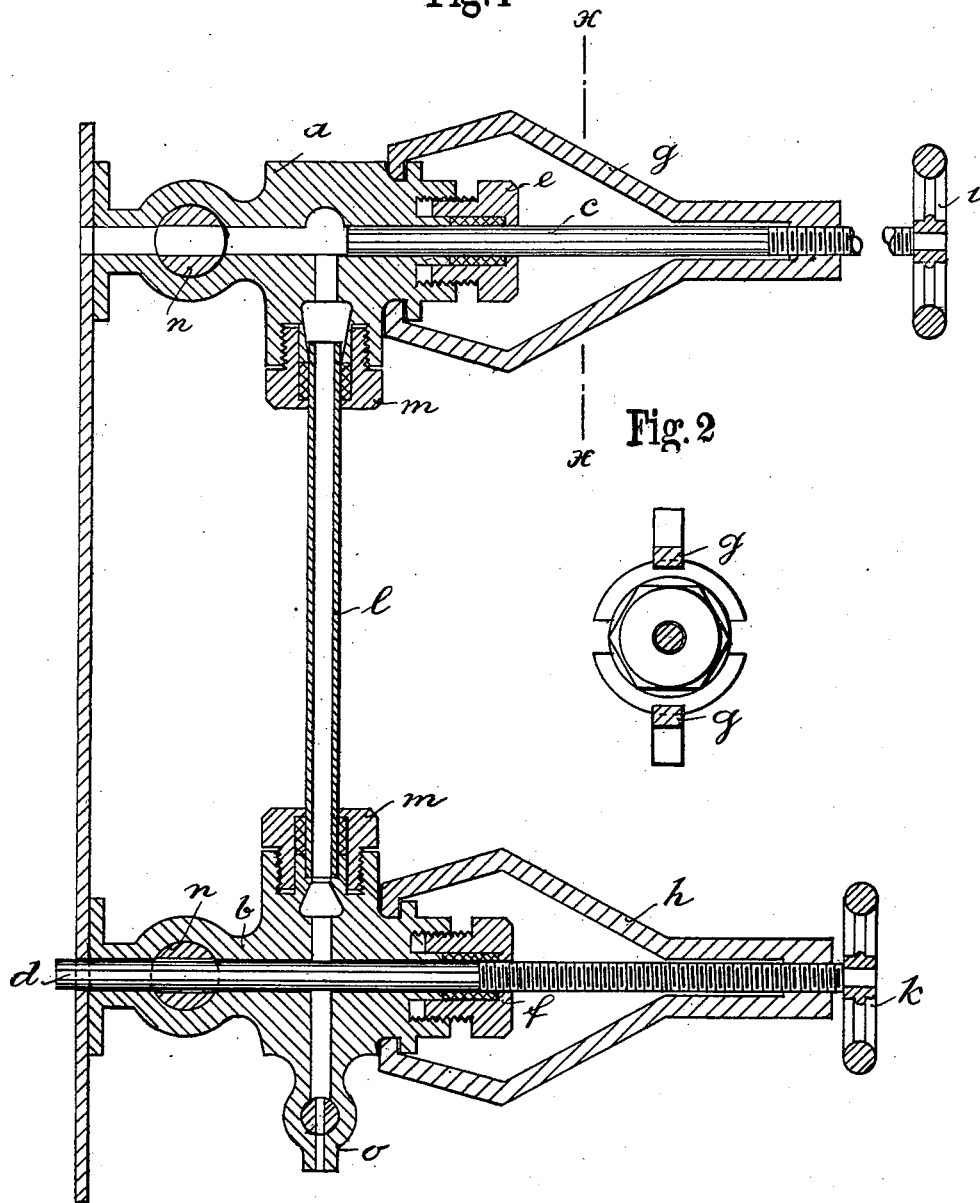
R. B. PAUL.

DEVICE FOR CLEANING THE PASSAGES OF WATER GAGES AND COCKS.

(Application filed Nov. 6, 1900.)

(No Model.)

Fig. 1



Witnesses:

L. Staaden.

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per

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att'y.

UNITED STATES PATENT OFFICE.

REINHARD BRUNO PAUL, OF CRIMMITZSCHAU, GERMANY.

DEVICE FOR CLEANING THE PASSAGES OF WATER GAGES AND COCKS.

SPECIFICATION forming part of Letters Patent No. 676,444, dated June 18, 1901.

Application filed November 6, 1900. Serial No. 35,685. (No model.)

To all whom it may concern:

Be it known that I, REINHARD BRUNO PAUL, a subject of the King of Saxony, residing at Crimmitzschau, in the Kingdom of Saxony and German Empire, have invented new and useful Improvements in Devices for Cleaning the Passages of Water Gages and Cocks, of which the following is a specification.

My invention has reference to devices for cleaning out the longitudinal passages of valves, cocks, and the like, and particularly for those employed in connection with water-gages.

To this end my invention consists, essentially, in a valve having an inlet-passage for fluid, an outlet-passage leading from the inlet-passage, and a valve-spindle fitting the inlet-passage and adapted to close off the outlet-passage and to be projected through the inlet-passage. By this means I am enabled to clean with certainty the inlet-passage of the valve, while at the same time the valve-spindle answers as a means for closing off the outlet-passage from the inlet-passage.

The nature of my invention will best be understood when described in connection with the accompanying drawings, in which—

Figure 1 represents a vertical section of a water-gage embodying my improved valves. Fig. 2 is a section on the line *x x*, Fig. 1.

Similar letters of reference designate corresponding parts throughout both views of the drawings.

Referring to the drawings, wherein I have shown my improved valves applied to a water-gage, the letters *a* and *b* designate the bodies of the valves, which are bored out horizontally or longitudinally throughout their lengths to form inlet-passages and are also formed with transverse outlet-passages. To the bores of the inlet-passages are fitted screw-spindles *c* and *d*, which pass through stuffing-boxes *e* and *f*, attached to the bodies *a* and *b* of the valves, and are also supported by brackets *g* and *h*, provided at their outer ends with internal screw-threads engaging with the fitted portions of the spindles. The spindles are turned by hand-wheels *i k* or other suitable means, so as to impart longitudinal movement to the spindles in one direction or the other. When both spindles *c d* are in the position of spindle *c*, as shown at the top of Fig. 1, then free communication

is established between the longitudinal and the transverse passages in both valves; but if either of the spindles *c d* is screwed inwardly the transverse passage of the corresponding valve is first closed off from the longitudinal passage, and then any or all accumulated material is forced through the longitudinal passage and into the boiler without any risk or danger on the part of the attendant in view of the fact that the screw-spindles are made long enough to project somewhat beyond the receiving ends of the inlet-passages.

In the form of water-gage herein shown, *l* is the tube, *m m* the two stuffing-boxes at its connection with the casing, *n n* the two stop-cocks for quickly shutting off the connections in case of damage to the water-tube, and *o* the blow-off cock, all of the usual and well-known construction.

It is of course to be understood that I do not wish to limit myself to the particular construction shown for carrying and guiding the spindle, as it is evident that any other suitable construction could be employed; nor do I wish to restrict myself to the application of this valve to a water-gage.

What I claim as new is—

1. The combination with a valve having an inlet-passage and an outlet-passage leading from said inlet-passage, of a valve-spindle, closely fitting the bore of the inlet-passage and adapted to cross the outlet-passage for closing off the same, and means for projecting the valve-spindle through and beyond the receiving end of the inlet-passage, substantially as described.

2. The combination with a valve having an inlet-passage and an outlet-passage leading from said inlet-passage, of a screw-spindle fitting the bore of the inlet-passage and adapted to cross the outlet-passage, and said screw-spindle extending beyond the valve, and a bracket attached to the valve and provided with a screw-thread engaging the thread of the spindle, substantially as described.

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

REINHARD BRUNO PAUL.

Witnesses:

RUDOLPH FRICKE,
CHAS. J. BURT.