No. 654,236. Patented July 24, 1900.

J. DRECKMANN.

VALVE.

(Application filed Jan. 16, 1900.)

(No Model.)

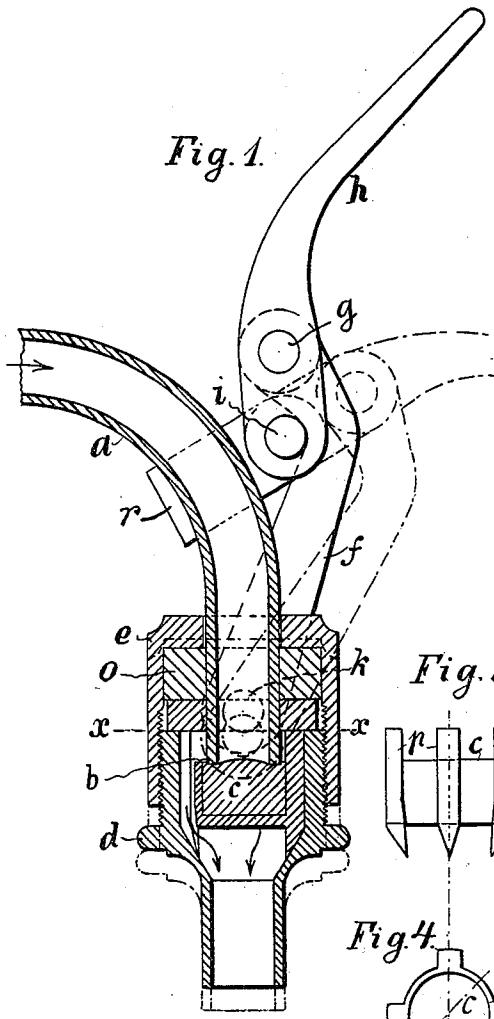

Fig. 1.

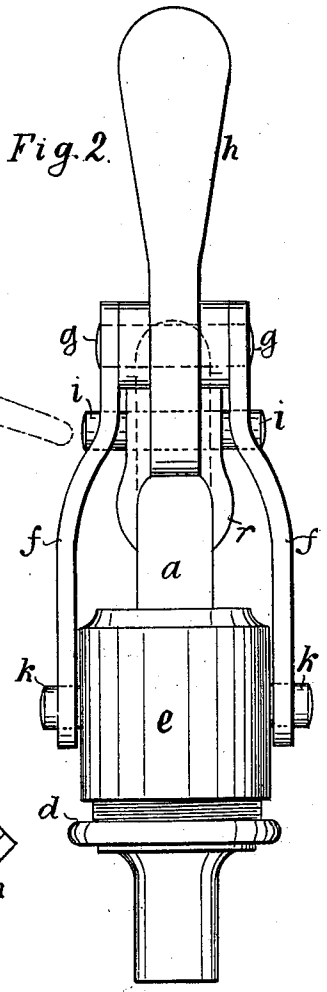

Fig. 2.

Fig. 5.

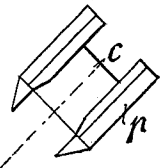

Fig. 6.

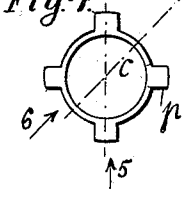

Fig. 4.

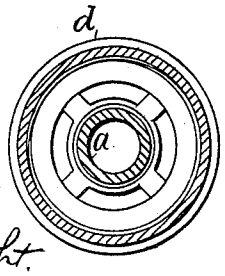

Fig. 3.

WITNESSES:

F. W. Wright.

S. C. Connor

INVENTOR

JOHANNES DRECKMANN

BY Howson and Howson

HIS ATTORNEYS.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHANNES DRECKMANN, OF CASSEL, GERMANY.

VALVE.

SPECIFICATION forming part of Letters Patent No. 654,236, dated July 24, 1900.

Application filed January 16, 1900. Serial No. 1,624. (No model.)

To all whom it may concern:

Be it known that I, JOHANNES DRECKMANN, engineer, a subject of the King of Prussia, German Emperor, residing at No. 4 Rottenditmolderstrasse, Cassel, Germany, have invented certain new and useful Improvements in Valves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention consists of a jointed-arm valve or cut-off which is adapted to be secured to the end of a pipe in such a manner that the mouth of the pipe serves as a valve-seat. A valve-plate is provided with suitable openings for the passage of the fluid, &c., and is located in a chamber which is movable on the end of said pipe through the action of a jointed arm pivotally secured on said pipe, which arm can be so adjusted that when in one position the valve-plate is forced over the mouth of the pipe, closing the same, while in another the same is open. In order to bring the valve-plate exactly to the mouth of the pipe, it is arranged within a cap more or less screwed into the valve-chamber.

A valve or cut-off embracing my invention is seen in the accompanying drawings, in which similar letters of reference refer throughout to similar parts.

Figure 1 shows in vertical section my new valve attached to the end of a pipe. Fig. 2 is a front view. Fig. 3 is a section on line *x x* of Fig. 1. Figs. 4, 5, and 6 show details employed.

In describing my invention it will be seen that I utilize the lower end *b* of a pipe *a* as a valve-seat, in conjunction with which a valve-plate *c*, provided with any suitable elastic material—as cork, rubber, &c.—is adapted to be brought. Said valve-plate is mounted in a cap *d*, which is screwed into a valve-chamber *e*, arranged to move up and down on pipe *a* aforesaid. The valve-plate carries on its periphery a plurality of vertically-projecting ribs *p*, (see Figs. 4 to 6,) thereby forming openings between said plate and the walls of said cap for the passage of the fluid, &c., when the valve is open. Suitable packing *o* is arranged in said chamber around said pipe and above said cap, so that as the latter is screwed into the chamber the packing is tightly compressed in the head of said valve-chamber and about said pipe, thus sealing the upper portion of the valve. Wear and tear of this packing can be taken up by simply screwing said cap *d* farther into the chamber, whence the packing is even more compressed, or by taking the cap out fresh packing can be quickly and easily substituted.

A collar or split ring *r* is adapted to be slipped over the pipe and clamped thereto in any desired manner and carries a pivot *i*, on which is mounted a hand-lever *h*. This lever *h* is pivotally connected to the upper end of a forked pitman *f* by a pin *g*, said pitman being so formed that when the lever *h* is in the position indicated in full lines in Fig. 1 it rests against the pivot *i* aforesaid, thus forming a limit to the movement toward this the closing direction. The lower ends of said pitman engage diametrically-located lugs *k k*, secured to the outer walls of valve-chamber *e* aforesaid.

The operation of the valve will be clearly understood from the foregoing description. By depressing lever *h* its pitman is forced down and chamber *e* shoved downwardly, whence the connected cap *d* carries valve-plate *c* down and away from the pipe *a*, opening the mouth of the same, while reversing lever *h* brings the said valve-plate against the end *b* of said pipe, acting as a valve-seat, and the cut off is effected.

Having now described my invention, what I claim as new, and desire to protect by Letters Patent of the United States, is—

1. In a new and improved valve for pipes the combination of a valve-chamber, a forked pitman engaging the same, a hand-lever pivoted on said pipe and engaging the upper end of said pitman, an adjustable cap secured to the lower end of said chamber and a valve-plate therein and adapted to coact with the end of said pipe serving as a valve-seat, substantially as described.

2. In a new and improved valve for pipes, the combination of a lever pivotally mounted on said pipe a valve-chamber surrounding

said pipe and adapted to be reciprocally moved thereon by said lever, an adjustable cap engaging the lower end of said chamber, and suitable packing within said chamber and about said pipe and adapted to be regulated by the adjustment of said cap, substantially as described.

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

JOHANNES DRECKMANN.

Witnesses:
FRITZ KLEINLEIN,
RICHARD LÜTHGENS.