

(No Model.)

G. W. FORTNER.
VALVE.

No. 592,986.

Patented Nov. 2, 1897.

FIG. 1.

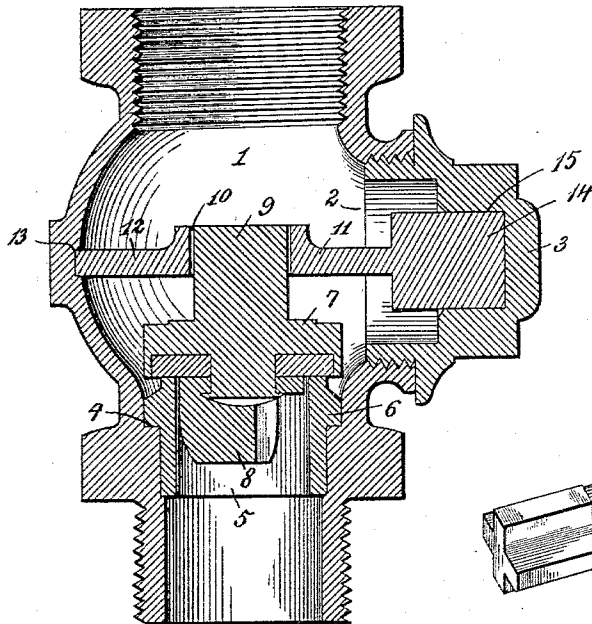


FIG. 3.

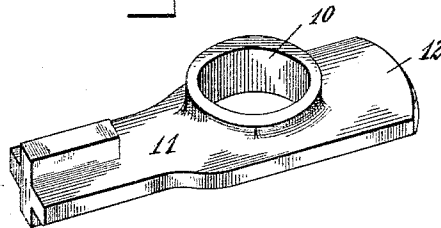


FIG. 2.

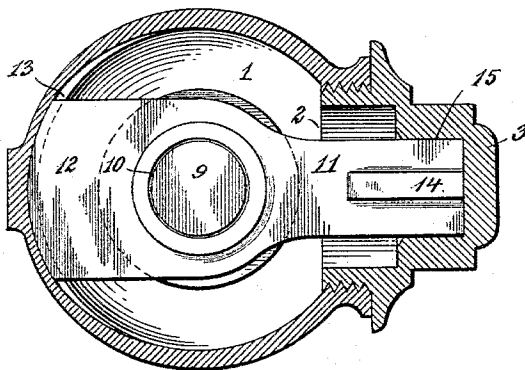
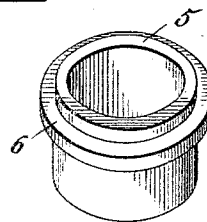


FIG. 4.



Inventor

George W. Fortner.

Witnesses

John F. Deufferiel
[Signature]

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

GEORGE W. FORTNER, OF MOWEAQUA, ILLINOIS, ASSIGNOR TO RHEEM E. WETZEL, OF SAME PLACE.

VALVE.

SPECIFICATION forming part of Letters Patent No. 592,986, dated November 2, 1897.

Application filed April 27, 1897. Serial No. 634,129. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. FORTNER, a citizen of the United States, residing at Moweaqua, in the county of Shelby and State of Illinois, have invented a new and useful Valve, of which the following is a specification.

My invention relates to valves, and particularly to check-valves, and has for its object to provide a valve of which the parts may be readily disassembled and wherein lateral access is given to the valve-seat, whereby the members thereof may be reached for cleaning without disconnecting the casing from the pipe or conveyer sections of which it forms a union.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a longitudinal sectional view of a valve constructed in accordance with my invention. Fig. 2 is a transverse sectional view. Fig. 3 is a detail view in perspective of the guide. Fig. 4 is a detail view of the valve-seat detached.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a casing provided with terminal male and female threads for attachment to contiguous portions of pipe or conveyer sections and also provided with a lateral opening 2, which is closed by a removable cap-nut 3. In one end of the casing is formed a shouldered valve-seat rest 4, in which is removably fitted a valve-seat 5, having a circumferential enlargement or shoulder 6 to engage the shoulder of the rest and fitting snugly in the cylindrical bore of the casing beyond the shoulder of the rest to avoid the necessity of employing fastening devices. The valve-disk 7 is provided with a winged guide 8 to fit in the bore of the valve-seat and also with an axial cross-sectionally-round extension 9 to fit in a guide-opening 10 in a removable guide-arm 11, said guide-arm being provided with a segmentally-rounded blade 12,

which fits peripherally in a guide-groove 13, 50 formed transversely in the casing opposite to the lateral opening 2 and provided at the opposite end with a winged arm 14 to fit in a cross-sectionally-round socket 15 in the cap-nut. 55

It will be seen that the socket of the cap-nut supports one end of the guide-arm, while the guide-groove in the wall of the casing supports the other end of said arm, whereby the valve-disk is free to move sufficiently to 60 unseat, while at the same time it is guided both above and below its plane, respectively, by the winged guide and the extension. Furthermore, it is obvious that by removing the cap-nut the guide-arm may be displaced, thus 65 releasing the valve-disk and allowing it, with the valve-seat, to be displaced for cleaning, regrinding, or repairing in other respects.

Various changes in the form, proportion, and the minor details of construction may be 70 resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is— 75

1. The combination of a valve-casing having a lateral outlet provided with a removable closure, a valve-disk seated in the casing and provided with an axial extension, a guide-arm having a guide-opening to receive said 80 extension and with a flat blade seated in a transverse groove in the casing, the other end of said guide-arm being fitted in and engaged by a socket in said closure, substantially as specified. 85

2. The combination of a valve-casing having a lateral opening, and provided in its wall opposite said opening with a transverse groove 13, a removable closure fitted in said opening and provided with a round socket 15, a valve-disk seated within the casing at one side of 90 said lateral opening, and having a stem 9 extending axially of the casing to a point midway of the lateral opening, and a guide-arm having a flat blade fitted terminally in the 95 groove 13, arranged transversely in the casing, and provided at its opposite end with a radially-winged head 14 fitting snugly in the

socket of the closure, said guide-arm being provided with a central guide-opening to receive the valve-stem, and both guide-arm and the valve being removable through said lateral opening when the closure is displaced, substantially as specified. *

In testimony that I claim the foregoing as

my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE W. FORTNER.

Witnesses:

J. O. ARMSTRONG,

R. E. WETZEL.