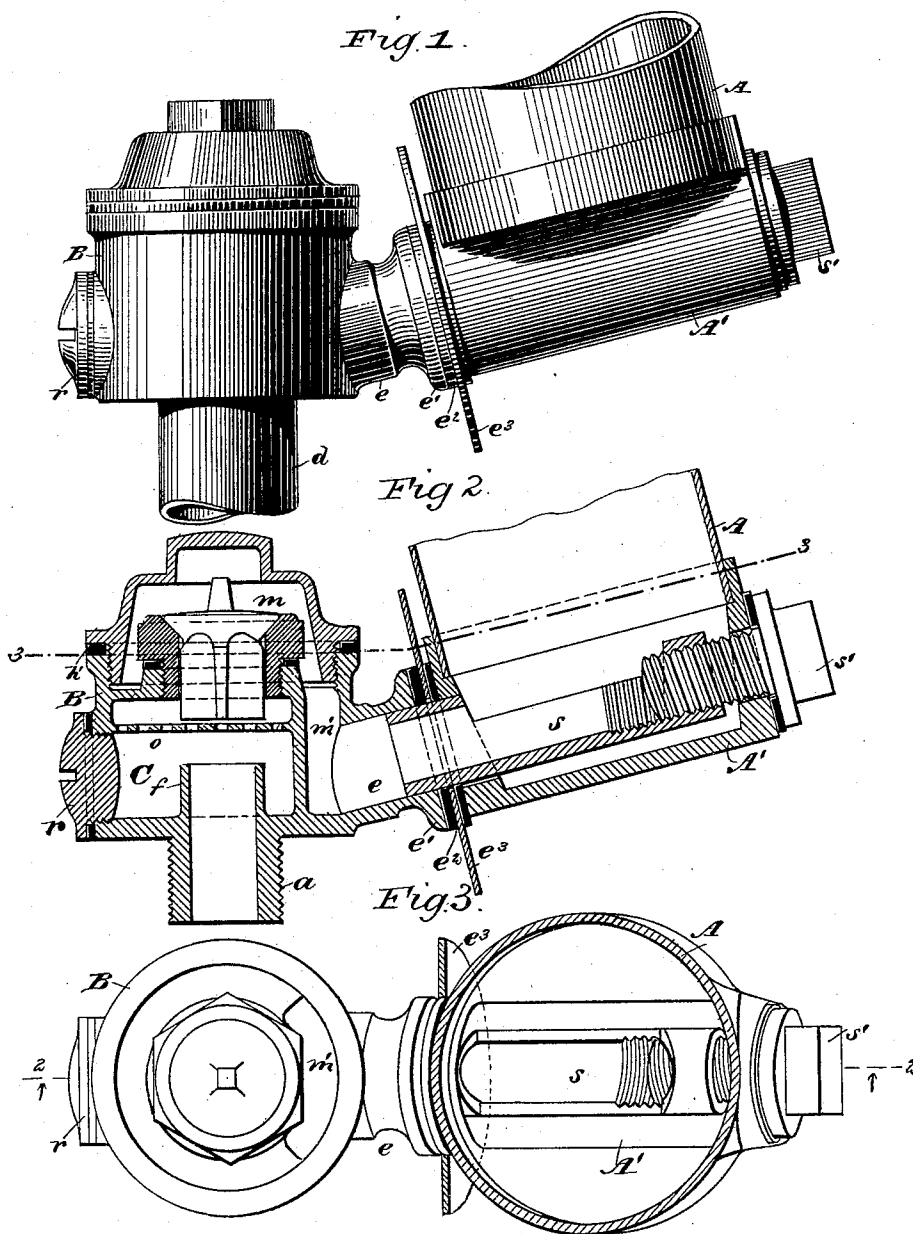


(No Model.)

J. NEUMANN.
PUMP VALVE AND CASE.

No. 479,299.

Patented July 19, 1892.



WITNESSES:
Paul Johat
Co. Sedgwick

INVENTOR:
J. Neumann
BY *Munn & Co*
ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN NEUMANN, OF BROOKLYN, NEW YORK.

PUMP VALVE AND CASE.

SPECIFICATION forming part of Letters Patent No. 479,299, dated July 19, 1892.

Application filed November 21, 1891. Serial No. 412,635. (No model.)

To all whom it may concern:

Be it known that I, JOHN NEUMANN, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful
5 Improvement in Pump Valves and Cases, of which the following is a full, clear, and exact description.

This invention relates to improvements in the valve-cases of pumps, the object being to
10 provide means for the quick detachment of the valve-case from the pump-barrel and a replacement of the same in an expeditious and secure manner.

To this end my invention consists in the
15 construction and combination of parts, as is hereinafter described, and indicated in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification,
20 in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side view of the valve-case and an attached pump-barrel, the latter being broken away above. Fig. 2 is a side view
25 in section, taken on the axial line 2 2 in Fig. 3; and Fig. 3 is plan view, partly in section, with the case-cap removed, taken on the line 3 3 in Fig. 2.

To cool the liquid drawn by a beer or ale
30 pump it is of advantage to locate the barrel of the pump within an ice-receptacle, which may be in the form of a box. (Not shown.)

This improvement contemplates such a location for one or a series of pumps, thereby facilitating the examination of the pump-valve
35 of each pump, if this becomes necessary. To this end the valve chamber or case B is adapted for a connection with the pump-barrel A at its base, so as to project the case a proper
40 distance removed from the barrel and exterior of the ice-box mentioned. The valve-case B, which can be of any suitable form, is preferably constructed as shown in the drawings, wherein it is provided with the inlet-
45 nipple *a* for attachment to pipe *d*, the settling-chamber C, having an opening in one side, closed by a plug *r*, the guard-flange *f* around the inlet within the settling-chamber, the foraminated diaphragm *o* at the top of the set-
50 tling-chamber, the valve *m*, and the channel

or passage-way *m'*, leading from the space above the valve down one side of the case to the bottom thereof. From the side of the case on which the channel or passage *w* at *m'* is located projects the outlet branch or neck *e''*. 55

A radial flange *e'* is formed on the branch *e* to provide an abutment for a washer *e²*, introduced between this flange and the upright front wall of an ice-box, (shown broken at *e³* in Fig. 2, the other parts of the box being re- 60 moved,) to which the pump-barrel A and valve-case B are attached when in position for service. Upon the base of the pump-barrel A a transverse sub-chamber A' is formed or 55 screwed, having parallel side walls and a cylindric bottom integral therewith, said chamber having free communication with the pump-barrel. The end walls of the sub-chamber A' are perforated in alignment to receive a trough-shaped limb *s*, that is secured by one 70 end in the branch piece *e*, and also permit the screw-bolt *s'* to enter the opposite end of the sub-chamber and have a threaded engagement with the perforated and tapped end wall of the limb *s*, as shown in Fig. 2, the insertion 75 of the screw-bolt serving to bind the pump-barrel and valve-case together and the wall of the ice-box between them.

From the above-described construction it will be seen that the valve-case can be quickly 80 and easily attached and detached from the pump-barrel, and the valve-case being outside of the ice-box the valve can be repaired without moving it from the box.

Having thus fully described my invention, 85 I claim as new and desire to secure by Letters Patent—

The combination, with the pump-barrel provided with a chamber at its lower end, said chamber having diametrically-opposite open- 90 ings, of a valve-casing provided with a flanged trough-shaped limb projecting into the openings of the chamber and having its end internally screw-threaded and a screw-plug screwed into the said limb, substantially as 95 herein shown and described.

JOHN NEUMANN.

Witnesses:

WM. P. PATTON,
E. M. CLARK.