

(No Model.)

H. E. HUNT.
PUMP VALVE.

No. 546,591.

Patented Sept. 17, 1895.

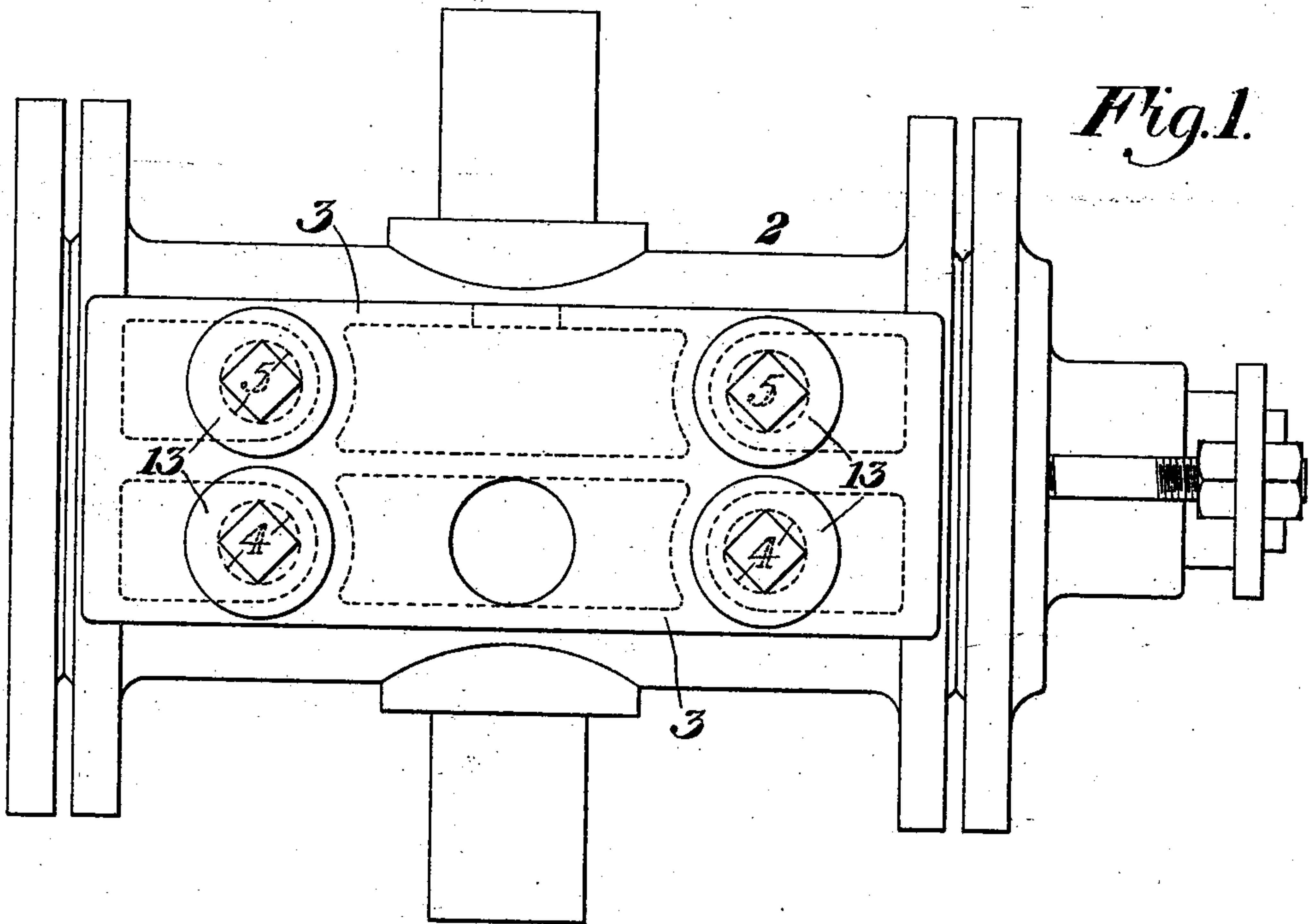


Fig. 1.

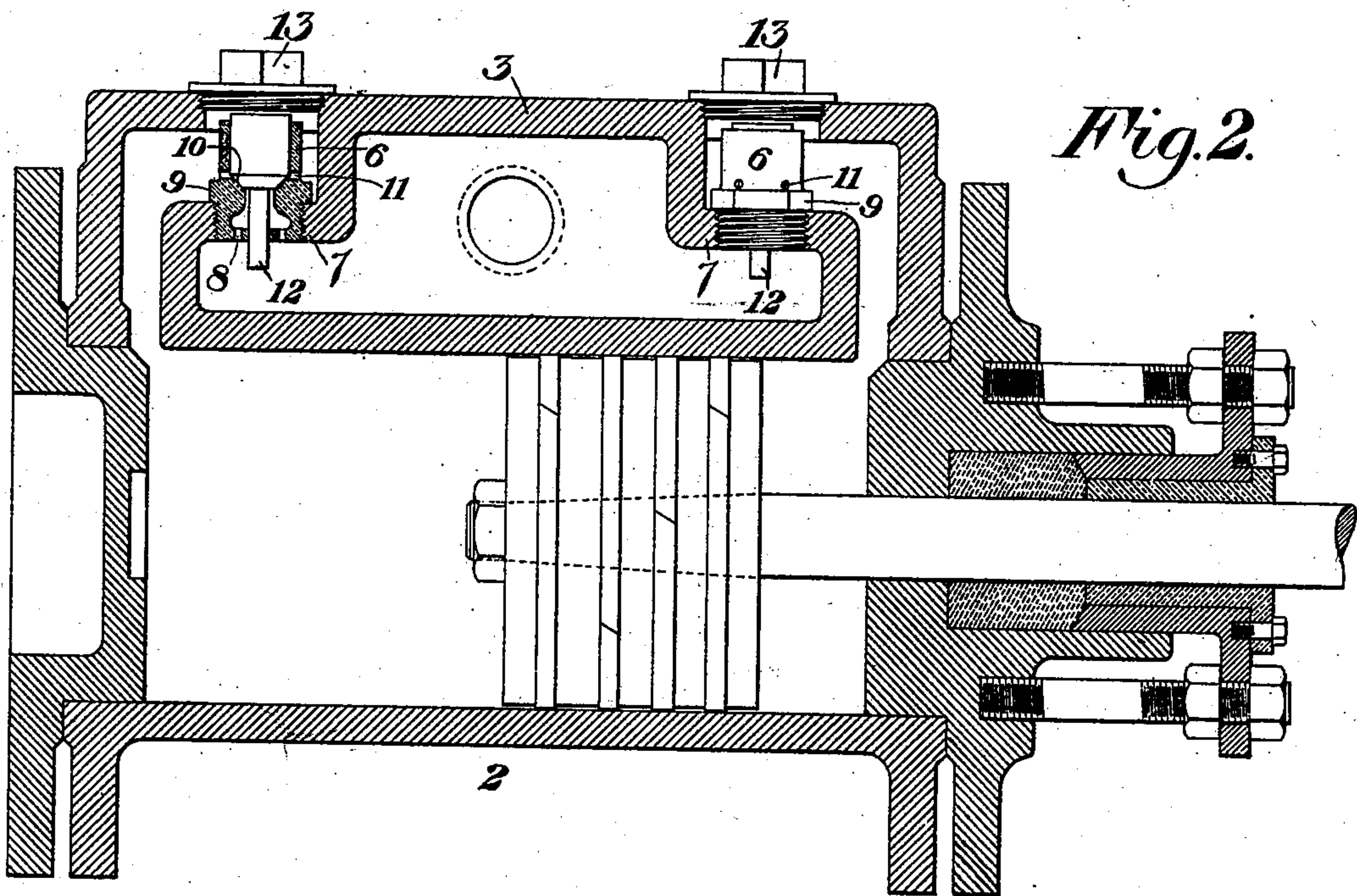


Fig. 2.

WITNESSES

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UNITED STATES PATENT OFFICE.

HERBERT E. HUNT, OF PITTSBURG, PENNSYLVANIA.

PUMP-VALVE.

SPECIFICATION forming part of Letters Patent No. 546,591, dated September 17, 1895.

Application filed December 21, 1894. Serial No. 532,515. (No model.)

To all whom it may concern:

Be it known that I, HERBERT E. HUNT, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Pump-Valves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

10 Figure 1 is a top plan view of a pump provided with my improved valves; and Fig. 2 is a vertical section of the same, one of the valve-casings being broken away.

15 My invention relates to the inlet and outlet valves used in pumps, and is designed to simplify, cheapen, and improve their construction and provide a valve which may be used either for a suction or a delivery valve.

20 In the drawings, in which similar numerals indicate like parts, 2 represents an air-pump, having the valve-chest 3. This chest is divided longitudinally into two parts, one part containing the inlet-valves 4 and the other the delivery-valves 5. Each valve, as shown 25 in Fig. 2, is provided with a valve-casing 6, which is externally screw-threaded at its lower end and is screwed into the bridge 7 in the air-chest. This casing is provided at its bottom end with inlet-holes 8 and with a shoulder 9, 30 which fits down upon the bridge and is provided with different faces for the application of a wrench. A tapered seat 10 is formed in the interior of the casing, and at the upper end of this seat are the outlet-holes 11. The 35 valve is a simple round plug-valve, which is tapered at its lower part to fit the seat 10, and is provided with a guide-stem 12 extending down through the casing. The stem is sufficiently smaller in diameter than the hole to 40 provide an annular opening of as great area

as the area of the holes 8. Above each valve is an opening through which the valve is inserted, these openings being closed by screw-plugs 13, which limit the upward movement of the valve.

The advantages of my improved valve will be apparent to those skilled in the art, since the valve casing and seat being in one piece are always uniform and the valve is not liable to stick.

50 The valve may be used either for the suction or delivery port, and will outwear the ordinary valves and occupy much less space. As no fins or wings are present upon the valve or its stem, no recesses are worn by the valve 55 in its casing, as formerly.

I claim—

A valve casing having two bores of different diameter joined by a beveled seat, and a valve having a body portion of substantially 60 uniform diameter throughout and fitting closely in the larger bore, said valve having a tapered intermediate portion fitting on the beveled seat and provided with a guide-stem extending downwardly through the smaller 65 bore, the casing having an annular chamber recessed therein around the guide-stem, and holes leading into said chamber, the stem being sufficiently smaller than the portion of the smaller bore above the recess to allow the 70 air to pass upwardly around said stem, the said casing having radial holes above the guide-stem; substantially as described.

In testimony whereof I have hereunto set my hand.

HERBERT E. HUNT.

Witnesses:

H. M. CORWIN,
W. B. CORWIN.