

J. W. Douglas,

Pump Fastening.

No. 98674.

Patented Jan. 11. 1870.

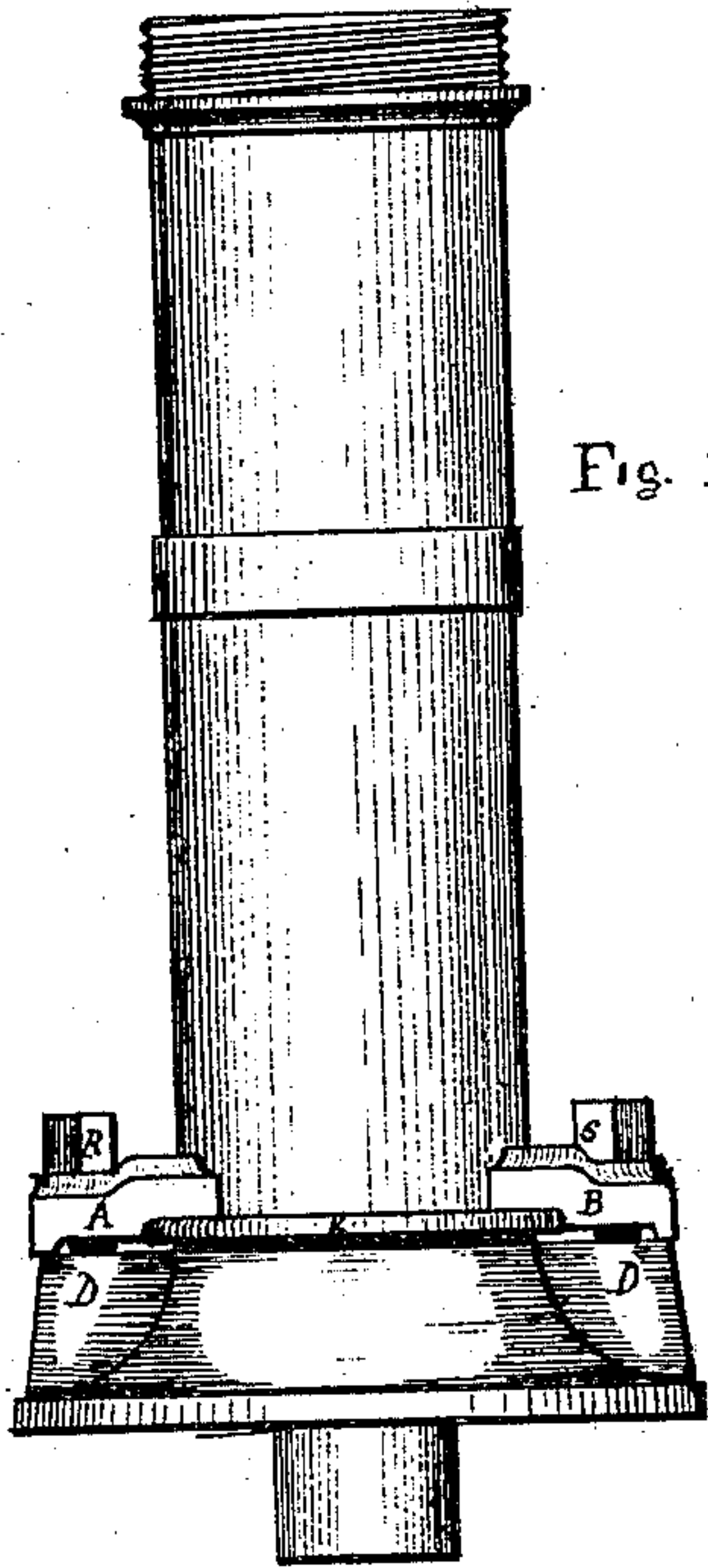


Fig. 1

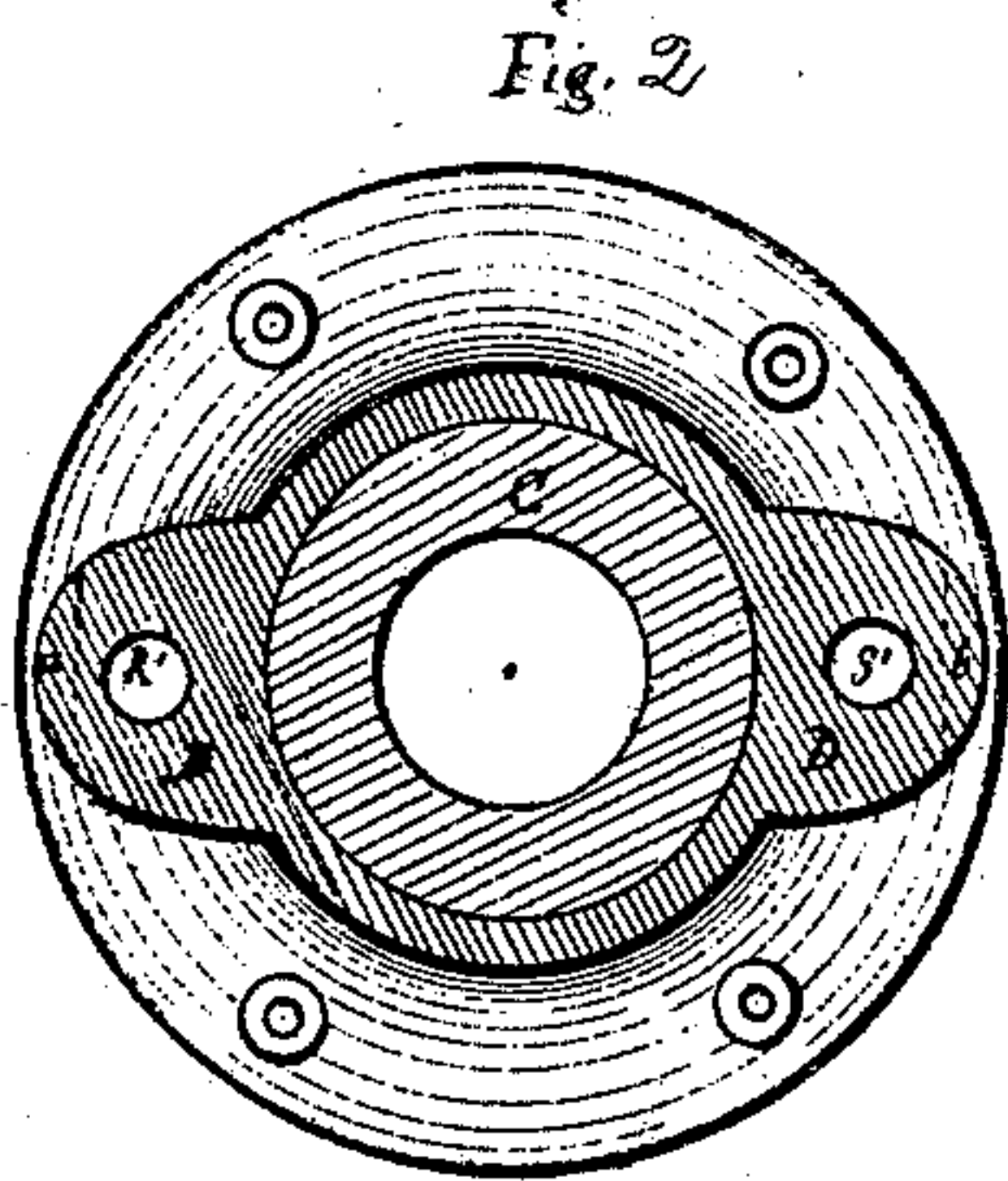


Fig. 2

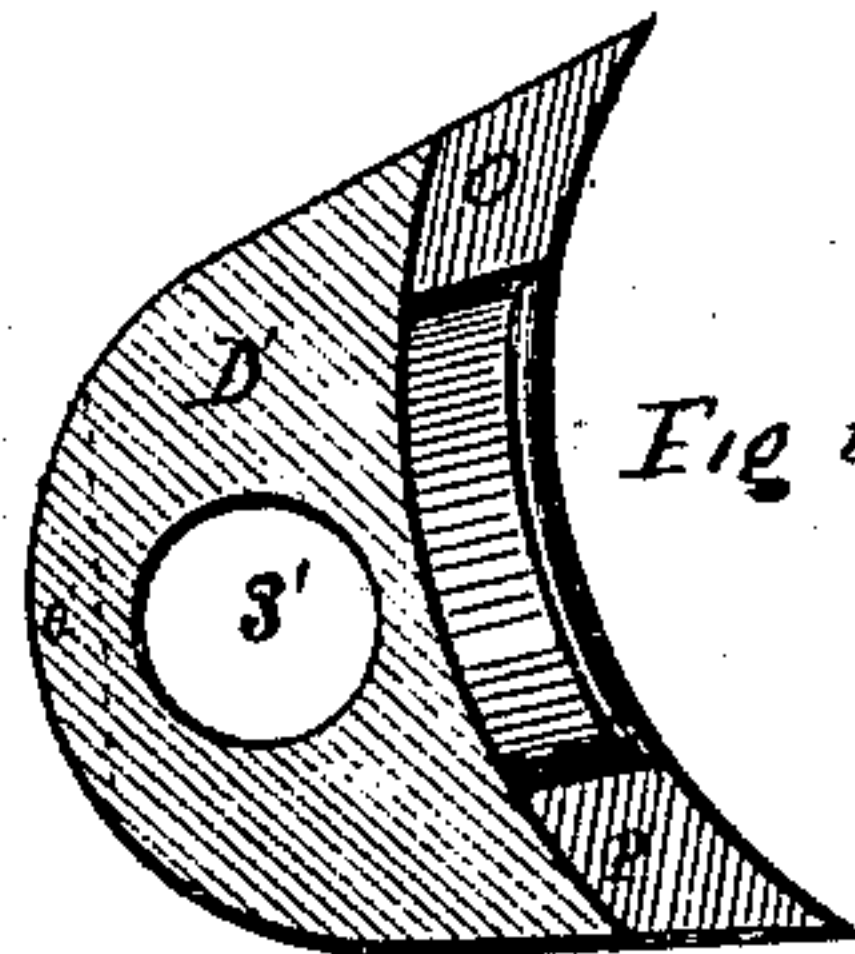


Fig. 3.

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Jos W Douglas
Per his Attorney
W D Gale

United States Patent Office.

JOSEPH W. DOUGLAS, OF MIDDLETOWN, CONNECTICUT, ASSIGNOR TO
W. & B. DOUGLAS, OF SAME PLACE.

Letters Patent No. 98,674, dated January 11, 1870.

IMPROVEMENT IN ADJUSTABLE ATTACHMENT OF PUMP-BARRELS TO THEIR BASES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOSEPH W. DOUGLAS, of Middletown, in the county of Middlesex, State of Connecticut, have invented a new and useful Device for Holding the Working Cylinder of a Pump to the Valve-Plate or Base; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of the pump-cylinder standing upon its base, showing the detachable ears A and B, holding the cylinder to its base, by means of the screw-bolts R and S and flange K.

Figure 2 represents a vertical view of the base of the pump.

Figure 3 represents a view of the under side of one of the detachable ears.

The nature of my invention consists in providing the lower part of the working cylinder of a pump, with a flange, which projects around and about the cylinder, immediately above the valve-plate or base of the pump; and in fastening the cylinder to the pump-base or valve-plate, by means of detachable ears or clamps, two or more, which rest upon this flange; and are fastened to the pump-base by means of screw-bolts.

The usual mode of attaching a pump-cylinder to its base is, by casting, with the cylinder, two or more ears or lugs upon the cylinder's lower end, projecting on its sides, and securing together the base and cylinder, by means of bolts running through these ears and into the pump-base. These ears are liable to break, and do break easily, and thereby render it a necessity to provide a new cylinder. To remedy this expense and inconvenience, I have devised a plan of constructing the cylinder and ears in separate and independent parts, so that upon the breaking of one of these ears, it can be easily and readily replaced, at small expense.

In ordinary pumps, there often is difficulty in setting the pump-spout in the most desirable direction, because the spout is immovable or fixed in one direction, and cannot be easily changed to new positions, for the handle and the spout are immovable.

In the construction of my pump, the spout (not shown in the drawings) may be moved to any point in

the circle, by merely loosening the clamps or ears and the screw-bolts, and rotating the pump-cylinder on its own axis, so that the spout may point in any desired direction.

In fig. 1 is shown the flange K, around and about the lower portion of the cylinder, the detachable ears A and B in position, resting upon the flange K, and the bearings D provided for them on the pump-base, secured to the pump-base by the screw-bolts R and S.

Fig. 2 shows a vertical view of the pump-base, provided with the bearings D D for the ears A and B, the socket R' S' for the screw-bolts R S, and the bearing C for the support of the valve and pump-cylinder.

Fig. 3 shows a vertical view of the under side of one of the detached ears, with the curved edges, adapted to the curved surface of the cylinder and the curved edge of the flange K, the bolt-hole S', the bearing D', and the bearings O P, adapted to rest upon the flange K. These ears are made in such manner as to gain the force and advantage of a tripod, having the two surfaces O P to rest upon the flange K, and the projection *a'* upon the clamp, dotted lines fig. 3, or the projection *a b*, dotted lines fig. 2, upon the pump-base, as the third foot of the tripod, or third point of contact; or the ears may be made with a flat under surface, D', to rest upon a flat bearing, D.

By this form of clamps, there is a readier adaptation of them to the position of the pump-cylinder, and consequent greater firmness and steadiness given to the pump.

Figure 1 shows the cylinder in position, resting upon the valve-plate, and secured in its place by the detachable ears A B and screw-bolts R S, in the manner hereinbefore described.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the detachable ears or clamps with the cylinder, arranged to turn on its own axis, in order to set the spout in any desired direction.

JOS. W. DOUGLAS.

Witnesses:

JNO. M. DOUGLAS,
GEO. M. SMITH.