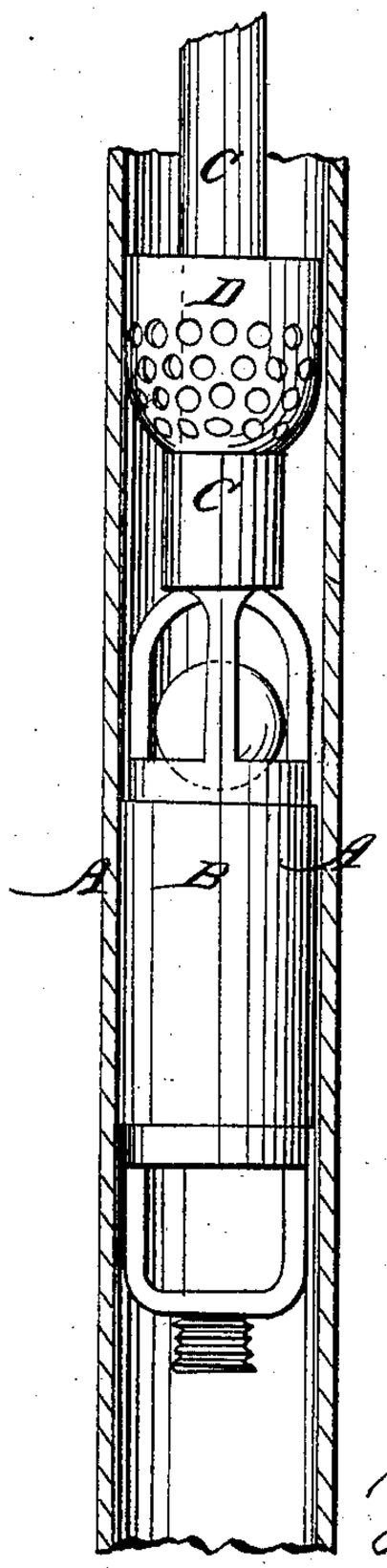
Morrison & Betts,

Oil Pump.

No. 56,435. Patented July 17, 1866.



Witnesses.

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UNITED STATES PATENT OFFICE.

W. E. MORRISON AND W. L. BETTS, OF FUNKVILLE, PENNSYLVANIA.

IMPROVEMENT IN PUMPS FOR DEEP WELLS.

Specification forming part of Letters Patent No. **56,435,** dated July 17, 1866.

To all whom it may concern:

Be it known that we, W. E. MORRISON and W. L. BETTS, of Funkville, in the county of Venango and State of Pennsylvania, have invented a new and useful Improvement in Oil-Well and other Pumps; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

In the use of pumps, in oil-wells more especially, much annoyance and trouble are occasioned through the breaking of the rivets by which the several sections of the sucker or piston rod of the pumps are held together, and their falling down upon the valve and its seat of the pump, not only obstructing its operation, but oftentimes causing the working barrel to be cut and the well-tube also drawn, to obviate which disadvantages is the object of the present invention, and is satisfactorily accomplished thereby.

It consists in attaching to the sucker or piston rod of the pump, above the upper end of the valve secured thereon, a cup-shaped vessel perforated upon its sides and bottom, with its open end up, which vessel surrounds the said rod, and is of such a size as to closely fit within the pump or well tube, whereby, as is obvious, any and all rivets or other particles falling through the pump-tube, because of the breakage of its sucker or piston rod, are prevented from coming in contact with the pump-valve, the said cup-shaped vessel on its sucker-rod serving as a receiver or receptacle for the same.

In the accompanying plate of drawings our improvement in pumps is illustrated, the figure representing a central vertical section through a portion of the pump or well tube, showing the upper valve and a portion of its piston or sucker rod having our improvement applied to it.

A in the drawing represents the working barrel or tube of the pump; B, the upper valve, arranged so as to move tightly within the pump-barrel, the construction of which valve is the same as the ordinary valves of oil-well pumps; C, the sucker or piston rod of the pump.

Above the upper end of the valve B and on the sucker-rod C is secured a cup-shaped vessel, D, perforated upon its sides and bottoms, with its open end up, and made of such a size as to closely fit the pump-barrel as it is moved up and down within the same in connection with the rod C. This cup-shaped vessel D surrounds the sucker-rod C, and as it is perforated it offers no obstruction to the passage of the oil or other liquid up through it from the pump-valve, while at the same time it prevents any rivets or other particles falling through the pump-barrel above it from coming in contact with the valve, it serving as a receiver and catcher, as it were, therefor, as is obvious without further explanation, the importance and advantages of which are apparent to all.

We claim as new and desire to secure by Letters Patent—

Attaching to the piston or sucker rod of a pump, and above the upper valve secured to it, a perforated receiver, substantially as herein described, and for the purpose specified.

W. E. MORRISON.
W. L. BETTS.

Witnesses:
W. W. MARSHALL,
J. G. ELLIOTT.