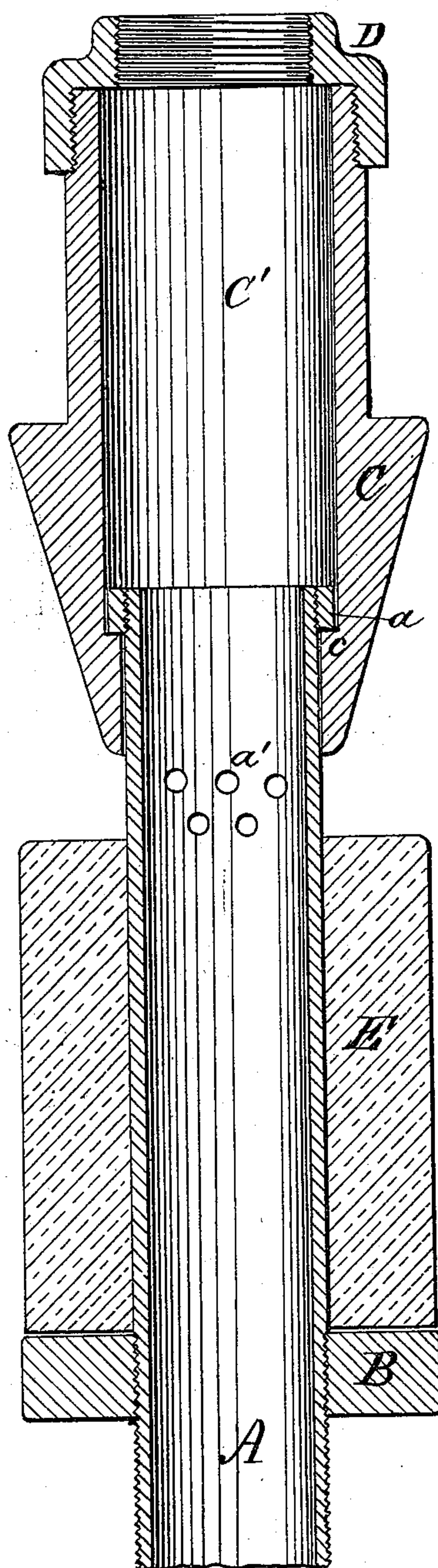


L. STEWART.  
Oil Well Packer.

No. 230,080.

Patented July 13, 1880.



Witnesses:  
W. B. Masson  
H. A. Bliss

Inventor:  
Lyman Stewart  
by H. A. Doubleday  
attly.

# UNITED STATES PATENT OFFICE.

LYMAN STEWART, OF TITUSVILLE, PENNSYLVANIA.

## OIL-WELL PACKER.

SPECIFICATION forming part of Letters Patent No. 230,080, dated July 13, 1880.

Application filed September 4, 1878.

*To all whom it may concern:*

Be it known that I, LYMAN STEWART, of Titusville, in the county of Crawford and State of Pennsylvania, have invented certain new and useful Improvements in Oil-Well Packers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to letters of reference marked thereon, which forms a part of this specification.

In the drawing, which is a vertical section of a packer embodying my invention, A represents the lower section of tubing, which rests upon the bottom of the well and extends up to the point at which it is desired to locate the packer.

B is a flange screwed or otherwise secured to tubing A, this flange being made preferably of cast-iron.

a is a ring or small flange screwed upon the outside of the upper end of tubing A. The tubing is perforated near the upper end, as indicated at a'.

C C' is the telescopic cone-wedge, provided at its lower end with an opening to receive and fit closely the upper end of the tubing A. The upper portion of the cone-section is of such internal diameter as to receive the ring or flange a, which, when the parts are in the position shown in the drawing, engages with a seat, c, formed by contracting the cone-wedge at that point.

D is a reducer, screwed upon the upper end of the cone-section to receive the upper portion of the tubing.

E is a hollow cylindrical block, of rubber, mounted upon the flange B, and from an examination of the drawing it will be readily seen that when the tubing A rests upon the bottom of the well the rubber may be packed tightly against the wall of the well by the cone-wedge. It will also be seen that when the wedge is withdrawn from the rubber, water may pass from above the packer through the holes a', and thence through tubing A to the lower part of the well, before the rubber has been withdrawn from the wall of the well, (by its own contraction or otherwise,) and thus equalize the pressure of the water upon both the upper and lower sides of the rubber.

The external diameter of both the flange B and the upper portion of the cone-wedge C is a little greater than that of the rubber E, thus keeping the latter from contact with the wall of the well while the packer is being lowered to place, and insuring that the latter shall not be injured by such contact.

What I claim is—

In an oil-well packer, the section A of tubing, provided with the flange B and with the ring a and holes a', in combination with the telescopic cone-section adapted to inclose or cover the holes when it is forced into the rubber, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

LYMAN STEWART.

Witnesses:

J. J. BARNSDALL,  
SAMUEL GRUMBINE.