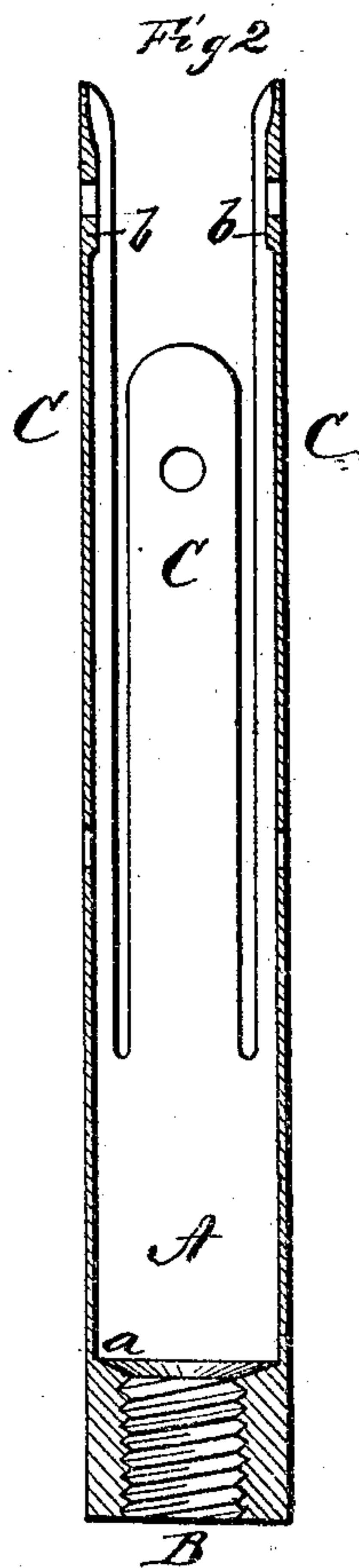
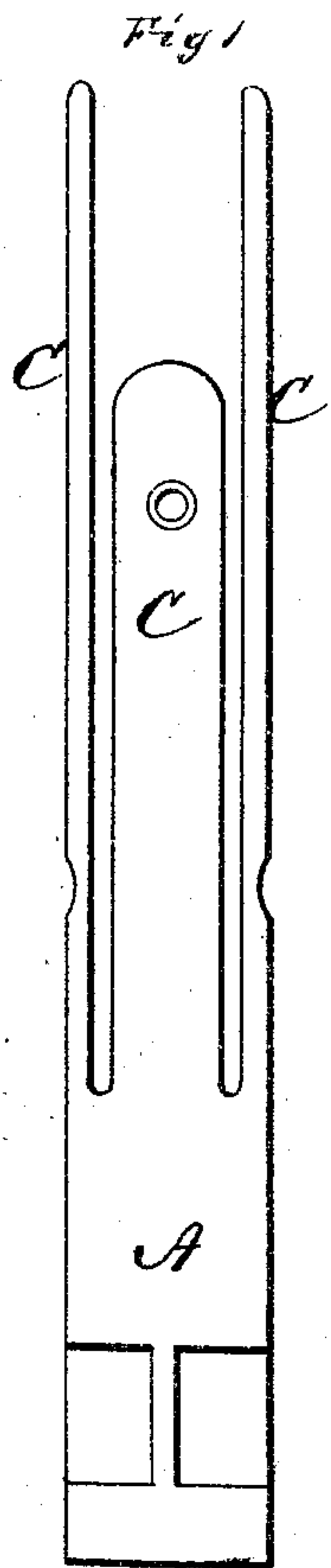


A. M. WILLIAMS.

Sucker-Rod Joints for Pumps.

No. 144,813.

Patented Nov. 18, 1873.



WITNESSES.

F. L. Ourand  
C. L. Ewert.

INVENTOR.

Abram M. Williams.  
Alexander Morton

By

Attorneys.

# UNITED STATES PATENT OFFICE

ABNER M. WILLIAMS, OF OIL CITY, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO CHARLES H. DUNCAN, OF SAME PLACE.

## IMPROVEMENT IN SUCKER-ROD JOINTS FOR PUMPS.

Specification forming part of Letters Patent No. **144,813**, dated November 18, 1873; application filed October 15, 1873.

*To all whom it may concern:*

Be it known that I, A. M. WILLIAMS, of Oil City, in the county of Venango, and in the State of Pennsylvania, have invented certain new and useful Improvements in Sucker-Rod Joints for Pumps; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in a socket with screw-hole at the lower end, an interior shoulder, and four wings extending upward, to form a joint for sucker-rods for pumps, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side view, and Fig. 2 a longitudinal section, of my improved sucker-rod joint.

A represents a socket made of malleable iron, with a screw-hole, B, at its lower end, and an interior circumferential shoulder, *a*, at the bottom of the socket. The upper end of the socket A forms four wings, C C, which project upward in continuation of the socket, and have rivet-holes through their upper ends to fasten to the rod. Heretofore this class of joints have been made with two straps or wings, which necessitated the position of the rivets to run in a straight line with the grain of the wood, thereby greatly tending to weaken and split the wood or rod to which the joint was riveted.

This has caused serious delay and inconvenience.

My invention overcomes this difficulty by the construction of the four wings in combination with the socket. The wings C C run opposite one another, bracing the wood on one side while the rivets are being driven on the other. The rivets, therefore, run transversely, and the socket holds the end of the wood so firm as to preclude any possibility of the rod splitting. The end of the rod rests on the interior shoulder *a*. On the inside of the wings C C, around the rivet-holes, are formed lugs *b b*, which are designed to take the strain off of the rivets on the upward motion, while the end of the rod which sits on the shoulder *a* in the socket relieves the rivets on the downward motion.

I do not claim a clamp for sucker-rod joints consisting of two bars provided with internal projections which fit into recesses in the sucker-rod.

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

A sucker-rod joint consisting of the socket A, with interior shoulder *a* and the four extended wings or straps C C C C, all formed of one piece of metal, as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 19th day of July, 1873.

ABNER M. WILLIAMS.

Witnesses:

JOSEPH P. ORR,  
GEORGE LAMB.