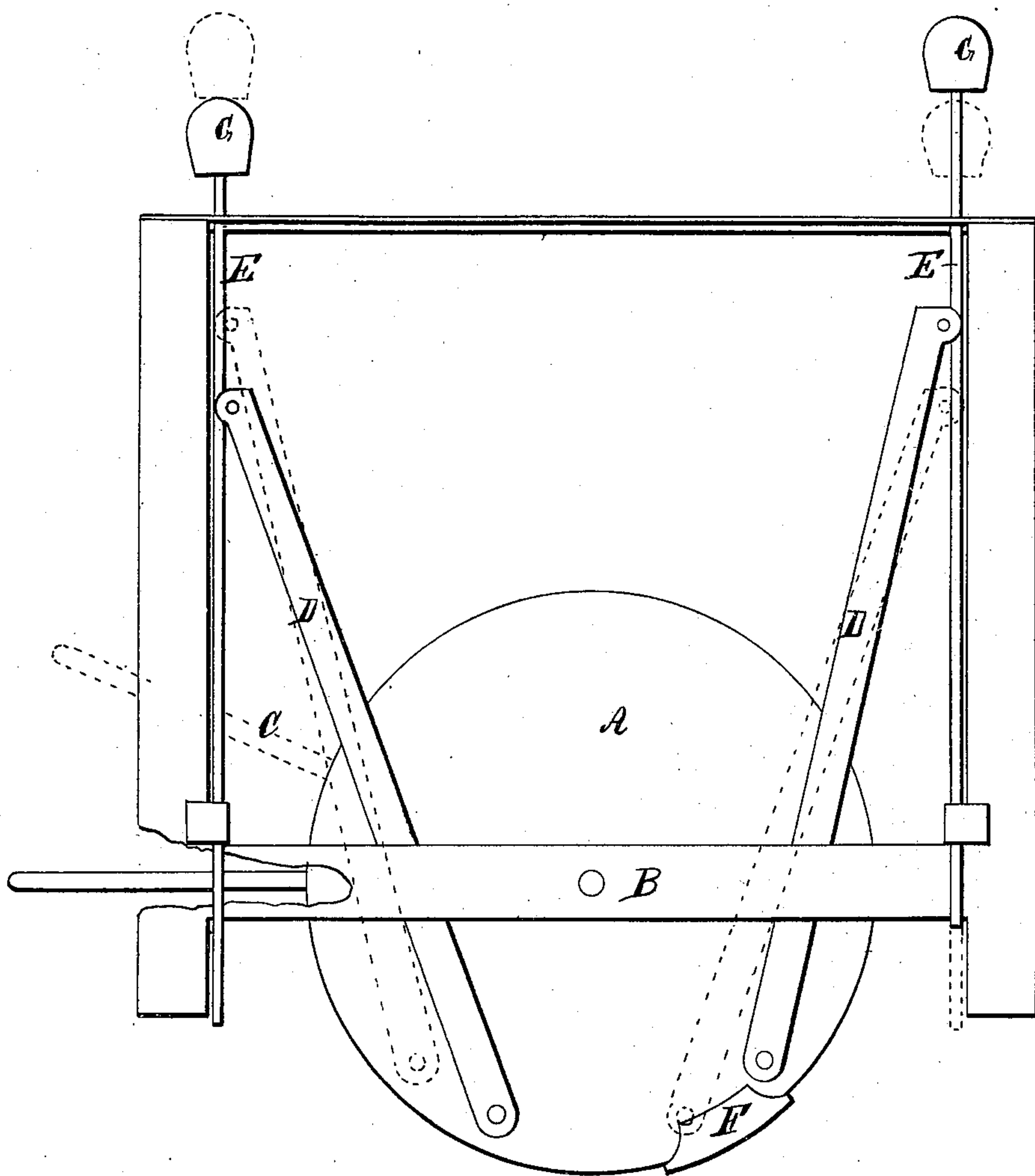


J. J. P. LYON.  
 APPARATUS FOR PRODUCING RECIPROCATING MOTION.  
 No. 82,964.                      Patented Oct. 13, 1868.



*Witnesses.*

*H. F. Oberb  
 Lewis L. Gordon*

*Inventor.*

*John J. Lyon  
 Per Attorney  
 Thos. S. Sprague*



JOHN J. P. LYON, OF YPSILANTI, MICHIGAN.

*Letters Patent No. 82,964, dated October 13, 1868.*

**IMPROVEMENT IN APPARATUS FOR PRODUCING RECIPROCATING MOTION.**

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

*To whom it may concern:*

Be it known that I, JOHN J. P. LYON, of Ypsilanti, in the county of Washtenaw, and State of Michigan, have invented a new and useful Improvement in Working-Attachment to Pumps; and I do hereby declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and being a part of this specification.

The nature of this invention is to construct an easy and rapidly-working attachment with which to elevate water by means of pumps of the ordinary construction for lifting or force-pumps; and consists of a wheel, A, of any desirable diameter, pivoted at its centre to any proper support, B, and provided with a suitable lever, C, firmly attached to the wheel A, by means of which a semi-rotating motion may be given to it.

The connecting-rods D are pivoted at their lower extremities to any desirable point near the periphery of the wheel, below its centre, their position exactly being determined by the size of the wheel and the

length of stroke required. The upper ends of these rods, D, are attached to pump-rods E, and give a reciprocating motion to them, when the wheel is semi-rotated by the lever, as above described. F is a counterpoise-weight, attached to the periphery of the wheel A; near the connecting-rod, on the opposite side from that to which the lever C is secured.

This apparatus can be used with one or two pumps, as may be desired. G are weights, which may be attached to the top of the pump-rods E, to assist in the downward motion of the same.

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

The wheel A, support B, lever C, connecting-rods D, and counterpoise-weight F, when used in connection with pump-rods E and weights G, and operating substantially as and for the purposes herein described.

JOHN J. P. LYON.

Witnesses:

H. S. SPRAGUE,  
H. F. EBERTS.