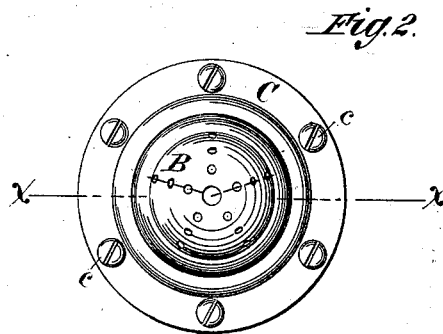
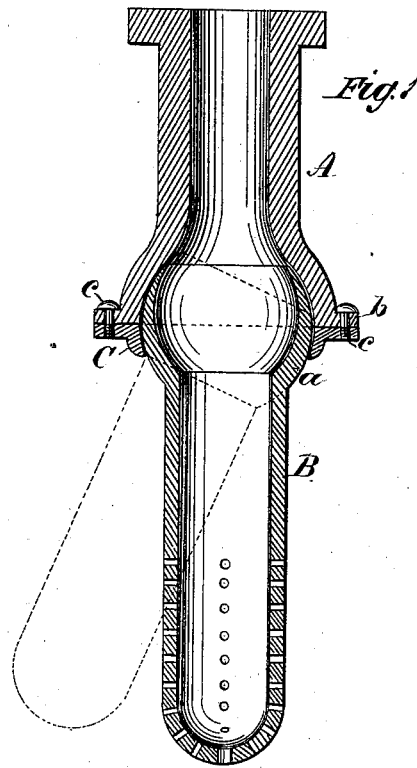


E. O. LEERMO.
Pump Suction Pipe.

No. 201,689.

Patented March 26, 1878.



WITNESSES:

Francis McArdle
C. Sedgwick

INVENTOR:

E. O. Leermo

BY

Munn

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ERIC O. LEERMO, OF GOLD HILL, NEVADA.

IMPROVEMENT IN PUMP SUCTION-PIPES.

Specification forming part of Letters Patent No. **201,689**, dated March 26, 1878; application filed January 15, 1878.

To all whom it may concern:

Be it known that I, ERIC O. LEERMO, of Gold Hill, county of Storey, and State of Nevada, have invented a new and Improved Pump-Suction, of which the following is a specification:

Figure 1 is a longitudinal section taken on line *xx* in Fig. 2. Fig. 2 is an end view.

Similar letters of reference indicate corresponding parts.

My invention relates to an adjustable suction for pumps used in mining and in other similar operations; and it consists in a perforated nozzle attached to the end of the suction-pipe by a ball-joint, so that it may be turned in any desirable direction.

Referring to the drawing, A is the stationary portion of the adjustable suction, which is flanged at its upper end to receive bolts, by which it is attached to the lower section of the suction-pipe, or it may be screwed to the suction-pipe, and its lower end is enlarged and adapted to the spherical end *a* of the perforated movable pipe B. It is also provided with a flange, *b*, for receiving the collar C, which is fitted to the spherical portion *a*

and secured to the flange *b* by bolts *c*. The edges of the spherical end *a* of the movable pipe B are beveled from the inner side, to make a smooth passage for water. The lower or free end of the movable pipe B is closed, and it is perforated in the end and also in the side for a portion of its length. This suction-pipe may be moved in any direction within certain limits, so that it may be placed out of the way of workmen sinking a shaft; or it may be made to operate in shallower water than a straight rigid suction-pipe, by swinging the movable pipe B so that it forms less than a right angle with the surface of the water.

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

The suction-pipe of a pump, connected with a nozzle-pipe, B, by securing the spherical end *a* of the nozzle loosely in a corresponding socket at the end of pipe A, as shown and described.

ERIC OLSON LEERMO.

Witnesses:

O. H. GALLUP,
W. G. HYDE.