P. WINEMAN.

CYLINDERS FOR PUMP STOCKS.

No. 180,513. Patented Aug. 1, 1876.

Fig. 1.

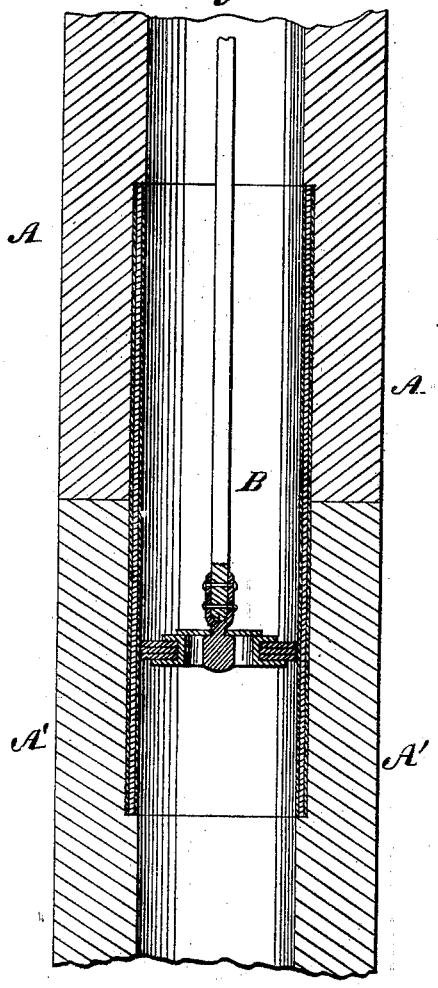
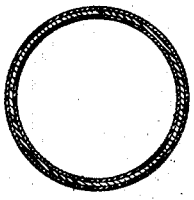


Fig. 2.



Witnesses.

L. VanRiswick.

P. Hannay

Inventor.

Parker Wineman

by A. McCallum

Atty

UNITED STATES PATENT OFFICE.

PARKER WINEMAN, OF ROCK ISLAND, ILLINOIS.

IMPROVEMENT IN CYLINDERS FOR PUMP-STOCKS.

Specification forming part of Letters Patent No. **180,513**, dated August 1, 1876; application filed May 6, 1876.

To all whom it may concern:

Be it known that I, PARKER WINEMAN, of Rock Island, in the county of Rock Island and State of Illinois, have invented certain new and useful Improvements in Cylinders for Pump Stocks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to pumps; and the invention consists in making the portion of the pump-stock in which the plunger moves up and down, and which is commonly known as the cylinder, of sheet-iron coated with some suitable vitreous substance on both sides, so that a smooth and uniform surface is provided for the play of the plunger, and the metal is completely protected on all sides from injury by oxidation.

I have before used pump-cylinders made of cast-iron lined on the inside with vitreous material, such as are fully described in Letters Patent of the United States No. 90,143, granted to me May 18, 1869, but I find that a sheet-iron cylinder will answer the same purpose as those made of cast-iron, and is much more economical to the public. I also find that by coating the sheet-iron cylinder on all sides with the vitreous material the wooden pump-stocks in which the cylinder is inserted, as well as the cylinder itself, will not be affected injuriously by the oxidation of the metal, but will be rendered, in a measure, indestructible from any such cause.

In the accompanying drawing, Figure 1 is a vertical sectional view of a portion of a wooden pump-stock with my new metal cylinder inserted therein. Fig. 2 is a sectional view of the cylinder, showing its construction, &c.

A A′ represent two sections of a wooden pump-stock, and B a cylinder inserted therein, and within which the plunger is intended to reciprocate or move up and down. The cylinder need only be of such length as will correspond with the stroke of the plunger. I find about twelve inches to be a very convenient and suitable length. The diameter of the cylinder may, of course, be varied as occasion requires; but for ordinary purposes the cylinder may be made about twelve inches long, and with a three-inch bore, or nine inches in circumference. The cylinder is coated, by any of the well-known processes, with vitreous material on both sides.

It will be evident that this sheet-iron cylinder might be used in connection with other kinds of pump-stocks than those made of wood, and, being thin and easily handled, it might be secured within metal tubing or other portion of metal pumps at the proper place for the working of the plunger.

I am aware that copper sheet-metal cylinders and pump-cylinders made of glass, stone, and porcelain have been used, and I do not wish to be understood as claiming any cylinder so constructed.

What I do claim, and desire to secure by Letters Patent, is—

A pump-cylinder made of sheet-iron coated on both or all sides with vitreous material, substantially as and for the purpose specified.

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

PARKER WINEMAN.

Witnesses:

JAMES J. PARKS,

W. H. GEST.