

Sherman & Shaeffer,

Print.

No. 109349.

Patented Nov. 15, 1870.

Fig. 1.

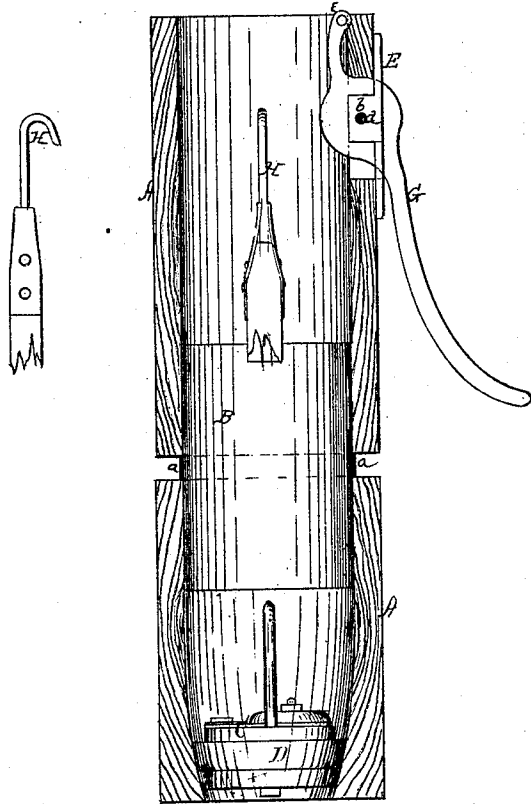


Fig. 2.

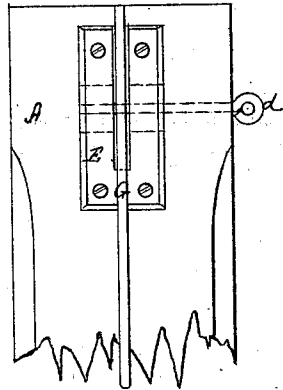
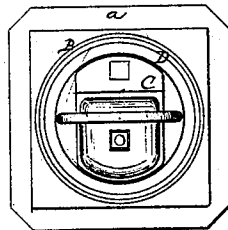


Fig. 3.



Witnesses:

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United States Patent Office.

ALONZO SHERMAN AND JOHN W. SHEAFFER, OF STERLING, ILLINOIS.

Letters Patent No. 109,349, dated November 15, 1870.

IMPROVEMENT IN PUMPS.

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

To all whom it may concern:

Be it known that we, ALONZO SHERMAN and JOHN W. SHEAFFER, of Sterling, in the county of Whitesides and State of Illinois, have invented certain new and useful Improvements in Pumps; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon which forms a part of this specification.

The nature of our invention consists in the peculiar construction and arrangement of the pump-cylinder, as will be hereinafter fully set forth.

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

Figure 1 is a longitudinal vertical section of the pump-stocks, with cylinder, showing the drop-valve;

Figure 2 is a side view of the pump top with the handle; and

Figure 3 is a horizontal section, showing the top of the drop-valve.

A A represent the pump-stocks.

B is a metallic cylinder, provided around its outside, in the center, with a flange, *a*.

This cylinder or chamber is of such length that the pump-piston, in its up-and-down movement, will operate within said chamber, and not come in contact with the pump-timbers.

The ends of the cylinder B are inserted in the pump-stocks or timbers A A, and driven so far in that the ends of said timbers will be close against the flange *a*, and thereby we have found, by experience, the trouble and annoyance of the cylinder coming loose is entirely obviated.

The pump-timber below the cylinder B is slightly contracted, as shown, and the drop-valve C is inserted in the same.

Around said valve is a rubber packing, D, which is firmly secured to the valve in any suitable and convenient manner.

When necessary, for any cause, to repair the valve C, it can readily be taken out and leave the seat per-

fectly clean. The valve is further provided with a bail, for convenience in removing the same.

In the upper end of the upper pump-stock is placed a slotted metallic plate, E, provided with ears *b b* on the inside, to form bearings for the fulcrum-pin *d* of the handle G.

It will be perceived that this cylinder requires no adaptation or modification of the sections of the pump-stock out of their exterior form, whether cylindrical or otherwise, and that it does not require the interior to be varied from a uniform bore; that its length and the clamping of its flange between the sections of the stock preserves such sections in vertical line; and that the removal of a worn-out cylinder and the substitution of a new one will always be an easy and sure operation; and further, that it may be applied to worn and otherwise useless stocks, so as to render them useful for years, this being accomplished simply by sawing the old stock in two in the part in which the piston moves.

We do not claim a pipe coupling, nor broadly a metallic lining for a pump-stock, so as to render the working part thereof smooth and lasting; nor do we claim a cylinder forming an independent section of the pump-stocks, as that has been done before.

Our invention, it will be observed, does not form an additional section, but a connection, whereby the stocks are firmly held in position and at the same time furnishing a smooth lining for the piston.

What we do claim as new, and desire to secure by Letters Patent, is—

As a new article of manufacture, the pump-cylinder B, provided with a solid central exterior flange, *a*, and of a length equal to or longer than the range of the pump-piston, said cylinder being inserted and fitting neatly in an upper and a lower section of a pump-stock, all substantially as shown and described.

In testimony that we claim the foregoing as our own, we affix our signatures in presence of two witnesses.

ALONZO SHERMAN.
JOHN W. SHEAFFER.

Witnesses:

J. B. MYERS,
JAMES MYERS.