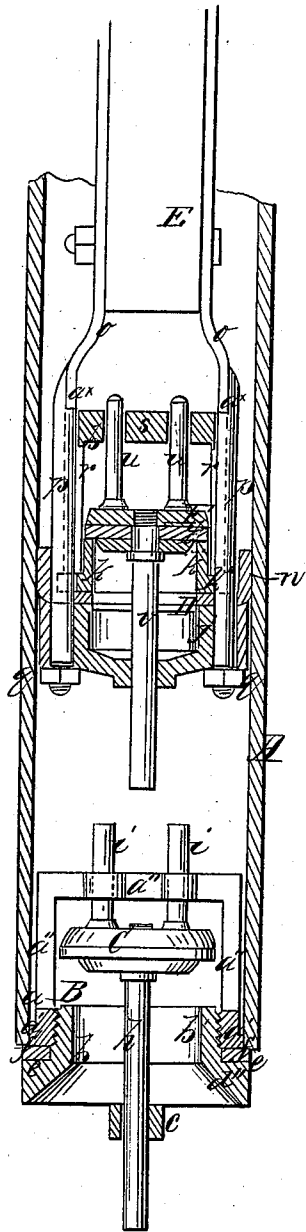


F. & J. Stock,

Pump Lift.

No. 23,795.

Patented Apr. 26, 1859.



Witnesses.

W^m Daniels

Charles Richter

Inventors.

Francis Stock

John Stock

UNITED STATES PATENT OFFICE.

FRANCIS STOCK AND JOHN STOCK, OF SAN JOSE, CALIFORNIA.

PUMP-BOX.

Specification of Letters Patent No. 23,795, dated April 26, 1859.

To all whom it may concern:

Be it known that we, FRANCIS STOCK and JOHN STOCK, both of San Jose, in the county of Santa Clara and State of California, have invented a new and useful Improvement in Pump-Boxes; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, making a part of this specification, said drawing being a vertical section of a pump-cylinder having our improved boxes fitted within it, the boxes being also centrally and vertically bisected.

This invention consists in a peculiar manner of constructing and arranging the parts of the upper box of the pump in connection with its valve and the manner of attaching said box to its rod or pole as hereinafter fully shown and described, whereby a very simple box and efficient arrangement is obtained, one that cannot readily get out of repair, and is capable of having proper packing adjusted to it with facility.

To enable those skilled in the art to fully understand and construct our invention we will proceed to describe it.

A, represents a portion of a pump cylinder, and B, is the lower valve box which is secured in the lower end of said cylinder. The box B, is formed of two parts *a*, *b*. The part *a*, is composed of a ring *a'*, which is soldered in the lower part of the cylinder and has a screw thread formed or cut within it, and on the upper side of said ring *a'*, there are two uprights *a''*, *a'''*, the upper ends of which are connected by a traverse piece *a'''*. The part *b*, of the box is also a ring, which has a bridge *c*, at its under side, and the upper part of the ring *b'*, is of smaller diameter than its lower part *d''*, so as to admit of a shoulder *e*, on which packing *f*, is placed. The upper part *b'*, of the ring is provided externally with a screw thread which screws into the upper part *a*, of the box, and causes the packing *f*, to fit snugly and water tight against the bottom of the cylinder A.

The upper edge of the upper part *b'*, of the ring *b*, forms the valve seat, and the valve C, is simply a circular plate provided with packing *g*, at its under side and having three guide rods *h*, *i*, *i*, attached, the rods *i*, *i*, being at its upper side and passing through the traverse piece *a'''*, the rod *h*, being at-

tached to the under side and passing through the bridge *c*.

The upper valve box D, is formed of three parts *j*, *k*, *l*. The lower part *j*, is very similar to the lower part *b*, of the box B, with the exception that two bolt holes are made through it at opposite sides, at each end of its bridge *m*. The part *k*, of the box D, is formed of a cylinder *k'*, having a flanch *k''*, projecting at right angles from the cylinder *k'*, and having packing *n*, placed on it, said packing projecting upward around the edge of flanch *k''*, and between it and the cylinder A.

E, is the pole or rod to which the upper valve box D, is attached. This rod has two plates *o*, *o*, attached to its lower end, said plates terminating in cylindrical rods *p*, *p*, which pass through the flanch *k''*, of the upper part *k*, of the box and through the lower part *j*, of the box, said rods *p*, having nuts *q*, on their lower ends.

Between the two rods *p*, *p*, two forked uprights *r*, *r*, are placed, said uprights being connected at their upper ends by a transverse bar *s*, said uprights and bar forming the part *l*, of the box.—The rods *p*, *p*, are fitted between the prongs of the uprights *r*, *r*, which serve as guides.

F, is a valve which is a circular plate provided with packing *t*, at its under side and with two guide rods *u*, *u*, at its upper side and one guide rod *v*, at its under side. The upper guide rods *u*, *u*, work loosely through the bar *s*, and the lower guide rod works loosely through the bridge *m*. The upper edge of the part *k*, of the box forms the valve seat.

From the above description it will be seen that by screwing up the nuts *q*, *q*, the part *j*, and flanch *k''*, will clamp tightly the packing *n*, and that the upper part of flanch *k''*, will bear against the lower ends of the forked uprights *r*, *r*, the upper ends of said upright bearing against shoulders *a''*, at the junction of the plates *o*, and rods *p*. The valve F', it will be seen is kept firmly in position equally so as if the box D, were stationary, as the uprights *r*, *r*, are firmly secured between the rods *p*, *p*, and all the parts are firmly connected and the packing allowed to be adjusted to the box with the greatest facility.

We do not claim the valve F, nor the

valve C, nor do we claim any parts connected with the lower B, as novel; but, having thus described our invention

What we do claim as new and desire to
5 secure by Letters Patent is.

The arrangement of the parts *j*, *k*, *l*, of the box D, in connection with the bolts

or rods *p*, *q*, and valve F, substantially as herein shown and described.

FRANCIS STOCK.
JOHN STOCK.

Witnesses:

CHARLES RICHTER,
WM. DANIELS.