

UNITED STATES PATENT OFFICE.

JOHN W. SHEAFFER, OF STERLING, ASSIGNOR TO ALONZO SHERMAN AND CHARLES DILLER, OF JORDAN, ILLINOIS.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. 54,420, dated May 1, 1866.

To all whom it may concern:

Be it known that I, JOHN W. SHEAFFER, of Sterling, in the county of Whiteside, in the State of Illinois, have invented a new and useful Improvement in Pumps; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and the letters and figures marked thereon, which form part of this specification.

The nature of my said invention consists in the peculiar construction of the valve-boxes herein described; in the arrangement, in combination with the upper and lower valve-boxes, of a hook and link or bail, whereby the lower box may be raised out from its bed for repairs or other purposes; and also in constructing the pump-handle of a peculiar form, and its arrangement in combination with the pump, substantially as hereinafter specified and described.

To enable those skilled in the art to understand how to construct and use my invention, I will proceed to describe the same with particularity, making reference in so doing to the aforesaid drawings, in which—

Figure 1 represents a longitudinal central section of my invention, and Fig. 2 a bottom view of the upper valve-box.

Similar letters of reference in the different figures denote the same parts of my invention.

A represents an ordinary pump stock, B the cap or cover, and C the handle, thereof; and D, a removable block fitting into the slot in which the handle is placed, above the handle, and E a slotted metallic plate in which the handle moves, and which preserves the pump-stock from being worn by the action of the handle. The said pump-stock is fitted tightly upon the metallic cylindrical chamber marked F, whose cavity slopes inward toward the bottom, as shown, so that the slightly and correspondingly inclined valve-box J will fit accurately and closely within said seat by simply dropping the box into the same.

H represents the metallic attachment to the chamber F, extending into the well, to the lower end of which is attached the pipe I, leading into the water. The advantage derived from the use of the attachment H is to enable the chamber to be readily removed by unscrewing it from said attachment H without disturbing the pipe below.

The valve-boxes J and L are constructed of metal, so that in attempting to repair them one is unable to drive in nails and split and otherwise injure them, as is the case when the boxes are made of wood. Upon the top of the box J the bail O is fixed in such a manner as not to interfere with the operation of the valve upon the box, and upon the under side of the box L, I attach the hook N.

The leather packing Q upon the box L is held in place by the metallic ring P, which is placed upon said packing and fastened to the box by means of the square-headed screws S, as shown. The heads of the screws are constructed in the form shown, so as to be readily removed by means of a wrench—a tool in the possession of nearly every one.

The handle C is constructed at that part lying within the slot in the pump-stock of a circular form, as indicated by C', so that in whatever position the handle may be the slot in which it works is closed. The handle is also curved in such a manner that it strikes against the pump-stock when the valve-box L is drawn up to the top of its chamber, and thus all strain and danger of breaking the apparatus is avoided.

Whenever the lower box, J, may need repairing, by removing the cover B and block D and the fulcrum or pin of the handle, one may grasp the end of the handle and lower the box L down far enough to attach the hook N to the bail O and withdraw said box J for repairs, when it can be replaced by dropping it into its seat, as hereinbefore mentioned, in all which operations the troublesome and uncertain arrangement of a screw and a rotary movement, also the delay and uncertainty incident to entering a flat catch into a slot, are wholly avoided.

Having described my invention, I will now specify what I claim and desire to secure by Letter's Patent:

The valve-boxes L and J, provided with the hook N and bail O, when constructed and operating substantially as and for the purposes set forth.

JOHN W. SHEAFFER.

Witnesses:

L. L. COBURN,
W. E. MARRS,