B. J. J. B. Pickering,

P11111 P151011,

Patented Den 4, 1866. 1.57.760. Witnesses; Bernill Techting.

Barton Pickering.

UNITED STATES PATENT OFFICE.

BURRILL PICKERING AND EDWIN PICKERING, OF WEST MILTON, AND BARTON PICKERING, OF MONTGOMERY COUNTY, OHIO.

IMPROVEMENT IN PUMP-PISTONS.

Specification forming part of Letters Patent No. 57,760, dated September 4, 1866.

To all whom it may concern:

Be it known that we, BURRILL PICKERING and EDWIN PICKERING, of West Milton, Miami county, and BARTON PICKERING, of Montgomery county, in the State of Ohio, have invented a new and Improved Piston for Pumps; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of our invention consists, principally, in the manner of securing the packing and of providing a free passage of the water through the piston.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

Figure 1 represents a tranverse section of the piston. Fig. 2 represents a top view of the piece A. Fig. 3 represents the under surface of the piece B. Fig. 4 represents the form of the leather packing.

A, Fig. 1, represents a cast piece, with the outer surface tapering from the top downward, having arms at the bottom and an orifice for the pump-1 od C. (Represented at Fig. 2, the dotted lines representing the taper from the top of the arms to the bottom.) From a line with the top of the arms the surface inclines outward to the top.

Fig. 3 represents the under surface of the cast piece B, the upper surface being a plane on which the leather valve E, Fig. 1, rests. There are five orifices, m m, made as large as possible for the passage of the water, and with so large openings in the plate, to make it suffi-

ciently strong projections n n are formed. (See representation at n, Fig. 1.) The piece B has an opening, o, for the pump-rod. The pump-rod has a shoulder at h and a thread cut on the end for the nut D.

The mode of attaching the packing and valve is described thus: The leather F is placed on the inclined surface of the piece A, the pump-rod being passed through the valve E and piece B, and through the piece A, and then the nut being screwed up, the packing is held firmly between the two pieces of the piston, and the valve is held to its seat by the shoulder of the pump-rod.

We are aware that pistons have been constructed having a plate with a series of holes and a leather valve used to close them, and with a lower plate to hold a packing of such form that the packing is held between the parallel surfaces.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The vertical part of the packing-piece A, having an inclined surface, as represented, for the purpose of holding the flaring packing F, when combined with the rod C and valveseat B, substantially as described and represented.

2. The arrangement of the pieces AB, packing F, valve E, and pump-rod C, substantially as described.

BURRILL PICKERING. EDWIN PICKERING. BARTON PICKERING.

Witnesses:

JOSIAH LOVELL,
DAVID VALENTINE