A. N. Parkhurst,

Pump Cylinder.

No. 37,638, Patented Feb. 10, 1863.

Fig. 1.

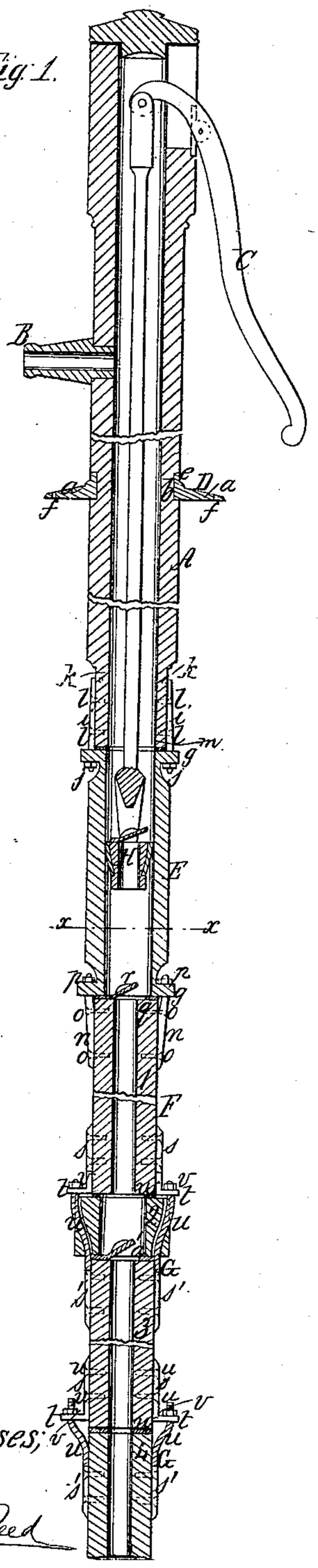


Fig. 2.

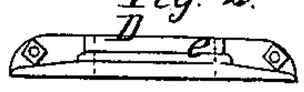


Fig. 3

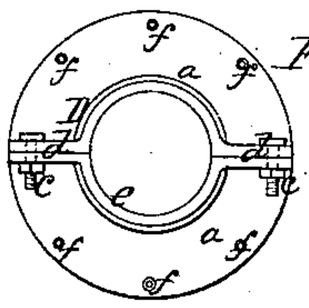


Fig. 4.

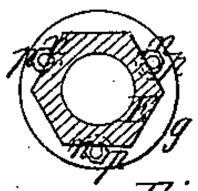
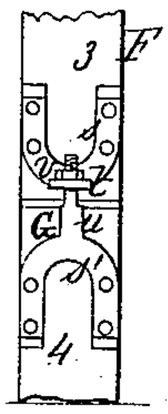


Fig. 5.

Fig. 6.



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UNITED STATES PATENT OFFICE.

A. N. PARKHURST, OF PEORIA, ILLINOIS.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. **37,638**, dated February 10, 1863.

To all whom it may concern:

Be it known that I, A. N. PARKHURST, of Peoria, in the county of Peoria and State of Illinois, have invented a new and Improved Pump; 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, making a part of this specification, in which—

Figure 1 is a central sectional elevation of my invention; Fig. 2, a detached side view of the flange by which the pump is secured to the platform at the top of the well; Fig. 3, a plan or top view of the same; Fig. 4, a transverse section of Fig. 1, taken in the line *x x*, Fig. 1; Fig. 5, a detached view of a valve pertaining to the same; Fig. 6, a detached side view of a coupling pertaining to the same.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improved pump of that class in which the piping is composed of wood and the cylinder of baked clay.

The object of the invention is to obtain a more durable pump of the kind specified than any hitherto used, and without any more expense in the construction or manufacture of the same.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the upper part of the cylinder of a pump, B the spout or nozzle, and C the handle. The part A of the cylinder is constructed of wood, turned or bored out in the usual way.

D is a flange, constructed of cast metal and of two semicircular parts, *a a*, which are fitted in a recess, *b*, in the part A of the pump-cylinder and are secured together and to the cylinder by screw-bolts *c c*, which pass through lugs or ears *d* on the parts *a a*. (See Figs. 2 and 3.) This flange is about one foot in diameter, and it has a collar, *e*, at its inner part, about one and three-quarters inches deep, and the flange gradually tapers from its inner edge or collar to its outer edge, as shown in Fig. 2, and has a series of holes, *f*, in it near its edge, through which screws pass into the platform.

To the lower end of the part A of the pump-cylinder the lower part, E, is attached. This part E is constructed of baked clay, internally glazed, so as to have a hard vitrified surface. This part E externally is of polygonal form, and has a circular flange, *g*, both at its upper and lower end. The length of the part E may be about sixteen inches, and it has a bore of about three and one-fourth inches in diameter. The flanges *g* are circular, and about one inch and five-eighths in thickness. In each flange *g* there are three holes, and through the upper flange bolts *i* pass, the lower ends of which have nuts *j* on them. The upper ends of the bolts *i* are bent inward to form spurs *k*, which pass into the lower part, A, of the pump-cylinder, and through these bolts screws *l* pass into the part A, and an annular packing, *m*, is interposed between them, as shown in Fig. 1. By this means a firm connection is obtained between the parts A E of the pump cylinder. The lower end of the part E of the pump-cylinder is secured to the square wooden piping F below by means of the bolts *n*, which pass through the lower flange, *g*, of E, and are secured to three of the sides of F by screws *o*. The upper ends of the bolts *n* have nuts *p* on them, and a leather packing, *q*, is interposed between the lower end of E and the upper end of F, said packing having a valve, *r*, formed in it by cutting a circular slit in the packing, forming nearly a circle, as shown in Fig. 5. The piping F is formed in sections, indicated by the figures 1, 2, 3, and 4, and these sections are connected together by clamps G, which are composed of metal straps *s s'*, of U form, screwed to the opposite sides of the piping near the ends of the sections. The straps *s* of one section are provided each with an ear or lug, *t*, through which bolts *u*, attached to the adjoining section, pass, the bolts *u* having nuts *v* on their upper ends. Packing *w* is interposed between the ends of the several sections, and the section 2 is much shorter than any one of the others, and forms a valve-box, the internal diameter of which is greater than that of the other sections of the piping. The valve *a'*, which is between this box and section 3 of the piping, is constructed precisely like the valve *r*, previously described.

A pump constructed in this manner is extremely durable. The sections of the piping, by means of the clamps, are firmly secured together, and the part E of the pump-cylinder is also firmly secured to the part A and to the piping. The pump-cylinder is also, by means

of the flange D, securely attached to the platform. The piston H works in the part E of the pump-cylinder.

I do not claim, broadly, a pump constructed of wood and baked clay, for they have been previously used; but

I claim as new and desire to secure by Letters Patent—

A pump constructed of wood and baked clay, having a cast-metal flange, D, attached to it, as shown, and the part E, which is formed of the baked clay, attached to the wooden part A, and to the upper section 1 of the piping by the bolts *i n*, and the different sections of the piping secured together by means of the clamps G, as herein set forth.

A. N. PARKHURST.

Witnesses:

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