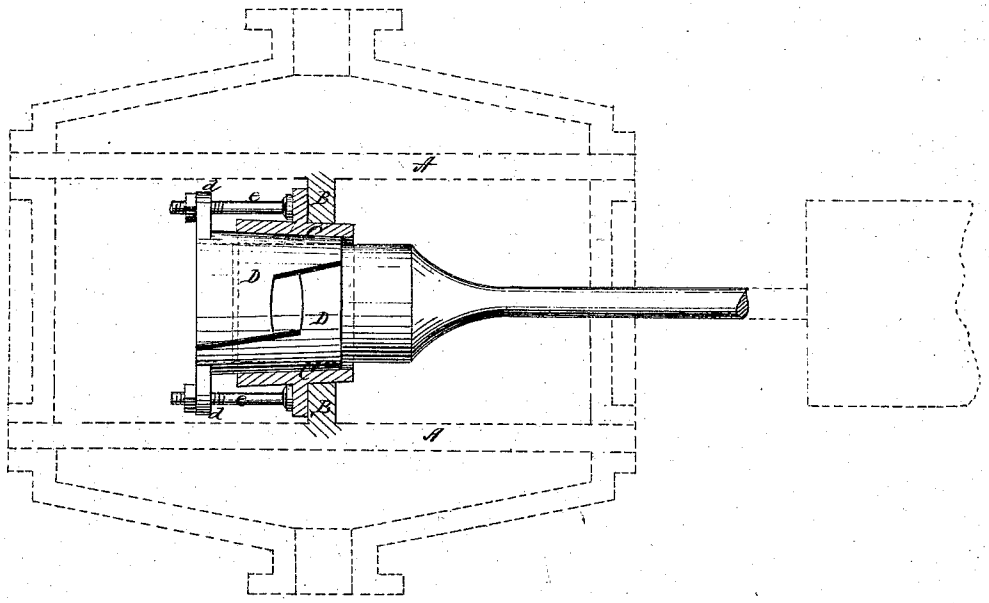
J. Clark,

Piston Packing.

No. 99,846. Patented Feb. 15. 1870.



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JOHN CLARK, OF HARRISBURG, PENNSYLVANIA.

Letters Patent No. 99,846, *dated February* 15, 1870.

IMPROVEMENT IN PISTON-PACKING.

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

I, JOHN CLARK, of Harrisburg, Dauphin county, Pennsylvania, have invented certain Improvements in Packing the Plungers of Steam-Pumping Engines, of which the following is a specification.

The invention is intended to be an improvement upon the well-known Worthington and Baker steam-pumping engine, and consists in the application of an adjustable packing, constructed so as to compensate for wear to the central transverse partition of the barrel of such an engine, through which the plunger plays.

The figure is a sectional plan.

A is the pump barrel, rectangular in cross section.

B is a transverse partition placed centrally of the barrel.

C is a cylindrical bushing, fastened by means of its flange, in any suitable manner, to one side of the partition.

Within the bushing C is placed the split packing ring D, having the usual diagonal lines of section *a b* separated by the offset *c*, and the break joint *h* interposed between the lines of section to prevent the transmission of steam from one to the other.

The interior of the cylindrical bushing has a regular taper from one end to the other, and the exterior of the packing ring has a corresponding taper, while the interior or bore of such ring is cylindrical, and closely fitted by the plunger E.

From the larger end of the packing ring project two ears *d d* from opposite sides, which ears are connected by means of threaded bolts *e e* with the flange of the bushing C.

By turning up the nuts on the threaded rods, the packing may be forced into the bushing with any degree of tightness required, and as often as the wear of the plunger may make it expedient.

F is the cylinder in which plays the piston head of the plunger.

This double-acting pump operates by the alternate rushing of water into the compartments of the barrel A from one side, through puppet valves, as the plunger is withdrawn, and its alternate expulsion at the other end as the plunger returns.

No pump barrel of this description has, so far as I am aware, ever been provided with an adjustable packing for the plunger.

Having thus described my invention,

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

The combination of the adjustable packing D provided with the ears *d*, with the bushing C, rods *e*, and partition B, in the manner and for the purpose described.

JOHN CLARK.

Witnesses:

WM. MITCHELL,

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