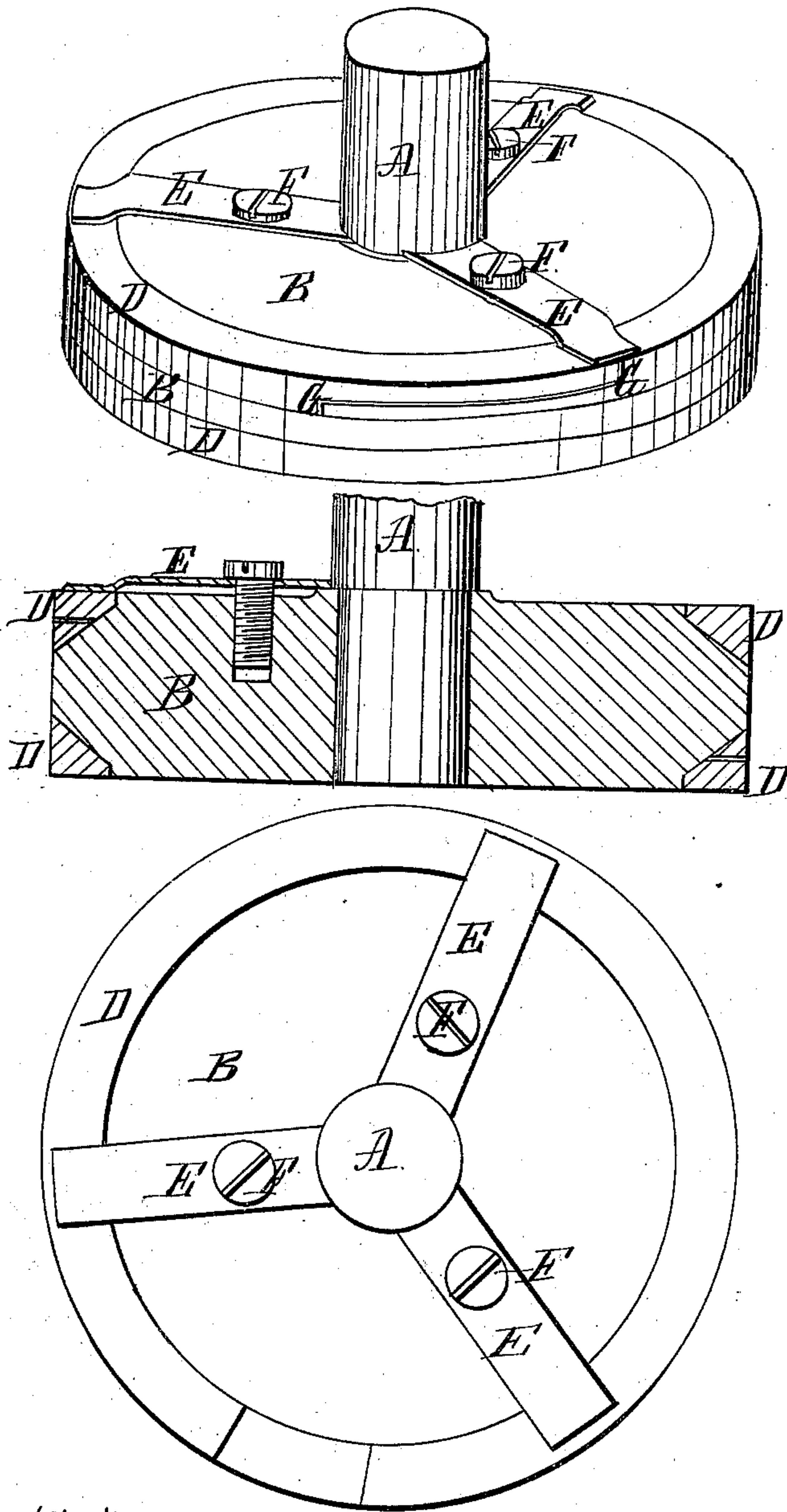


J. U. Adams.

Piston Packing.

No 78,911.

Patented June 16, 1868.



witnesses:
J. W. Houghton
H. S. Sprague

Inventor:
James U. Adams

United States Patent Office.

JAMES U ADAMS, OF RICHFIELD, MICHIGAN.

Letters Patent No. 78,911, dated June 16, 1868.

PACKING FOR PISTON-HEADS.

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

TO WHOM IT MAY CONCERN:

Be it known that I, JAMES U. ADAMS, of Richfield, in the county of Genesee, and State of Michigan, have invented a new and useful Improvement in Piston-Heads for steam-engines; and do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and being a part of this specification.

Figure 1 is a perspective view.

Figure 2 is a sectional view.

Figure 3 is a top view.

Like letters indicate like parts in each figure.

To the piston-rod A is firmly secured head B, sufficiently chamfered at the periphery to receive metallic packing-rings D, secured in position by springs E and screw F.

The head B is constructed in size nearly the diameter of the bore of the cylinder, to allow the same to reciprocate freely, but not loosely, in the same, by the pressure of the steam against the rings, adjusting the same to the full calibre, thereby preventing any waste or leakage between the rings and sides of the cylinder.

Rings D are severed by sawing vertically to the centre from opposite directions at some distance apart, as shown by G G, allowing space between, as at H, where is inserted a plate of copper, first prepared by plating one side of the same, securing a more perfect adhesion to the metal, the opposite side separating, leaving a smooth and parallel joint, thereby preventing the passage of steam, and allowing the expansion of the rings, as before described.

Springs E prevent any disarrangement of the rings by their equal pressure, and allow the same to contract or expand, as required, by the action of the same, thereby forming a very perfect and convenient device for the purpose described.

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

1. The springs E and rings D in combination with piston-head B, substantially as described.
2. The copper, H, or other metal, inserted in the manner described, and for the purposes specified.

JAMES U. ADAMS.

Witnesses:

H. S. SPRAGUE,
J. W. HOUGHTLIN.