

W. Johnson.

Piston Packing.

N^o 93,889.

Patented Aug. 17, 1869.

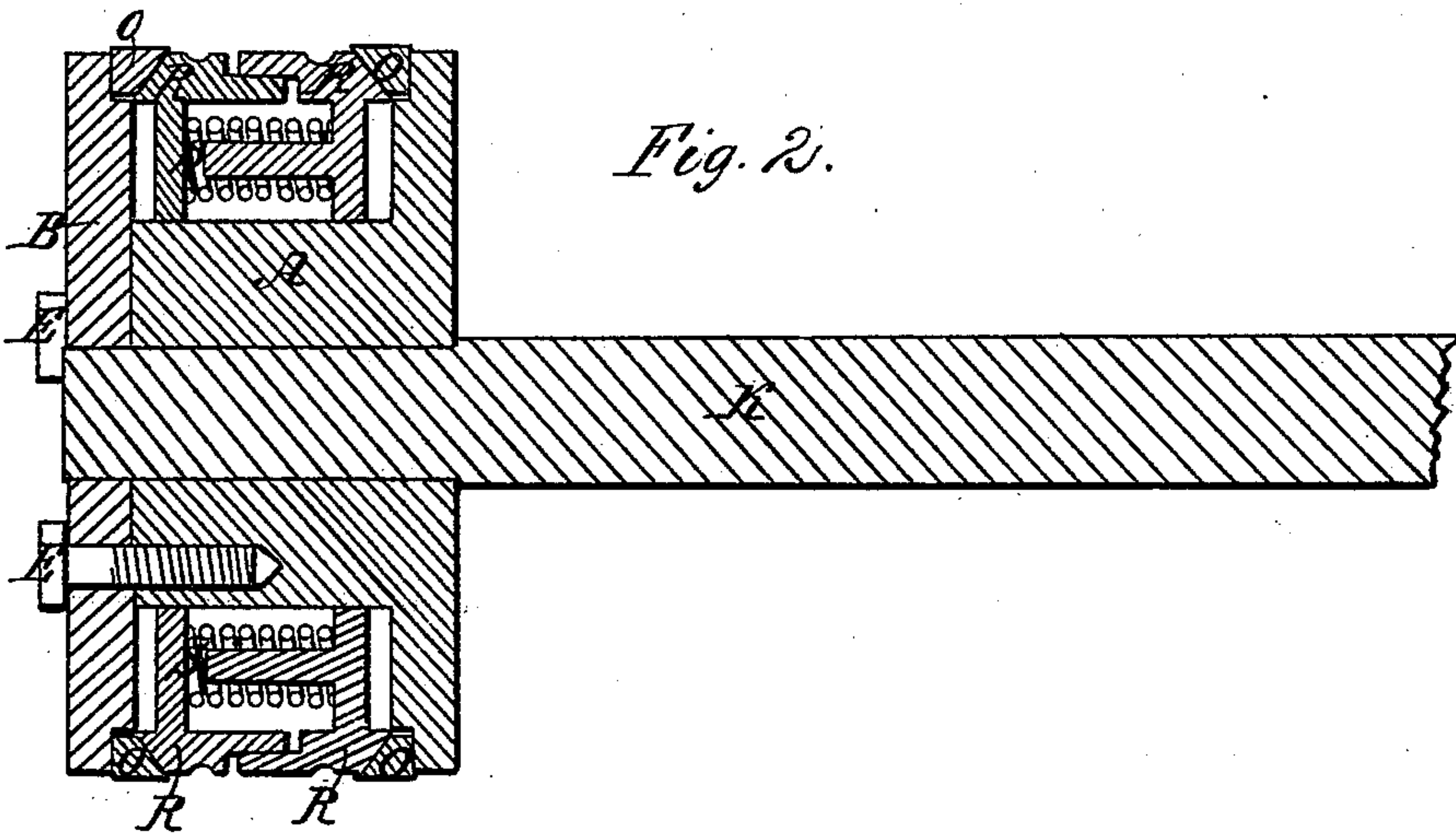


Fig. 2.

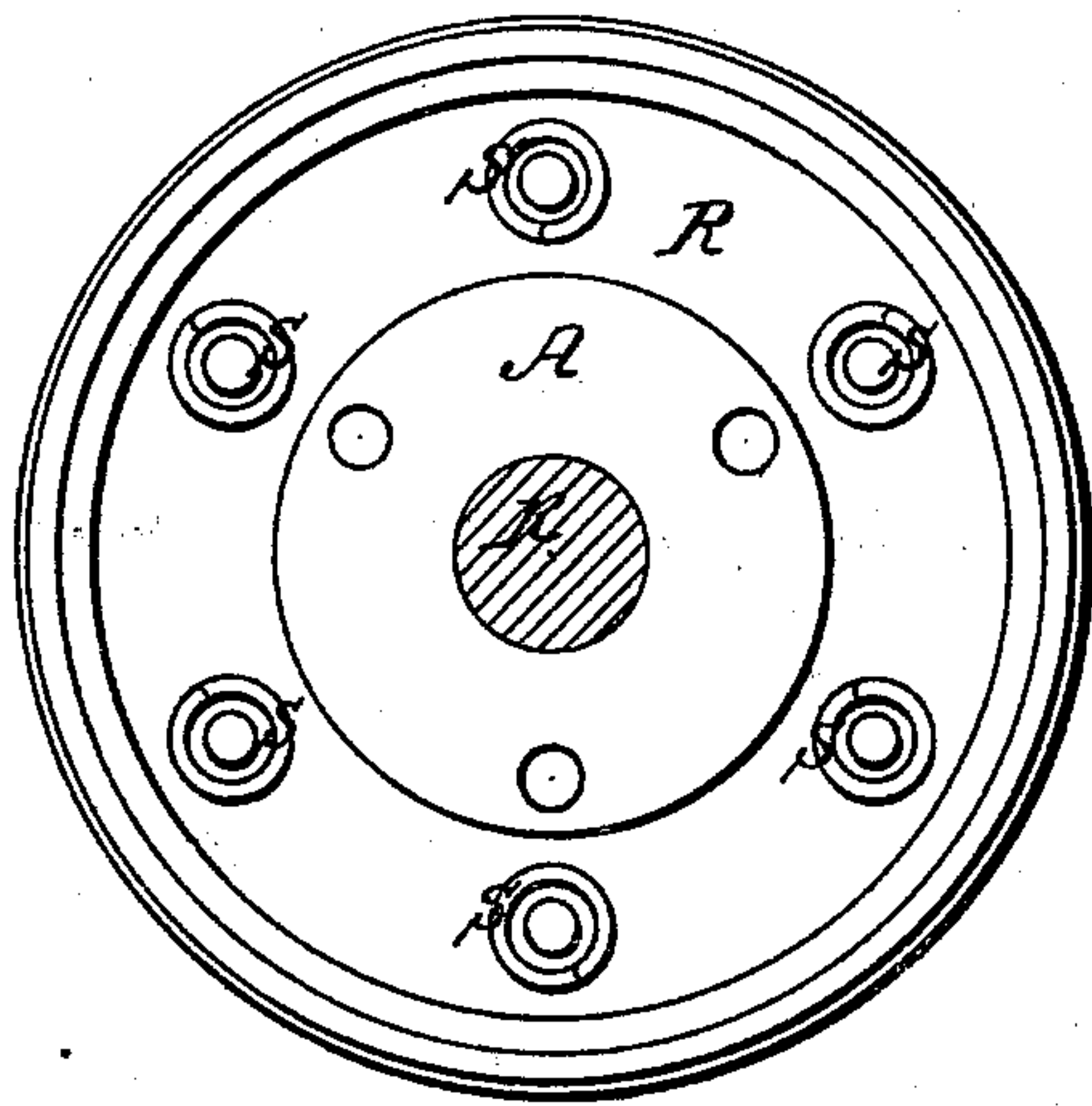


Fig. 1.

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WILLIAM JOHNSON, OF LAMBERTVILLE, NEW JERSEY.

Letters Patent No. 93,889, dated August 17, 1869.

IMPROVEMENT IN STEAM-CYLINDER PISTON-PACKING.

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

To all whom it may concern:

Be it known that I, WILLIAM JOHNSON, of the town of Lambertville, in the county of Hunterdon, and State of New Jersey, have invented a new and improved Piston for Steam-Engines, Pumps, &c.; and I 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.

My invention consists, briefly, in fitting two circular plates to slide upon the hub or body of the piston, between the flange of the piston-head and follower-plate.

These circular plates have a rim projecting around their outside, which, when fitted together, form an annular groove around the hub of the piston, in which groove are inserted any required number of springs between the plates, to force them apart.

The outside edges of said spring-plates are bevelled, and on either side a narrow packing-ring, with a corresponding bevelled edge, is inserted between said spring-plates and the flange and follower-plates of the piston.

Its operation is as follows:

The narrow packing-rings being cut apart, in the usual manner, are held in place by the follower and flange-plates, while the bevelled edges of the spring-plates, forced apart by means of the springs between them, open or spread the packing-rings out against

the cylinder at every point alike, thereby holding the piston precisely central with the bore of the cylinder.

In the accompanying drawings—

Figure 1 is an end view of piston, with the follower-plate, one packing-ring, and one spring-plate removed, showing the position of springs.

Figure 2 is a longitudinal sectional view, showing the relation of all the parts.

The several letters in all the figures refer to the same parts.

A is the flange, or piston-head, secured firmly to rod K.

B, follower-plate.

O O, the narrow packing-rings.

S S S S S S, the springs.

E E, screws, to hold the follower-plate.

R R, the circular spring-plates.

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

The packing-rings O O, having one edge bevelled, in combination with the circular spring-plates R R, having corresponding bevelled edges, when combined and arranged in the manner substantially as described and set forth.

WM. JOHNSON.

Witnesses:

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