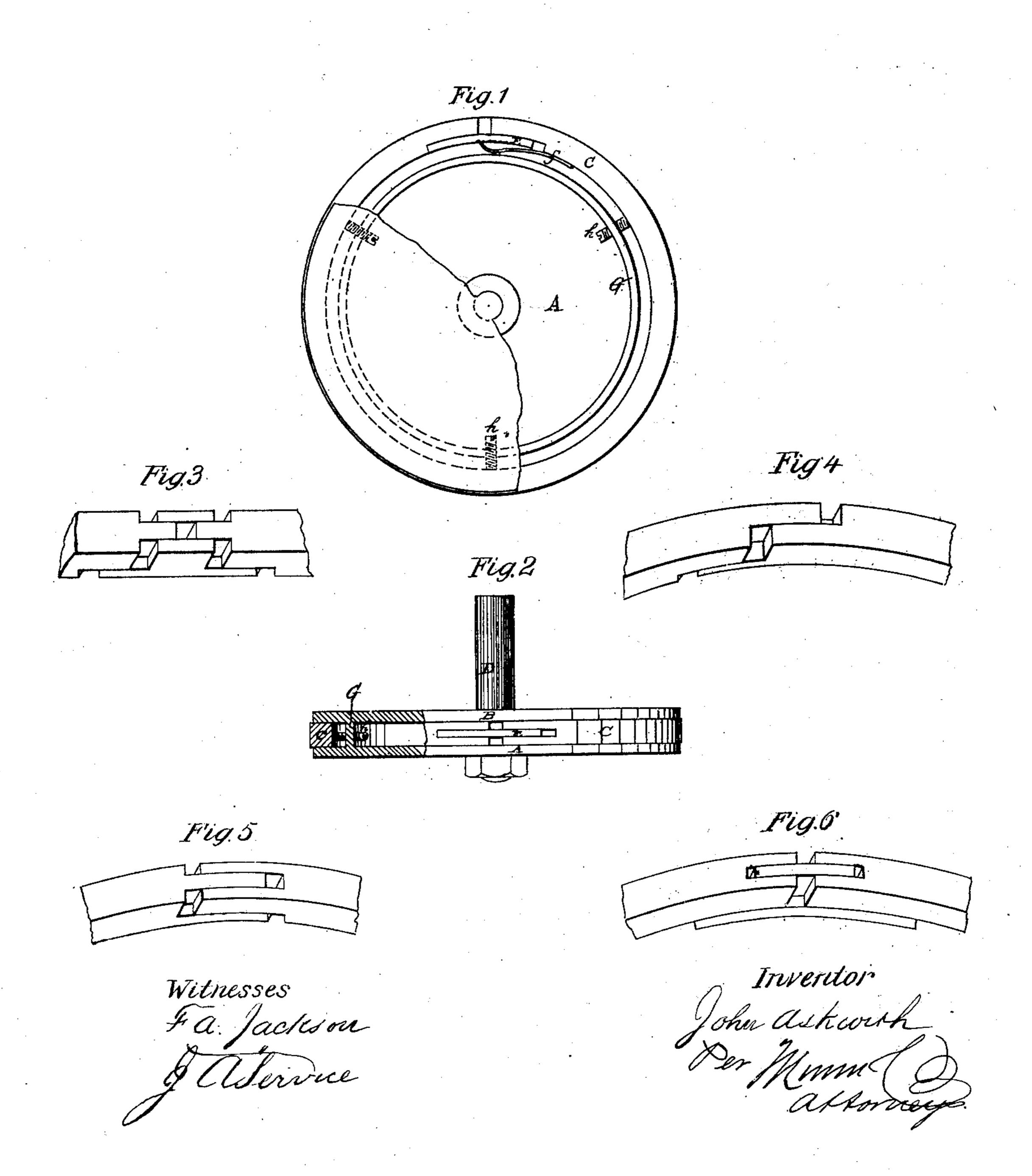
J. ASKWITH. PISTON PACKING.



Anited States Patent Pffice.

JOHN ASKWITH, OF CHICAGO, ILLINOIS.

Letters Patent No. 62,590, dated March 5, 1867.

IMPROVEMENT IN PISTON PACKING.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, John Askwith, of Chicago, in the county of Cook, and State of Illinois, have invented a new and useful Improvement in Piston Packing; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others' skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to the steam engine, and to a method of preventing the steam from escaping past the piston; and the invention consists in the provision made for keeping the ring expanded to the cylinder steam-tight and in a central position.

Figure 1 represents a horizontal section of the piston, showing the spider and the packing ring, and also the method of expanding it.

Figure 2 shows an edge view of the ring in its plane, with a portion broken away to show the set-screw as it acts upon the ring to expand it or move it.

Figures 3, 4, 5, and 6 represent modifications of the joint in the packing ring, or the different ways in which the ring may be divided and the joint formed.

Similar letters of reference indicate like parts.

The piston here represented in fig. 2 is composed of but one ring between the disk-plate or spider of the piston and the follower, but any desired number of rings may be used and operated in the same manner.

A represents the disk or bottom plate of the piston. B is the follower. C represents the packing ring. D is the piston rod. The packing ring is turned of proper size or diameter, and divided in one or more places, or cut across or through the section. Each end of the ring thus made is then slotted out or rebated, as shown in modification, fig. 6. The inner side of each of the ends so rebated, is recessed or cut away, as seen in fig. 1 E is a piece fitted into the recesses and the rebutment thus formed. The tongue portion is flush with he periphery of the ring, and the edges back of the tongue are flush with the upper and the lower side of the ring. The inner side has ratchet teeth, which receive the end of a spring, f, which spring bears against it, and keeps it in place and the ring expanded. G is a flange upon the plate A, through which the set-screws h work for the purpose of keeping the ring in a central position, and expanding it when it becomes worn or loose. The ring is not made to fit tight between the plate A and the follower B. A little steam is allowed to enter the recess or centre of the piston, and to press out the packing ring when the engine is running. There are small holes through the flange G to assist in this operation.

I do not confine myself to the particular form of joint described above; either of the modifications shown may be used, with the same or a similar effect, and any number of joints may be used; but having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The ratchet-piece E, the spring f, and the set-screws h, in combination with the ring C, as and for the purpose set forth.

JOHN ASKWITH.

Witnesses:

FRANKLIN CHAVETT.

A. D. HUNTER.