(No Model.)

W. H. MOSELEY.

CHECK OR VALVE.

No. 286,472. Patented Oct. 9, 1883.

Fig. 1.

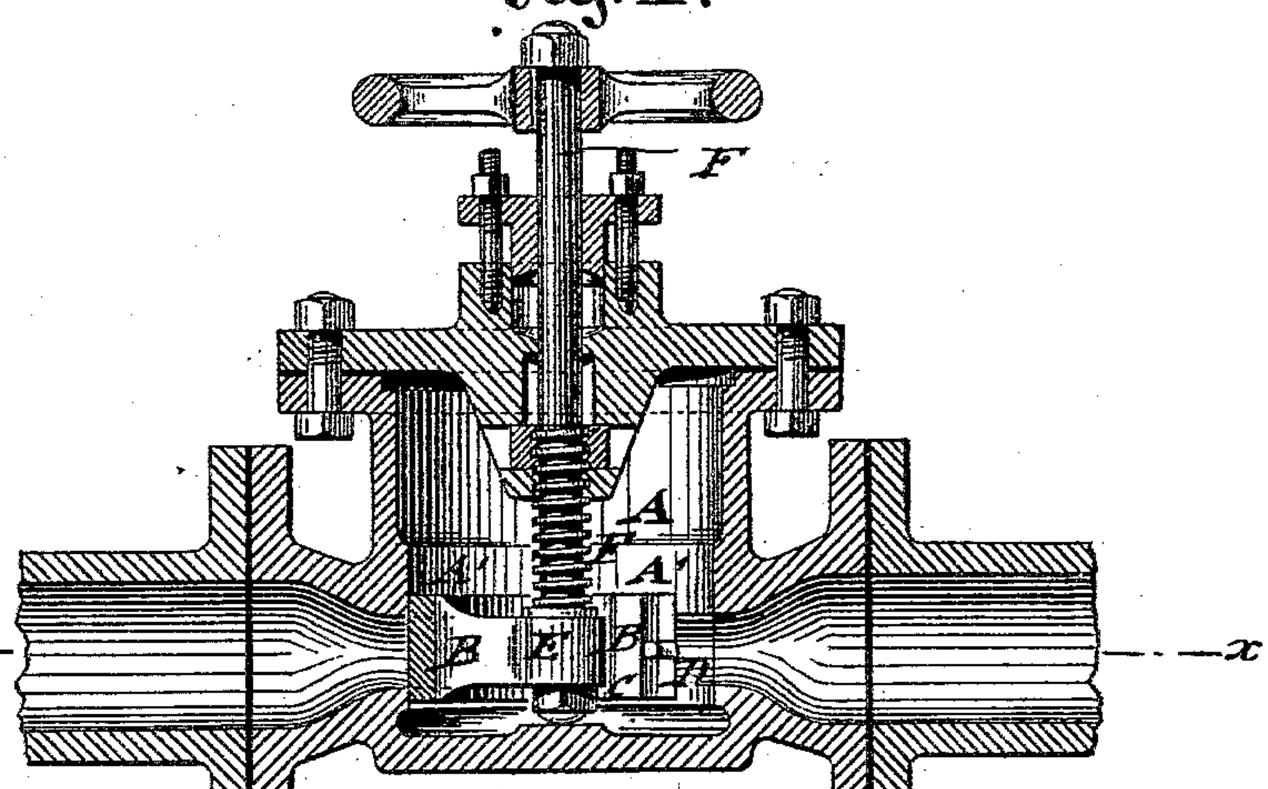


Fig. 2.

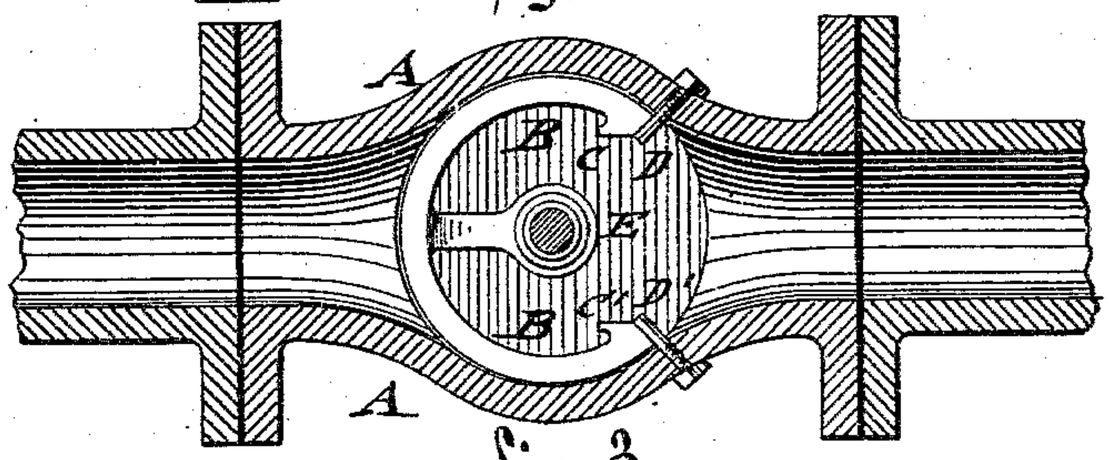


Fig. 3.

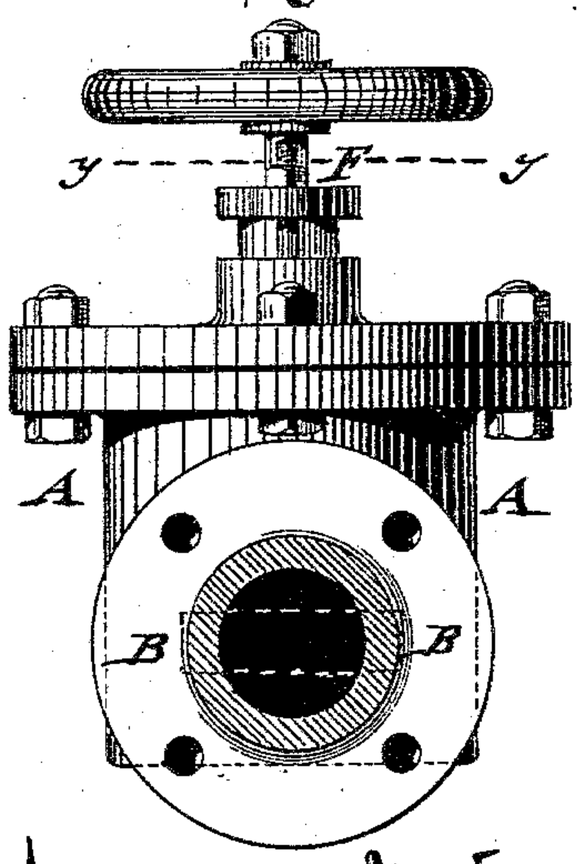


Fig. 4.

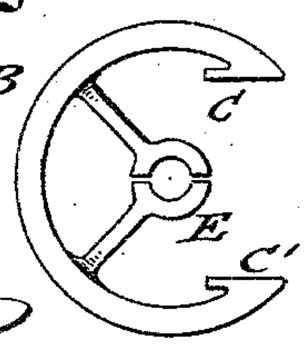
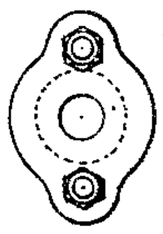


Fig. 5.



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WILLIAM HENRY MOSELEY, OF DERBY, COUNTY OF DERBY, ENGLAND.

CHECK OR VALVE.

SPECIFICATION forming part of Letters Patent No. 286,472, dated October 9, 1883.

Application filed April 20, 1883. (No model.) Patented in England October 30, 1882, No. 5,144, and in France December 19, 1882, No. 152,735.

To all whom it may concern:

Be it known that I, WILLIAM HENRY MOSELEY, of the town and county of Derby, England, engineer, have invented certain new and useful Improvements in Cocks or Valves for Controlling or Regulating the Flow of Water, Steam, Gas, and other Fluids, (for which I have obtained Letters Patent in Great Britain, No. 5,144, bearing date October 30, 1882, and in France, dated December 19, 1882, No. 152,735,) of which the following is a specification.

This invention relates to improvements in cocks or valves for the purpose of regulating or controlling the flow of steam, gas, or liquids; and it consists in forming in the shell or body of the cock or valve a cylindrical facing, on which slides an elastic ring of cast-iron, brass, or other metal, regulated by a screw-spindle, lever, or other device. The elasticity of the ring keeps it tight against the face and forms a perfect joint, keeping sediment or grit from getting between the faces.

Heretofore nearly all stop-valves have been liable to the objection that the valve, when opened, recedes or falls away from its facing. In other stop-valves where it is not so, springs and other devices which soon get out of order have been used to obviate this defect. The present invention, while always keeping the valve tight up against its facing, contains in the valve itself the elasticity requisite for the purpose, thus gaining the desired result.

In the accompanying drawings, which fully illustrate my invention, Figure 1 is a vertical longitudinal section of a stop-cock suitable for boilers, steam-engines, &c. Fig. 2 is a horizontal section of the same on line *x x*, Fig. 1. Fig. 3 is an end elevation. Fig. 4 is a plan of a ring with a split boss and two arms; and Fig. 5, a detail horizontal section on line *y y*, Fig. 1, showing the top plate of spindle stuffing-box.

Similar letters of reference indicate corresponding parts.

A is the valve box or casing, which may be made of cast-iron or other suitable metal and of any required dimensions.

B is a ring of suitable metal, having end lugs, C C′. The ring B is turned the same diameter as that of the interior bore of the valve-facing A′. D D′ are two small stops to prevent the ring from turning. These are not required when the valve is opened by a lever and spindle.

To insert the ring B, it is drawn together by means of a cramping device applied to the lugs C C′. When in position in the valve-casing A, the cramping device is removed, so that the ring, being sprung in its seat, contains within itself sufficient elasticity to cause it to press strongly against the bore of the facing, thus always keeping it up against the same, whether open or shut, insuring a perfect joint when closed, and by the act of closing cleaning away from the facing any deposit or grit which may have settled there.

A hub, E, is cast on the ring, with a central hole bored in it for the passage of the spindle F, which actuates the valve.

It will be seen in the plan view, Fig. 2, that the ring has a place between the lugs C C′, thus leaving the passage always open at the back of the valve, and permitting the fluid or gas to flow inside the ring, so that when the valve is closed there is no part whatever of the facing along which the ring slides exposed to the action of the steam, fluid, &c. It is applicable where two or more passages are required. The ring can be split in any part, and I find it frequently advantageous to use a ring with a split boss and two arms, as shown in Fig. 4.

The principle of the valve is applicable for steam, water, gas, and all other pipes where a stop-cock is required. When the liquids or gases possess corrosive properties, the working parts must be constructed of or coated with materials capable of resisting such action.

In the case of small valves—such as for beer or liquors—the valve may be closed by a spring on the spindle, and opened by a lever, for the sake of quickness, instead of screwing it down; but I do not bind myself to or claim any special mode of operating the valve.

I am aware that in itself the mere making of a spring-ring is not novel, such rings having been used for packing pistons and pump-buckets, and I do not claim this feature, broadly.

I am also aware that valves made of a metallic spring-ring that is pressed against the interior face of the valve-casing and raised or lowered by suitable means have been used heretofore, and I do not claim the same, broadly.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of a valve-casing, A, having an interior valve-facing, A′, and metallic spring-ring B, having end lugs, C C′, and central hub, E, with stops D D′ and spindle F, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 20th day of February, 1883.

WILLIAM HENRY MOSELEY.

Witnesses:

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