

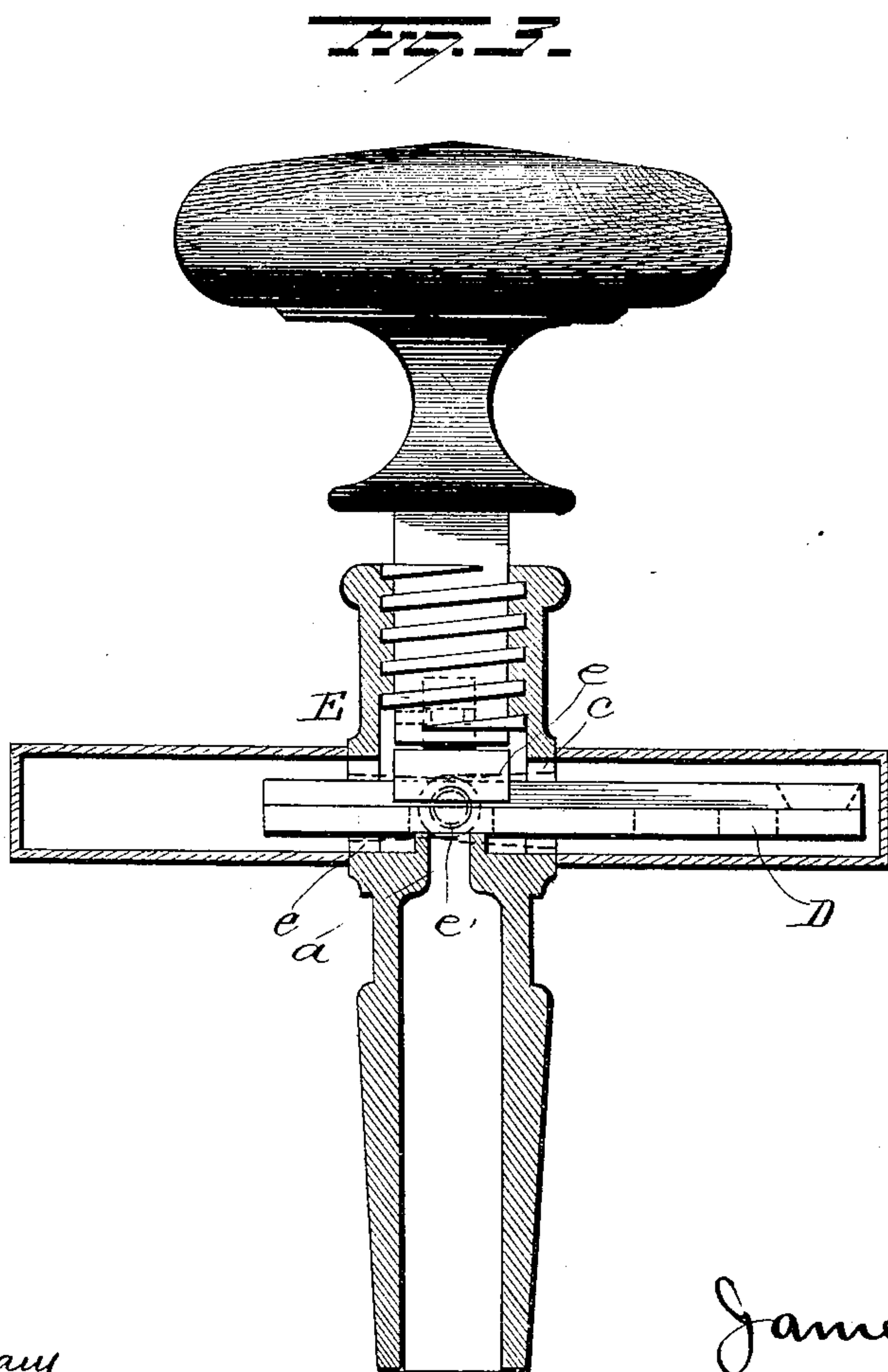
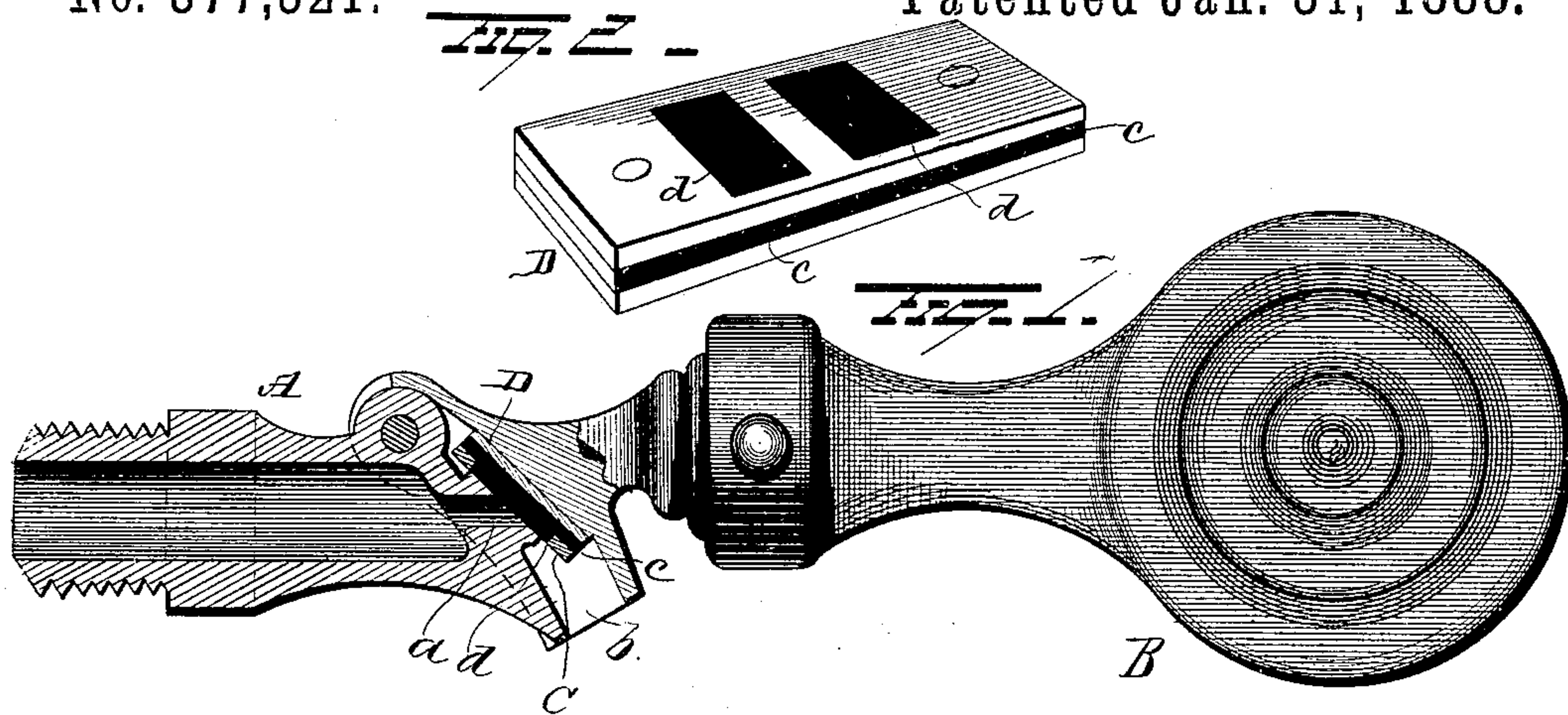
(No Model.)

J. McGWIN.

GAGE COCK.

No. 377,321.

Patented Jan. 31, 1888.



Witnesses  
*E. Nottingham*  
*Albert Popkins*

Inventor  
*James McGwin*

By his Attorney  
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# UNITED STATES PATENT OFFICE.

JAMES MCGWIN, OF FULTON, MISSOURI.

## GAGE-COCK.

SPECIFICATION forming part of Letters Patent No. 377,321, dated January 31, 1888.

Application filed September 28, 1887. Serial No. 250,909. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES MCGWIN, of Fulton, in the county of Callaway and State of Missouri, have invented certain new and useful Improvements in Gage-Cocks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in gage-cocks.

It is important that the packing for gage-cocks, in order to do the best work, should be so arranged that it may be readily renewed, and as a means to accomplish this end gage-cocks have been constructed heretofore with a rubber tape so arranged that when one portion becomes worn by use another portion may be moved into the place of the worn portion by simply shifting the position of the tape over the jet-orifice. Objection has, however, arisen to this form of construction, because of the liability of the rubber tape drying, cracking, becoming soiled from its exposure, or becoming torn or otherwise mutilated or rendered useless for the purpose sought.

It is the object of my present invention to obviate these difficulties by inclosing the packing in a protected position in a recessed slide of such construction that the packing will be in position to be quickly and conveniently slid along into its proper place to rest over the jet-orifice.

With this end in view the invention consists in certain features of construction and combinations of parts, as will be hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a longitudinal section through a gage-cock in which my improved packing is employed. Fig. 2 is a view of the packing-plate, and Fig. 3 is a modified form of gage-cock.

A represents a hollow screw-plug of the usual form and adapted to screw into a boiler. A jet-orifice, *a*, is formed in one end of this plug, and pivoted above said orifice is the weighted gravity-handle B. A box, *b*, is formed on the pivoted end of this handle and adapted to receive the projecting end in which the orifice *a* of the plug is located. In the sides of this box the slots C are formed oppo-

site each other. The slots may be variously formed; but the preferred form is rectangular, as shown in the drawings.

The slide D is preferably composed of a pair of moderately-thin metallic plates, secured together with rubber or yielding composition material, *c*, secured between them. One of these plates is provided with a series of suitable-sized slots, *d*, arranged at proper distances apart, these slots being of a size to correspond approximately with the size of the projection through which the orifice *a* is formed and adapted to expose the packing therein. The packing may now be inserted in plugs into the slots, or in the form of elastic tape be placed between the plates and the latter be riveted together.

It is obvious that the construction of this slide might be considerably varied, as the rubber or composition might be exposed through a single long slot, and the manner of adjusting the slide in place may be accomplished by an adjusting-screw in the back of the box for holding the slide in place; or, as shown in Fig. 2, perforations might be formed at the sides and between the slots for the reception of a pin or similar means for limiting the distance to which the slide passes through the slots C, this distance being always arranged to throw the packing in position to rest over the orifice when the handle B is released and permitted to drop into normal position.

In the modification shown in Fig. 3 a compressional or screw gage-cock is employed. The slide in this case, as before, is placed in a slot, C, and the plug E screwed into place back of the slide. In this construction the back of the slide and the button forming the end of the compressional plug are dovetailed together, so that the plug cannot be possibly turned entirely out of place or away from the slide, while the latter may be slid out of the button *f* of the plug.

A pair of caps, one funnel or conical shaped and the other rectangular or cylindrical, are removably secured over the slot partially to protect the plate and particularly to prevent the spattering of steam and water. These caps may be readily secured in position by placing the loops *e* over the lugs *e'*.

It is evident that slight changes might be



resorted to in the form and arrangement of the several parts without departing from the spirit and scope of my invention; hence I do not wish to limit myself to the particular construction herein set forth; but,

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

1. In a gage-cock, the combination, with a plug having an orifice therein, of a removable packing-slide having a yielding packing material therein adapted to be seated over the orifice, substantially as set forth.

2. In a gage-cock, the combination, with a plug having an orifice therein, of a movable rigid slide carrying a yielding packing adapted to be seated over the orifice, and caps adapted to be removably secured to the plug, substantially as and for the purpose set forth.

3. In a gage-cock, the combination, with a plug having an orifice therein, of a removable packing-slide having a yielding packing therein adapted to be seated over the orifice, and a screw compressional plug dovetailed at one end to the slide, substantially as set forth.

4. A removable packing-slide constructed of rigid material and having a recess therein and a yielding packing located in said recess, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JAMES McGWIN.

Witnesses:

JAMES W. OVERTON,

JAMES D. HENDERSON.