(No Model.)

R. P. GARSED.

Cock, Faucet, &c.

No. 237,854. **Patented Feb. 15, 1881.**

Fig. 1.

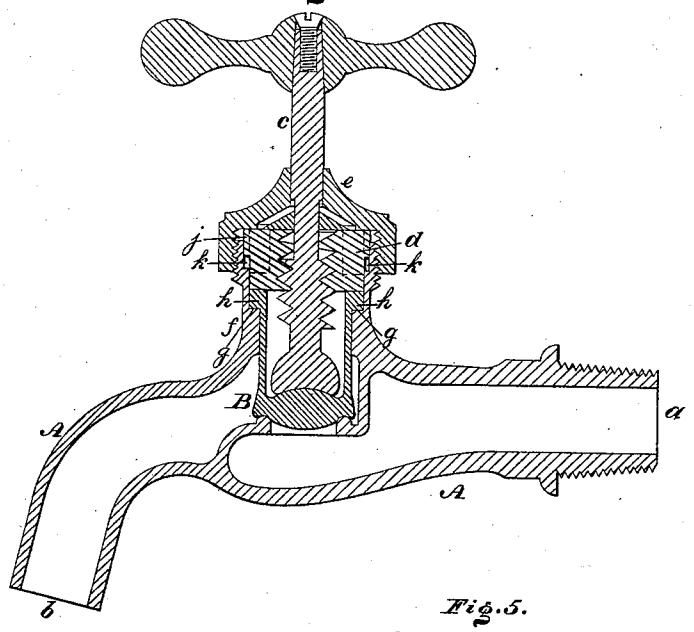


Fig. 5.

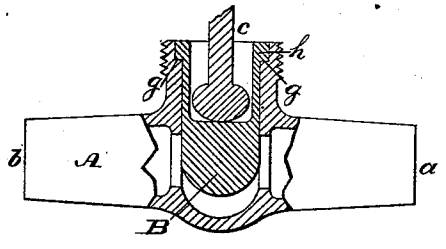


Fig. 4.

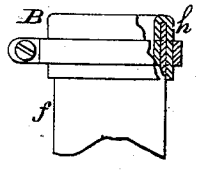


Fig. 2.

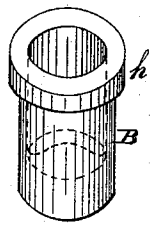


Fig. 6.

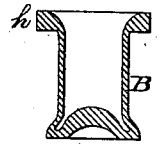
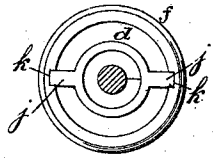


Fig. 3.



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UNITED STATES PATENT OFFICE.

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COCK, FAUCET, &c.

SPECIFICATION forming part of Letters Patent No. 237,854, dated February 15, 1881.

Application filed October 27, 1880. (No model.)

To all whom it may concern:

Be it known that I, ROBERT P. GARSED, a citizen of the United States, residing at Norristown, in the county of Montgomery, State of Pennsylvania, have invented a new and useful Improvement in Cocks, Faucets, &c., which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a longitudinal vertical section of a cock embodying my invention. Fig. 2 is a perspective view of a detached portion thereof. Fig. 3 is a top view of a portion thereof. Figs. 4, 5, and 6 are views of modifications.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of an expansible or flexible plug or thimble, serving both as a valve and packing for a cock, faucet, spigot, &c.

Referring to the drawings, A represents a cock, having an inlet-branch, *a*, outlet-branch *b*, screw-stem *c*, head *d*, and cap *e*.

On the inner face of the upper portion, *f*, of the shell of the cock is a shoulder, *g*, from which is suspended a plug or thimble, B, formed of soft rubber or other elastic flexible material, and having the lower end of the stem *c* projecting into the same. The upper end of the thimble has a flange, *h*, which rests on the shoulder *g*, and is clamped by the head *d*, to which the screw stem or plug *c* of the valve is fitted and against which presses the cap *e*, said head having lugs *j*, which enter notches *k* in the portion *f* of the cock and prevent rotation of the head.

It will be seen that when the stem *c* is rotated its lower end bears against the base of the thimble B and expands the latter, so that it is extended to the valve-seat and compressed against the same, whereby the cock is closed, as shown in Fig. 1. When the stem is rotated in opposite direction it rises and the thimble contracts or assumes its normal position, thus leaving the valve-seat and opening the cock.

In Fig. 4 the upper end of the thimble is turned over the top of the portion *f*, and secured in position by a clamping-band.

In Fig. 5 the cock has two valve-seats, and the thimble or valve, which is shown partly open, plays between the walls of the seats in the opening and closing motions.

In Fig. 1 the base of the thimble is formed with an upwardly-projecting swell or convexity, and the contiguous end of the stem *c* with a concavity to accord with said swell or convexity of the thimble, and thereby more readily expand the thimble and force it reliably and securely on the valve-seat. In Fig. 5 the base of the thimble is enlarged and the lower end of the stem is bulbous. The base of the thimble in Fig. 6 is concavo-convex, and in either case the stem and thimble are unattached, as the rising of the thimble or valve is due to the contraction of the material of which it is formed; but, if desired, the stem may be swiveled to the thimble for raising the same, the additional advantages of employing the flanged plug or thimble being the closing of the top of the shell and preventing of leakage thereat without the employment of packing around the stem or plunger-rod *c*.

The outer edge of the bottom of the thimble and top of the inner bulge or swell thereof may be formed of rigid material, secured or applied by molding or other suitable means, so that the wearing property of said bottom or base is increased and its shape preserved.

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

The combination of cock A, having internal shoulder, *g*, screw-clamped head *d*, screw-threaded stem *c*, having a knob or button at its lower end, and the hollow cylindrical rubber plug B, closed at the bottom and provided at its top with external flange, *h*, which rests on shoulder *g* and receives the pressure of head *d*, substantially as set forth.

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Witnesses:
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