(No Model.)

W. H. DEMING.

LOCK COCK.

No. 359,714. Patented Mar. 22, 1887.

Fig. 1.

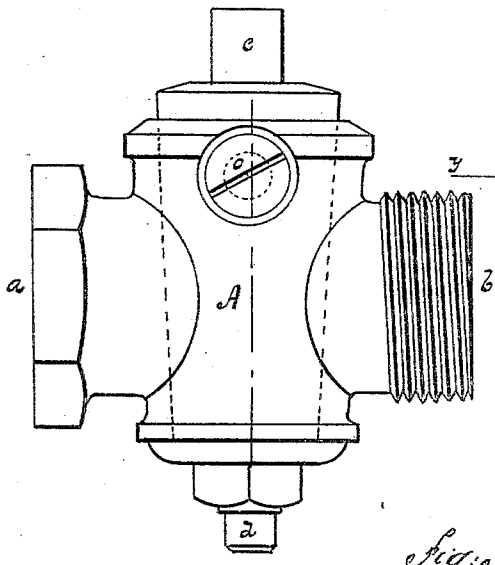


Fig. 2.

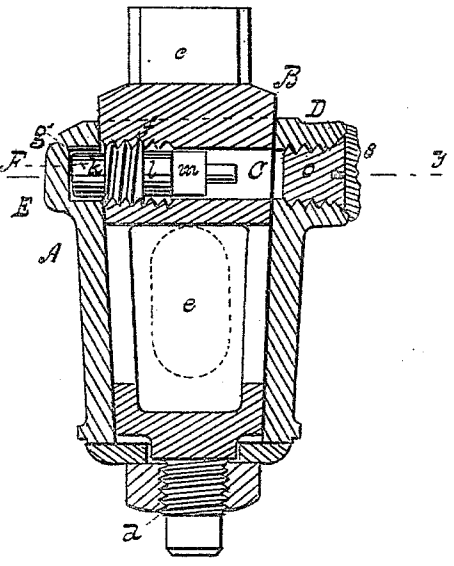


Fig. 3.

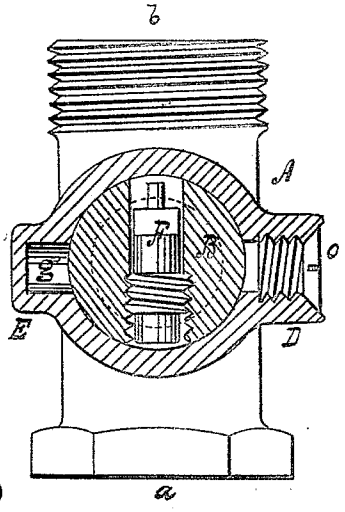


Fig. 4.

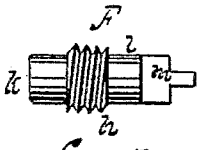


Fig. 5.

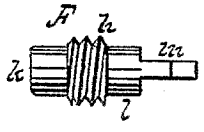


Fig. 6.

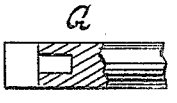
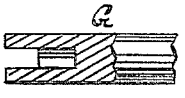


Fig. 7.



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UNITED STATES PATENT OFFICE.

WILLIAM H. DEMING, OF BROOKLYN, NEW YORK.

LOCK-COCK.

SPECIFICATION forming part of Letters Patent No. 359,714, dated March 22, 1887.

Application filed December 17, 1886. Serial No. 221,823. (No mode'.)

To all whom it may concern:

Be it known that I, WILLIAM H. DEMING, of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Lock-Cocks, of which I declare the following to be a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This invention is in the nature of an improvement in lock-cocks; and the invention consists in a lock-cock constructed, combined, and arranged in the manner hereinafter shown, described, and claimed.

In the accompanying sheet of drawings, Figure 1 is a side elevation of my device; Fig. 2, a vertical section of same in the line *x x*, Fig. 1; Fig. 3, an edge or front view, partly in section, in the line *y y*, Fig. 2; Fig. 4, a side elevation of screw-plug; Fig. 5, an edge view of same; Figs. 6 and 7, views of key, partly in section.

Similar letters of reference indicate like parts in the several views.

As stated, this invention relates to lock-cocks—that is, cocks that may be locked in the closed or shut-off position, so that unauthorized persons cannot make use of gas, liquor, or other substance which flows through the pipe to which is attached the cock. Lock-cocks, in the broadest sense, are old and well known; but, so far as I am aware, they have heretofore consisted of a cock combined with a padlock. The construction of my device, however, is wholly different from these old and well-known lock-cocks, as will be seen from the following description, in which, referring to the drawings, A represents the ordinary seat for the plug B, and *a* and *b* the inlet and outlet openings of the cock. The plug is provided with the ordinary square, *c*, at one end and the threaded stem *d* at the other end. The opening *e* in the plug is of the usual form and proportions. In fact, the plug B of the cock in no wise differs from the well-known construction, except that it is perforated at C near the head of the plug. This perforation passes through the plug in the same direction as does the opening *e*, and it is immediately above that opening. The perforation C, which is peculiar to my invention, is provided in part with screw-threads *f*. Cast with the exterior of the valve-seat A, and opposite to each other, are two lugs, D and E, the lug D being threaded interiorly, and the lug E having a cavity, *g*. Passing into the perforation C is a cylindrical plug, F, threaded at *h*, with a projection, *k*, at one end, and having a stem, *l*, terminating in a square, *m*, at the other end. The threads on this plug F correspond with the threads in the perforation C. These screw-threads may be "right and left hand" screw-threads; but, for the reasons hereinafter named, I prefer to make them left and right hand threads.

My device, when constructed substantially as above described, is operated by inserting the plug F in the perforation C of the plug B by screwing it therein until neither of its ends project beyond the surface of the plug B, to interfere with its working. The plug then being inserted in its seat A, the cock may, if desired, be operated the same as any ordinary cock; but should it be intended to lock the cock in its shut-off or closed position, so as to prevent unauthorized access to gas or substance conveyed by the inlet-pipe to which the cock is attached, then a key, G, having the general construction shown in Figs. 6 and 7, or any other that will answer the purpose, is inserted into the lug D, so that it may engage with the square *m* of the plug F, and therewith this plug is turned until the projection or end *k* of the plug is forced into the cavity *g* of the lug E, (see Fig. 2,) when, as is apparent, the plug B of the cock is dogged and prevented from turning in its seat A, and upon the withdrawal of the key G from the lug D no means of turning the plug F to release the plug B is presented, and since the square *m* of the plug F does not project, but, on the contrary, is well in the interior of the perforation C, it will not be convenient to unscrew the plug F without a key properly fitted for that purpose.

As a further precaution against tampering with the plug F, a stud, *o*, is screwed into the lug D, and the head of this stud being countersunk, the recess may be filled with wax *s*, suitably impressed, which must necessarily be broken in order to get at the stud to withdraw it.

Of course the locking device is effectual with-

out the stud *o;* but as an auxiliary it opposes an additional impediment, and, furthermore, its use permits the use of the seal without danger of gumming up the square on the end of the plug F or the perforation C which receives that plug.

The advantage of making the screw-threads in the plug F left-hand threads is simply to baffle a tamperer, for as most persons will naturally turn a screw from right to left to unscrew, such turning will only tend to screw the plug F more tightly in place.

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

1. A lock-cock having the following in combination: the plug B, constructed with a perforation passing through the same, said perforation having screw-threads formed therein, and a plug, F, also threaded to correspond with the thread in said perforation and proportioned to prevent the turning of the plug B in its seat when said plug F is screwed through the plug B into the side of the plug-seat A, and not to interfere with the free turning of the plug B when said plug F is screwed wholly within the plug B, but not removed therefrom, as and for the purpose described.

2. In a lock-cock, in combination, a perforated and threaded plug, B, a plug, F, constructed to lie wholly within the perforation in said plug B, a key to operate said plug F, a lug, D, a screw-stud, *o*, and a seal, *s*, as and for the purpose described.

WILLIAM H. DEMING.

In presence of—

D. A. CARPENTER,

T. G. EARL.