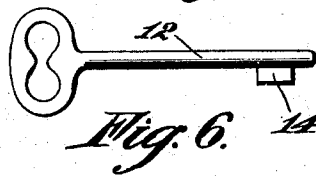
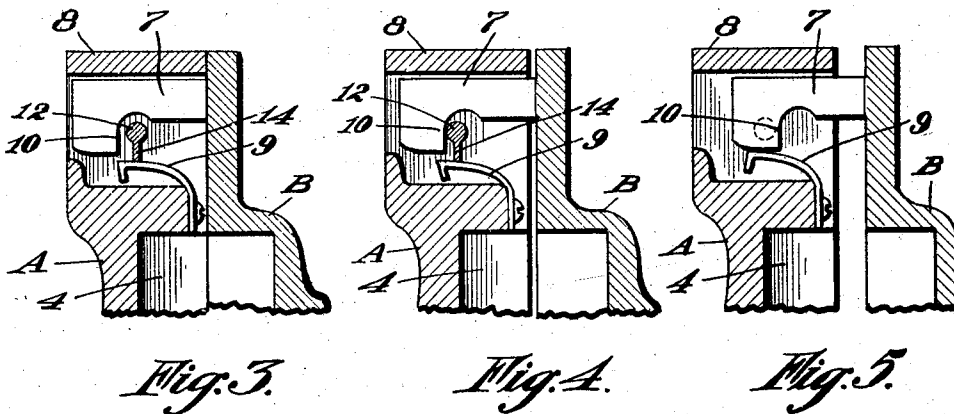
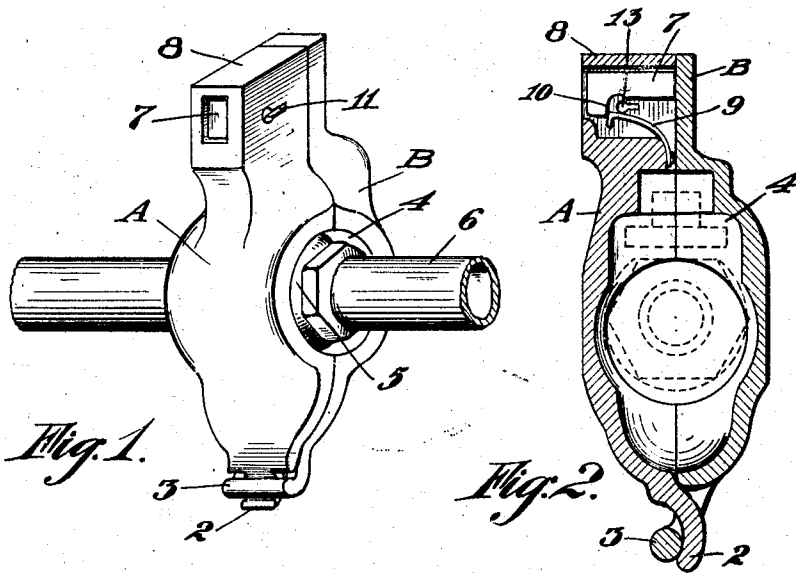


J. J. KELLY.
VALVE GUARD.
APPLICATION FILED AUG. 1, 1910.

994,409.

Patented June 6, 1911.



Witnesses;
A. S. Berry
H. E. Chaynard

Inventor
John J. Kelly
By *G. H. Strong*
His Attorney

UNITED STATES PATENT OFFICE.

JOHN J. KELLY, OF SAN FRANCISCO, CALIFORNIA.

VALVE-GUARD.

994,409.

Specification of Letters Patent.

Patented June 6, 1911.

Application filed August 1, 1910. Serial No. 574,963.

To all whom it may concern:

Be it known that I, JOHN J. KELLY, a citizen of the United States, residing in the city and county of San Francisco and State of California, have invented new and useful Improvements in Valve-Guards, of which the following is a specification.

This invention relates to a valve-guard and lock-clamp, and particularly pertains to a lock-clamp for locking stop-cocks and valves on service pipes for water, gas, etc.

It is the object of this invention to provide a valve-guard which is adapted to be placed over a stop-cock or the like in such manner as to prevent the stop-cock being operated or tampered with by unauthorized persons, and which is especially applicable for use on shut-off valves usually interposed in water and gas service pipes near where the latter are cut in on the mains, or adjacent to the meters wherever the latter are employed.

A further object is to provide a lock-clamp of the above description which is simple in construction and which can be manufactured cheaply, and which can be readily applied.

Another object of this invention is to provide a combination clamp, shield and padlock in which the shield or clamp and the locking means are combined in substantially one piece, thus dispensing with the use of padlocks commonly used in devices of this character.

A further object is to provide a combination clamp, shield and padlock in which the key operates to place the locking parts in position to be unlocked, but which cannot be opened until the key is removed.

The invention consists of the parts and the construction and combination of parts as hereinafter more fully described and claimed, having reference to the accompanying drawings, in which—

Figure 1 is a perspective view of the invention as applied. Fig. 2 is a vertical section showing the clamp in the locked position. Fig. 3 is a sectional view in detail of the lock showing the first stage of the unlocking operation. Fig. 4 is a similar view showing the second stage of the unlocking operation. Fig. 5 shows the third and last stage with the lock unlocked. Fig. 6 is a view of the key employed in unlocking the lock.

In the embodiment of my invention, as shown in the drawings, I employ a pair of

leaf members, or jaws, or shields A and B which may be hingedly connected at their lower ends in any suitable manner, and here shown as detachably hinged by means of a tongue or hook 2 on the leaf A engaging with a loop or strap 3 formed on the leaf B.

The central portions of the leaves A—B are bowed outwardly and oppositely so as to form a cavity or recess 4 between the leaves A—B to accommodate and house a stop-cock 5 on the service pipe 6, as shown in Fig. 1. This recess 4 is designed approximately to conform to the shape of the stop-cock 5 so that when the leaves A—B are closed together over the stop-cock 5, the latter will be effectively incased or covered by a shield which, when locked as later described, will effectually prevent access to the valve.

The locking means consist of a laterally extending hasp-bolt 7 or locking lug 7 rigidly mounted on the inner face of one of the leaves or jaws, as B, which is adapted to extend into a chamber or lock case extension 8 formed on the upper end of the opposed leaf A, and to be engaged therein by suitable means, as the spring detent 9; the detent 9 normally projecting into the path of the bolt 7 and engageable behind a shoulder 10 thereon to prevent the withdrawal of the bolt.

A keyhole 11 is provided in the case 8 through which a suitable key, as 12, shown in Fig. 6, is inserted to unlock the lock. The position of the keyhole with respect to the shoulder 10 and detent 9 is important because after the key pushes the detent 9 out of the way of the shoulder 10, the latter, in opening the lock, encounters the key so the device cannot be completely opened until the key is withdrawn, as will be more particularly described.

The operation is as follows: The key 12 is inserted in the keyhole 11 with the end of the key stem or shank entering a hole 13 on the opposite side of the case 8. As seen in Fig. 3, a quarter turn of the key 12 causes the bit 14, of the key, to press the spring detent 9 outward from beneath the shoulder 10. This releases the bolt 7 from the detent and allows the former to be partially withdrawn from the case 8, as shown in Fig. 4. At this point the shank of the key 12 lies in the path of the shoulder 10 on the bolt 7 and prevents the latter being entirely withdrawn; also the spring detent cannot get

under the shoulder 10 when the key is withdrawn, which is the next operation, for in order to release the bolt 7 it is now necessary to turn the key 12 back to its original position and withdraw it from the case 8 out of the path of the shoulder 10 on the bolt 7. In turning the key 12 back, the detent 9 is caused to rest against the under side of the shoulder 10 and out of engagement therewith, so that the bolt 7 may be withdrawn, as shown in Fig. 5, which is accomplished by separating the leaves A—B.

From the foregoing it will be seen that the shank of the key 12 performs an important function in operating the lock, as it provides a stop or detent to prevent the withdrawal of the bolt until the key is removed, and unless one knows the combination or the particular mode of manipulation it is impossible to unlock or remove the attachment, or disturb the adjustment of the valve.

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

25 1. A valve-guard comprising two hingedly connected clamp members having their middle portions oppositely expanded and recessed to form a valve-inclosing pocket, and said clamp members having cooperating self-locking means, said last named means including a locking lug on one member fitting a recess in the other member, said recessed member having a key-hole through which a key is passed transversely in front of the shoulder whereby the key obstructs the opening of the member until said key is withdrawn.

2. A valve-guard comprising two hingedly connected clamp members having their middle portions oppositely expanded and recessed to form a valve-inclosing pocket, and said clamp members having cooperating self-locking means, said last-named means including a laterally extending, shouldered locking lug on one member fitting a recess in the other member, and a detent in the recess engageable with said shoulder one of said members having a hole proximate to said shoulder when the members are in closed position through which and across said should-

der a key must be passed to engage said detent.

3. A valve-guard comprising two hingedly connected clamp members having their middle portions oppositely expanded and recessed to form a valve-inclosing pocket, and said clamp members having cooperating self-locking means, said last-named means including a laterally extending, shouldered locking lug on one member fitting a recess in the other member, a detent in the recess engageable with said shoulder, a key insertible into the recess and in the path of said shoulder, and means by which when the key is turned in one direction it will release the detent from the shoulder and permit said lug partly to be withdrawn from the recess, and on the subsequent removal of the key from the recess permit the clamp to be opened.

4. A valve-lock comprising two hingedly connected jaw members arranged to embrace a pipe and inclose a valve or the like, and cooperating locking means on the two members, said last-named means including a shouldered locking lug on one member fitting a chamber in the other member, a spring detent carried by the latter member and engageable with the shoulder on said locking lug, and a key insertible into said chamber to operate the detent, said key arranged in the path of said shoulder to prevent the withdrawal of the lug from the chamber after the detent is released.

5. A valve-guard comprising two cooperating clamp members, self-locking means on the members for locking the members together, and a key for unlocking the members, with means whereby the key will engage with the locking means to partially unlock said members, and said members are only completely unlocked by the subsequent withdrawal of the key.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses:

JOHN J. KELLY.

Witnesses:

J. W. CANTRELL,
A. H. CAMA.