(No Model.)

J. H. PHILLIPS.

SEAL PADLOCK.

No. 307,221. Patented Oct. 28, 1884.

Fig. 1.

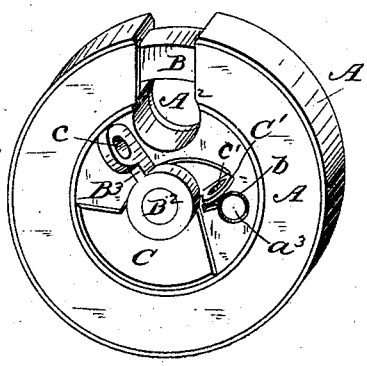


Fig. 2.

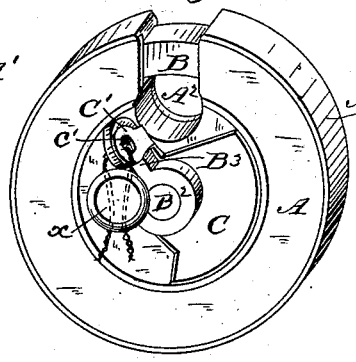


Fig. 3.

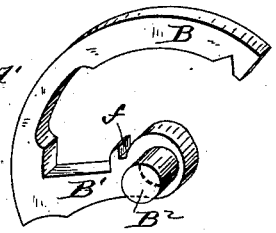


Fig. 4.

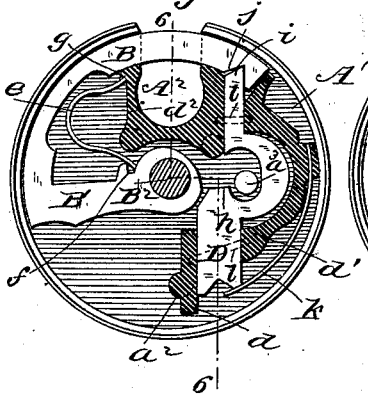


Fig. 5.

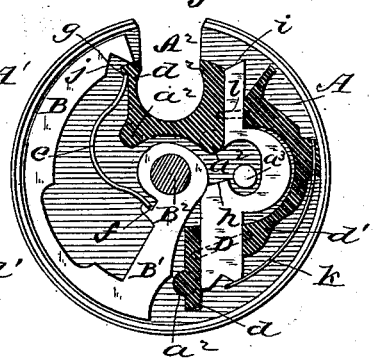


Fig. 6.

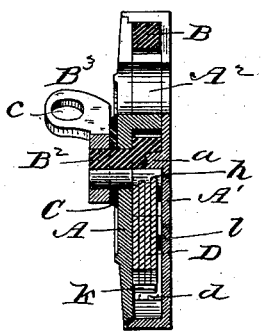
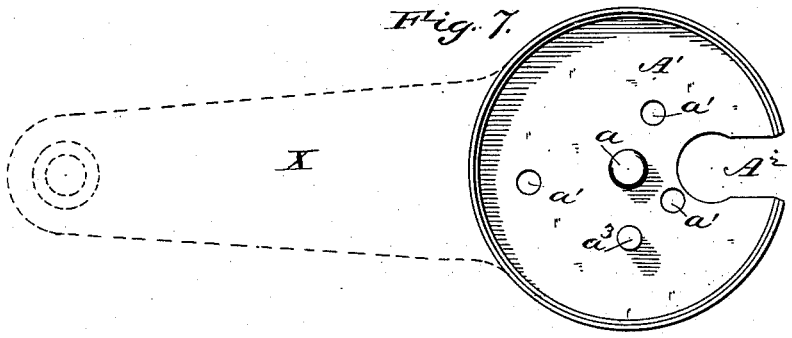


Fig. 7.



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UNITED STATES PATENT OFFICE.

JOHN H. PHILLIPS, OF NEW BRIGHTON, PENNSYLVANIA.

SEAL-PADLOCK.

SPECIFICATION forming part of Letters Patent No. 307,221, dated October 28, 1884.

Application filed March 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. PHILLIPS, of New Brighton, Beaver county, State of Pennsylvania, have invented certain new and useful Improvements in Locks, of which the following is a specification.

My invention has reference to that kind of hasp-lock or padlock in which is employed a circularly-moving segmental bolt. It mainly relates to means for sealing said lock, and it also refers to the arrangement of the interior working parts which co-operate with the bolt.

The invention can best be explained and understood by reference to the accompanying drawings, in which—

Figure 1 is a perspective view of the lock with the seal-plate in the position it occupies when removed from the key-hole. Fig. 2 is a like view with the plate in position to cover the key-hole. Fig. 3 is a perspective view of the circularly-moving segmental bolt, its central spindle or axis, and the radial arm connecting the two. Fig. 4 is a plan of the interior working parts with the bolt advanced. Fig. 5 is a like view of the same parts with the bolt retracted. Fig. 6 is a section of the lock on line 6 6, Fig. 4. Fig. 7 is a plan of that part of the lock-casing which is fitted to the part that carries the working parts.

The casing is composed of two parts, A A′. The former is a plate to which the working parts of the lock are secured. The latter is a box-like part which receives and surrounds the interior working parts. A′ is provided with a central boss, *a*, (to enter a corresponding recess in the inner end of the rotary bolt-carrying spindle,) with three or more holes, *a′*, to receive the ends of corresponding steady-pins, a^2, on part A, which pins can be upset at their projecting ends, so as to serve as means for holding together the two parts of the casing, and with a stem, a^3, which is placed in proper position to form the key-post. The casing is slotted or formed with a peripheral recess, A^2, to accommodate the staple, and the circularly-moving segmental bolt B is arranged to move in a path which will cause it, when advanced, to cross or span the slot A^2, in doing which it of course passes through the staple, as customary. This bolt is carried on the outer end of a radial arm, B′, attached at the inner end to the spindle B^2, which passes centrally through and is supported so as to rotate in the part A. On the outer projecting end of the spindle is fast a hub from which projects an arm, B^3, that serves as a handle by which the spindle, and consequently the bolt when unlocked, can be operated from the outside. In part A is the key-hole *b*, through which the key that unlocks the bolt is inserted. Mounted to turn on the spindle as an axis is a sectional plate, C, which I term the "seal-plate," arranged so that it may be turned to cover or uncover the key-hole, as desired. The seal-plate is provided with a projection, C′, which serves as a handle for operating it, and this handle C′ is so arranged with reference to the bolt-operating handle that when the bolt is advanced and the seal-plate is moved into position to cover the key-hole its handle C′ will meet and lie alongside and up against the bolt-operating handle, as indicated in Fig. 2, in which position it can be secured by fastening it to the handle B^3. One convenient way of doing this is to form in the two handles coinciding holes *c c′*, and to pass through these holes, when the handles are together, a wire whose ends are secured by a seal, as indicated at *x*, thus effectually sealing the lock and preventing access to the key-hole without breaking or cutting the seal or the seal-plate.

I can, if desired, use the lock as a hasp-lock by forming the casing with an extension, such as indicated by dotted lines at X in Fig. 7.

Upon the inner face of the part A are abutments or ledges *d d′* d^2, which support the tumblers and the springs for controlling the tumblers and the bolt. The bolt-spring is shown at *e*. It is a bow-spring with one of its ends seated in a notch, *f*, in the radial arm B′, and the other in a notch, *g*, in ledge d^2. The spring, when the bolt is unlocked, throws it back to the position shown in Fig. 5, the rearward movement of the bolt being limited by any suitable stop, which in this instance is the ledge *d*. The tumblers D slide lengthwise. Their rear ends move between the ledges *d d′*, and their front ends between ledges *d′* d^2, these ledges thus serving as guides for the tumblers. The latter are so formed as to bridge the key-hole *b* and to furnish at the proper point acting faces *h*, against which the key can bear, so as to re-

tract them. At their outer ends they are beveled, as indicated at *i*, so that the bolt, when turned forward by its handle, will bear against and force back these beveled ends, which latter then, as the bolt continues to advance, snap into the V-recess *j* in the bolt, and thus lock it in place. The tumbler-controlling spring *k* is secured to the ledge *d'*, and bears against the rear ends of the tumblers, its tendency being to force the tumblers forward. Straps *l*, extending between ledges *d d'* and *d' d²*, keep the tumblers down in their place.

The whole organization, it will be noted, is compact, simple, convenient, and comparatively inexpensive. The tumblers lie close to the bolt-spindle and supporting-arm, without, however, interfering with the free movement of the latter, and the springs are placed where they are well protected and at the same time in position to act efficiently. In this connection I remark that I am aware that a hasp or padlock containing a circularly-moving bolt provided with an outside handle and combined with spring-controlled locking-tumblers is not new, broadly considered.

Having described my improvements, what I claim as new and of my own invention is—

1. The combination, with the lock-case, the circularly-moving bolt, the rotary bolt-operating spindle, and the handle thereon, of the seal-plate mounted to revolve on the spindle as an axis, and provided with a handle so placed that when the bolt is in its advanced position and the seal-plate is in position to cover the key-hole in the casing the two handles will meet or be brought into juxtaposition, substantially as and for the purposes hereinbefore set forth.

2. The combination, with the casing, of the sliding tumblers, their guides and controlling-spring, the circularly-moving bolt, its supporting-arm, the rotary spindle carrying said arm, the spindle-handle, and the bolt-controlling spring, these parts being constructed and arranged relatively to one another and for joint operation as hereinbefore shown and described.

In testimony whereof I have hereunto set my hand this 8th day of March, 1884,

JOHN H. PHILLIPS.

Witnesses:
C. F. MARTIN,
D. A. GLASS.