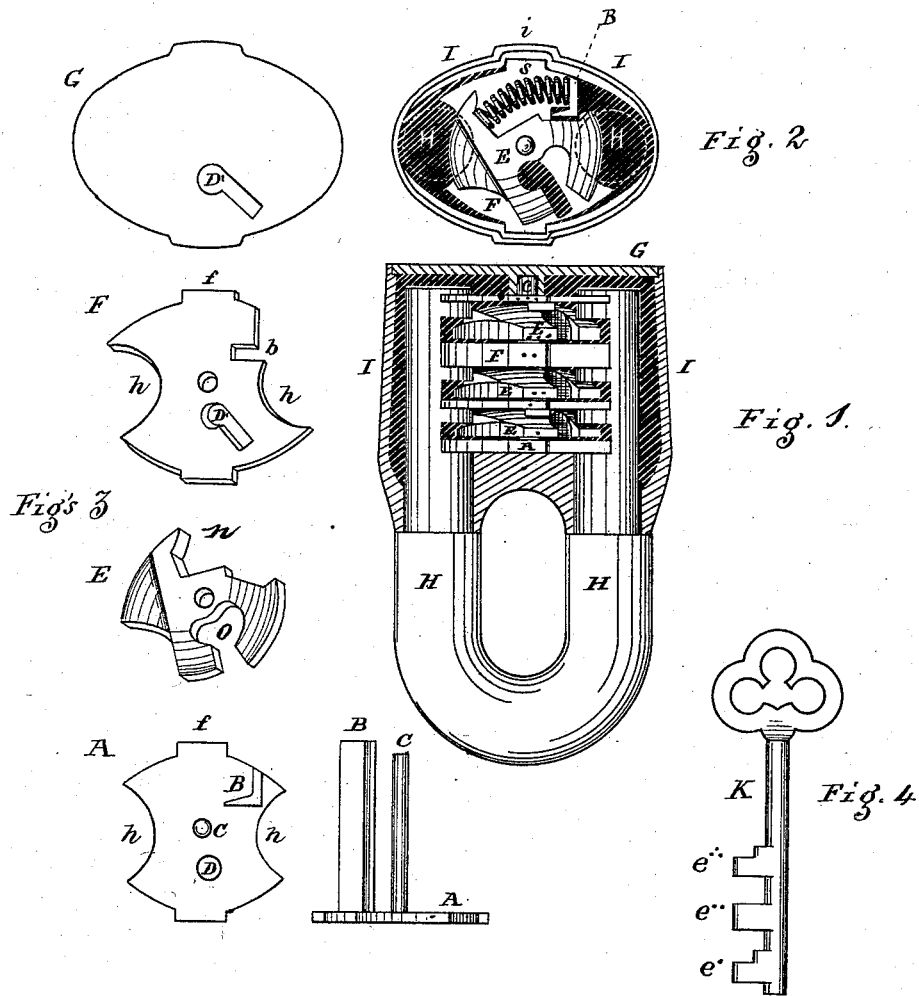


T. H. WICHERT.
Padlock.

No. 219,375.

Patented Sept. 9, 1879.



WITNESSES.

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THEODOR H. WICHERT, OF LANCASTER, PENNSYLVANIA, ASSIGNOR TO
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IMPROVEMENT IN PADLOCKS.

Specification forming part of Letters Patent No. **219,375**, dated September 9, 1879; application filed April 4, 1879.

To all whom it may concern:

Be it known that I, THEODOR HEINRICH WICHERT, of the city and county of Lancaster, in the State of Pennsylvania, have invented certain Improvements in Combined Tumbler-Padlocks, of which the following is a specification.

The object of this invention is to devise a padlock with tumbler-like bolts of variable thickness, as well as the intervening wards or partitions, arranged on a central pin with a coiled spring on one side of such bolts abutting against a fixed angle-post, so arranged that the key stops when sufficiently turned to withdraw the bolts. Otherwise its general make-up is similar to locks of this class—that is, in the case and shackle.

The accompanying drawings, with the letters of reference marked thereon, and a brief description will enable those skilled in the art to make and use the same.

Figure 1 shows a section of the interior arrangement and external shell and shackle in place. Fig. 2 is a top view, looking down into the case, to show the relation of the spring and upper tumbler when in place. Fig. 3 shows the form of the tumblers and partitions detached. Fig. 4 represents the key adapted for this arrangement.

As shown, the bottom of the lock is turned upward, showing the base-plate A resting against the core of the shell between the shackle-openings, and serving as the base, upon which the remaining parts of the lock are built up in order. This base-plate A has a central fixed pin, C, extending into a socket formed for its reception in a central lug on the inner side of the covering-plate, or, properly, bottom G. There is also a post, B, flanged at right angles, affixed to one side of plate A, which extends in like manner to the covering-plate G, which also has a lug that fits into the angle of post B to steady its upper end.

The lugs *f* of the base A enter the recesses in the sides of the case.

h are segments cut out to receive the shackle, and D a hole to receive the heel of the key. The intervening partitions (shown by F, Fig.

3) have each a slot cut out at *b* to receive the inner wing or flange of the post B. These partitions F and the tumblers between them are respectively marked in the order of their arrangement by points.

The tumblers E are duly represented in form in Fig. 3, showing the central opening for the pin C, the rounded bolt-face spring-retaining hook *n*, and entering-space *o* for the key K.

Fig. 2 shows one of the tumblers in position in the notches of the shackle H, and held in place by the spring S pressing against the raised limb *n* of the bolt E, with its hook to retain it, while the other end of the spring abuts against the angle of the flanged post B. Underneath is shown the position of the partition F, with its key-hole D'. This will suffice for each of the three chambers as to their form and arrangement; but as the several tumblers E and the partitions F can be diversified in their thickness respectively, requiring different slots in the web of the key, a number of changes can thus be made. The notches in the shackle may also be diversified.

This arrangement is believed to be more secure than that of other shackle-locks against being picked, and differs from that shown in the joint patent taken out by W. T. Wirth and myself.

This lock has a central pin for a fulcrum, but only a single bolt in each chamber, locking on opposite sides. The single spring, instead of being confined between projections on one side of a pair of cross-bolts, has the flanged piece B for one end of the coil to abut against.

By making the ends of the shackles H blunt, these ends cannot be inserted without the aid of the key. By filing or wedging off the shackle ends on the reverse sides of each limb and the notches somewhat on the side, the shackle could be introduced by wedging the bolts apart, as in some other locks; but it is deemed more secure to make them as shown.

What I claim as my improvement in shackle-padlocks is—

The combination of the base-plate A, provided with a fixed angle-post, B, and central

fulcrum-pin, C, both extending through the case to the covering-plate G, the partitions F, provided with a slot, *b*, the intermediate bolts or tumblers E, having bolting-projections on two opposite sides, a stop key-space, *o*, and spring-retainer *n* within a case, I, provided with shackles H, the whole arranged sub-

stantially as shown and described, for the purpose specified.

THEODOR HEINRICH WICHERT.

Witnesses:

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JNO. C. LONG.