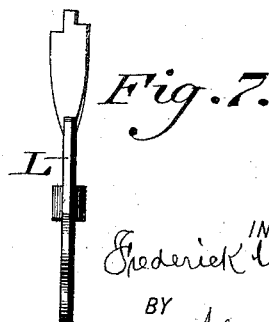
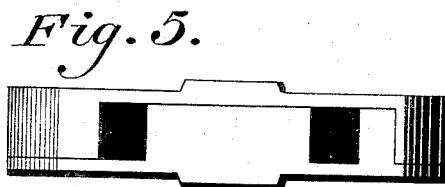
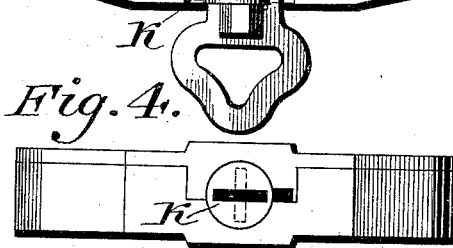
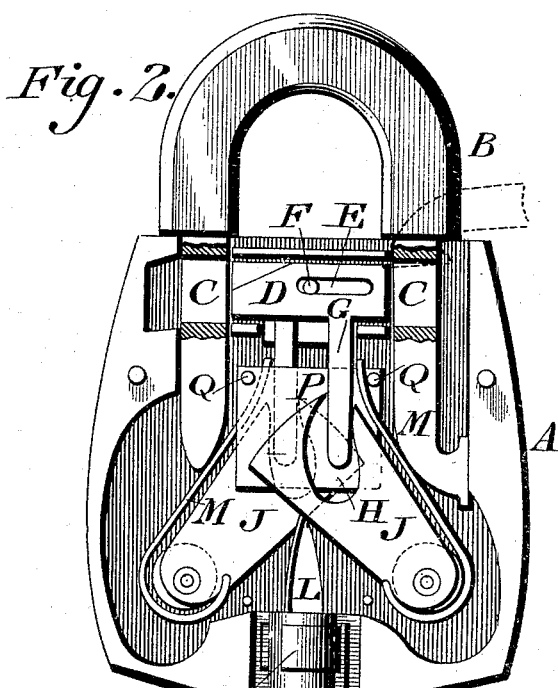


F. W. SCHULTZE.
PADLOCK.

Patented Feb. 21, 1893.



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FREDERICK W. SCHULTZE, OF PHILADELPHIA, PENNSYLVANIA.

PADLOCK.

SPECIFICATION forming part of Letters Patent No. 492,240, dated February 21, 1893.

Application filed July 5, 1892. Serial No. 438,870. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. SCHULTZE, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Padlocks, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a padlock which has novel means for controlling the shackle thereof, the same being composed of dogs which are adapted to enter the limbs of the shackle, and tumblers which are formed with slots whose walls are adapted to engage with said dogs for throwing the same in opposite directions, in order to lock or unlock the shackle, as will be hereinafter fully set forth.

Figures 1 and 2 represent views of the interior of a padlock embodying my invention. Fig. 3 represents a section on line *x, x*, Fig. 1. Fig. 4 represents a bottom view thereof. Fig. 5 represents a top view thereof, the shackle being removed. Fig. 6 represents a bottom view of the key bushing removed. Fig. 7 represents a side elevation of the key that may be employed.

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

Referring to the drawings:—A designates the casing of a lock, the same being provided with a shackle or bow B, in whose limbs are openings C to receive the dogs D, in each of which is a longitudinally extending slot E through which passes a pin F, which latter is secured to the casing A. Depending from the dogs D are stems G, which enter the slots H of the tumblers J, the latter being pivoted at one end to the lock casing and projecting obliquely in opposite directions.

In the bottom wall of the casing A, is a bushing K, which is rotatably mounted in said wall and adapted to receive the spiral or twisted key L, whose bits are adapted to engage with the under edges of the tumblers J at the place of crossing of the same, it being evident that when the proper key is employed, the same presses the tumblers in such manner that they are forced outwardly or caused to separate, whereby the walls of

the slots H bear against the stems G, and impart motion to the dogs D, it being noticed that the slots H are somewhat curved, the curvatures being in opposite directions, consequently the dogs D are moved in opposite directions, and thus they emerge from the openings C in the limbs of the shackle B, the parts being in position shown in Fig. 2, whereby the shackle may be withdrawn by hand or the action of springs M, which latter are secured to the tumblers J, and serve to return the same to their normal positions.

When the shackle is to be locked, it is pushed into the casing, and as its limbs bear against the springs M, the tumblers are moved downwardly, whereby the proper walls of the slots H bear against the stems G, and thus force out the dogs D, and cause them to enter the openings C in the legs of the shackle, said dogs retaining their positions, owing to the action of the springs M, and thus the shackle is in locked condition, as shown in Fig. 1.

Interposed between the dogs D are wards N, for separating the same, and interposed between the tumblers J are wards P, which serve to separate the same and are provided with pins Q, which form abutments for the upper ends of the springs M and limit the outward motion thereof.

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

1. A padlock having a shackle with openings in its limbs, spring-pressed tumblers, and sliding dogs, which are adapted to engage in said openings, and provided with stems engaged by said tumblers, said parts being combined substantially as described.

2. A padlock having a shackle, tumblers pivoted to the casing, and provided with slots, stems which enter said slots and are adapted to be engaged by the opposite walls thereof, and dogs carried by said stems, said parts being combined substantially as described, whereby said dogs are movable in opposite directions into and from the limbs of the shackle, as stated.

3. A padlock having dogs adapted to en-

ter the limbs of the shackle thereof, and piv-
oted tumblers having slots the walls of which
are adapted to engage in opposite directions,
with stems on said dogs, and springs which
5 are connected with the tumblers and adapted
to be engaged by the limbs of the shackle,
whereby the dogs are moved into locking en-

gagement with, and disengagement from the
legs of the shackle, substantially as described.

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