

April 1, 1924.

L. OROS

1,489,146

LOCK

Filed Feb. 24, 1923

FIG. 1.

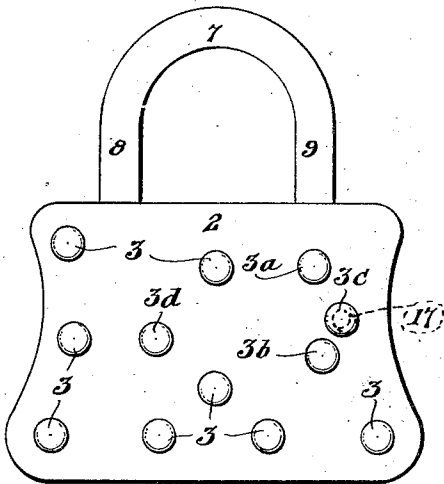


FIG. 2.

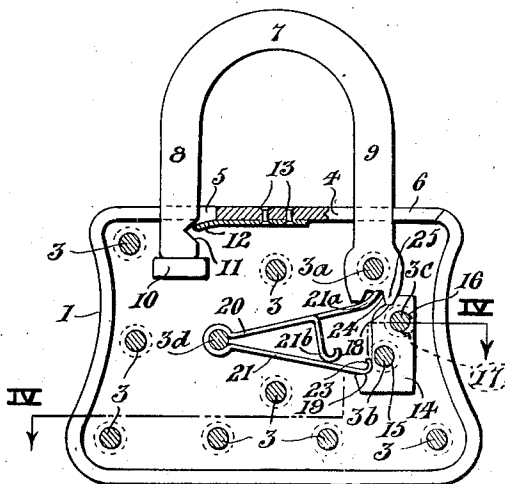


FIG. 4.

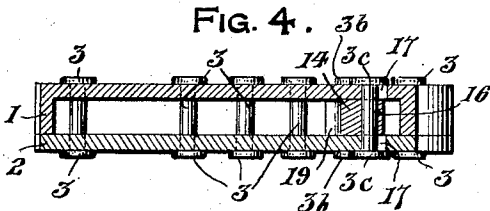


FIG. 3.

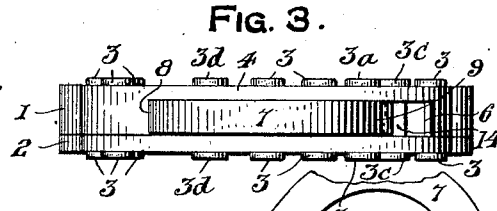


FIG. 6.

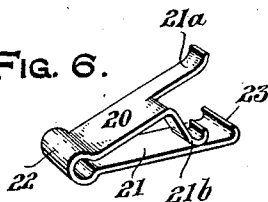


FIG. 7.

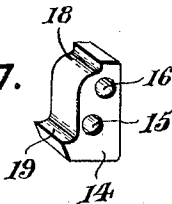
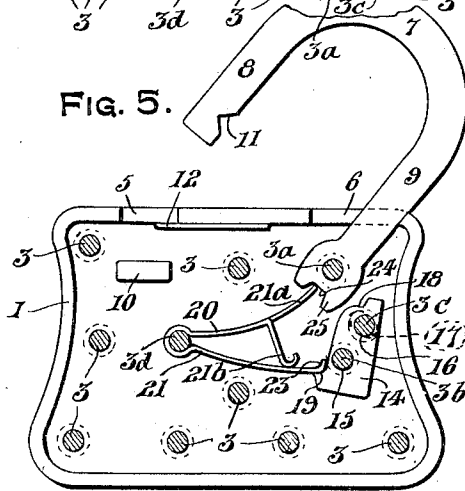


FIG. 5.



Inventor

L. Oros

334

J. H. Bryant
Attorney

UNITED STATES PATENT OFFICE.

LESTER OROS, OF PHILLIPSBURG, NEW JERSEY.

LOCK.

Application filed February 24, 1923. Serial No. 620,963.

To all whom it may concern:

Be it known that I, LESTER OROS, a citizen of Hungary, residing at Phillipsburg, in the county of Warren and State of New Jersey, have invented certain new and useful Improvements in Locks, of which the following is a specification.

This invention relates to certain new and useful improvements in locks of the padlock type wherein a casing has a U-shaped shackle with one of its ends pivotally supported within the lock casing and having means associated with the pivoted end for retaining the shackle in a locked position.

A further object of the invention is to provide a lock of the type above set forth that is releasable without the aid of a key, a tensioned pivotally mounted block disposed within the casing and being operable exteriorly of the casing being associated with the pivoted end of the shackle.

With the above and other objects in view as the nature of the invention is better understood, the same consists of the novel form, combination and arrangement of parts hereinafter more fully described, shown in the accompanying drawing and claimed.

In the drawing, wherein like reference characters designate corresponding parts throughout the several views,

Figure 1 is a side elevational view of a lock constructed in accordance with the present invention, there being illustrated a plurality of rivets connecting the side walls of the lock, two of the rivets being associated with the block controlling the releasing movement of the shackle,

Figure 2 is a side elevational view of the lock with one of the side plates removed showing the shiftable block for retaining the shackle in its locked position and the spring mounting between the block and pivoted end of the shackle,

Figure 3 is a top plan view of the lock,

Figure 4 is a horizontal sectional view taken on line IV—IV of Fig. 2 showing the movable rivet for the shackle releasing block extending through relatively short slotted openings in the side walls of the lock casing,

Figure 5 is a view, similar to Fig. 2 showing the shackle in its released position,

Figure 6 is a perspective view of the spring associated with the block and shackle, and

Figure 7 is a perspective view of the block associated with the shackle.

Referring more in detail to the accompanying drawing, there is illustrated a lock embodying a casing having side walls 1 and 2 permanently connected by cross rivets 3 as shown in Fig. 4, the upper edge wall 4 of the lock casing being provided with spaced openings 5 and 6 to accommodate the mounting of the U-shaped shackle 7 as shown more clearly in Figs. 2 and 5.

The shackle 7 being of U-formation includes side legs 8 and 9, the outer end of the leg 9 being pivotally mounted upon the rivet 3^a and extending through the opening 6 in the upper wall of the lock casing. The outer end of the leg 8 of the shackle extends through the opening 5 in the upper wall 4 of the lock casing and abuts at its terminal end a stop lug 10 disposed within the lock casing, the inner side face of the free end of the shackle leg 8 being provided with a V-shaped notch 11 that receives the free end of the flat spring 12 that is secured as at 13 to the lower side of the casing wall 4.

A block and spring disposed within the lock casing are associated with the pivoted end of the shackle 7, the block 14 having a transverse bore 15 therein for pivotal mounting upon the rivet 3^b of the lock casing, while a bore 16 adjacent the upper end of the block 14 receives the rivet 3^c, the opposite ends of which rivet 3^c are slidable in slots 17 formed in the side walls 1 and 2 of the casing as shown more clearly in Fig. 4. One side face of the block 14 is cut away to provide shoulders 18 and 19.

The spring is associated with the block and pivoted end of the shackle, the spring being bent into V-formation to provide side legs 20 and 21 with a connecting loop portion 22 that is mounted on the rivet 3^d. The upper leg 20 of the spring is split to provide an extension finger 21^a and a depending spring finger 21^b that engages the lower leg 21 of the spring, the outer end of the leg 21 being curved as at 23. The curved end 23 of the spring leg 21 is received on the shoulder 19 of the block 14, and the outer end of the spring finger 21^a extends into the socket 24 provided in the end of the shackle leg 9 as shown in Figs. 2 and 5, the socket 24 providing a side lug 25 that engages the upper shoulder 18 of the block.

When the shackle 7 is in the locked position shown in Fig. 2, the free end of the shackle leg 8 extends through the opening 5 in the casing wall 4 and engages the stop

lug 10, the free end of the spring 12 being received in the notch 11, while the lug 25 upon the pivoted end of the shackle leg 9 abuts the shoulder 18 of the block 14 to prevent movement of the shackle relative to the lock casing. The spring engaging the pivoted end of the shackle bolt and the shoulder 19 upon the block maintains the block against movement with the shackle securely retained in a locked position. When it is desired to release the shackle, the headed ends 3^c of the rivet disposed outwardly of the lock casing are shifted through the slotted openings 17 to move the block upon the pivot rivet 3^b, displacing the block shoulder 18 from the lugs 25 upon the shackle and permitting pivotal movement of the shackle upon the rivet 3^a, the shackle being moved upon said rivet against the tension of the spring 12.

While there is herein shown and described the preferred embodiment of the present invention, it is nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

What is claimed as new is:—

1. In a lock of the type described, a casing embodying side walls connected by a plurality of rivets, and having spaced openings in the upper edge wall thereof, a U-shaped shackle having its ends positioned through said openings, one end being pivoted on one of the rivets, a spring latch associated with the other end, means associated with the pivoted end of the shackle for holding the latch retained end in locked

position within the casing, said means including a block pivotally mounted on one of the rivets engaging the pivoted end of the shackle, a spring interposed between the pivoted end of the shackle and the block, said block being fixed to another one of said rivets and the side walls of the casing having slotted openings therein through which the ends of the last named rivet extend for shifting the block to free the pivoted end of the shackle.

2. In a lock of the type described, a casing embodying side walls connected by a plurality of rivets, and having spaced openings in the upper edge wall thereof, a U-shaped shackle having its ends positioned through said openings, one end being pivoted on one of the rivets, a spring latch associated with the other end, means associated with the pivoted end of the shackle for holding the latch retained end in locked position within the casing, said means including a block pivotally mounted on one of the rivets engaging the pivoted end of the shackle, a spring interposed between the pivoted end of the shackle and the block, said block being fixed to another one of said rivets and the side walls of the casing having slotted openings therein through which the ends of the last named rivet extend for shifting the block to free the pivot end of the shackle, and said block having a pair of shoulders, one engaged by one end of the spring and the other engaged by the pivoted end of the shackle.

In testimony whereof I affix my signature.
LESTER OROS.