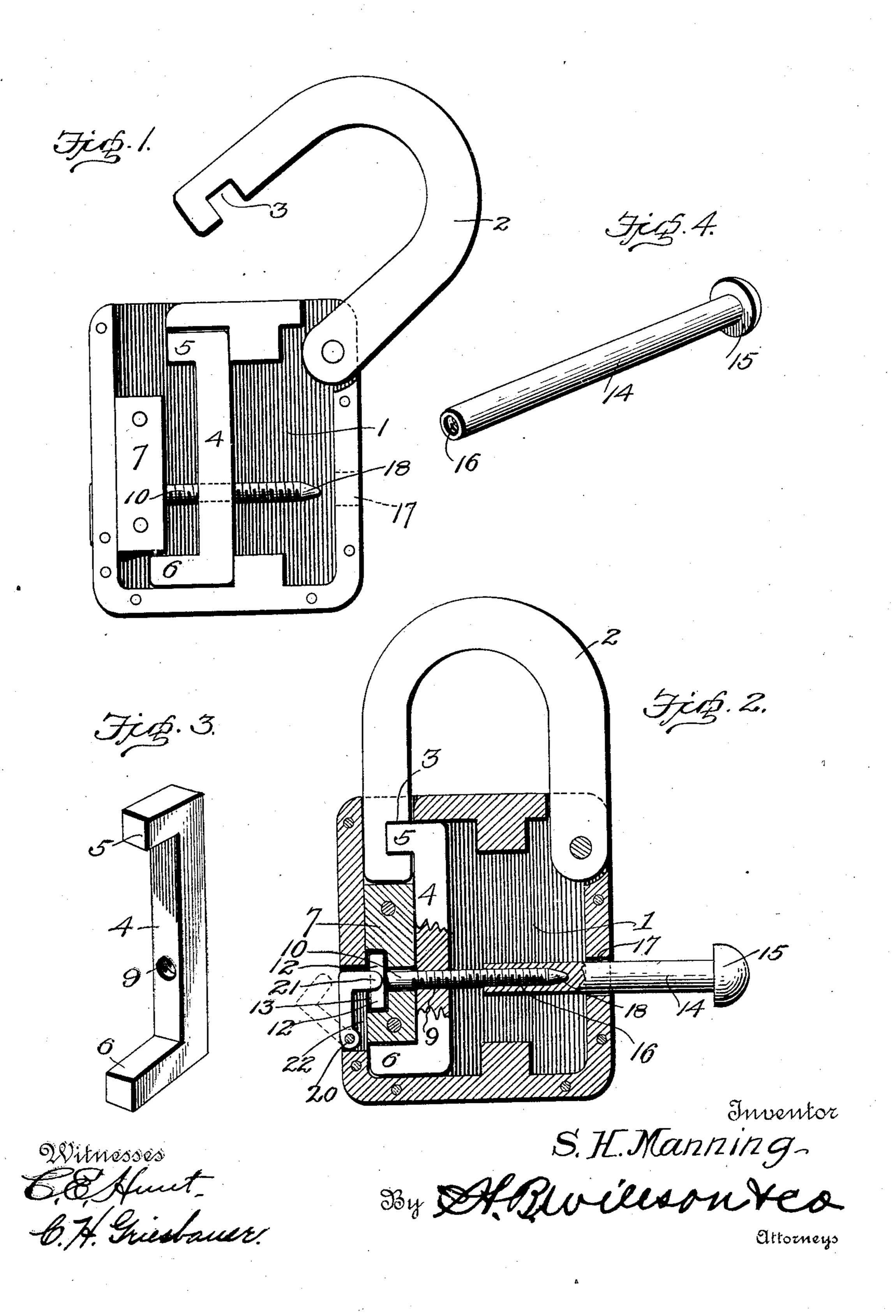
S. H. MANNING.

PADLOCK.

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HTED STATES PATENT OFFICE.

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PADLOCK.

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To all whom it may concern:

Be it known that I, Samuel H. Manning, a citizen of the United States, residing at Wilton, in the county of Knox and State of Ken-5 tucky, have invented certain new and useful Improvements in Padlocks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which 10 it appertains to make and use the same.

This invention relates to improvements in

padlocks.

The object of the invention is to provide a springless padlock which will be simple, 15 strong and durable in construction, secure and reliable in operation and which consists of but few parts which are not liable to get out of order.

With this and other objects in view, the 20 invention consists of certain novel features of construction, combination and arrangement of parts as will be described and particularly pointed out in the appended claims.

In the accompanying drawing, Figure 1 25 is a side view of the lock with one of the side plates removed, and showing the arrangement of the parts when in an unlocked or released position; Fig. 2 is a vertical sectional view showing the parts in unlocked 30 position and the key applied thereto; Fig. 3 is a detail perspective view of the locking bolt; and Fig. 4 is a detail perspective view of the key.

Referring more particularly to the draw-35 ings 1 denotes the casing, in the upper end of which is pivotally mounted a locking shackle, 2, in the free end of which is formed a locking recess, 3. Slidably mounted in the casing 1, between the side plates thereof is a locking 40 bolt, 4, said bolt having on its upper end a right - angularly formed detent, 5, which, when the bolt is in an operative position, is adapted to engage the locking recess; 3, in the shackle, 2. On the lower end of the bolt, 45 4, is a right-angularly formed guide lug, 6, which is adapted to slide between the end of a swivel block, 7, and the lower edge of the lock. In the casing, 1, are formed stop lugs, or shoulders, 8, between which and the 50 swivel block 7 the bolt 4 is adapted to be moved to lock and unlock the shackle, 2.

In the bolt, 4, is formed a transversely disposed threaded passage, 9, through which is adapted to work a bolt-operating screw, 10, 55 one end of which is loosely mounted in the swivel block, 7, and is provided with a flat,

elongated head, 12, which is adapted to turn in a recess, 13, formed in the block, 7, adjacent to one edge of the lock, as shown. By thus mounting the screw, 10, the latter may 60 be freely turned in one direction or the other by a suitable key, thereby moving the locking bolt, 4, into operative and inoperative positions to lock and unlock the shackle, 2, said bolt being moved by reason of the 65 threaded engagement of the screw, 10, with

the passage, 9, therein.

In order to turn the screw, 10, in the proper direction for locking or unlocking the bolt, 4, I provide a key, 14, which is prefer- 70 ably in the form of a cylindrical rod, having on its outer end a head, 15, and in its inner end a threaded socket, 16, which is adapted to be engaged with the free end of the screw, 10, and to be screwed thereon until the end 75 of the screw reaches the end of the socket, after which a further rotation of the key will cause the screw 10 to revolve and thereby shift the bolt 4. The key, 14, is engaged with the end of the screw, 10, through a suit- 80 able passage, 17, formed in one edge of the lock, as shown. The end of the screw, 10, is preferably reduced or slightly tapered as at 18, to facilitate the engagement of the end of the key therewith.

In order to provide for the locking of the operating screw, 10, against rotation, and thereby prevent the operation of the bolt by the key, I provide a safety latch, which is here shown and is preferably in the form of a so hook, 19, having on one end an apertured lug, 20, which is pivotally mounted in a recess formed in one edge of the lock and is provided on its opposite end with a flat bill, 21, which is adapted to project through a 95 slot, 22, in the edge of the casing and into the recess, 13, in the swivel block and to engage the flat, elongated head of the operating screw, thereby preventing the turning of the latter in either direction. The latch hook, 100 19, when in a closed or operative position is seated in a groove formed in the edge of the lock, as shown.

From the foregoing description, it will be seen that the lock consists of comparatively 105 few parts which are operated without the use of springs and provide a positive and secure locking mechanism which is not liable to become disarranged or to get out of order and which cannot be readily "picked" or tam- 110

pered with. From the foregoing description, taken in

connection with the accompanying drawing, the construction and operation of the invention will be readily understood without re-

quiring a more extended explanation.

5 Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined in the appended 10 claims.

Having thus described my invention, what I claim as new and desire to secure by Let-

ters-Patent, is:

1. In a lock of the character described, a 15 locking bolt, an operating screw having a threaded engagement with said bolt, and a key adapted to be screwed into engagement with said bolt to operate the latter, substantially as described.

2. In a lock of the character described, a slidably mounted locking bolt, an operating screw having a threaded engagement with said bolt whereby the same is moved to a locked and unlocked position, means to oper-25 ate said screw, and means to lock the same against operation, substantially as described.

3. In a bolt of the character described, a shackle, a locking bolt adapted to be engaged with said shackle, a revolubly mounted 30 operating screw having a threaded engagement with said bolt whereby the same is shifted to a locked and unlocked position, a key adapted to be screwed into engagement with said operating screw, and means to lock 35 said screw against rotation by said key, substantially as described.

4. In a lock of the character described, a casing, a shackle pivotally mounted in said casing, a slidably mounted locking bolt hav-40 ing at one end a detent adapted to be engaged with said shackle to hold the same in locked position, an operating screw revolubly mounted in said casing and having a threaded engagement with said locking bolt,

45 a key having a threaded socket adapted to be engaged with said operating screw whereby

the same is turned to shift said bolt, means to guide the bolt in its movement, and means to limit the movement of the same, substantially as described.

5. In a lock of the character described, a casing, a shackle pivotally mounted in said casing, said shackle having in one end a locking recess, a locking bolt slidably mounted in said casing, a detent on one end of said bolt 55 to engage the recess in said shackle, a guide lug on the opposite end of said bolt, a swivel block secured in said casing, an operating screw revolubly mounted in said block, said screw having a threaded engagement with 60 the bolt whereby the latter is shifted to a locked or unlocked position, a safety latch adapted to be engaged with said screw to hold the same against rotation, and a key adapted to be screwed into engagement with 65 said operating screw whereby the same may be turned to shift said locking bolt, substantially as described.

6. In a padlock, a pivoted shackle, a slidably mounted bolt adapted to be engaged 70 with said shackle, said bolt having a threaded passage, an operating screw revolubly mounted in said casing and operatively engaged with the threaded passage in said bolt, a head on one end of said screw, a tapered 75 key-engaging portion on the opposite end, a key having a threaded socket adapted to be operatively engaged with the free end of said screw, a safety latch comprising a hook pivotally mounted in one edge of said lock, and 80 adapted to be swung into engagement with the head of said operating screw, whereby

the latter is held against rotation by said key, substantially as described.

In testimony whereof I have hereunto set 85 my hand in presence of two subscribing witnesses.

SAMUEL H. MANNING.

Witnesses:

ROBERT W. BIRCH, James T. Manning.