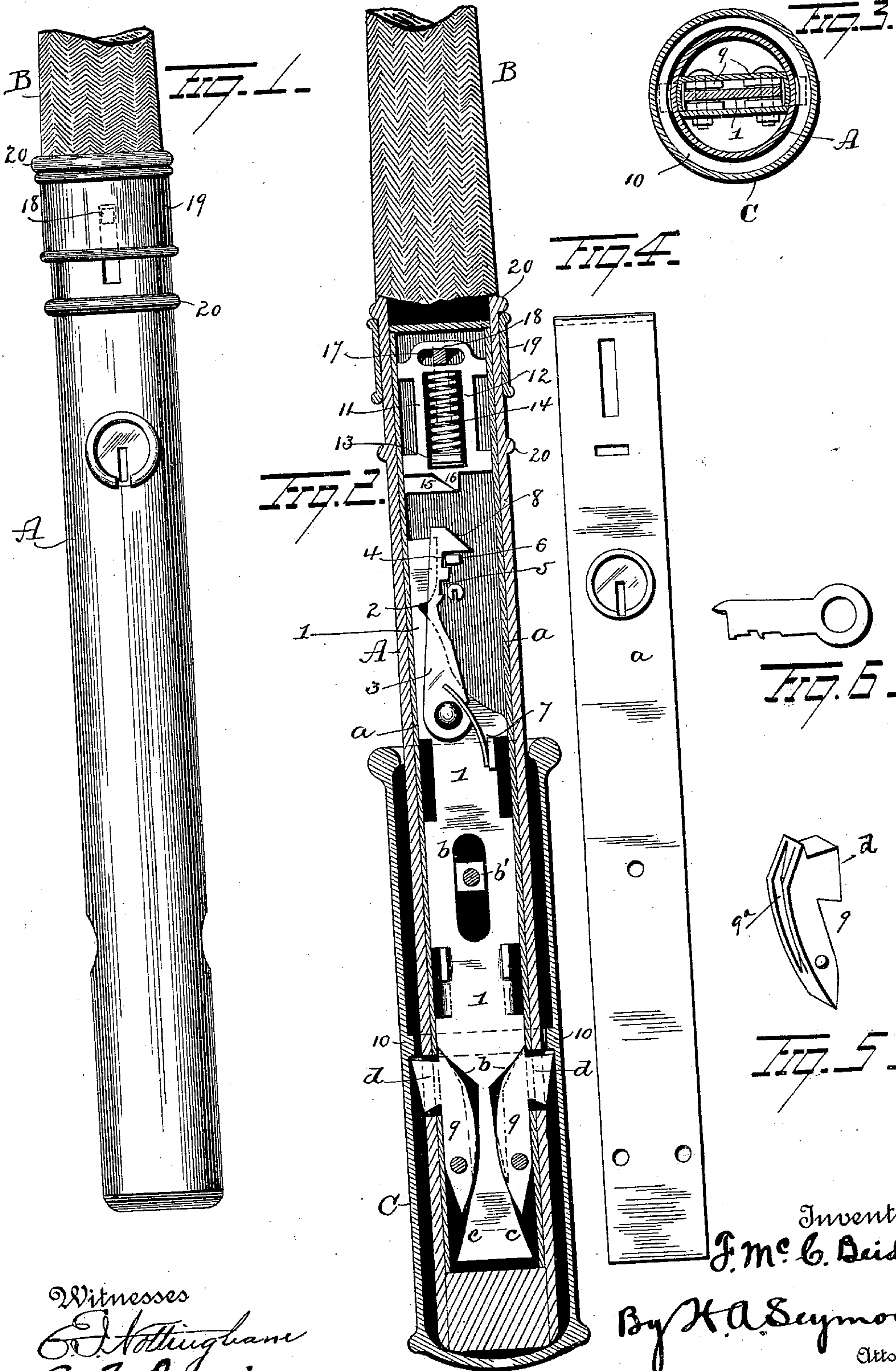


(No Model.)

F. McC. BEIDLER.
WHIP LOCK.

Patented Oct. 1, 1895.

No. 547,059.



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UNITED STATES PATENT OFFICE.

FRANK McCUTCHEN BEIDLER, OF UPPER SANDUSKY, OHIO.

WHIP-LOCK.

SPECIFICATION forming part of Letters Patent No. 547,059, dated October 1, 1895.

Application filed January 19, 1895. Serial No. 535,516. (No model.)

To all whom it may concern:

Be it known that I, FRANK McCUTCHEN BEIDLER, a resident of Upper Sandusky, in the county of Wyandot and State of Ohio, have invented certain new and useful Improvements in Whip-Locks; and I do hereby 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 it appertains to make and use the same.

My invention relates to an improvement in locks for whips, the object of the invention being to produce a simple and efficient means whereby to lock a whip in a whip-socket.

A further object is to produce a whip having a lock in its butt-end adapted to engage a suitable device in a whip-socket.

A further object is to provide a whip with a lock for securing it in a whip-socket, which lock shall be so constructed and arranged that it can be operated to lock the whip in the socket or unlock it by means of a key, and so that it can be locked, but not unlocked without the use of a key.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of a whip having my improvements applied thereto. Fig. 2 is a sectional view showing the whip locked in the socket. Figs. 3, 4, 5, and 6 are detail views.

A represents a tube or casing made preferably of a single piece of metal and adapted at its forward end to receive the whip B. Within the tube A a lock-casing *a* is secured. Located within the casing *a* is a sliding tumbler 1, provided with an elongated slot *b*, into which a lug *b'* projects, whereby to limit the movements of said tumbler. In proximity to its upper end the tumbler is notched, as at 2, for the reception of a key, whereby to slide it in either direction to throw the bolts or withdraw them. The tumbler is retained in the position to which it is moved by the key by means of a plate or arm 3, which is pivoted at one end and provided with notches 4 5 for the reception of a pin 6, projecting from the lock-casing, and said arm is retained normally

in engagement with said pin by means of a spring 7. The upper end of the arm or plate 3 is made with a beveled enlargement 8, for a purpose presently explained. The lower end of the tumbler 1 is recessed or cut away to produce beveled edges *b² b²* and *c c* to accommodate the bolts 9 9, having recesses 9^a, which bolts are disposed between the respective beveled edges *b² b²* and pivotally connected between their ends to the lock-casing. The upper end of each bolt is made with a projection *d*, adapted to be engaged by the beveled edges *b² b²*, so that when the tumbler moves downwardly said bolts will be projected and made to pass through openings in the lock-casing and tube A, so that their hook-shaped ends will engage a shoulder 10, located within the socket C. When the tumbler is moved upwardly, the beveled edges *c c* will engage the lower ends of the bolts and turn them on their pivots so as to withdraw the hook-shaped ends of the bolts and permit the whip to be withdrawn from the socket. From this construction and arrangement of parts it will be seen that when the key is turned it will first move the arm 3 out of locked engagement with the pin 6 and then engage the tumbler and slide it to throw or withdraw the bolts, according to the direction in which the key is turned. Within the upper end of the lock-casing a slide 11 is located and made with an elongated opening 12, into which a lug 13 from the lock-casing projects. Between this lug and the upper end of the slot or opening 12 a spring 14 is located. The lower end of the slide is made with a projection 15 and a beveled lug 16. The upper end of the slide is made with a perforation 17 for the reception of a pin 18, which passes through slots in the lock-casing and tube and at its respective ends is secured to a collar or ferrule 19, the movements of which will be limited by means of beads 20 20 on the tube A.

From this construction and arrangement of parts it will be seen that when the collar or ferrule is moved downwardly the slide 11 will be moved down, the beveled lug 16 first engaging the beveled upper end of the plate or arm 3 and moving it out of contact with the pin 6, so as to release the tumbler, and then the projection 15 will engage the upper end

of the tumbler and move it downwardly, causing the bolts to be thrown, as above explained, and the whip to be locked to the socket. When the collar or ferrule shall have been released, the spring 14 will cause it and the slide 11 to return to their normal positions. Thus it will be seen that the whip may be locked in the socket without the use of a key, but that to unlock the whip a key must be used.

My improvements are exceedingly simple in construction, can be cheaply manufactured, and are effectual in every respect in the performance of their functions.

Numerous changes might be made in the construction of the lock and in other details of construction without departing from the spirit of my invention or limiting its scope, and hence I do not wish to limit myself to the precise details of construction herein set forth; but,

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

1. The combination with a whip socket having an annular shoulder therein, of a whip provided with locking bolts adapted to be operated by means of a key to engage said shoulder, and a slide independent of the key for engagement and throwing said bolts and incapable of withdrawing them, substantially as set forth.

2. The combination with a whip socket, of a whip provided with a lock to engage said socket, a slide adapted to engage the tumbler of said lock when moved in one direction, means for returning said slide to its normal position, and a collar connected with said

slide whereby to operate it, substantially as set forth.

3. In a lock for a whip, the combination with a tumbler and bolts adapted to be operated by said tumbler, of a slide adapted to engage said tumbler when moved in one direction and cause the bolts to be thrown, a spring for returning said slide to its normal position, and means connected with said slide whereby to operate it, substantially as set forth.

4. In a lock for a whip, the combination with a tumbler having sliding connection with the whip and bolts connected with the whip and adapted to be operated by said tumbler, of a spring actuated arm connected with the tumbler, and a pin to be engaged by said spring arm to lock the tumbler in the position to which it is moved, substantially as set forth.

5. In a lock for a whip, the combination with a tumbler and bolts adapted to be operated by said tumbler, of a spring actuated arm, connected with the tumbler a pin to be engaged by said arm whereby to lock the tumbler in the position to which it is moved, a slide, means connected with said slide to operate it, a spring for returning the slide to its normal position, a beveled lug on the slide to engage the spring actuated arm and release it from the pin and a projection on the slide to engage and operate the tumbler, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

FRANK McCUTCHEN BEIDLER.

Witnesses:

ADAM STUTZ,

ARTHUR A. STUTZ.