(No Model.)

H. E. SCHREADER.

WHIP SOCKET.

No. 481,063. Patented Aug. 16, 1892.

Fig 1.

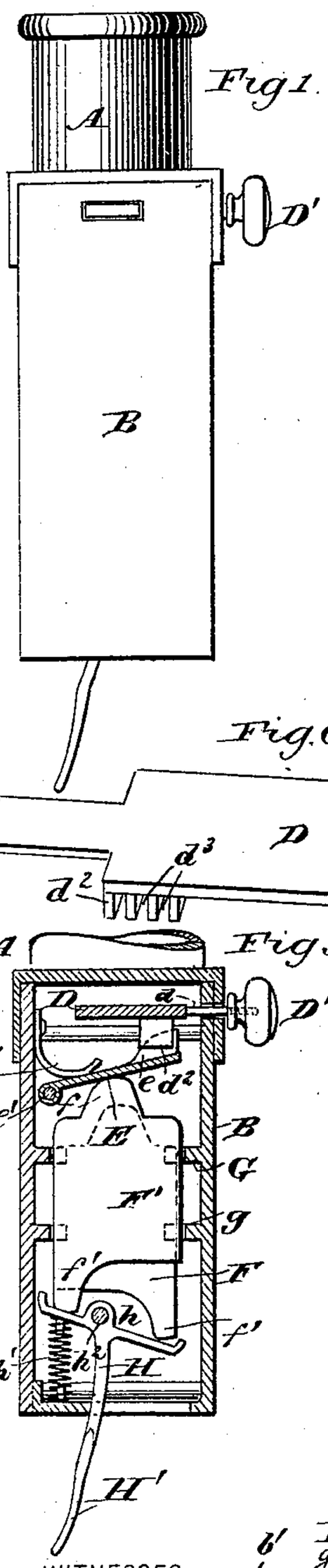


Fig 2.

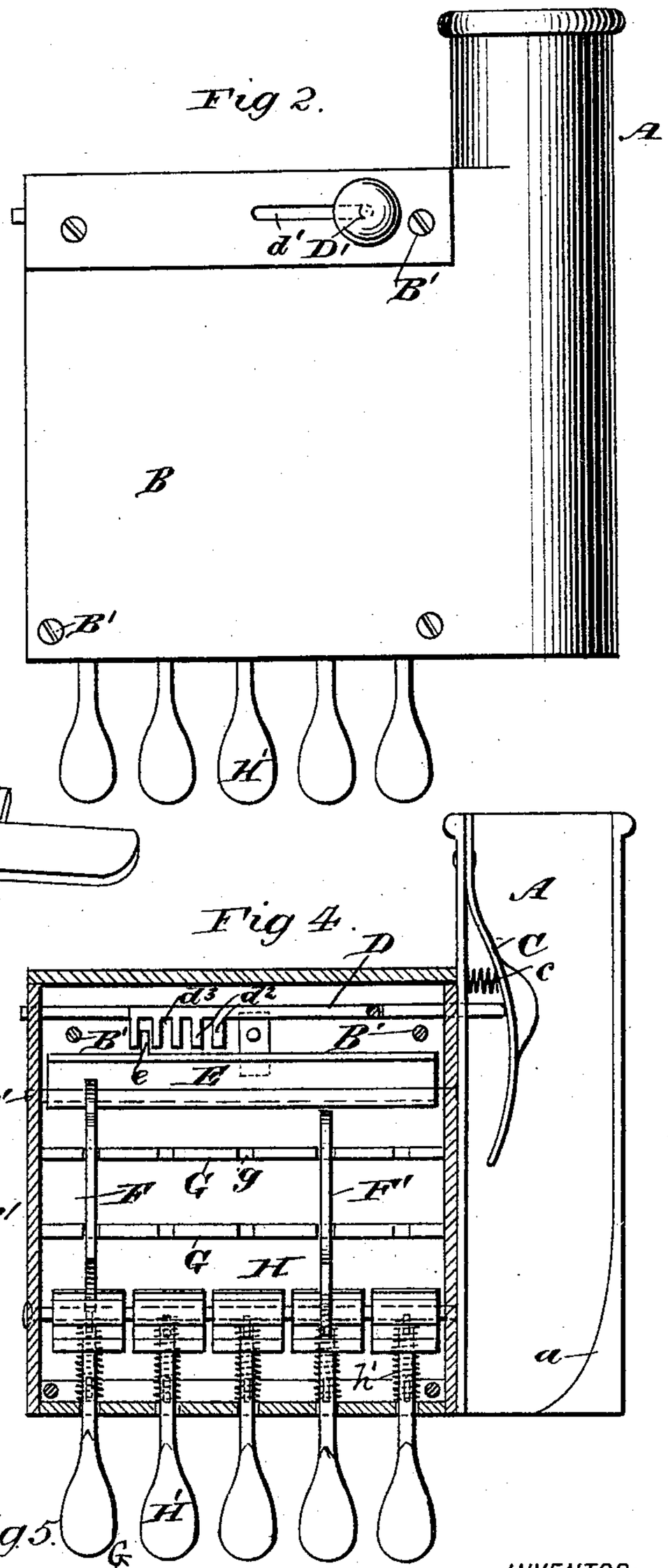
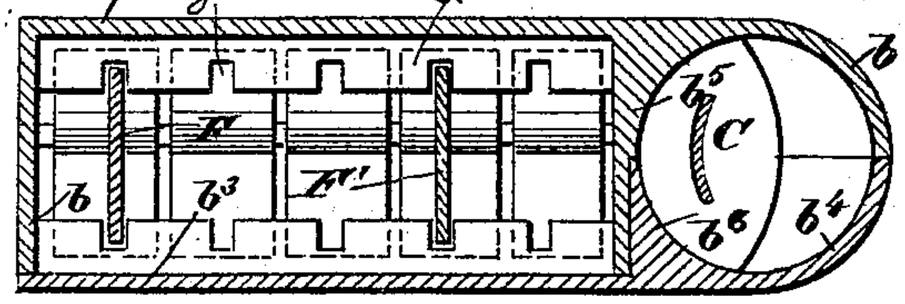


Fig. 6.

Fig 3.

Fig 4.

Fig 5.



WITNESSES:

Paul Johnston

C. Sedgwick

INVENTOR:

H. E. Schreader

BY.

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

HENRY E. SCHREADER, OF MANTENO, ILLINOIS.

WHIP-SOCKET.

SPECIFICATION forming part of Letters Patent No. 481,063, dated August 16, 1892.

Application filed January 22, 1892. Serial No. 418,900. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. SCHREADER, of Manteno, in the county of Kankakee and State of Illinois, have invented a new and Improved Whip-Socket, of which the following is a full, clear, and exact description.

The invention relates to whip-sockets having locking devices for preventing the whip from being abstracted; and the object of the invention is to provide simple and improved locking devices capable of a great variety of adjustments.

The invention consists in the novel construction and combination of parts, as will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the views.

Figure 1 is an end elevation of a whip-socket embodying my improvements. Fig. 2 is a side elevation thereof. Fig. 3 is a vertical transverse section. Fig. 4 is a longitudinal vertical section. Fig. 5 is a horizontal section, and Fig. 6 is a perspective view, of the locking-slide removed from the lock.

In constructing the improved whip-socket and its appurtenances the socket proper A is preferably formed integral with the lock-case B, the two being divided longitudinally, one member forming the end b of the lock, its back b', and one half-section b^2 of the socket A, and the other member forming the front b^3 and the remaining half-section b^4 of the socket. Each member has an internal flange b^5 b^6, the two overlapping and forming a rabbet-joint, as shown in Fig. 5, to form the dividing-wall between the socket and lock. Screw-bolts B′ or the like serve to hold the case together.

In the socket A there is secured a vertically-ranging whip-retaining plate C, the same being capable of flexure or otherwise constructed and arranged to be forced toward the center of the socket for the purpose of contracting the bore, in effect, after the whip-butt has been forced into the same beyond said plate. A retractile spring c may be arranged to normally hold the whip-retaining plate against the side to which it is secured. The retainer C is controlled by a locking slide or bolt D, mounted to slide in the lock-case B and be projected into the socket A against said retainer. A knob D′ outside of the case and connecting its stem d to the slide D serves to actuate the latter, the case B being slotted horizontally, as at d', for the movement of said stem.

On the under side of the slide D a rack d^2 or its equivalent is formed with recesses d^3, into any one of which is adapted to be projected the locking-bit e of a latch-bar E, said latch-bar being mounted on a pivot e', located at one side of its longitudinal center, preferably at one longitudinal edge, to permit the latch-bar to rock in the vertical plane for causing its engagement or disengagement from the locking-slide D.

Below the latch-bar E are arranged a series of vertically-movable tumblers F F′, which are fitted loosely between guide-flanges G on the inner surface of the sides of the lock-case in vertical recesses g therein, said tumblers being reversible and each having a ward f at its upper end for engaging and controlling the latch-bar E and having at its lower end a toe f', adapted to rest on the T-heads h of trips H, which have finger pieces or keys H′ outside of the case.

Two tumblers F and F′ only are shown, but more may be employed. The one F is shown with its toe f' resting on the head h of the trip at the inner side of its pivot or shaft h^2, while the other F′ is in the reverse position, the toe f' thereof resting on the head at the outside of the pivot. It will be seen, therefore, that when the key of the trip beneath the tumbler F is moved toward the front, the said tumbler will be permitted to fall and will in turn permit the latch-bar E to disengage itself by gravity from the locking-slide D. If, however, the key H′ of the trip beneath the tumbler F′ is given a like movement on its pivot, the said tumbler will be moved upward and serve to retain the latch-bar E in engagement with the locking-slide. Thus it will be necessary for one to know which keys to throw in order to withdraw the tumblers from the latch-bar. A spring E′ may be employed to insure the disengagement of the latch-bar when the tumblers are withdrawn; also, suitable springs h' are provided for returning the trips H to their normal positions.

It will be observed from Fig. 4 that the socket has a contracted bore at the bottom,

an inclined or curved surface *a* being produced at the side opposite the side to which the retainer C is secured, whereby as the whip-butt strikes the incline it will be deflected toward the retainer.

From the above description it will be seen that the locking-slide D may be quickly withdrawn to permit entrance of the whip-butt, and upon the slide being pressed inward the retainer C will be crowded against the whip outside of its enlarged butt, in which position the slide may be locked by merely releasing the keys H'.

By providing a number of tumblers their relative positions may be changed from time to time and a great variety of combinations is made possible.

In practice any suitable form of case may be provided, as I do not limit myself to the form shown.

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

1. A whip-socket having a lock-case at one side, a transverse slide-rack therein provided with an external operating-handle, a whip-retainer in the socket at the inner end of the slide-rack, a toothed latch in the case for engaging the said rack, a series of sliding tumblers engaging the said latch, and keys pivoted in the case in engagement with the tumblers and having finger-pieces projecting through the casing, substantially as described.

2. The combination, with a whip-socket, of a locking-slide movable into said socket, a latch-bar adapted to engage said slide, a series of tumblers movable toward and from said latch-bar, and separate keys for actuating said tumblers to throw them against the latch-bar and cause it to move into engagement with the said slide, substantially as described.

3. The combination, with a whip-socket, of a lock in which is comprised a slide movable into the socket and formed with a rack, a whip-retainer at the inner end of the slide, a rocking latch-bar having a bit adapted to engage said rack, a series of reversible tumblers below said latch-bar, and separate trips for each of said tumblers, the trips being provided with operating-keys, substantially as described.

4. The combination, with a whip-socket, of a whip-retaining plate therein, and a lock comprising a slide movable against said retainer-plate and formed with a rack, a latch-plate for the slide, pivoted to rock toward and from the same and having a bit adapted to engage the rack thereon, a series of tumblers below the latch-bar, said tumblers being loosely held by recessed guide-flanges on the interior of the case, actuating-trips for the tumblers, having T-heads extending at both sides of the pivot thereof and provided with keys, and the tumblers having each at one end a ward for contacting with the latch-bar and at the opposite end a toe resting on the T-head of the trip, substantially as described.

HENRY E. SCHREADER.

Witnesses:
WM. M. SIMS,
E. W. PETERS.