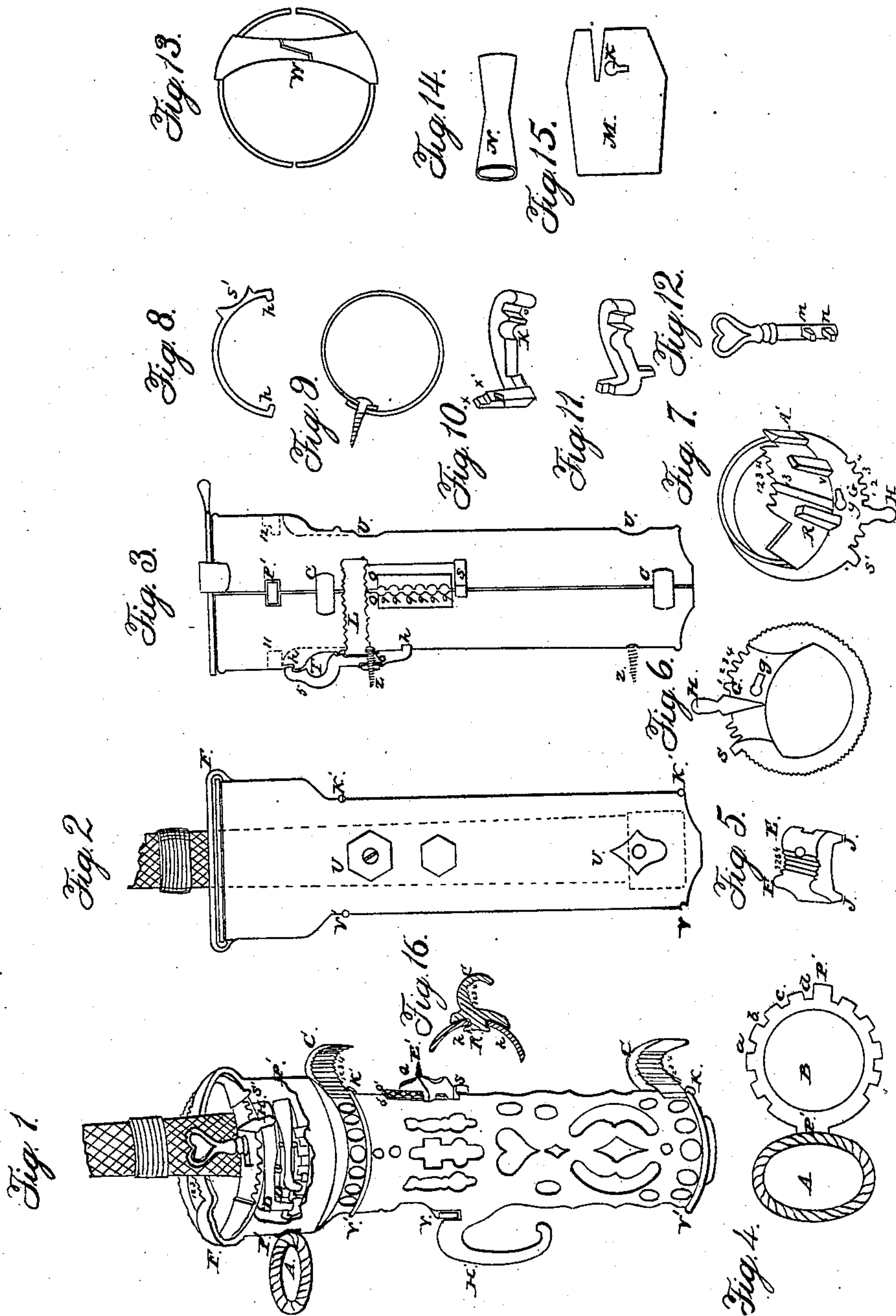


T. WEAVER.

Whip-Socket.

No 67,237.

Patented July 30. 1867.



Witnesses:
 S. E. Gollidge
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Inventor:
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United States Patent Office.

T. WEAVER, OF HARRISBURG, PENNSYLVANIA.

Letters Patent No. 67,237, dated July 30, 1867.

IMPROVEMENT IN WHIP-SOCKET.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, T. WEAVER, of Harrisburg, in the county of Dauphin, and State of Pennsylvania, have invented new and useful Improvements on a Locking Whip-Socket and Line-Holder combined; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, in which—

Figure 1 is a perspective view, with whip-stock butt inserted, with the lock locked, a part of the tube being removed to show the parts of lock.

Figures 2 and 3 are side elevations.

Figure 4 is a top view of two massed rings, forming a part of line-holder and lock respectively.

Figure 5 is a perspective view of a brace, or saddle-shaped clasp

Figure 6 is a top view of locking-thimble, with the rubber, fig. 15, removed.

Figure 7 is a perspective view of locking-thimble inverted, with tumblers and key removed, which are shown in perspective, figs. 10, 11, and 12.

Figure 8 is a top view of a clasp for carriage post or side board of box.

Figure 13 is a top view of disk at top of socket-tube, in two sections, for the insertion of the hour-glass shaped sleeve shown in fig. 14.

Figure 15 is a top view of a removable clutch.

Construction and Operation.

I construct my socket-tube in two sections or halves, flared or widened to form a chamber for the introduction of a lock. One section has solidly attached to it two clutches, as shown at C C, figs. 1 and 3, which are toothed on their inner circle at 1, 2, 3, 4. When the socket-tube is made of vulcanized rubber, or material which would not afford strength enough to make a clutch, the clutch is made of metal, in the form shown in fig. 15, with a dove-tail hold, R', to enter a slot between the sections of the socket-tube *h h*, which is held in place by the action of the brace shown in fig. 5, at Q, fig. 1. This brace is used in either form of clutches to hold the sections of tube together by means of two sets of lugs, J J, fig. 5, which impinge on two inclined slides, O' O', figs. 1 and 3. These lugs also guide the descent of the brace from the wider place above the slides, made so for easier insertion of the brace. The reverse side next to the rail of the dash has notched curved surface E, 1, 2, 3, 4, fig. 5. When the clutches are inserted around the rail of dash, the socket-tube then comes near enough to the said rail or rod to leave slightly less space than the middle of the brace, fig. 5, which being driven down in said space impinges sharply with its teeth 1, 2, 3, 4, on the rod or leather covering, its shoulders forming part of circle around the rod, thus assisting the teeth 1, 2, 3, 4, on clutches C C, figs. 1 and 15, which impinge on the rod from opposite side, to hold the socket firmly in place to resist the tension of the line-holder on opposite side of the socket. After the brace is driven down it is arrested by a stop, S, fig. 1, from going out of the slides, and its ascent is prevented by the screw E', which passes through the brace, and its point is buried in the leather around rod of dash on the left side. The screw is driven through an aperture, Y, on opposite side of tube, and may pass through any one of a row of holes marked 9 9 9 9 9, fig. 3. Said screw cannot be removed when the whip is locked in the tube; it is therefore a locking-fastening to dash. When the socket is to be mounted on a carriage post, or on the side of a box of vehicle, the brace, fig. 5, is modified into the form shown in fig. 8, having a curve, S', to fit post or indent the box side, and being provided with two lugs, *h h*, to clasp the sections of socket-tube together as before described. When this brace is in place, as at L, fig. 3, it is prevented from going upward by the flare of the socket-tube, and prevented from coming down by the screw *z*, which is driven through the socket as before described, and impinges against lower edge of brace at 6. The point of screw, entering the post or side of box, holds the brace and socket in place, and cannot be removed until whip is removed from socket, and is therefore also a locking fastening. When the socket is mounted on the rod or rail of a carriage seat which runs in a horizontal direction there is added an additional brace, shown at 5, fig. 3. This has likewise two lugs, *h h*, to hold it in an upright position, a curve to form the circular space T for the insertion of the seat rail, a recess at 6 for the reception of a nut, which the screw *z* enters from inside of socket-tube as before. The nut cannot be removed from the outside, as the shoulders on brace prevent its being turned. This, therefore, is a locking fastening. On the opposite side of the clutches C C is a hasp, shown

at Y, fig. 1. This consists of a shoulder on the base of the hook H', and a recurved tongue on opposite section of the tube, fitting said shoulder. This hasp acts in combination with either form of brace above described. To cause the two sections of the tube to meet exactly and to preserve an exact circle for the locking-thimble, two wire bands, shown at V' K', fig. 1, are passed around the tube near the clutches C C. These being twisted and soldered at the place where the socket-tube touches the dash or post, or side of box, form also an ornamental bead around the tube, and hold the parts together until the socket is mounted. The hook H', in combination with the ring A, fig. 1, constitutes the line-holder. The lines are doubled, and the doubled end is passed through the ring *a* and hooked on the hook H'. The lock consists of the notched ring B, fig. 4; the thimble, figs. 6 and 7; the tumblers, figs. 10 and 11, and the key, fig. 12. The ring B has rectangular notches, *a b c d*, on its outer circle, as shown in fig. 4, and two bearings, P' P', to retain the ring in place in the bottom of the chamber, as shown at the points P' P', fig. 1. The thimble, shown in figs. 6 and 7, has on its upper surface a depressed place, G, deep enough to receive a suitable slip of leather, gum, or cloth, shaped as shown in fig. 15, and has a flaring rim, which is toothed, on the part marked G, for biting and holding the one end of said rubber material, while the other end is bit and held by another set of teeth marked 1 2 3 4, fig. 7, on the under edge of the short side of the thimble. The top has also a handle, H, for revolving the thimble easily in its chamber, and a stop, S', to limit its revolution, by coming against the top disk F, fig. 1. The under side of the thimble has ledges, R V A', for the erection and retention of the tumblers shown in figs. 10 and 11, and a groove for the insertion and poising of key marked 13, fig. 7. All these ledges are on the outside of the short side of the thimble, a chamber being formed for the tumblers by the side being short. The recesses O O, figs. 10 and 11, fit the ledge R; the other ends of the tumblers rest against and slide on the ledge V. The points of the tumblers marked D D, figs. 10 and 11, have two benches, *x x'*. *x* enters the notches in the ring, fig. 4, and *x'* rests on the upper edge of the ring to prevent its falling at an irregular depth in the ring, as shown in fig. 1. The tumblers are of proper thickness to fill the space between the thimble and the socket-tube. The tumbler in fig. 11 has a stop, P, which prevents its being lifted high enough to lift the tumbler above it by other means than the key. The stop P slides up between the upper tumbler and the short side of the thimble, and is stopped by coming against the top part near the key-hole. It is plain that the tumblers, being thus independent in their action, and dependent on the wards *m n* of key, fig. 12, the lock cannot easily be picked through the key-hole, while the short side of the thimble is made to extend deeper into the tube of socket, thus forming a shield for the tumblers against picking from the inside. The approaches to the key-hole of the tumblers are inclined on the under side, so that by turning the key the wards lift them in a vertical direction and bring the points out of the line of the notch in the ring, fig. 4. The notch in said ring may be on one or two benches, as shown in fig. 3 at 11 and 12. The disk F, figs. 1 and 2, has its side next the whip-stock smooth, while the opposite or farther edge is toothed to receive a covering of leather, gum, or other material, in such a manner that the action of the whip cannot strip or move it towards the middle of the disk. The disk is also raised above the edge of the tube to permit the free motion of the flange on the thimble. When a gum rubber is used to clothe the disk F, fig. 1, it is made in the form of a narrow sleeve tapered from the ends to the middle, and is put on the disk through a breach in the disk, as shown at W, fig. 13, the parts of the disk being placed on different parts of the socket-tube. It will thus be seen that both the disk and that part of lock which comes against the whip-stock are provided with a suitable material to prevent rubbing or defacing the whip. When the lock is unlocked, which is done by turning the key, it remains unlocked, and the thimble can be turned freely either way until the key is turned back, and then it is locked at all points that suit different sizes of whip-stocks.

I disclaim the construction of the thimble, as that has already been broadly claimed by my patent antedated August 13, 1866; nor do I claim the locking device combined with said thimble of said date, but as improvements on it and other parts of socket, I desire to secure other combinations and devices by Letters Patent, as set forth below.

1. I claim a whip-socket in sections, flared or widened at a place suitable for the insertion of a locking device or line-holder, substantially as herein set forth.
2. A whip-socket provided with a set of single clutches rigidly attached or removable, to grip the rod in a dash, in combination with a brace, substantially as herein set forth.
3. The mode of preventing the revolution of a socket at its bearings on a rod, by means of the indented arcs 1 2 3 4, in figs. 1 and 5, for the purpose specified.
4. The locking fastening, as shown in figs. 3 and 8, and otherwise described.
5. The combination of the bands V' K', V' K', with a socket for the purpose specified.
6. The slides *o' o'*, the holes 9 9 9 9, fig. 3, in combination with the brace, fig. 5, and the screw E', for the purpose herein specified.
7. The combination of a tumbler or tumblers with a locking-thimble provided with a flange at top, the teeth 1 2 3 4, key-hole *g*, key-guard 13, the toothed lock shield 1 2 3 4, the ledges R V A', handle H, stop S', when made to operate by a key, as herein set forth.
8. The combination of the subjects of the seventh claim with a circle of notches, as shown in fig. 4, or with two circles, as shown at 12, fig. 3, for the purpose herein set forth.
9. The combination of a ring A with a hook, H', for the purpose specified.
10. Clothing or covering the parts of a lock that come in contact with a whip-stock in a socket with a suitable material, substantially in the manner as and for the purpose herein shown and described.
11. I claim inserting a key in a vertical or upright position in a whip lock, as shown in fig. 1.

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Witnesses:

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