

No. 637,407.

Patented Nov. 21, 1899.

H. PAUL.
SPRING LOCK WHIP SOCKET.

(Application filed July 27, 1899.)

(No Model.)

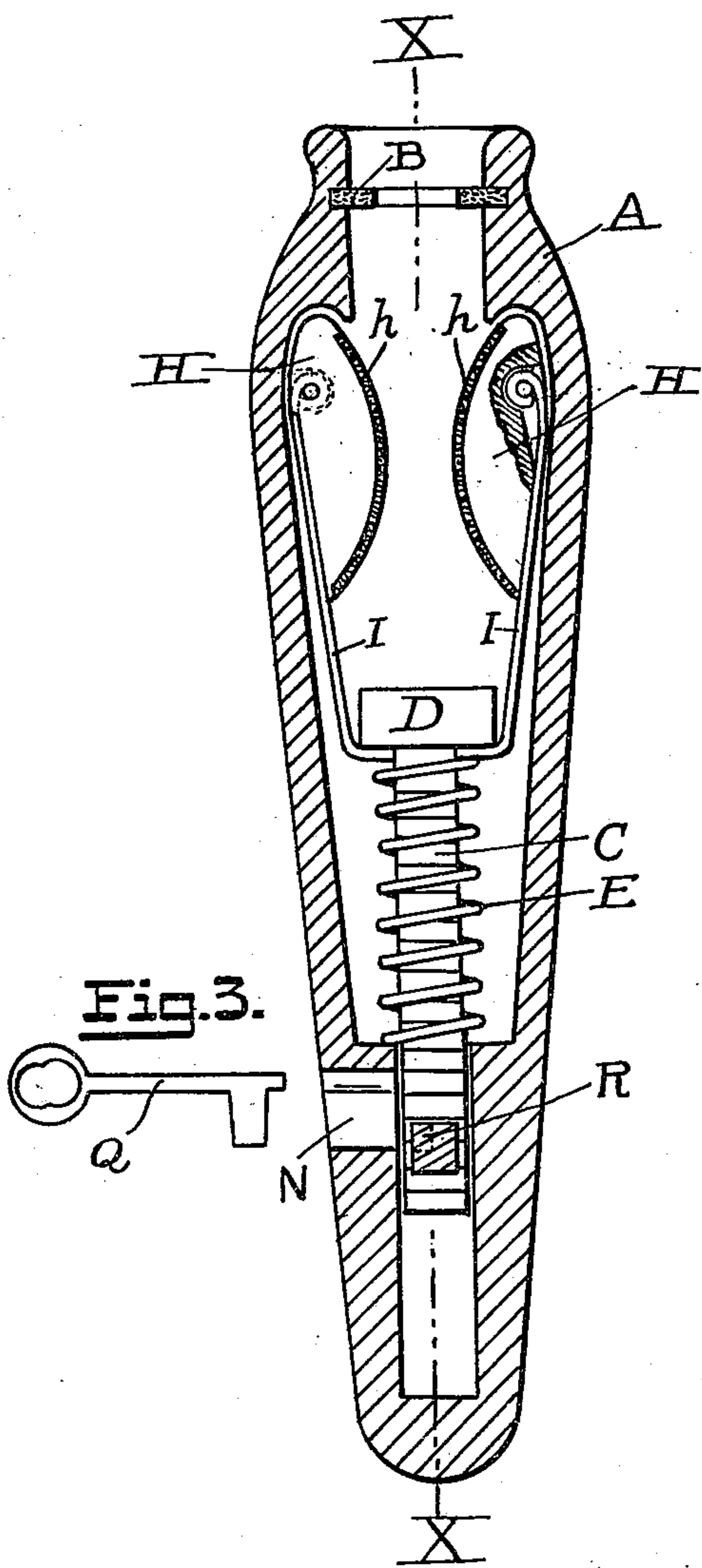


Fig. 1.

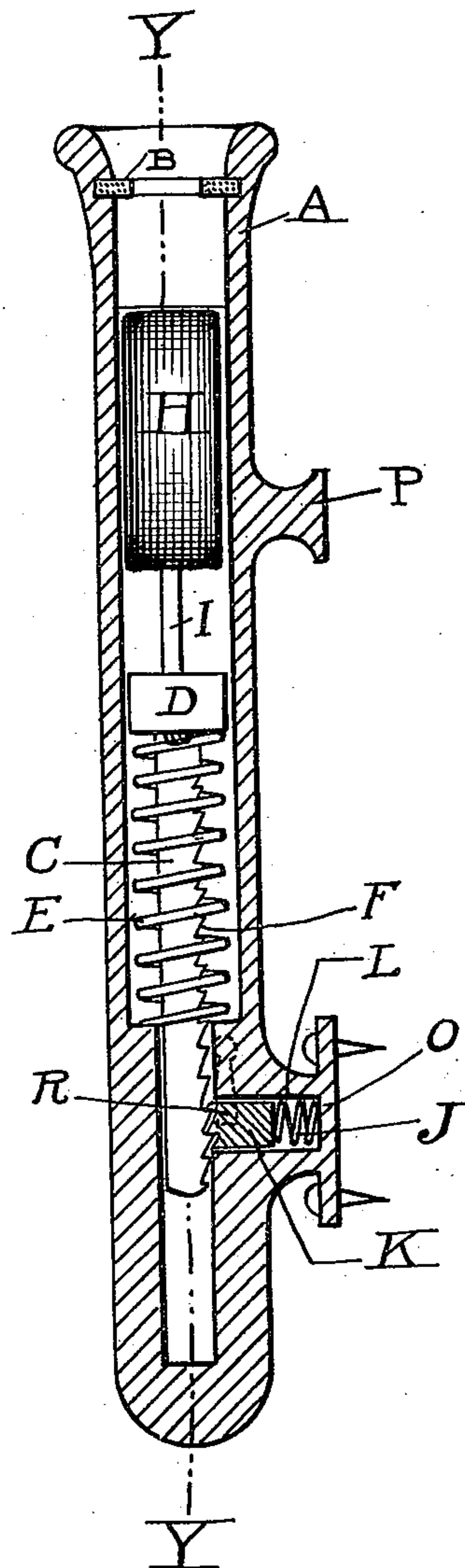


Fig. 2.

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by

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HARRY PAUL, OF CHATHAM, NEW YORK.

SPRING-LOCK WHIP-SOCKET.

SPECIFICATION forming part of Letters Patent No. 637,407, dated November 21, 1899.

Application filed July 27, 1899. Serial No. 725,244. (No model.)

To all whom it may concern:

Be it known that I, HARRY PAUL, a citizen of the United States of America, and a resident of Chatham, county of Columbia, State of New York, have invented certain new and useful Improvements in Spring-Lock Whip-Sockets, of which the following is a specification.

My invention relates to improvements in whip-sockets; and the object of my invention is to produce a whip-socket in which the whip may be readily locked or fastened, so that it cannot be withdrawn without being unlocked by a key made especially to fit. I attain this object by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of the entire whip-socket through the center at Y Y in Fig. 2. Fig. 2 is also a vertical section of the entire socket at X X in Fig. 1. Fig. 3 is a key to unlock the whip.

Similar letters refer to similar parts throughout the several views.

A is an outside casing of my spring-lock whip-socket.

B is a rubber ring projecting around the top of the inside of the whip-socket to prevent the whip coming in contact with the sides.

C is a plunger with a cap-piece D and held in position by the coiled spring E. One side of the plunger C is provided with ratchet-teeth F, as shown in Fig. 2. H H are two cams, one on each side of the chamber in the whip-socket, and held in position by a wire spring I, passing through the top of the plunger C under the cap-piece D. The cams H H are hinged or pivoted loosely on the top ends of the wire spring I, and the cams are covered with leather or some similar material which will not injure or deface the whip on the inner sides *h h*, Fig. 1.

One side of the casing A of the socket is provided with a recess J, Fig. 2.

K is a block or dog made to move easily in the recess J. The block or dog K is provided on one side with ratchet-teeth which mesh with the ratchet-teeth of the plunger C.

L is a spring to hold the dog K firmly against the plunger C.

N is an aperture in the casing of the socket to admit of the insertion of the key to move

the dog K away from contact with the plunger C. The dog K is also provided with an opening suitable for a key to fit into. O and P are brackets for fastening the whip-socket against the front or side of the wagon or where desired.

The sides of the casing A are the broadest at a short distance below the top, where the cams are held in place by the spring I, and become narrower as the sides converge toward each other as they descend toward the bottom, as shown in Fig. 1.

The operation of my spring-lock whip-socket is as follows: When the parts are all in position, as shown in Fig. 1, the whip may be inserted and withdrawn freely, as in an ordinary whip-socket, without being locked, the butt-end of the whip resting upon the cap-piece D. When it is desired to lock the whip, the whip is pressed downward, the butt-end upon the cap-piece D, and the cap-piece D and the plunger C pressed downward, compressing the spring E. The dog K being held against the plunger C by the spring E and the ratchet-teeth of the dog K meshing with the ratchet-teeth of the plunger C holds the plunger down. As the plunger C and the cap-piece D descend in the socket they will carry downward the cams H H, which as they descend will be brought closer together by the converging sides of the casing A, and will thus press tightly against the whip. The cams H H being hinged loosely upon the upper ends of the wires I, any attempt to remove the whip while they are pressed against the sides will cause the lower ends of the cams H H to swing inward and press more tightly against the sides of the whip, and so hold it more securely. When it is desired to release the whip or unlock it, the key Q is inserted in the keyhole or aperture N and, being made to fit into the opening R in the dog K, turning the key will press the dog away from the plunger C, and thus release the ratchet-teeth of the dog K from contact with the ratchet-teeth of the plunger C. The resiliency of the spring E raises the plunger C and the wire I, with the cams H H, to their former position, thus leaving the whip free to be removed.

By making the opening R in the dog K of different sizes and shapes keys of different

construction and shapes may be used, so as to prevent the same key being used for different whip-sockets or the lock being easily picked by a false key.

5 What I claim as my invention, and desire to secure by Letters Patent, is—

1. A spring-lock whip-socket with converging sides and provided with two or more cams each pivoted on a spring, and held in
10 position by another spring which, when compressed, will draw said cams toward each other, substantially as described and for the purposes set forth.

2. A spring-lock whip-socket the insides of
15 which converge toward each other, together with two or more cams held in position against said converging sides by being pivoted upon springs attached to a plunger, so arranged that when the plunger is pressed downward
20 by the whip, the cams will be pressed against the whip by the converging sides of the socket, substantially as described and for the purposes set forth.

3. A spring-lock whip-socket, provided with
25 a plunger having ratchet-teeth on one side and a dog with corresponding ratchet-teeth, held against said plunger by springs and one or more cams pivoted upon springs attached to said plunger; a spring adapted to hold said
30 plunger up and return it in place when re-

leased from said dog, together with a key adapted to release the ratchet-teeth of said dog from the ratchet-teeth of said plunger, all substantially as described and for the purposes set forth.

4. In a spring-lock whip-socket, the interior sides of which converge toward each other, two or more cams held against said sides by being pivoted upon springs; said
35 cams arranged and adapted to approach each other as they move downward along said converging sides, in combination with a plunger held in position by a spring and adapted to carry said cams downward along said converging sides, as said plunger descends in
40 said socket; springs holding said plunger and said cams in position; ratchet-teeth upon one side of said plunger; a dog adapted to catch upon the ratchet-teeth of said plunger; a spring adapted to hold said dog against
45 said plunger, and a key adapted to disengage said dog from said plunger, all substantially as described and for the purposes set forth.

Signed by me at Albany, New York, this
17th day of July, 1899. 55

HARRY PAUL.

Witnesses:

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