

(No Model.)

W. H. HART, Jr.
LOCK FOR BICYCLE CHAINS.

No. 505,292.

Patented Sept. 19, 1893.

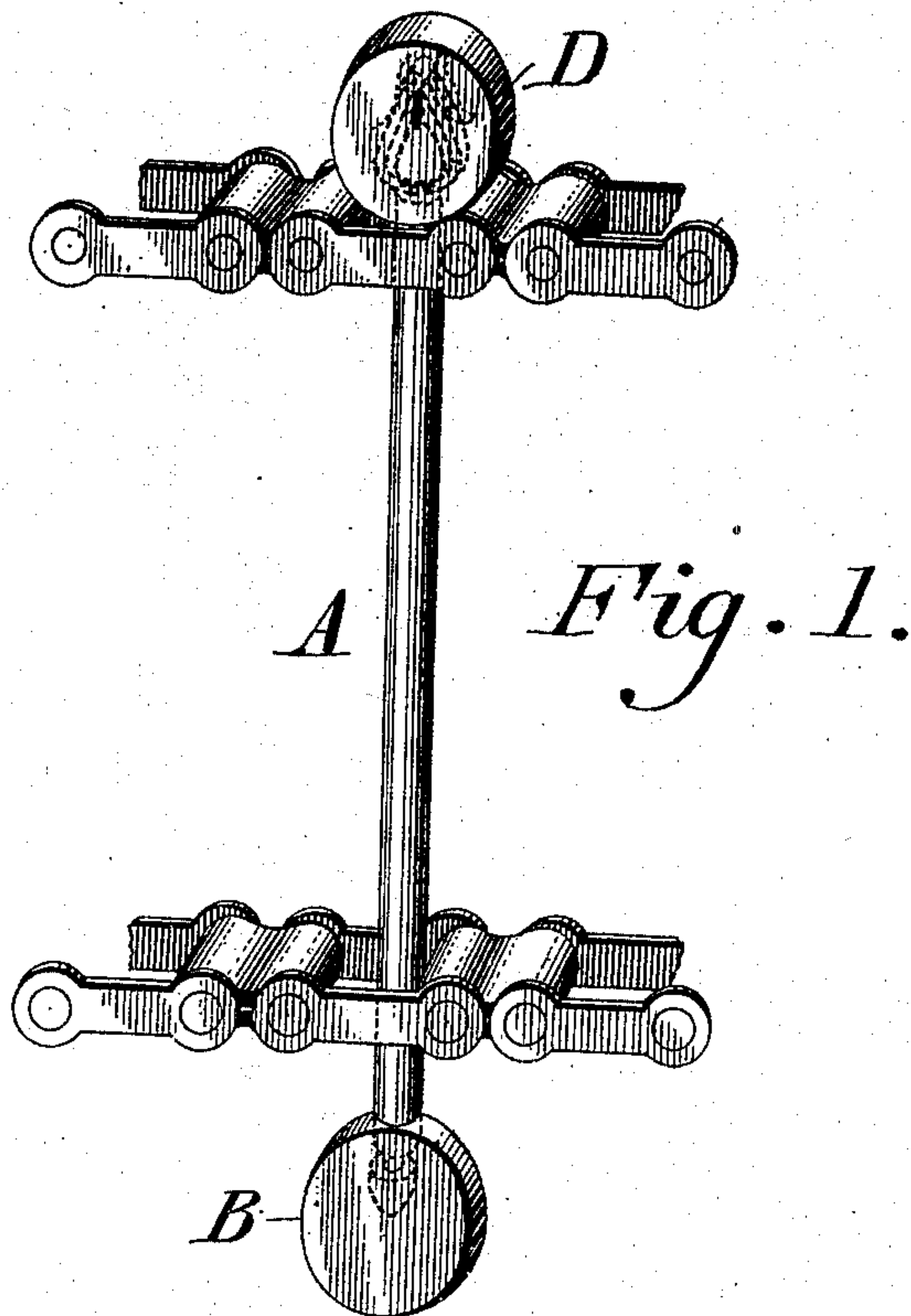


Fig. 1.

Fig. 3.

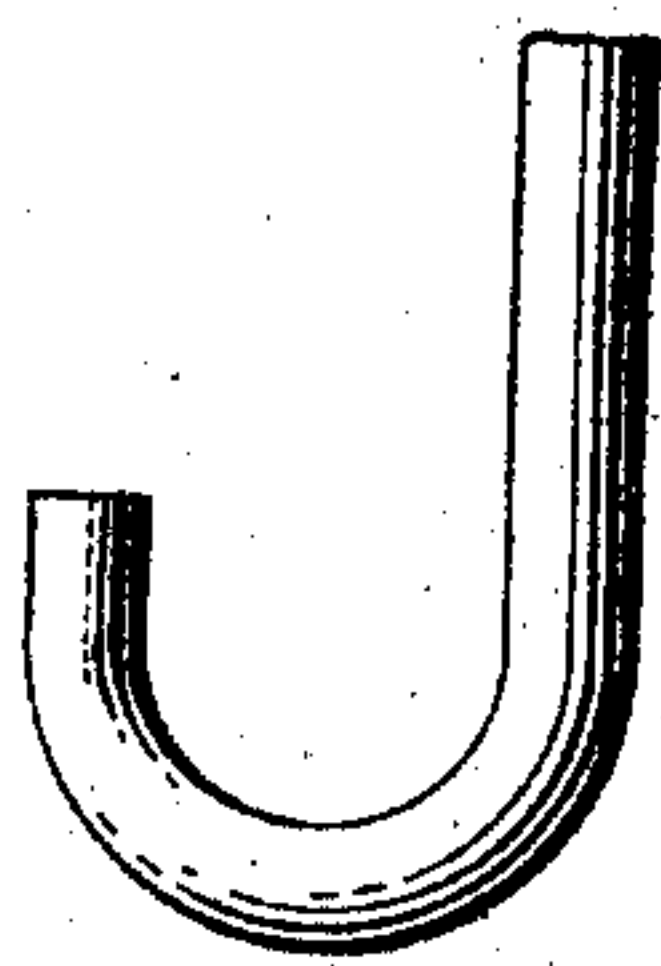


Fig. 2.

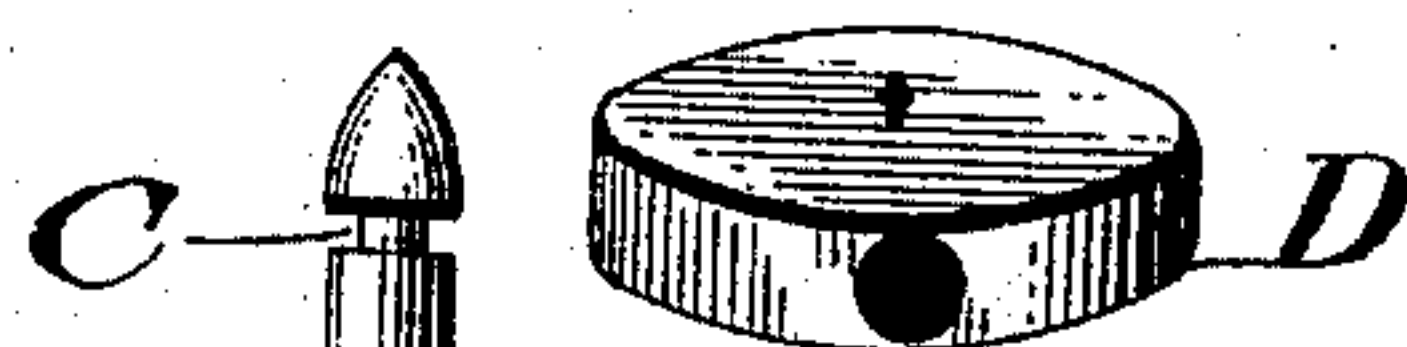
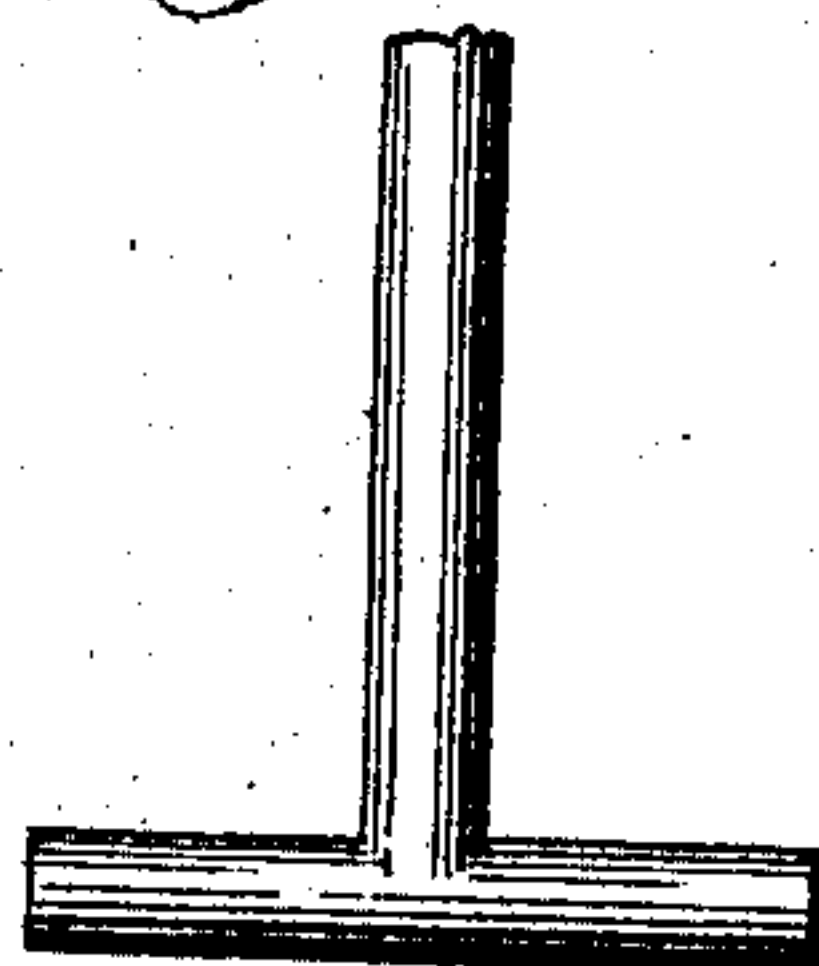
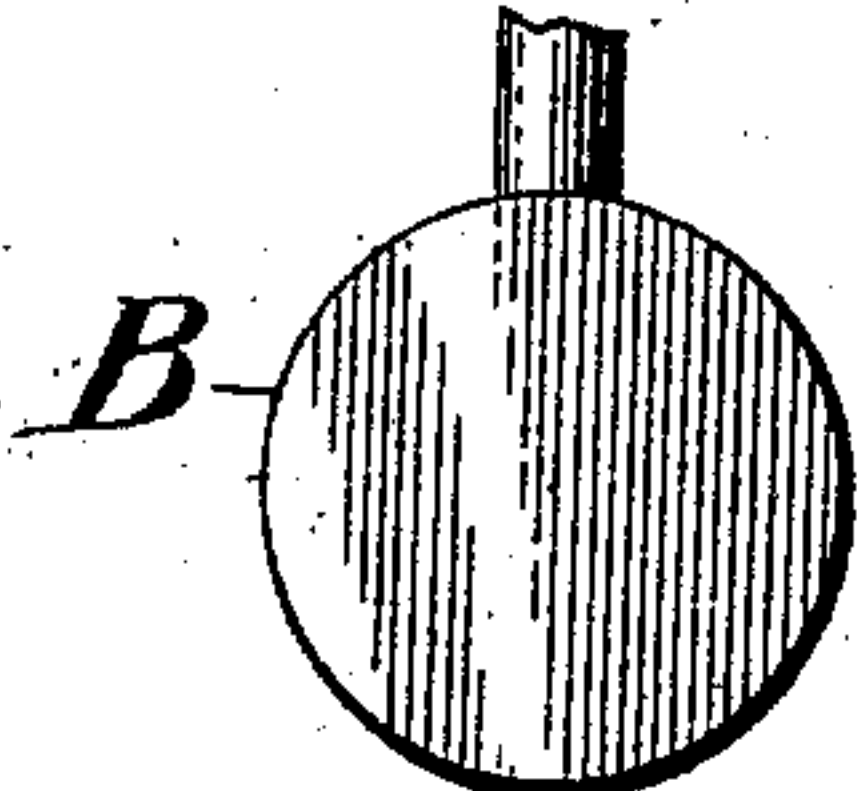


Fig. 4.



WITNESSES:

O. F. Chagles.
R. H. Graessers.



INVENTOR.
W. H. Hart, Jr.
BY *John A. Diederichs*
ATTORNEY.

UNITED STATES PATENT OFFICE.

WILLIAM H. HART, JR., OF PHILADELPHIA, PENNSYLVANIA.

LOCK FOR BICYCLE-CHAINS.

SPECIFICATION forming part of Letters Patent No. 505,292, dated September 19, 1893.

Application filed October 6, 1892. Serial No. 447,985. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. HART, Jr., a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Locks for Chains of Bicycles, &c., which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a lock for the chain of a bicycle or other object, the same being formed of a headed shank provided with a neck, and a lock having a bolt engaging in the walls of said neck, as will be hereinafter set forth.

Figures 1 and 2 represent perspective views of a chain lock embodying my invention, the parts being shown separated in Fig. 2 and on an enlarged scale therein. Figs. 3 and 4 represent side elevations of different forms of heads for the shank of the device.

Similar letters of reference indicate corresponding parts in all the figures.

Referring to the drawings: A designates a rod, tube or other piece of suitable metal or material, forming a shank on the lower end of which is a head B, which may be cast therewith or otherwise firmly secured to said shank.

On the shank, near the upper end thereof is a peripheral groove forming a neck C, said end being adapted to enter the casing of a lock D, whose bolt engages with said neck, thus holding the lock connected with the shank.

In the drawings is shown a lock having a key hole in the side in which the key when introduced forces apart the bolt which normally is held engaged by means of springs, but I do not limit myself to this construction of lock. Any lock may be used having a bolt engaging in the neck of the shank.

The operation is as follows: The lock is opened by a suitable key which is inserted in the casing so as to remove the end of the bolt therein from engagement in the neck C of the shank. The lock is then removed from the shank, as shown in Fig. 2. The shank is now inserted through the links of the chain to be secured, and the lock applied to the shank, so that the neck C is within the casing thereof. The bolt is now caused to enter the neck or spring into the same, so as to en-

gage therewith, as will be seen in Fig. 1, it being evident that as the head B and lock D are of greater width or length than that of the links of the chain through which the shank passes, the said chain is controlled and travel of the same prevented. Owing to the neck C should the lock be turned in order to twist or wrench the same from the shank, said lock will rotate owing to the free projection of the lock bolt into the groove which forms said neck, thus preventing said improper action. Should, however, the key of the lock be inserted and operated, the lock will be opened and the same may then be slipped off of the shank, and the latter withdrawn from the chain, leaving said chain uncontrolled and properly movable, as is evident. If desired the head B may be substituted by a lock, in which case the shank A may have a neck in its lower end, as shown by the dotted lines in Fig. 1, but whether a lock is at either end, it receives the end of the shank within the same, as has been stated with the additional advantage of inclosing and concealing said end and preventing access to the same from the outside of the lock casing. In Figs. 3 and 4 I show two forms of heads for the shank, without producing different results from those hereinbefore stated.

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

1. A chain lock having a headed shank provided with a neck, and a removable lock on the neck end of the shank having a bolt adapted to engage in the walls of said neck, said parts being combined substantially as described.

2. A chain lock consisting of a shank adapted to be passed through the opposite links of a chain, a head on one end of said shank wider than the openings in the link, a neck in the other end of the shank, and a lock proper wider than the openings in the link and having a bolt adapted to engage in said neck, said lock being rotatable on said shank, said parts being combined substantially as described.

WILLIAM H. HART, JR.

Witnesses:

JOHN A. WIEDERSHEIM,
R. H. GRAESER.