(No Model.)

F. H. LARRABEE.

BICYCLE LOCK.

No. 575,719. Patented Jan. 26, 1897.

Fig. 1.

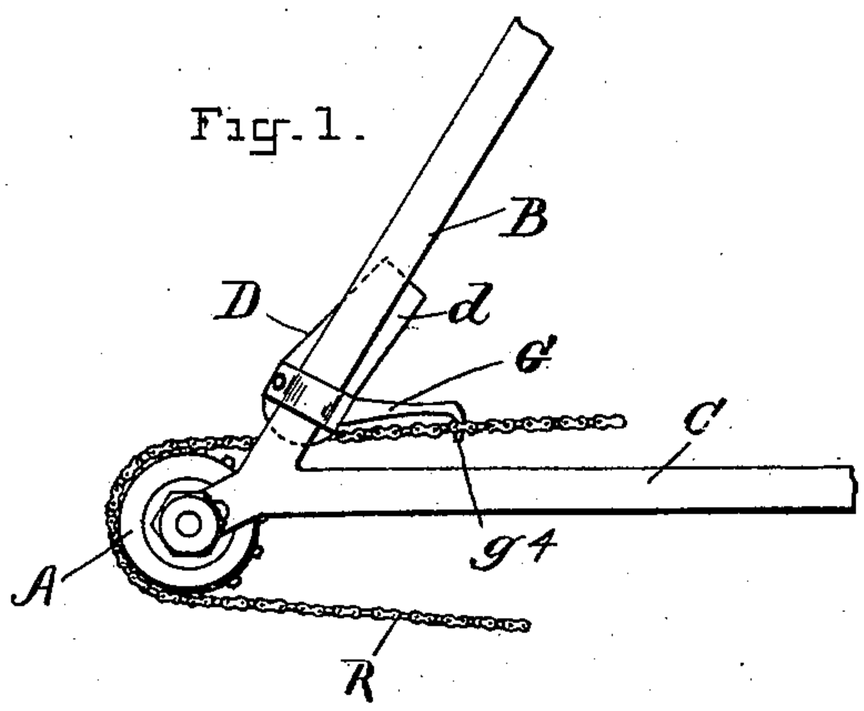


Fig. 2.

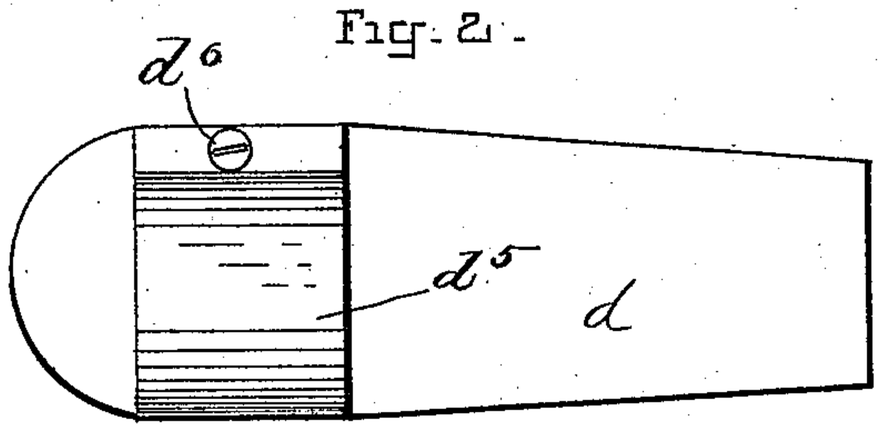


Fig. 3.

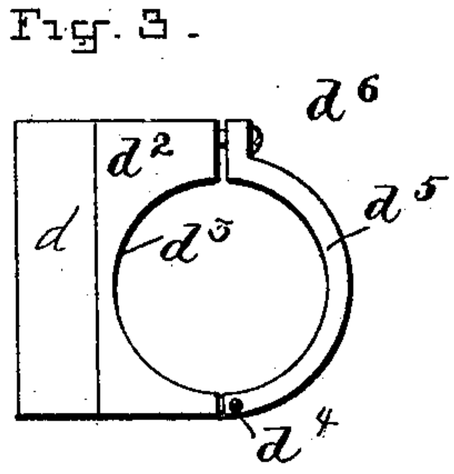


Fig. 4.

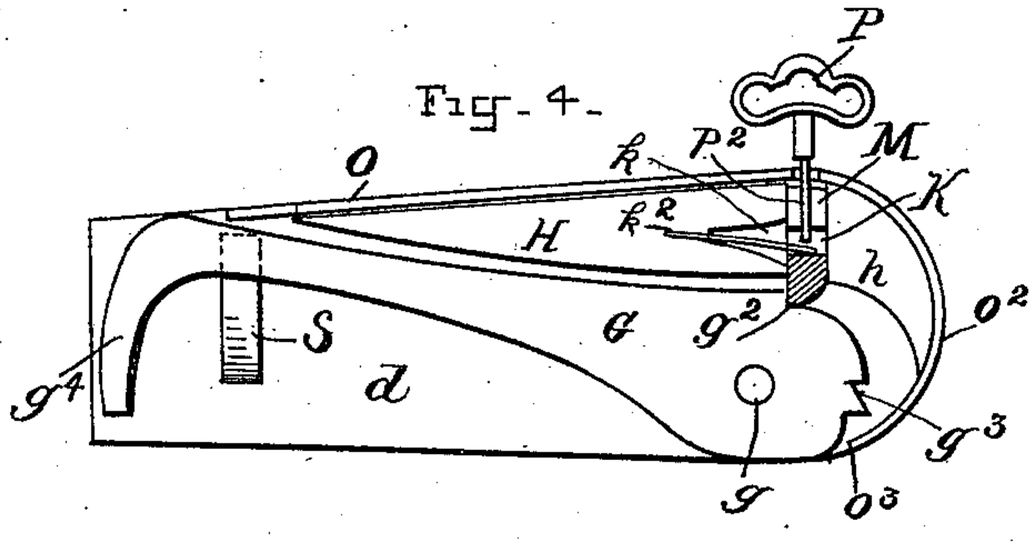
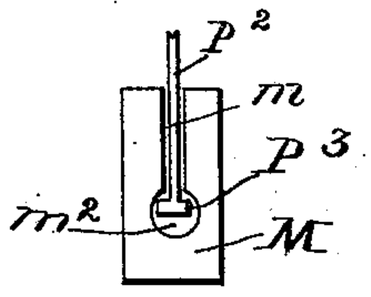


Fig. 5.



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UNITED STATES PATENT OFFICE.

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BICYCLE-LOCK.

SPECIFICATION forming part of Letters Patent No. 575,719, dated January 26, 1897.

Application filed February 19, 1896. Serial No. 579,812. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN H. LARRABEE, a citizen of the United States, and a resident of Hutchinson, in the county of Reno and State of Kansas, have invented certain new and useful Improvements in Bicycle-Locks, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to bicycle-locks; and the object thereof is to provide an improved device of this class which is adapted to be connected with one of the rods of the frame of the vehicle and to operate in connection with the drive-chain.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a side view of a part of the frame of a bicycle, showing also the sprocket-wheel mounted on the pedal-shaft, and a part of the drive-chain and my improved lock; Fig. 2, a side view of said lock; Fig. 3, an end view; Fig. 4, a side view opposite to that of Fig. 2 and showing a part of the casing removed, and Fig. 5 represents a detail of the construction.

In the drawings forming part of this specification, A represents the sprocket-wheel, which is mounted on the pedal-shaft, and B and C represent parts of the frame by which the pedal-shaft is supported, the part B being the upwardly-directed rod which connects with the main frame at or near the seat-support, which is not shown, and in the practice of my invention I provide a lock D, which is preferably of the form shown in Figs. 2 and 3.

Referring to Fig. 2, d represents one side of the casing of my improved lock, and secured thereto near one end thereof is a block d^2, which is provided with a semicircular cavity or recess d^3, and hinged thereto at d^4 is a segmental or semicircular jaw d^5, the free end of which is adapted to be connected with the block d^2 at d^6 in any desired manner.

The end of the casing of the lock adjacent to the block d^2 is preferably segmental or semicircular in form, and mounted therein is a lever G, which is pivotally connected therewith at g and provided with a circular head, at the top of which is formed a stop-shoulder g^2, and the end thereof is provided with locking-notches g^3, and the end of the lever G extends to the opposite end of the casing and is provided with a depending hook or arm g^4. Arranged in the upper part of the casing are two blocks H and h, the latter of which conforms to the curved or segmental end thereof, and between the blocks H and h is a passage K, in which is mounted a sliding locking-bolt M, one end of which projects into the space occupied by the lever G, and the other end of which is provided with a longitudinal slot or opening m, which communicates with a transverse aperture m^2, and the end of the block H, adjacent to the transverse passage K, is provided with a triangular notch or recess k, in which is mounted a spring k^2, the free end of which projects through the aperture m^2 in the locking-bolt M.

The lower side of the block H conforms to the upper side of the lever G, and the upper or outer side of the casing of the lock consists of a curved metal plate O, which is secured near the end of the casing adjacent to the free end of the lever G, and which extends along the side thereof, and around the curved or segmental end, as shown at O^2, and terminating in shoulder O^3, which forms a stop-shoulder for the circular head when in locked position. I also provide a key P, which is provided with a shank P^2, the end of which is provided with a head P^3, which is adapted to be inserted into the slot m of the key-bolt, and into the transverse aperture or opening m^2, formed therein, and the operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings.

It will be understood that that side of the lock shown in Fig. 4 is provided in practice with a casing or covering and the lock is secured to the rod B of the frame, as shown in Fig. 1, by means of the segmental jaw b^5, said lock being secured to said rod adjacent to the drive-chain R.

The normal position of the parts is that shown in Fig. 4, in which the inner end of the locking-bolt M abuts against the shoulder formed by the notch or recess g^2 in the head of the lever G, and secured to the side d of the casing of the lock adjacent to the free end

of the lever G is a plate-spring S, which bears upon and holds the lever G in said position, and whenever it is necessary or desired to lock the machine the free end of the lever is depressed, so that the arm or hook g^4 thereof will engage with one of the links of the drive-chain R, as shown in Fig. 1, and in this position the inner end of the locking-bolt will engage with one of the notches or recesses g^3 in the head of said lever and securely hold it in said position, said locking-bolt being forced inwardly by the spring k^2, and whenever it is desired to unlock the machine the key is inserted and the bolt drawn outwardly, when the lever may be again returned to the position shown in Fig. 4.

It is evident that changes in and modifications of the construction herein described may be made without departing from the spirit of my invention or sacrificing its advantages, and I reserve the right to make all such alterations therein and modifications thereof as fairly come within the scope of the invention.

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

1. A lock for bicycles, consisting of a casing of the form shown and described, said casing being adapted to be secured to the frame adjacent to the drive-chain, and being provided with a lever which is pivoted therein at one end thereof, the free end of said lever being provided with a depending hook or arm, and the pivoted end thereof, being provided with a circular head in which are formed notches or recesses, and said casing being provided with a spring-operated sliding bolt, which is adapted to operate in connection with said notches or recesses, substantially as shown and described.

2. A lock for bicycles, consisting of a casing of the form shown and described, said casing being adapted to be secured to the frame adjacent to the drive-chain, and being provided with a lever which is pivoted therein, at one end thereof, the free end of said lever being provided with a depending hook or arm, and the pivoted end thereof, having a circular head in which are formed notches or recesses, and said casing being provided with a spring-operated sliding bolt, which is adapted to operate in connection with said notches or recesses, and said bolt being provided with a longitudinal slot at one end, and with a transverse aperture or opening with which said slot communicates, said slot and opening being adapted to receive a key, substantially as shown and described.

3. The combination with a frame of a bicycle, of a lock connected therewith, and adapted to connect with the sprocket-chain thereof, said lock consisting of a casing on one end of which is formed a block d^2 having a segmental recess formed therein, provided with a segmental jaw d^5 to secure the casing to the frame and a lever G, pivotally mounted within said casing and having circular head in which is formed a stop-shoulder g^2, the opposite end of said lever being provided with a hook or extension g^4, said casing being provided with two blocks H and h, between which is mounted a spring-actuated sliding bolt M, having a longitudinal slot, communicating with an opening m^2 and a key adapted to operate the lock-bolt M and a spring S to retain the free end of the lever G within the case, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 12th day of February, 1896.

FRANKLIN H. LARRABEE.

Witnesses:
N. L. ELLIOTT,
J. P. DILLON.