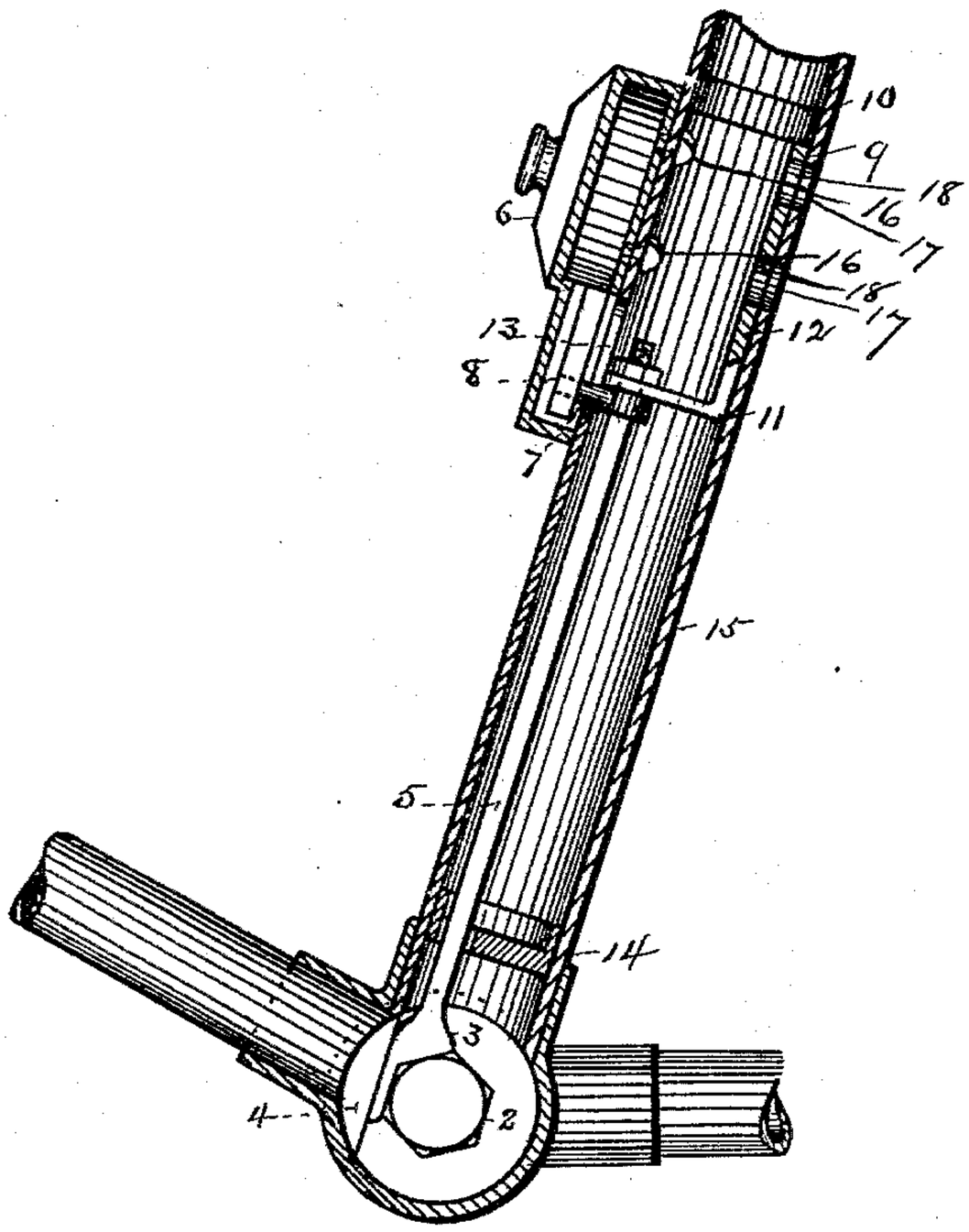
(No Model.)

W. REEHLING.

BICYCLE LOCK.

No. 598,113. Patented Feb. 1, 1898.



WITNESSES:

Walter J. Burns

Walter J. Burns

William Reehling INVENTOR

BY

H. C. Hartman Jr. ATTORNEY.

UNITED STATES PATENT OFFICE.

WILLIAM REEHLING, OF FORT WAYNE, INDIANA.

BICYCLE-LOCK.

SPECIFICATION forming part of Letters Patent No. 598,113, dated February 1, 1898.

Application filed September 9, 1896. Serial No. 605,278. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM REEHLING, a citizen of the United States, residing at Fort Wayne, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in Bicycle-Locks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the figures of reference marked thereon, which forms a part of this specification.

My invention relates to improvements in bicycle-locks which by locking some portion of the movable parts of the bicycle prevent its use until unlocked; and the invention consists in the construction and novel combination of parts hereinafter described, pointed out in the appended claim, and illustrated in the accompanying drawing, in which the figure is a sectional view of the entire device attached to part of the tubular frame of a bicycle.

The invention consists in making the central part of the crank-axle in line with the seat-post of three or more sides, preferably hexagonal, as shown in the drawing, providing a locking-piece to impinge against two or more of said sides, and means to hold them in such impingement by connection with a suitable lock, and means to attach the lock to a tubular part of the frame from the inside of the tube and to close the orifices through which such means are operated automatically by the movement of the bolt of the lock.

I have illustrated a preferable form of carrying out this invention.

The locking-piece 3 is attached to rod 5, which connects it with the lock 6, by means of a pin 7, passing through an orifice 8 in the bolt of the lock. The upper end of the rod 5, to which is attached the pin 7, is held in place by a sliding frame 9, which forms the upper guide. It consists of two cylindrical portions 10 and 11, connected at their bottom with a bar 12, so as to hold and guide the rod, so that the pin 7 is moved backward and forward by the bolt of the lock 6 through a slot 13, provided in the tubular seat-post 15. The lock is secured to the frame by screws 16, which are inserted through the orifices 17, the post 15, and orifices 18 in the bar 12 of the sliding frame 9 when the two orifices 17 and 18 are coincident with each other. This coincidence occurs when the frame 9 is moved upward by the lock 6, and the orifices 17 in the post 15 are closed when the frame 9 is moved downward with the bolt 8 of the lock 6 to lock the crank-axle as described. At the lower end of the post there is another guide for the connecting-rod 5, which consists of a circular disk 14, secured inside a tube, and having an orifice at one side, through which the rod 5 passes, whereby it forms a guide to direct the locking-piece into position. Thus constructed all the operating parts except the lock 6 are within one of the tube parts of the frame.

The mode of operation is obvious from the drawing and description.

I have shown a combination-lock; but any suitable lock may be used, and one could be adapted to be placed inside the tube part 13. The function of the lock 6 is to hold the locking-piece in or out of position by means of communicating mechanism. It is obvious that different sorts of guides may be used instead of the frame 9 and disk 14, performing the same functions. When the bolt is turned backward, the locking-piece is lifted out of connection with the crank-axle, which can then move freely. When the bolt is thrown forward, the locking-piece is thrown into position and locks the crank-axle, preventing its rotation.

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

In a bicycle-locking device in which the bicycle is locked by impingement of a locking-piece against the crank-axle, a connecting-bolt 5 in the tube 15; a lock attached to said tube by screws entered from the inside of the tube; orifices in said tube for the passage and insertion of the screws; a sliding frame within the tube connected by intervening mechanism to the bolt of the lock and adapted to close said orifices when moved downward, and to open them when moved upward by the bolt of the lock.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM REEHLING.

Witnesses:
THEO. HARGET,
H. C. HARTMAN.