

No. 620,221.

Patented Feb. 28, 1899.

H. J. BREEZE.
BICYCLE LOCK.

(Application filed Oct. 3, 1895.)

(No Model.)

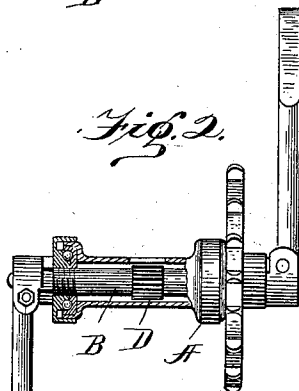
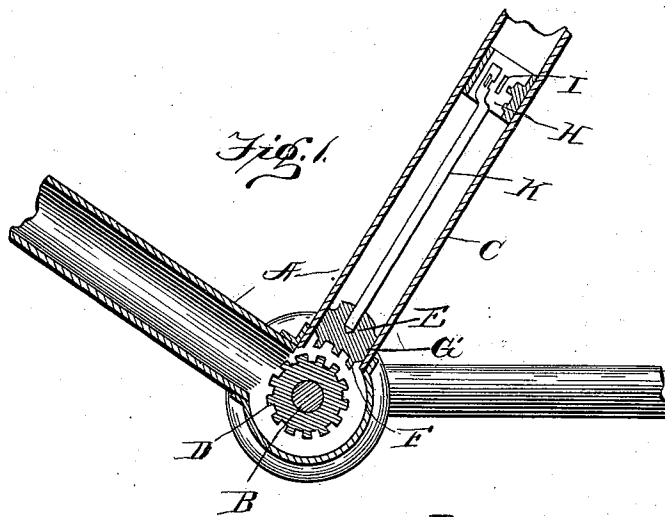
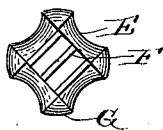


Fig. 3.



Witnesses:
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BICYCLE-LOCK.

SPECIFICATION forming part of Letters Patent No. 620,221, dated February 28, 1899.

Application filed October 3, 1895. Serial No. 564,479. (No model.)

To all whom it may concern:

Be it known that I, HERBERT J. BREEZE, a citizen of the United States, residing at Port Huron, in the county of St. Clair and State of Michigan, have invented certain new and useful Improvements in Bicycle-Locks; and I do hereby 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.

The object of this invention is to provide a cycle with a simple locking device that will be positive and reliable in operation, that is adapted to be used upon cycles as now ordinarily made, and that will be entirely out of sight within the frame of the cycle, and thereby avoid detracting from the appearance of the same and render it difficult to tamper with the lock, as more fully hereinafter set forth.

Figure 1 is a vertical section showing the lock out of engagement in a bicycle-frame. Fig. 2 shows a pedal-shaft with parts for engagement. Fig. 3 shows parts for engagement on lock-bolt.

The drawings show an ordinary arrangement of bicycle-frame A holding the pedal-shaft B and having a hollow part or tube C, with its axis in a line radially from such shaft and the lock apparatus inclosed in this part C. The pedal-shaft B has around it, in the center of its bearing in the frame, a wheel-like part with cogs D or suitable means of engagement.

In the part C of the frame is fitted a part E, arranged to slide freely along the hollow therein while held at the sides by guide-bearings G, and bearing on its end cogs F or parts adapted to engage with cogs D on shaft B to lock the shaft, and to be withdrawn to release it. At some distance up part C is located a lock H, having a keyhole I from the outside to the lock within. This lock has a bolt K with means for engagement with the key, so as to be operated by it. The bolt K at its other end connects with slide part E, so as to push that down or pull it up as the key is turned to lock or unlock the driving-gear of the bicycle, as desired.

It will be observed that I thus provide a bicycle with a locking device that will be positive and reliable, that contains no springs or other delicate devices to get out of order and

need repair, and that is entirely hidden from view. It will be seen that the essential feature lies in mounting the locking-block solidly in the frame and providing means for moving it positively toward and from the center of the pedal-shaft and positively locking it in both its engaged and disengaged positions, whereby all liability of the locking-block accidentally dropping into engagement while the cycle is in motion is avoided and the heavy strain due to any attempt to rotate the pedal-shaft while locked will be transmitted by the locking-block directly to the frame, reducing liability of breakage to a minimum. It will also be seen that thus making the line of movement of the locking-block directly radial to the pedal-shaft there will be very little liability of the locking-block being disengaged by any rotative strain applied to the wheel.

I claim—

1. The combination with a cycle-frame having a pedal-shaft journaled therein, a toothed wheel on said shaft, one of the bars of the cycle-frame being tubular and extending radially from said toothed wheel, a block provided with a tooth adapted to engage said toothed wheel, said block being mounted to slide in said tubular part of the frame, in contact with the wall of the same so as to be guided and braced thereby, the line of movement of the block being substantially radial to said toothed wheel, and a lock mounted in said tubular part of the frame and having a reciprocating bolt connected to said sliding block.

2. The combination with a cycle-frame having journaled in it a rotative element, as a shaft, carrying a rotating toothed wheel, a locking-block inclosed within the frame and mounted to slide to and from said wheel, said block being in contact with the wall of the frame so as to be positively guided and braced thereby, means for sliding said block and locking it into engagement and out of engagement with said wheel.

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

HERBERT J. BREEZE.

Witnesses:

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