

No. 656,334.

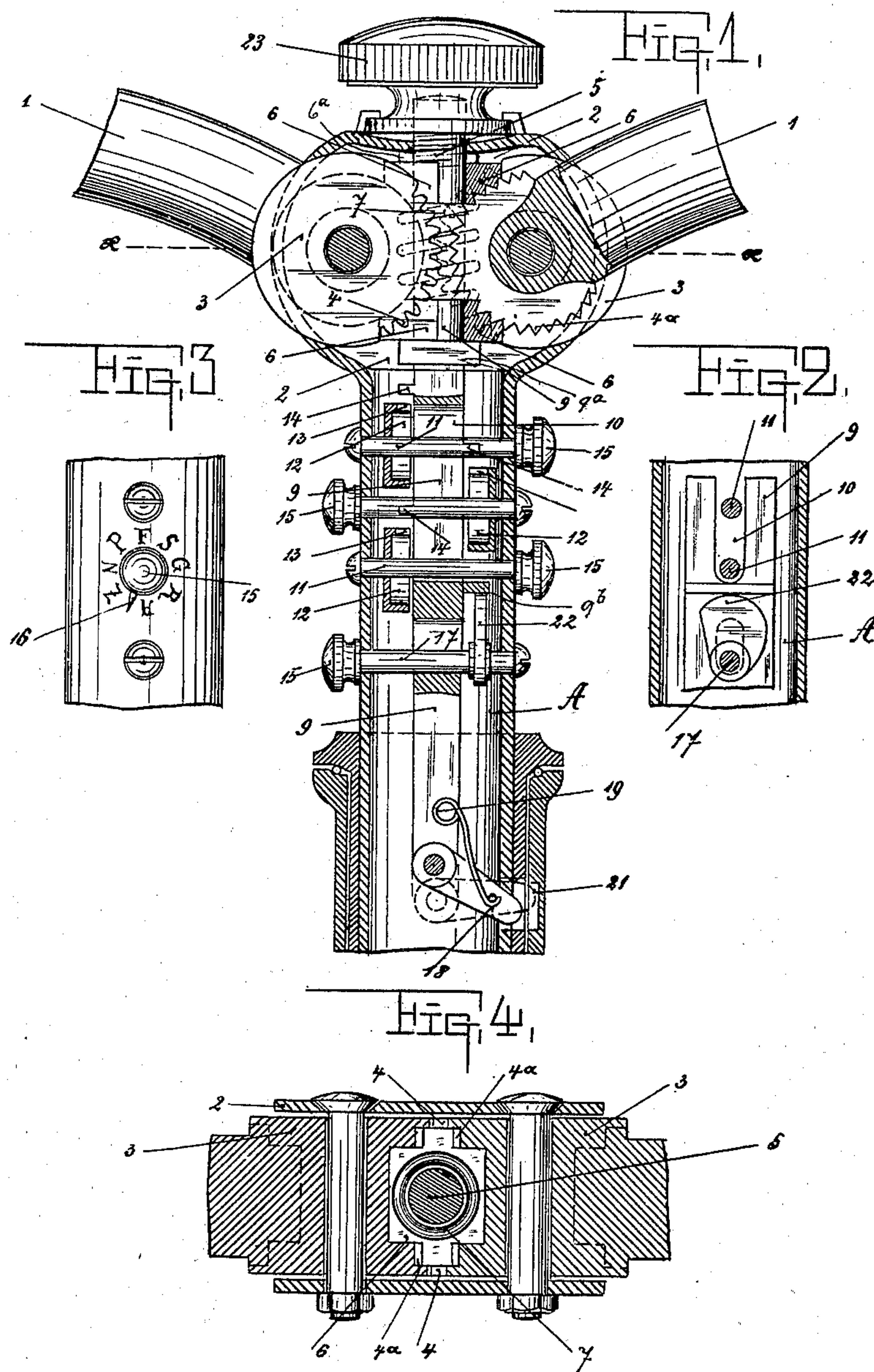
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A. WESSNICK & A. GUTOWSKI.

BICYCLE LOCKING DEVICE.

(Application filed Sept. 16, 1899.)

(No Model.)



Witnesses:

A. Wille.

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Inventors

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# UNITED STATES PATENT OFFICE.

ADOLF WESSNICK AND ADAM GUTOWSKI, OF NUREMBERG, GERMANY.

## BICYCLE LOCKING DEVICE.

SPECIFICATION forming part of Letters Patent No. 656,334, dated August 21, 1900.

Application filed September 16, 1899. Serial No. 730,758. (No model.)

*To all whom it may concern:*

Be it known that we, ADOLF WESSNICK, mechanic, residing at 9 Burgstrasse, and ADAM GUTOWSKI, manufacturer, residing at 12 Imhofstrasse, Nuremberg, in the Kingdom of Bavaria, German Empire, subjects of the King of Bavaria, have invented certain new and useful Improvements in Bicycle Locking Devices; and we 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 present invention relates to improvements in devices for securing bicycles from being used by unauthorized persons by means for displacing the handle-bar and blocking up the steering tube or head.

In the drawings, Figure 1 represents in vertical section a handle-bar stem comprising our improvements. Fig. 2 is a section of a portion of the handle-bar stem. Fig. 3 is a side elevation of a portion of the handle-bar stem, and Fig. 4 is a cross-section on line *x x* of Fig. 1.

The handle-bar stem consists of a tube A, having its upper end enlarged to form a casing 2, in which are mounted the ends of the handle-bar 1. Secured to the said ends of the handle-bar are disks 3, the teeth 4 of which intermesh, while their other teeth 4<sup>a</sup>, lying behind the teeth 4, engage the contiguous faces of the upper and lower plates 6. The upper plate 6 is positioned just below the collar 6<sup>a</sup>, which surrounds the bolt 5, under the casing 2, while the lower plate 6 is arranged between the toothed disks aforesaid and a collar 9<sup>a</sup> on the bar or rod 9. The upper end of the bar 9 is connected with a bolt 5, the upper end of which is threaded and carries a nut 23, adapted to be rotated by the fingers. When the nut 23 is screwed down so that the upper plate 6 is against the inner face of the collar 6<sup>a</sup>, the pressure of the casing 2 on the upper plate 6 and the collar 9<sup>a</sup> on the lower plate 6 forces said upper and lower plates toward each other in a manner apparent, and when said nut is released or unscrewed said plates will be normally forced apart by the action of the spiral spring 7, which surrounds the bolt 5 and bears against said upper and lower plates, respectively.

The bar 9 has extending laterally therefrom at different points a series of projections or pins 14 and has a portion cut away, as at 10, to form a guideway for a series of bolts 11, to be described. These bolts extend through suitable openings in opposite sides of the tube A and have arranged thereon heads 15, bearing pointers or hands 16, and on the inside of the tube carry flanged disks 12, in the flange of which is an opening 13, adapted to register with the pins 14 when the disks are properly adjusted thereto. On the outside of the tube, surrounding the heads 15, are characters, as "L, N, P, F, S, R, A," which indicate the positions in which the pins 14 will register with the openings 13 in a manner well known in what are known as "pin-locks." A bolt 17 extends through the tube and carries within the latter a cam 22, which normally bears against a lug 9<sup>b</sup> on the bar 9 and serves to hold the bar in a raised position when the bolt is turned. Pivoted to the lower end of the bar 9 is a latch 18, which is normally held outwardly by a spring 19, causing the free end of said latch to enter the opening 21 when the bar is pressed down, but permitting its withdrawal when the bar is moved upwardly. This latch when in the recess or opening 21 in the fork-stem serves to lock the latter to the steering-head and prevents the turning of said head.

To secure the bicycle against unauthorized use, the disks are turned so that their openings register with the pins 14, the nut 23 is loosened, thus permitting the spring 7 to force the upper and lower plates 6 apart and by the expansion of the spring causing the bar 9 to drop. The action of the plates 6 permits the handle-bars to drop from their normal position into a position in which they cannot be readily used. When the bar 9 has moved downwardly, the disks are turned so that their openings do not register with the pins 14, and thus the head is blocked. It is understood that the downward movement of the bar 9 is permitted only when the cam 22 is turned so that it does not engage the lug 9<sup>b</sup>.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a bicycle locking device, a tubular handle-bar stem, handle-bars pivoted therein



and having disks secured to their inner ends, said disks provided with engaging and non-engaging teeth, movable plates adapted to engage and to release said disks, a vertically-  
5 moving bolt for forcing said plates in engagement with said disks, and a spring between said plates to separate them when released from said forcing-bolt, substantially as set forth.

10 2. In a bicycle locking device, a tubular handle-bar stem, handle-bars pivoted therein and having disks secured to their inner ends, said disks having engaging and non-engaging  
15 disks and hold them in position, a bolt for forcing said plates in engagement with said disks, a spring between said plates to separate them when released, means for raising and locking said bolt in position, and means  
20 for permitting and preventing the operation of said raising and locking means, substantially as set forth.

3. In a bicycle locking device, a tubular handle-bar stem, handle-bars pivotally mounted therein and having toothed inner end portions, a vertically-adjustable bolt arranged  
25 in said handle-bar stem, means for effecting the adjustment of said bolt, a bar or rod secured to said bolt and having pins extending therefrom, rotatable bolts passing through  
30 the shank of the handle-bar stem and carrying means for engaging and releasing said pins, plates mounted on said vertically-adjustable bolt and adapted to hold said inner  
35 end portions in position, and a spring for separating said plates, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

ADOLF WESSNICK.  
ADAM GUTOWSKI.

Witnesses:

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MAX SCHNEIDER.