

No. 610,061.

Patented Aug. 30, 1898.

P. W. KIRKPATRICK.
BICYCLE STAND.

(Application filed Dec. 24, 1897.)

(No Model.)

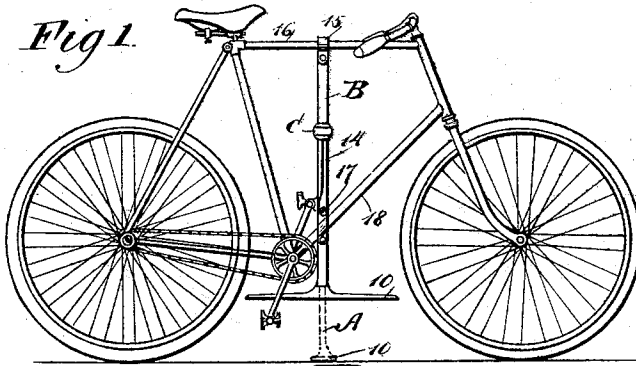


Fig 2.

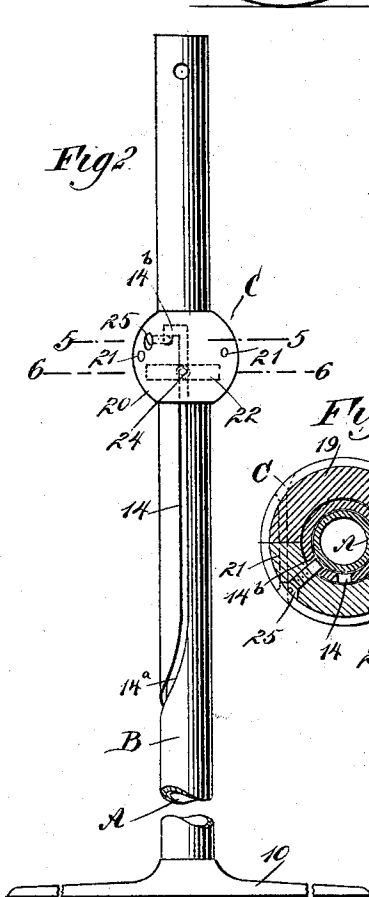


Fig 4.

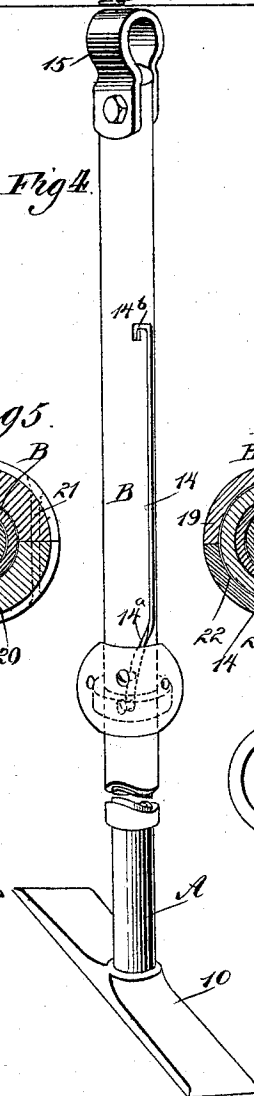


Fig 3.

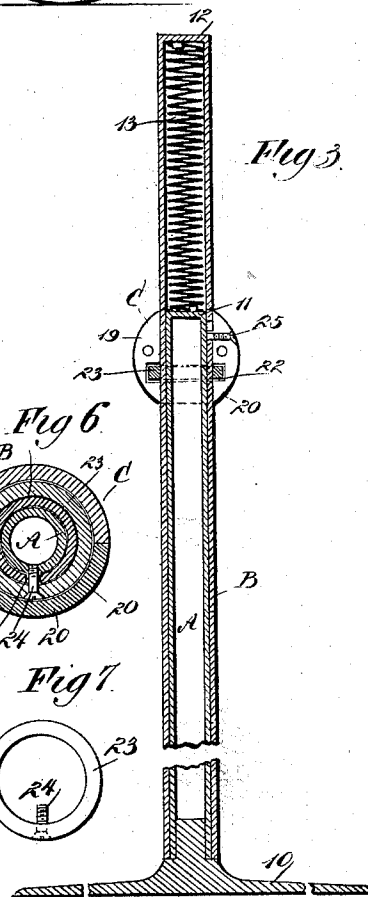


Fig 5.

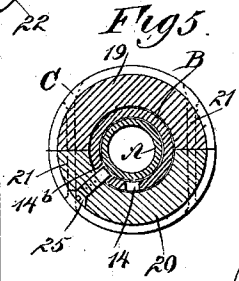


Fig 6.

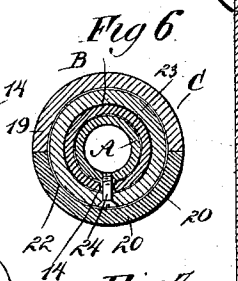
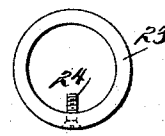


Fig 7.



WITNESSES:

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UNITED STATES PATENT OFFICE.

PERCY W. KIRKPATRICK, OF BELLEAIR, FLORIDA.

BICYCLE-STAND.

SPECIFICATION forming part of Letters Patent No. 610,061, dated August 30, 1898.

Application filed December 24, 1897. Serial No. 663,375. (No model.)

To all whom it may concern:

Be it known that I, PERCY W. KIRKPATRICK, of Belleair, in the county of Hillsborough and State of Florida, have invented a new and Improved Bicycle-Stand, of which the following is a full, clear, and exact description.

The object of the invention is to provide a stand adapted to support a bicycle, but especially adapted for use in connection with diamond frames, either single or tandem, the stand being constructed in an exceedingly simple and durable manner.

A further object of the invention is to so construct the stand that it may be expeditiously attached to the bicycle at the central portion of the frame, the stand being capable of a firm support upon the floor or ground, perfectly balancing the bicycle, while the arrangement of the parts is such that the stand may be expeditiously and conveniently applied to the bicycle or removed therefrom and adjusted so as to carry the bicycle from the ground or floor or lower it in contact therewith.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a bicycle and of the improvement applied thereto. Fig. 2 is a broken side elevation of the stand, indicating its normal position. Fig. 3 is a broken longitudinal section through the stand when in its normal position. Fig. 4 is a side elevation of the stand in position to support a bicycle. Fig. 5 is an enlarged horizontal section on the line 5 5 of Fig. 2. Fig. 6 is a similar section on the line 6 6 of Fig. 2, and Fig. 7 is a detached plan view of an essential detail that is a part of the invention.

The inner tube A is secured to the base 10, which base is in the form of a foot and may be of any dimensions, the foot or base being adapted, when the stand is in use, to occupy a position in front of the rear wheel of the machine. The inside tube A is adapted to slide within the outside tube B. The out-

side tube is longer than the inside tube, and the inside tube is provided with a cap 11 at its top, and the outside tube is provided with a similarly-located cap 12. In the space between the caps of the two tubes a spring 13 is located, as shown in Fig. 3, the spring extending from one cap to the other, having bearing against both caps, or the spring may be attached to the caps. This spring is placed under tension when the inner tube is elevated. Therefore the spring exerts downward pressure upon the said inner tube. A clip or a clamp 15 of any suitable form is attached to the upper end of the outer tube and is adapted to be passed over the upper main tube 16 of the bicycle-frame, the said tube resting upon the upper end of the outer tube of the holder, and a second clip or clamp 17 is secured to the outer tube of the holder, being arranged to receive the lower main tube 18 of the bicycle-frame, as shown in Fig. 1.

A longitudinal slot 14 is made in the outside tube, extending from points between the extremities thereof, and the said slot is straight, except at its bottom, where it is provided with a curved section 14^a, and at the top, where an angular section 14^b is formed embodying a horizontal and a vertical member, as shown best in Figs. 2 and 4. A slide C is loosely mounted upon the outside tube B. This slide is preferably made in two sections 19 and 20, as shown in Figs. 5 and 6, and is usually of spherical form, the sections being connected by screws 21 or their equivalents, as shown in Fig. 5. In the inner face near the lower end of each section of the slide a horizontal groove 22 is formed, the grooves in the sections being correspondingly located, and the said grooves of the sections of the slide are adapted to receive a ring 23, which is loosely mounted directly upon the outside tube B and is provided with a guide-pin 24, which pin is passed through the slot 14 and is screwed into or is otherwise attached to the inside tube A, as illustrated in Fig. 6. In addition to the guide-pin 24 a second pin 25 is passed through one of the sections of the slide and is made to enter the aforesaid slot 14, but is not attached to the inner tube. The pin 25 is a locking-pin.

When the device is to be closed, the slide C is carried upward, and as the ring 23, loosely

contained within the slide, is connected by the guide-pin 24 with the inner tube A the said tube will also be carried upward, compressing the spring 13. When the bottom of the outer tube B engages with the base 10, the slide C is turned until the locking-pin 25 enters the horizontal portion of the angular section 14^b of the slot 14, whereupon the locking-pin is permitted to drop into the vertical portion of said slot-section to hold the inner section A of the device in its upper position. Whenever the inner tube A is raised from its lower to its upper position or is dropped from its upper to its lower position, the base is given a quarter-turn, the base being parallel with the length of the bicycle-frame when raised and at right angles to the length of the frame when lowered. The function of the guide-pin 24 is to turn the inner tube A of the device and its base. When the inner tube is permitted to drop, it travels straight downward until the guide-pin 24 enters the curved section 14^a of the slot 14, at which time the inner tube and its base will be given the quarter-turn above mentioned and the base will stand transversely of the machine. When the inner tube is carried upward, the guide-pin 24 in leaving the curved section of the slot will restore the base to its normal position.

While the guide-pin and the lock-pin both travel in the slot 14, each is for a different purpose, one operating the base and the other serving to lock parts of the device in a raised position; but one pin in its action is independent of the other.

The application of the device is preferably made to the bicycle-frame opposite the point at which the sprocket is placed.

In operation when the locking-pin is brought to the longitudinal straight portion of the slot 14 the spring 13 will force the inner tube downward, and as the guide-pin 24 enters the curved section of the said slot the inner tube and its base are given a partial revolution.

When the device is not needed, the inner tube is carried upward by the slide against the tension of the spring 13, the tube turning as it ascends until the straight portion of the slot is reached, and when the slide is in its upper position the locking-pin is made to lock the slide to the outer tube.

A holder of the above construction may be secured to the frame of the bicycle and so remain while the machine is being ridden, if desired.

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

1. A bicycle-holder consisting of telescopic sections, one of the sections being spring-controlled and provided with a base, and the other section being provided with a slot having a locking-section at one end and a curved section at the opposite end, a slide loosely mounted on the slotted section of the holder, a ring loosely mounted in the slide, a guide-pin carried by the ring, which pin is passed through the said slot and is attached to the base-carrying section of the holder, and a locking device also carried by the said slide, as and for the purpose set forth.

2. In a bicycle-holder, the combination, with an inner tube, a base attached thereto, an outer and longer tube, a spring located between the ends of the two tubes and connected therewith, the outer tube being provided with a slot having an angular upper portion and a curved lower portion, of a slide loosely mounted on the outer tube, a ring loosely mounted in the slide, a guide-pin carried by the ring passing through said slot to an engagement with the inner section of the holder, and a locking-pin carried by the slide, also entered into the said slot, operating independently of the guide-pin, for the purpose set forth.

PERCY W. KIRKPATRICK.

Witnesses:

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