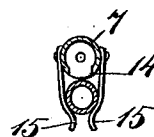
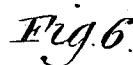
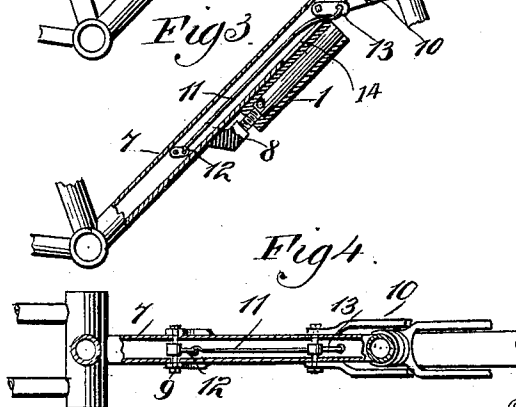
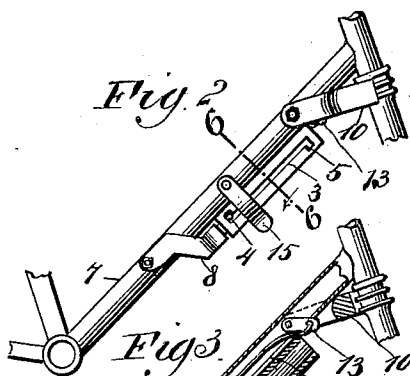
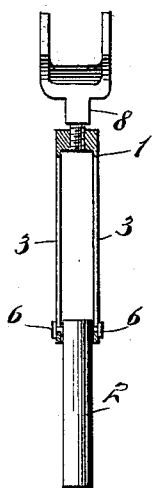
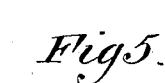
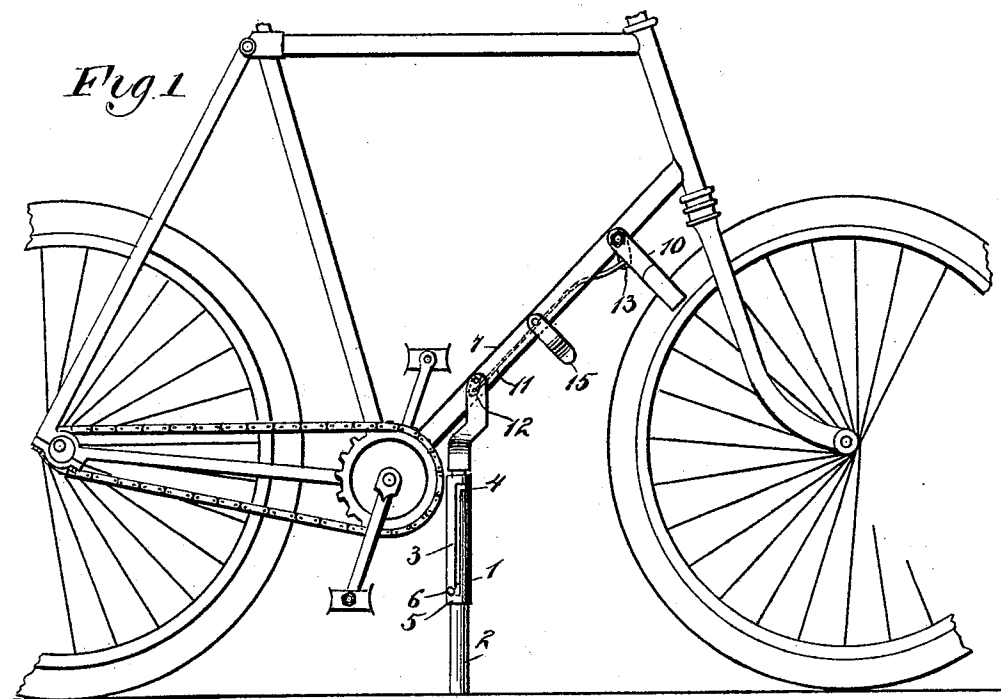


No. 619,646.

Patented Feb. 14, 1899.

F. J. WARD.
BICYCLE SUPPORT.
(Application filed June 11, 1897.)

(No Model.)



WITNESSES:
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ATTORNEYS.

UNITED STATES PATENT OFFICE.

FRANK J. WARD, OF AYER, MASSACHUSETTS.

BICYCLE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 619,646, dated February 14, 1899.

Application filed June 11, 1897. Serial No. 640,332. (No model.)

To all whom it may concern:

Be it known that I, FRANK J. WARD, of Ayer, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Bicycle-Support, of which the following is a full, clear, and exact description.

This invention relates to supports for bicycles; and the object is to provide a simple device of this character which when not in use as a support may be folded closely against the lower brace of the bicycle-frame.

I will describe a bicycle-support embodying my invention and then point out the novel features in the appended claim.

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 views.

Figure 1 is a side elevation of a bicycle, showing a support embodying my invention as attached thereto. Fig. 2 is a side view of a portion of the frame and showing the support in its closed position. Fig. 3 is a longitudinal section thereof. Fig. 4 is a section at right angles to Fig. 3. Fig. 5 is a partial section and partial elevation of the support separated from the frame, and Fig. 6 is a section on the line 6 6 of Fig. 2.

The support comprises a tube 1 and a rod 2, movable by telescoping into the tubular portion. The tubular portion 1 is provided with a longitudinal slot 3 either on one or both sides, and this slot has an offset slot 4 at its upper end and an offset slot 5 at its lower end. The rod 2 has a pin 6, which extends through the slot 3 and is movable therein. When the rod 2 is drawn outward to its supporting position, the pin 6 will be turned into the offset slot 5 and hold the parts rigidly in such supporting position. When the support is folded up against the frame or the lower brace thereof, the pin 6 will be turned into the offset slot 4, thus preventing an accidental outward movement of the rod 2.

The support has a swinging connection with the lower brace 7 of the bicycle-frame. As here shown, this connection consists of a shank 8, having a screw-thread engagement with the upper end of the tube 1, and this shank portion has a yoke the members of which engage at opposite sides of the lower brace, and these

members of the yoke portion are secured by a bolt 9, which passes transversely through the brace and is adapted to turn therein.

Pivotally connected to the forward portion of the lower brace is a yoke 10, designed to engage over the tire of the front wheel, as indicated in Fig. 1, so as to prevent the said wheel from turning laterally. This wheel-holding yoke 10 is moved by a movement of the support. As a means therefor I extend a wire 11 from an arm 12, rigidly mounted on the bolt 9. The other end of this wire 11 is connected to a similar arm 13, rigidly attached to the bolt on which the yoke 10 is mounted, this bolt of course passing transversely through the bottom brace. During the movement of the parts the wire or rod 11 is designed to move into and out of the lower brace, and for this purpose I provide the lower brace with a longitudinal slot 14 at its under side. When the support is moved downward to its supporting position, the yoke 10 will also be drawn downward into its position to engage the opposite sides of the front wheel, as plainly indicated in Fig. 1. At this time the wire or rod 11 will be outside the lower brace. When, however, the support is moved to its folded position, the yoke 10 will be moved upward out of engagement with the wheel, and the wire or rod 11 will be moved into the brace, as indicated in Fig. 3.

The support may be held in its closed position by any desired means. I have here shown spring-clips 15 attached to the lower brace and designed to engage around the tubular portion of the support. Before moving the support to its supporting position it is obvious that the front wheel must be turned straight or in alinement with the rear wheel.

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

In a bicycle, the combination with the lower brace of the frame, of a support comprising a tubular member and a rod member movable therein, the said tubular member having a longitudinal slot and offset slots at the ends thereof, a pin extended from the rod member into said slot, a yoke on said tubular member engaging opposite sides of the lower brace, a bolt extended through the lower brace and

having rigid attachment to the yoke, an arm
extended from said bolt, a front-wheel-hold-
ing yoke pivoted to said lower brace, a rod
extended from the arm on the pivot-bolt of
5 the support to a connection with an arm ex-
tended from the pivot-bolt of the wheel-hold-
ing yoke, the said rod being movable into and

out of the lower brace through a slot in the
brace and means for holding the support in
its folded position, substantially as specified.
FRANK J. WARD.

Witnesses:

FESTUS C. CURRIER,
THOMAS TROTIER.