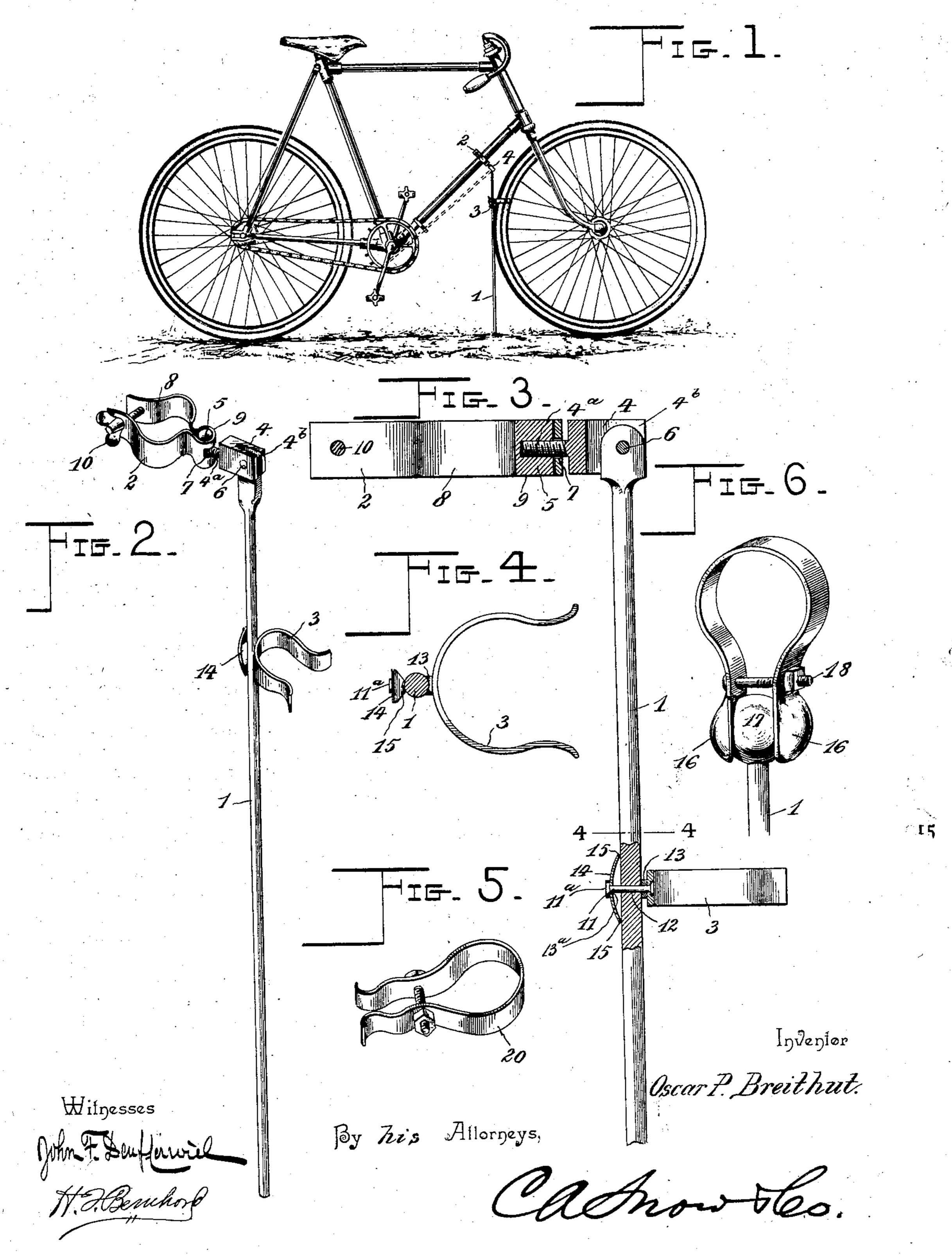
O. P. BREITHUT. BICYCLE SUPPORT.

(Application filed Oct. 28, 1897.)

(No Model.)



United States Patent Office.

OSCAR P. BREITHUT, OF WILLIAMSPORT, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO MAX J. REINHOLD, OF SAME PLACE.

BICYCLE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 608,543, dated August 2, 1898.

Application filed October 28, 1897. Serial No. 656,681. (No model.)

To all whom it may concern:

Be it known that I, OSCAR P. BREITHUT, a citizen of the United States, residing at Williamsport, in the county of Lycoming and State of Pennsylvania, have invented a new and useful Bicycle-Support, of which the following is a specification.

My invention relates to bicycle-supports; and it relates more particularly to improvements in that class of devices which are to be carried on the bicycle-frame in position for ready adjustment to sustain the frame in an upright position to overcome the necessity for standing the machine against a wall, a street-curb, or other place.

The primary object that I have in view is to provide an improved support in which provision is made for connecting the supporting leg or rod to the front bicycle-wheel and for inclining said leg either to the right or left of the line of the machine without disconnecting the leg or rod from the front wheel of the machine.

A further object that I have in view is to so construct the leg or rod and the wheel-clasp that the latter will be held firmly and steadily in position no matter what inclination may be given to the leg or rod, whereby the support serves efficiently in holding the o bicycle in its upright position.

A further object of the invention is to provide an improved support which shall be simple in construction, efficient and reliable in operation, easy of adjustment in connecting the leg or rod to the wheel or detaching it from the same, and cheap of manufacture.

To the accomplishment of these ends my invention consists in the novel combination of elements and in the construction and arangement of parts, which will be hereinafter fully described and claimed.

To enable others to understand my invention, I have illustrated the preferred embodiment thereof in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a view of an ordinary safetybicycle, showing my improved support applied thereto, the dotted lines representing the position of the support when folded close against the bicycle-frame to be out of the way.

Fig. 2 is a perspective yiew of the support detached from the bicycle. Fig. 3 is an enlarged vertical sectional view through the upper part of the support. Fig. 4 is a transseries sectional view on the plane indicated by the dotted line 4 4 of Fig. 3, showing the front-wheel clasp in plan view. Fig. 5 is a detail perspective view of the clip by which the free end of the supporting-leg may be held 60 out of the way when folded against the bicycle-frame. Fig. 6 is a detail perspective view of another form of the frame-attaching clamp which may be used in connection with the leg or rod of my improved support.

Like numerals of reference denote corresponding parts in all the figures of the drawings.

In my improved bicycle-support I provide the leg or rod 1 with means for attaching it 70 to a bicycle-frame—such, for example, as the clamp 2 and the clasp 3, for engagement with the front or steering wheel of an ordinary "safety-bicycle."

One of the important features of my invention resides in the wheel-clasp 3, because I construct this clasp in a manner to engage with the wheel and allow the leg or rod 1 to be inclined in either direction at any proper angle to support the bicycle, such inclination 80 of the leg or rod serving in no wise to detach the clasp 3 from the wheel.

The leg or rod 1 consists of a suitable length of metal to permit its application to the lower inclined reach of the bicycle-frame and to 85 stand laterally therefrom in an inclined direction, thus permitting the leg or rod to rest on the street-surface or floor. The upper end of the leg or rod is connected by a universal joint with the clamp 2, which is designed to 90 be attached to the bicycle-frame, and this universal joint permits the leg or rod to be swung downward and forward for the pur pose of fitting the clasp 3 to the front bicyclewheel and of being moved laterally to an in- 95 clined position to either side of the line of the bicycle. I may employ either form of the clamp and universal joint shown by Figs. 2 and 3 or by Fig. 6 of the drawings; but I prefer the form of clamp and joint shown by 100 Figs. 1, 2, and 3 of the drawings.

In my preferred form of clamp I employ a

hanger 4, which is pivotally attached at 5 to the clamp, and the leg or rod is pivoted at 6 to the hanger. I preferably construct the clamp from a piece of sheet metal, which is 5 doubled upon itself to form the loop 9, and then the clamp is bent to form the curved jaws 8, which are adapted to embrace the inclined reach of the bicycle-frame. The looped lower part of the clamp is provided to with a slot or opening 7, which extends nearly around the looped part of the clamp, and through this slot 7 passes the stem 4° of the hanger. The pivot 5 is in the form of a pin or bolt, which passes through the loop 9 of 15 the clamp, and to this pivot pin or bolt 5 is fastened in any suitable way the stem 4° of the hanger. The pivot pin or bolt 5 enables the hanger to be swung laterally or sidewise in the clamp, so as to permit the leg or rod 20 to be inclined in either direction with relation to the line of the bicycle, because the stem 4° of the hanger is adapted to play or move in the slot 7 of the clamp. The lower free end of the hanger is forked or bifurcated, 25 as at 4b, and in this forked end of the hanger is fitted the upper end of the leg or rod 1, said leg or rod, being pivotally attached to the hanger by the pivot-pin 6, which permits the leg or rod to have a swinging movement 30 toward or from the front wheel of the bicycle. The clamp is provided with a binding or set screw 10, by which its jaws may be compressed, so as to firmly bind the clamp on the bicycle-frame, and the described form of the 35 clamp enables the device to be readily ap-

plied to or detached from the frame of a bicycle. The clasp 3 is bent from a single piece of metal, substantially in the U shape shown 40 more particularly by Fig. 4 of the drawings. Through the base of this U-shaped clasp is formed a pivot-hole to receive one end of the pivot 11, which passes through a suitable opening 12, formed in the rod or leg at a suitable 45 point intermediate of the length of the rod and below the attachment of said rod to the hanger. This clasp is fitted against a seat 13 on the rod or leg, and the pivot 11 also passes through a central opening 13a, formed in the 50 tension-spring 14. This tension-spring is in the form of a leaf-spring with recesses or notches 15 in its ends, and said spring is applied against the opposite side of the leg or rod from the clasp 3. The end of the pivot 11 55 is formed with a head 11a, which is adapted to bear against the central part of the tensionspring, and the spring is thus adapted to exertits tension against the pivot to hold the latter and the clasp in position. The pivot 11 60 and the clasp are rigidly joined together to have simultaneous movement or adjustment, and said pivot 11 is fitted loosely in leg-opening 12, so as to turn therein and to be capable of a limited endwise movement. The tension-65 spring has its notched or recessed ends seated against the rod or leg, so as to be held prac-

tically in one position thereon, and said spring

exerts such tension on the pivot and the clasp as to prevent said parts from turning freely, while allowing them to move when the leg is 70 turned sidewise.

My support may be provided with a clamp of the form shown by Fig. 6 of the drawings, in which I make the clamp with ball-shaped sockets 16 in the free extremities of the clamp 75 and provide the ball-shaped head 17 on the upper end of the leg or rod. A set-screw or bolt 18 passes through the clamp at a point between the ball and the looped part of the clamp to fit the bicycle-frame. The described form of 80 clamp provides a ball-and-socket-connection between the leg or rod and the clamp proper, by which a universal adjustment of the leg or rod is obtained; but I prefer to employ the other style of clamp hereinbefore described, 85 in which I employ the hanger with the pivots or pins at right angles to each other.

This being the construction of my improved bicycle-support, the operation may be described as follows: To apply the support, the 90 clamp is fitted to the lower reach of the frame, substantially as indicated by Fig. 1, and the set-screw is tightened to make the samp rigid and firm on the frame. When the support is not in use, it may be folded against the bicycle-95. reach, as shown by dotted lines in Fig. 1, and the leg is held in its raised position by a clip 20 of suitable construction, which is attached to the bicycle-frame in a position to engage with the leg at or near its free end. To adjust the 100 support for use, the leg or rod is disconnected from the clip 20, and it is then swung downward and forward on the pivot 6 toward the front wheel, so as to force the clasp 3 into engagement with said front wheel, after which 105 the leg or rod is swung on the pivot 5 laterally with respect to the bicycle, so as to assume the inclined position at one side of the frame. In this lateral or sidewise adjustment of the leg or rod on the pivot 5 the clasp 3 turns on 110 its pivot 11, so as to accommodate the clasp to the inclination of the leg or rod 1 without disconnecting the leg from the front wheel, and under all conditions of adjustment of the leg the spring holds the clasp against free turning movement. The support is thus made to serve efficiently in holding the bicycle in a steady upright position and obviates the necessity for standing the machine against a wall, street-curb, or other surface. The leg 120 may be readily swung back and free from engagement with the bicycle-wheel and lifted upwardly to engage with the clip 20, thereby disposing the leg in compact relation to the bicycle-frame and entirely out of the way of 125 the rider.

My improved support is very simple and durable in construction, efficient and reliable in service, and cheap of manufacture

It is evident that changes in the form and 130 proportion of parts may be made by a skilled mechanic without departing from the spirit of the invention.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a leg or rod, and a clamp for connecting said leg or rod to a bi-5 cycle, of a pivoted clasp mounted on the leg independently of the clamp and adapted to embrace a front wheel of a bicycle, and a tension-spring for holding said clasp in position and permitting the clasp to adjust itself to to the inclination of the leg or rod without disconnecting the same from the wheel, substantially as and for the purpose described.

2. The combination with an attachingclamp, of a leg or rod, a wheel-engaging clasp 15 connected by a horizontal pivot to the leg or rod and adapted to turn on the rod to an angular position when the latter is moved sidewise out of the plane of the bicycle-frame, a tension-spring seated against the leg or rod 20 and connected with the clasp, and the uni-

versal joint between the rod or leg and the attaching-clamp to permit the leg to have endwise and lateral adjustment of a bicycle-

frame, substantially as described.

3. The combination with a leg or rod, of a 25 clamp doubled upon itself to form a loop and provided with a slot through said loop, a pivot fitted in the loop of the slot, a hanger pivoted to the leg and attached to the pivot confined in the loop, and a clasp carried by the leg, for 30 the purposes described, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

OSCAR P. BREITHUT.

Witnesses:

JOHN H. SIGGERS, ROBT. E. CRUMP.