(No Model.)

DE WITT C. WALLACE.

BICYCLE SUPPORT.

No. 574,292. Patented Dec. 29, 1896.

Fig. 1.

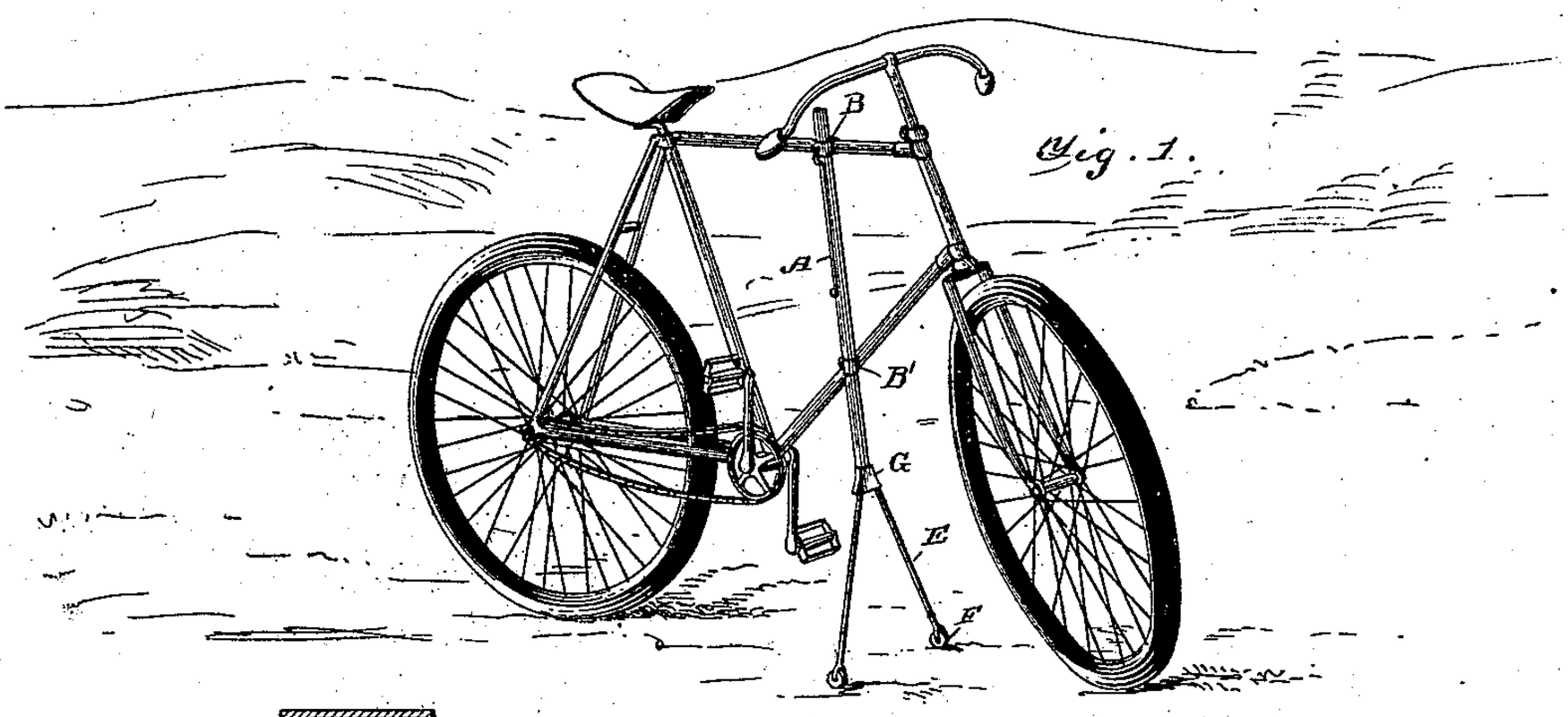


Fig. 2.

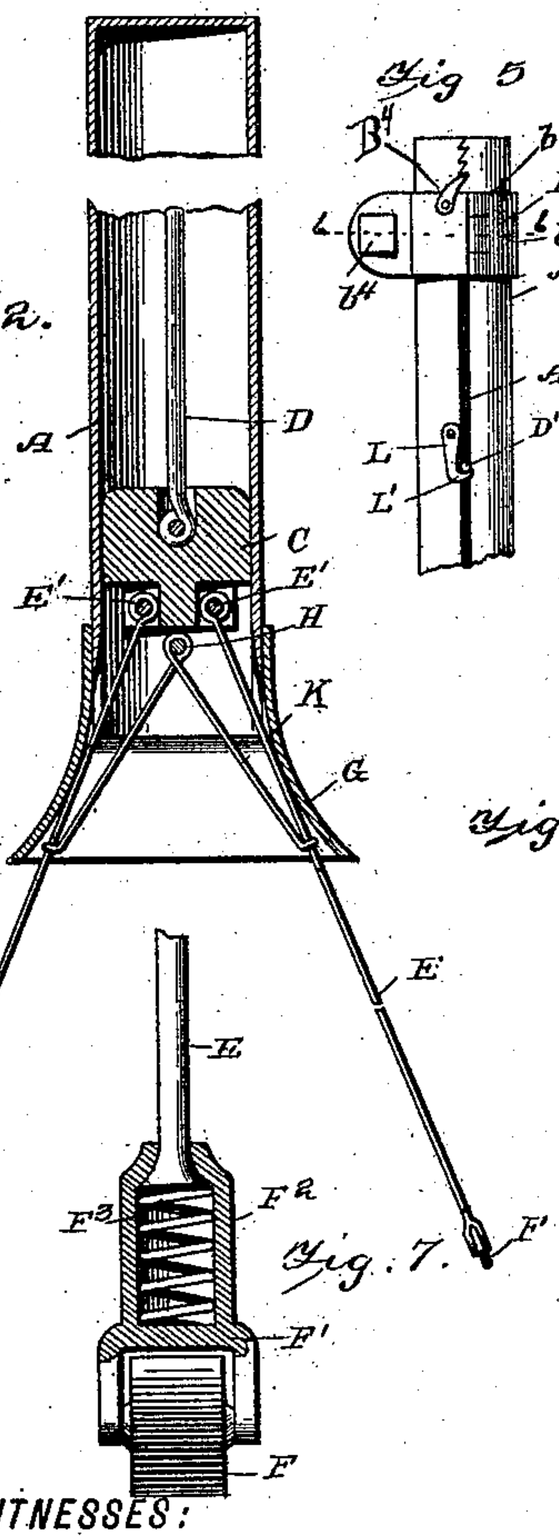
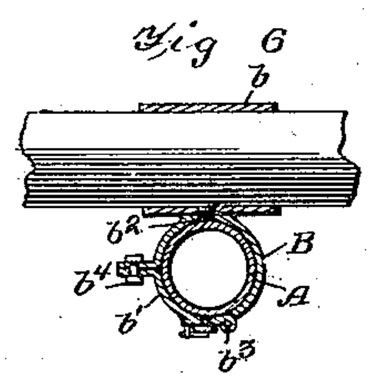


Fig 5

Fig 6



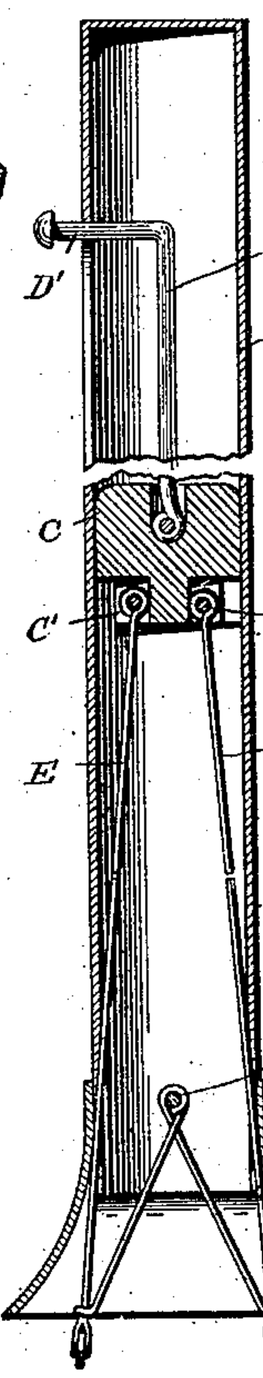


Fig. 3.

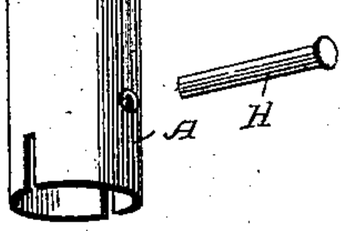
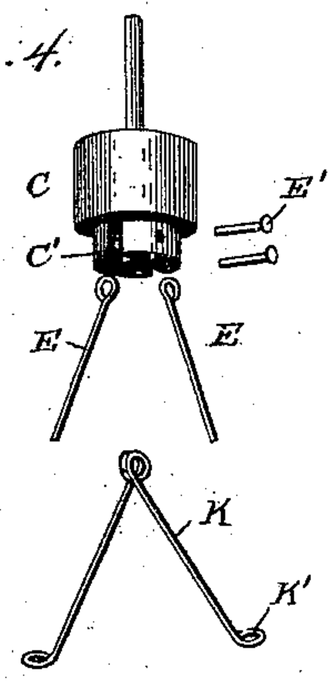


Fig. 4.



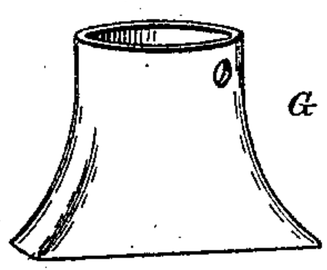


Fig. 7.

WITNESSES:

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UNITED STATES PATENT OFFICE.

DE WITT C. WALLACE, OF PADUCAH, KENTUCKY, ASSIGNOR OF ONE-HALF TO JOSEPH J. BORNSCHEIN, OF SAME PLACE.

BICYCLE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 574,292, dated December 29, 1896.

Application filed May 13, 1896. Serial No. 591,350. (No model.)

To all whom it may concern:

Be it known that I, DE WITT C. WALLACE, residing at Paducah, in the county of McCracken and State of Kentucky, have invented a new and Improved Bicycle-Support, of which the following is a specification.

This invention relates generally to bicycles, and particularly to an improved bicycle-support for maintaining the bicycle in an upright position without leaning the same against a curb, tree-box, or other fixed object.

The object of the invention is to provide a portable bicycle-support which can be attached to any of the bicycles now in use without disfiguring the frame in any manner, and another object is to provide a portable support which can be quickly and easily thrown into or out of operation.

Another object is to provide a bicycle-support having rollers upon the supporting-legs, so that the bicycle can be rolled along a short distance without interfering with or straining any of the parts of the support.

Another object is to provide an automatic catch for holding the support in an elevated or inoperative position, and a still further object is to provide an improved means for spreading the supporting-legs as they are projected downward to the ground.

Another object is to construct and assemble all of the parts in the cheapest and simplest manner possible.

With these various objects in view my invention consists in the peculiar construction of the various parts and in their novel combination or arrangement, all of which will be fully described hereinafter, and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a perspective showing the invention in use. Fig. 2 is a longitudinal section showing the support down. Fig. 3 is a similar section showing the support up. Fig. 4 shows the details of all parts. Fig. 5 is a detail view of the upper end of tube, clipped for securing the same. Fig. 6 is a horizontal section taken on the line 6 6 of Fig. 5. Fig. 7 is a detail view of the end of supporting-legs.

In carrying out my invention I employ a thin metallic tube A, which may be round or square in cross-section, as desired, which tube is adjustably secured to the frame of the bicycle and has a longitudinal slot A′ for the greater portion of its length.

In order to adjustably fasten the tube to the frame of the bicycle, I employ the upper and lower clips B and B′, each clip being compound in construction, comprising a sleeve b, adapted to be rigidly fastened around the tube of the bicycle-frame, and the sleeve b', adapted to be secured around the vertical tube A of the support, said sleeves b and b' being pivotally connected by means of a rivet b^2, and it will be observed that these sleeves are hinged at b^3 and are connected by the bolt or nut b^4, so that the said clips can be quickly and easily attached to the frame and tube and can also be quickly and easily detached therefrom without injuring the frame in the least.

Sliding within the tube A is a plunger C, which is slid up and down by means of an operating-rod D, attached to the said plunger at its lower end, and at its upper end is formed with a right-angle handle portion D′, which projects through the slot A′ in the vertical tube. The plunger is recessed at C′ at diametrically outward points, and within said recesses are pivoted the upper ends of supporting-legs E by means of the pivot pins or bolts E′, the lower ends of said supporting-legs carrying the rollers or casters F.

The rollers or casters F are mounted in brackets F′, which have tubular sockets F^2 extending upward therefrom, in which the lower ends of the supporting-legs are fixed, said legs resting upon the springs F^3, held within the socket, the purpose of said springs being to compensate for any unevenness or irregularity of the ground.

A bell-shaped ferrule G is attached to the lower end of the vertical tube A by means of a transverse pin or bolt H, and the lower end of this ferrule is made flat or oval, in contrast with the upper end, which is essentially circular or of the same shape as the vertical tube A.

The ends of the tube A within the ferrule G are slotted, as shown at I, so that when the plunger is forced down and the supporting-legs spread out the said legs will enter the slots and thus be permitted to spread to the full extent of the ferrule, and it will be ob-

served that the longitudinal diameter of the ferrule is arranged transverse to the length of the bicycle, and thereby provide a broad base for the bicycle to rest upon.

In order to spread the supporting-legs as the plunger is forced down, I employ a spreading-spring K, which is coiled intermediate its ends about the connecting-bolt H, and at the lower ends the members of said spring are formed with loops or eyes K′, through which the supporting-legs pass, so that as the plunger is forced down, the legs working in the loops or eyes, which are normally spread, the supporting-legs will of course be spread to the full limit of the bell-shaped ferrule.

The tube A is adjustable in the clips B, the tube being slid down when the support is put into use and slid up when not in use, the distance of movement being about two inches, the advantage of such idea being that a shorter tube and shorter legs can be employed. The upper clip also has a dog B^4 for locking the tube in either a raised or lowered position.

It will be noted here that the pin that serves to connect the bell-shaped ferrule to the end of the vertical tube also serves as the post upon which the spreading-spring is fixed, and said pin also acts as a stop to limit the downward movement of the plunger carrying the supporting-legs.

In order to lock the support in its elevated or inoperative position, I employ a spring-catch L, which is pivoted to the tube and has a beveled dog L′, which the handle of the operating-rod throws to one side as it is moved up, and as soon as said handle passes the said beveled head the spring of the latch or catch will immediately throw said head into engagement with the handle of the rod and hold same from downward movement.

Whenever it is desired to throw the support into an operative position, the tube is lowered, the locking-catch is turned to one side, and the plunger forced downward by means of the handle and operating-rod, and as the plunger is forced down the supporting-legs will be spread through the medium of the spreading-spring having eyes at the ends, and owing to the elongation of the bell-shaped ferrule and the slots in the ends of the vertical tube the said supporting-legs will be spread a considerable distance before they reach the ground, thereby providing an ample support for the bicycle, and inasmuch as the supporting-legs have spring rollers or casters at their lower ends the bicycle can be moved along a short distance without interfering with any of the supporting parts. When the supporting-legs are drawn up into the tube, they are drawn entirely out of sight, inasmuch as the caster-rollers rest entirely within the bell-shaped ferrule.

It will of course be understood that the tube can be circular or square in cross-section and can be made of any suitable material, and it will also be understood that I do not wish to confine myself to the exact construction of the plunger herein shown and described, as all of these parts can be somewhat modified without departing from the broad spirit of my invention.

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

1. In a bicycle-support, the combination with the slotted tube having a bell-shaped ferrule, the operating-rod and plunger, the supporting-legs attached to said plunger the spreading-spring arranged in the bell-shaped ferrule, and having eyes or loops at each end through which the supporting-legs pass, substantially as shown and described.

2. The combination with the tube, slotted as described, having a bell-shaped ferrule, of the plunger and operating-rod, the supporting-legs attached to the plunger, the connecting-pin connecting the tube, the bell-shaped ferrule, the spreading-spring arranged upon said pin, and having eyes or loops at its lower end, the ends of the main tube being slotted within the bell-shaped ferrule, the compound clips for attaching the tube to the machine, and the spring-locking catch carried by the upper clip, and adapted to engage the handle of the operating-rod, substantially as shown and described.

In testimony whereof I hereby affix my hand in the presence of two witnesses.

DE WITT C. WALLACE.

Witnesses:

C. E. JENNINGS,

W. H. PATTERSON.