No. 685,062. Patented Oct. 22, 1901.

H. W. ROBB & J. T. LUND.

BICYCLE SUPPORT.

(Application filed Feb. 14, 1901.)

(No Model.)

Fig. 1.

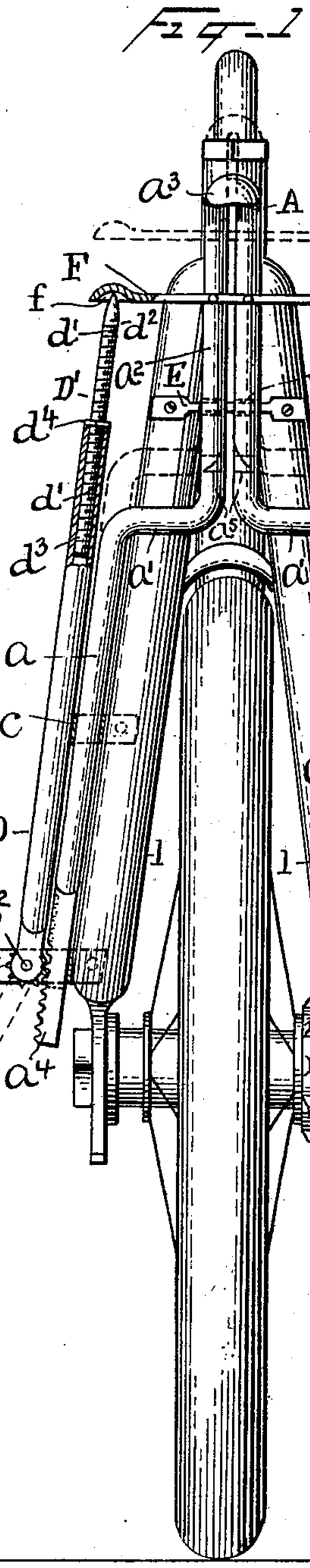


Fig. 2.

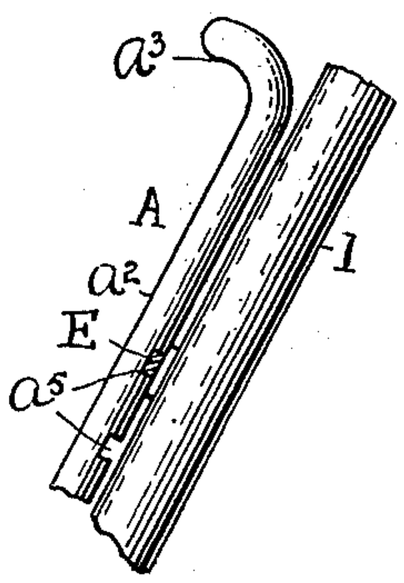


Fig. 3.

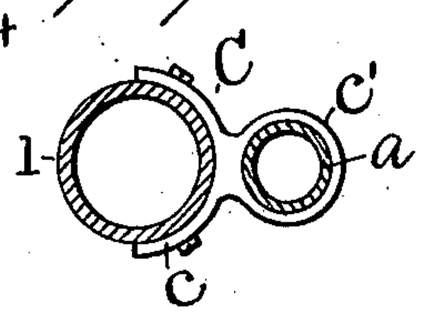
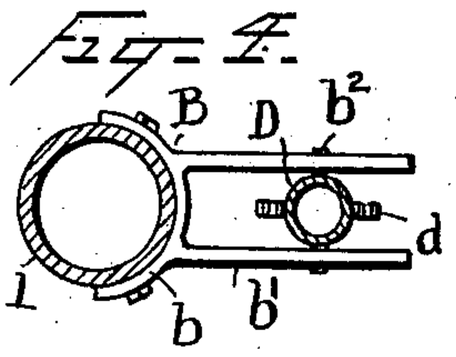


Fig. 4.



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HUGH W. ROBB, OF GOLDEN, AND JOHN THEODORE LUND, OF DENVER, COLORADO.

BICYCLE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 685,062, dated October 22, 1901.

Application filed February 14, 1901. Serial No. 47,333. (No model.)

To all whom it may concern:

Be it known that we, HUGH W. ROBB, residing at Golden, in the county of Jefferson, and JOHN THEODORE LUND, residing at Denver, in the county of Arapahoe, State of Colorado, citizens of the United States, have invented certain new and useful Improvements in Bicycle-Supports; and we do 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, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in supports or props for bicycles and the like, our object being to provide a simple and efficient structure carried by the bicycle which can be readily attached to machines of the usual pattern, is securely held upon the machine, and firmly supports the bicycle when thrown into operative position.

To these ends and also to improve generally upon devices of the nature indicated our invention consists in the various matters hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a rear elevation of a bicycle with the present support applied thereto, a portion of the bracket for the supporting-leg being removed, one of the guides being shown in section, a portion of the supporting-leg end guard being in section, and a portion of one of the supporting-legs being in section to show the removable foot, this figure showing the parts in closed or inoperative position in full lines and in open or operative position in dotted lines. Fig. 2 is a fragmentary side elevation illustrating the means employed for locking the supporting parts in either operative or inoperative position, and Figs. 3 and 4 are top plan views of the guide for the slidable operating member and the bracket for the supporting-leg, respectively, each of said parts being shown in connection with the machine-frame tube to which it is attached.

Referring now more particularly to the drawings, 1 1 represent the usual rear-fork tubes of a bicycle-frame, the present drawings showing the support attached to said fork, although it will be readily understood that the said support can be attached to other portions of the machine-frame without departing from the spirit of our invention. The slidable member A of the support is connected to said rear-fork tubes, as will be more fully hereinafter described, and said slidable member comprises a forked frame having the downwardly and outwardly extending legs a, which slide along the fork-tubes of the machine, said legs having inwardly-extending portions a' at their upper ends and upwardly-extending portions a^2 upon the inner ends of said inwardly-extending portions, these upwardly-extending portions lying substantially together and being connected at their tops, which are turned outwardly to form an operating-handle a^3. The said slidable frame A can thus be conveniently constructed from a single bar bent into the proper shape.

Guides for the fork-legs a are secured upon the fork-tubes of the machine, each leg being guided at its lower or free end by a guide B and at a suitable point intermediate its ends by a guide C, each of said guide members having a bracket b and c, respectively, by which it is attached to the outer side of the fork-tube 1, the member B having side plates b' extending outwardly from the bracket b, while the member c has an eye c' upon the outer side of the bracket c. Each leg a slides freely in the eye c' and between the plates b'. Pivoted between said plates b' is a supporting-leg D, the outer end of which is preferably tubular, as shown, while its inner end is curved and provided with teeth, this inner end thus producing a segmental gear d, which meshes with a rack a^4, formed upon the outer face of the coöperating slidable leg a. The pivot b^2 for the said leg extends through the gear portion d. Each supporting-leg has a detachable and reversible foot D', whose exterior threads d' engage suitable interior threads in the tubular leg end, one end d^2 of said foot being preferably pointed, while its other end d^3 is blunt to permit the user to employ either type foot he may desire. A projecting flange d^4, about substantially the center of the foot, serves to limit the movement of said foot into the leg,

the threads d' being upon each side of the projecting stop.

It will now be apparent that when the slidable fork A is pressed downwardly the supporting-legs D are rocked upwardly into inoperative position, while when the said fork or frame A is pulled upwardly said supporting-legs are thrown downwardly and outwardly into supporting position. In order to lock the parts in either of these positions, a bar E extends across between the rear forks 1, being secured thereto at its ends, and suitable notches a^5 upon the adjacent face of the fork A receive said bar to lock the parts, the said fork A being capable of being sprung away from the locking-bar when it is desired to operate the parts. When in closed position, the legs a lie folded along the sides of the bicycle, and in order to confine their ends and to protect the clothing of the rider from said ends a guard F is carried by the slidable member A. This guard is a plate carried by the portions a^2 of the said member A, said plate having recesses f in the under side to receive the ends of the supporting-legs D. It is manifest that the legs being in operative position when the member A is raised to throw the supporting-legs into open position this guard F is carried away from the leg ends, and said legs are thus released, while the last portion of the downward movement of the fork A serves to bring the guard into position over the leg ends, which have previously been thrown into closed position.

The present device has but few parts, can be readily attached to any bicycle of usual construction, is easily operated, is securely held upon the machine, is locked in either operative or inoperative position, guards the supporting-leg ends, and firmly supports the machine when the parts are thrown into operative position.

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

1. The combination with the frame of a bicycle or the like, of a supporting-leg pivotally connected thereto and movable in a plane transverse to said frame having its inner end curved and provided with teeth to produce a segmental gear, and a rack-bar also supported upon said frame and under the control of the operator, said rack engaging said gear and capable of reciprocation in the plane in which the leg moves; substantially as described.

2. The combination with the frame of a bicycle or the like, of side plates supported upon said frame, a supporting-leg having its inner end pivoted between said plates, said inner end being curved and provided with teeth to produce a segmental gear, and a rack-bar under the control of the operator and engaging said segmental gear; substantially as described.

3. The combination with the frame of a bicycle or the like, of a bracket secured to one of the tubes of said frame, side plates upon said bracket, a supporting-leg pivoted between said plates and having its inner end curved and provided with teeth to produce a segmental gear, a rack-bar under the control of the operator and having its rack in engagement with said gear, said rack being confined between said side plates, the said gear and the said bracket, a second bracket secured to said frame-tube, and a guide for said rack-bar upon said second bracket; substantially as described.

4. The combination with the frame of a bicycle or the like, of a pivoted supporting-leg movable in a transverse plane into operative and inoperative position, a movable member operatively connected to said leg and having a part extending between forks of the machine, and a locking-bar extending between said forks and secured thereto, the face of said movable member adjacent said bar being provided with notches to receive said bar and thus lock the parts in adjusted position; substantially as described.

5. The combination with the frame of a bicycle or the like, of pivoted supporting-legs movable in a transverse plane into operative and inoperative position, a forked slidable member under the control of the operator and operatively connected with said supporting-legs, the forked legs of said slidable member moving along the forks of the machine-frame, a locking-bar extending between said machine-forks and supported thereon, and a part connected to said legs of the slidable member and movable across said locking-bar, said part having its face adjacent said bar provided with notches to receive the bar and thus lock the parts in adjusted position; substantially as described.

6. In a device of the nature indicated, a supporting-leg movable into operative and inoperative position, means for so operating said leg, a guard for the leg end when in inoperative position, and connection between said guard and said operating means for throwing said guard into guarding position when the said leg is thrown into inoperative position and for moving said guard to release said leg as the latter is thrown into operative position; substantially as described.

7. In a device of the nature indicated, a supporting-leg movable into operative and inoperative position, a movable member operatively connected with said leg, and a leg end guard carried by said movable member and being brought by said member into guarding or unguarding position as said member is moved to correspondingly operate the said leg; substantially as described.

8. In a device of the nature indicated, a supporting-leg movable into operative and inoperative position, a movable member operatively connected with said leg, and a plate

upon said movable member and having a recess to receive the leg end, said plate being moved by the said movable member into guarding or unguarding position as the said member moves to correspondingly operate the said supporting-leg; substantially as described.

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

HUGH W. ROBB.
JOHN THEODORE LUND.

Witnesses:
IRA B. HOUSE,
C. F. SHATTUCK.