W. C. HUMPHREY. CYCLIST'S BRACE AND BACK SUPPORT. (Application filed Dec. 22, 1899.)

(No Model.)



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UNITED STATES PATENT OFFICE.

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CYCLIST'S BRACE AND BACK-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 660,216, dated October 23, 1900.

Application filed December 22, 1899. Serial No. 741, 303. (No model.)

To all whom it may concern: Beitknown that I, WILLIAM C. HUMPHREY, a citizen of the United States, residing at Jamestown, in the county of Stutsman and 5 State of North Dakota, have invented certain new and useful Improvements in Cyclists' Braces and Back-Supports; and I do declare

the following to be a full, clear, and exact description of the invention, such as will enable 10 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 letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful 15 improvements in bicycle attachments, and especially to improvements upon my invention which was patented May 24, 1898, No. 604,677, and it is my aim in the present invention to 20 generally render more practical this class of

devices. More specifically the invention resides in means for detaching a lever or link, which is connected to a body-strap or shoulder-brace,

25 from a lug, which is secured by a clamping member held to the head or handle-bar and post of the bicycle.

The invention relates, further, to an apparatus of the character referred to in which a 30 member is designed to be clamped to the handle-bar and post of the bicycle and pro-

- vided with a lug, which is adapted to be engaged by a link connected to a strap or brace, which is designed to be secured to the body 35 of a bicycle-rider, and a spring-actuated re-
- leasing device for disengaging said link from the lug, which releasing is effected by means of a cord or chain connection with the springactuated member.
- 40 To these ends and to such others as the invention may pertain the same consists in the novel construction, combination, and adaptation of parts, as will be hereinafter more fully described and then specifically defined in the 45 appended claims.
 - My invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form part of this application, and in which drawings-
- Figure 1 is a side elevation of my attach-50 ment shown as secured to a bicycle. Fig. 2

is an end elevation of the attachment. Fig. 4 is a vertical section through the lug-carrying member.

Reference now being had to the details of the drawings by letter, A designates the waistband or belt of the brace or back-support, which is designed to encircle the body of the rider, or partially so, and this, if preferred, 60 may be provided with a neck-strap. Connected to the strap A is a link H, said link having an aperture H' near its free end.

Secured to the handle-bar post of the bicycle, also to the handle-bar, is a member N, 65 which is composed of two plates secured together by means of screws N'. Mounted on the horizontal portion of the member N is a casting O, having an upright portion O', which is recessed out, as at O², and mounted 70 in the face of said upright portion is a springplate P, the forward surface of said plate being preferably flush with the face of the upright portion of the casting. Upwardly extending from the surface of the casting is a 75 lug Q, over which lug the apertured end of the link H is adapted to engage in order to connect said link, which is carried by the body-brace or belt, to said casting.

Mounted on one end of the member N is a 80 clip J, which is adapted to secure one end of the member of the handle-bar post of the bicycle, as shown in the drawings, and pivoted to the projections n of the horizontal portion of the member are the bands or clips L, which 85 are adapted to encircle the handle-bar on either side of its middle portion.

Fastened to the member N is a plate R, having an aperture R' near one end thereof and through which the spring-actuated lever go S passes and is held by the opposite walls of said aperture. Said lever is bent at right angles and has an aperture S' near one end which normally rests over the lug on the casting, and at the extreme end of said angle- 95 lever is a projection S², to which one end of a coiled spring T is connected, said spring being adapted to work through an aperture in the member N, the opposite end of said spring being connected to the end of the plate R². 100 In order to tilt said lever S, a chain W is connected to its lower end, which in turn may be connected to a band secured at any conis a side elevation of the attachment. Fig. 3 | venient location adjacent to the handle of

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the handle-bar. At the fulcrumed point of said angle-lever, on its under side, is a lug S³, which lug is adapted to bear against the horizontal portion of the plate R, adjacent to the elongated aperture R', through which said

5 the elongated aperture K', through which said angle-lever passes, as clearly shown in the drawings.

In operation the link H, which has been previously secured to the body-brace or belt,

- 10 is placed over the lug and rests on the upper surface of the spring-actuated angle-lever, whereby the operator may when the link is thus connected brace back, the pull being thrown onto the head of the bicycle. In case
- 15 it is desired to throw the link from the lug the operator pulls on the chain, which is connected to the handle-bar, which causes the upper apertured end of the angle-lever, which surrounds the lug, to raise the link from en20 gagement with the lug, and said link is at

once disconnected. In case it is desired to utilize the device without the spring-actuated angle-lever and

its connections the same may be removed and 25 the link caught over the lug and held in engagement therewith by means of the springplate described. In order to disengage the link when thus connected, the rear end of the latter is merely raised slightly, which will 30 cause the same to be disconnected.

It will be noted that a device constructed in accordance with my invention may be applied to bicycles having various-shaped handle-bars and may be easily applied and adjusted for use, and by the provision of such

- 35 justed for use, and by the provision of such apparatus the back of the rider may be provided with a suitable brace, which, it is found, will greatly rest or assist a rider in mounting grades or upon long rides.
- Having thus described my invention, what
 I claim to be new, and desire to secure by Letters Patent, is—

1. An attachment for bicycles, consisting of a lug-carrying member designed to be se-

45 cured to the head or post and handle-bar of a bicycle, a spring-actuated lever mounted on said member and engaging over the lug, means for tilting said lever, and a link engaging said lug and a body-brace connected to said link,
50 as shown and described.

2. In combination with a bicycle, a mem-

ber secured to the handle-bar and post thereof, the casting secured to said member having a right-angled upwardly-projecting portion, a lug on said casting and a recessed portion in 55 the upright portion thereof, a spring secured to the upright portion and a link adapted to engage over said lug and held in engagement therewith by means of said spring, and means for disengaging the link from the lug, as set 60 forth.

3. In combination with a bicycle, the member secured to the handle-bar and post thereof, a casting having an integral lug and an angled extension secured to said member, the 65 angled portion of said casting being recessed, a spring secured to the face of said angled extension over the recess, and a spring-actuated angle-lever having an apertured end seated over said lug and loosely mounted on 70 said member, means for tilting said lever, and a link and body-brace, as shown and described.

4. In combination with a bicycle, the member N secured to the handle-bar and post there- 75 of, an apertured plate R, a right-angled casting fastened to said member, a lug on said casting, a link adapted to engage said lug, the body-brace secured to the link, a springplate mounted over a recess in the upright 80 portion of the casting, a spring-actuated lever loosely mounted in an elongated aperture in the plate R, a lug on said lever adjacent to its fulcrumed point, the lower end of the lever being apertured and a chain secured thereto, 85 and the plate \mathbb{R}^2 having an elongated aperture through which said lever passes and is guided, as set forth.

5. In combination, a member having two parts held together, one of which has a clip 90 adapted to be secured to the post of a bicycle, the other having pivoted straps designed to be attached to the handle-bar, a casting, a lug thereon, a link adapted to engage over said lug, and a body-brace secured to the link, as 95 shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM C. HUMPHREY. Witnesses:

ALFRED STEEL, J. A. BUCHANAN.

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