

(No Model.)

W. C. HUMPHREY.
CYCLIST'S BRACE AND BACK SUPPORT.

No. 604,677.

Patented May 24, 1898.

Fig. 1.

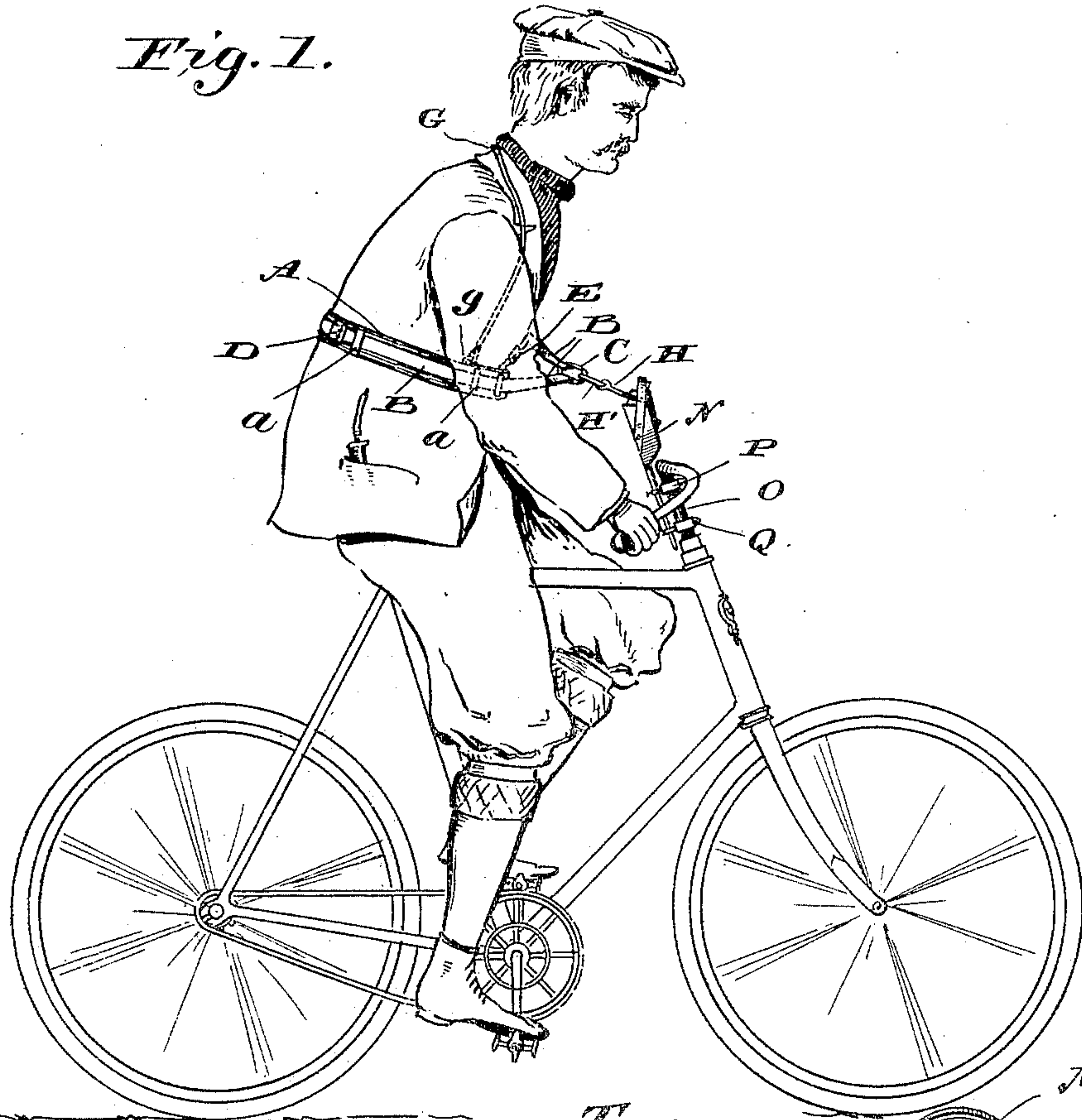


Fig. 3.

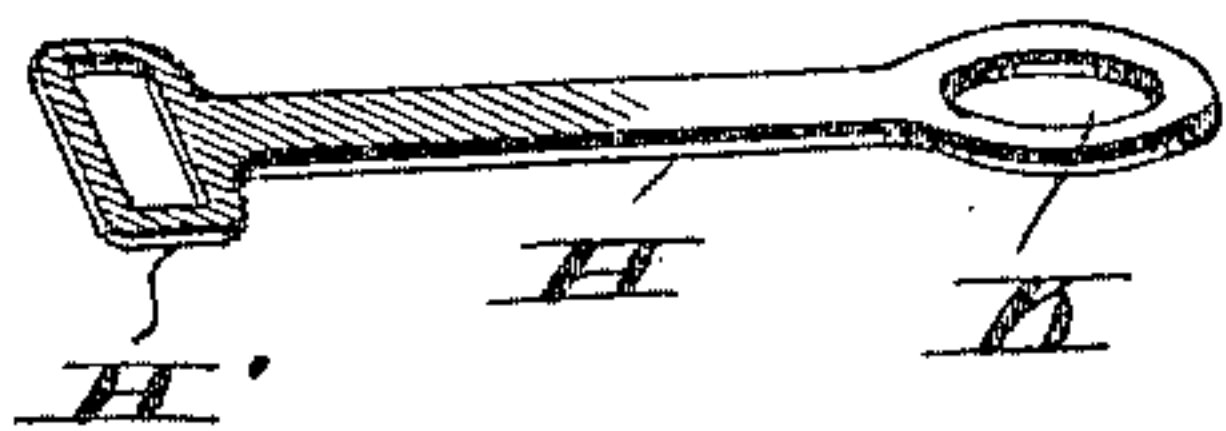


Fig. 2.

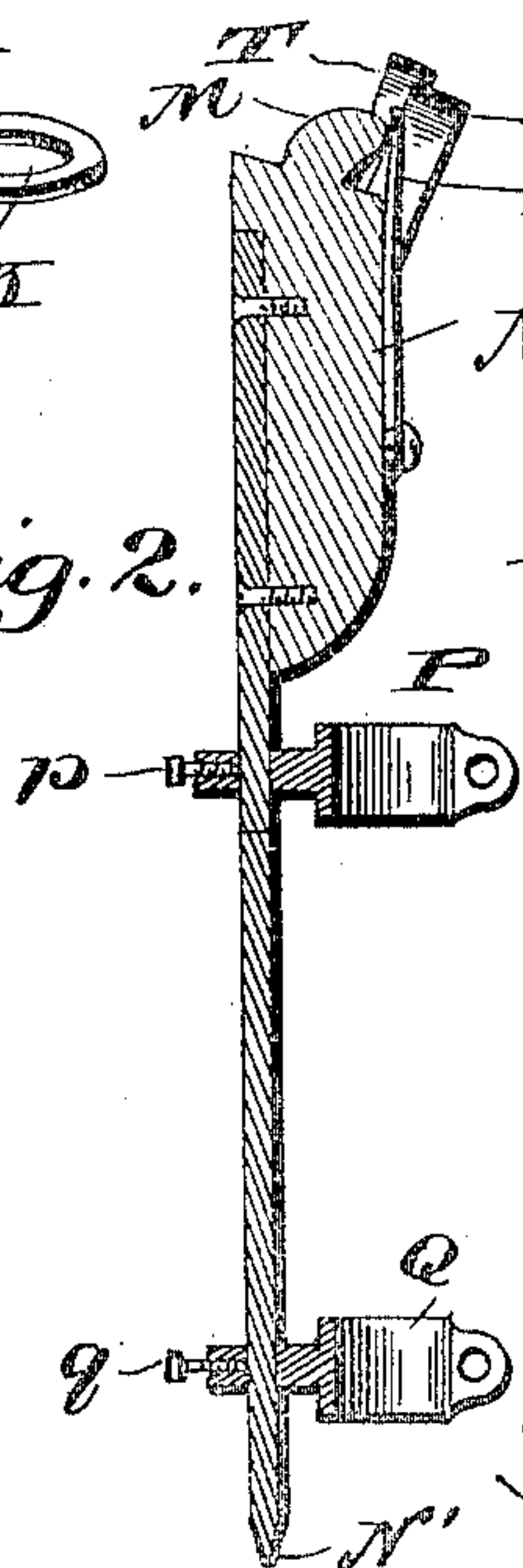
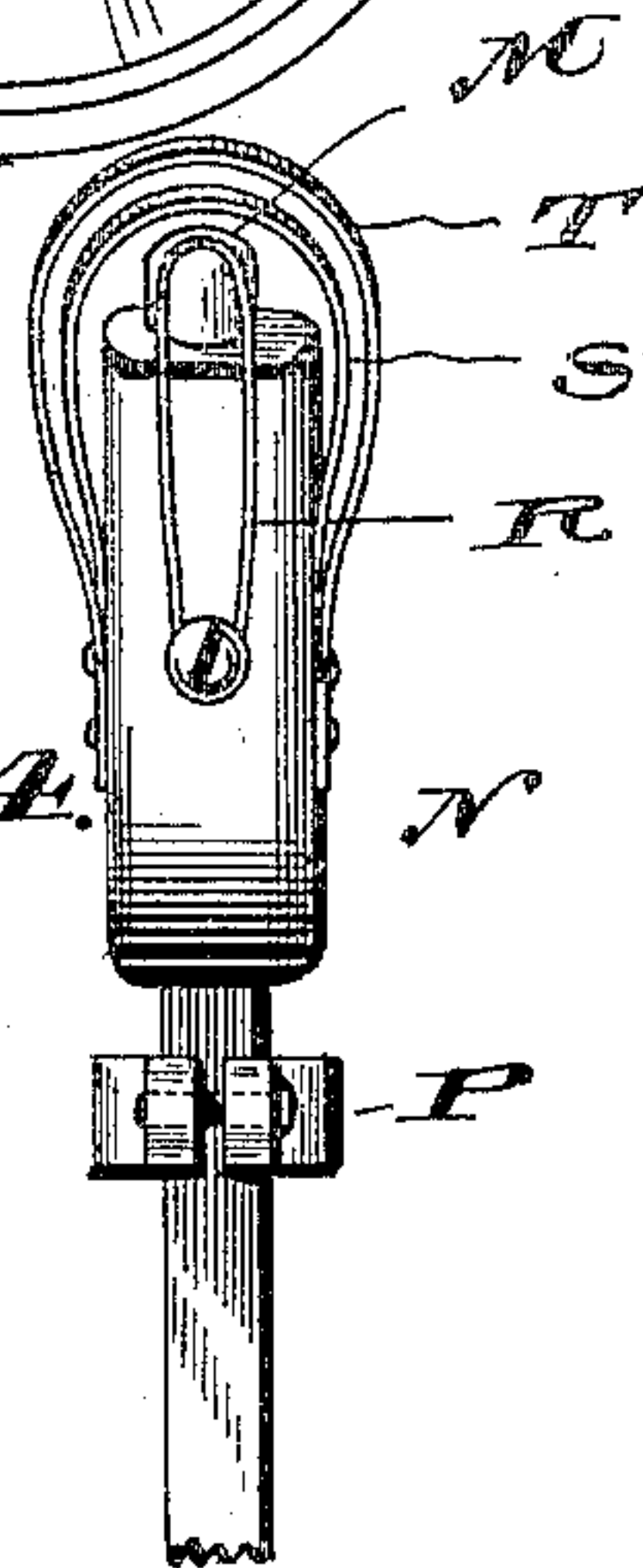


Fig. 4.



Witnesses

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CYCLIST'S BRACE AND BACK-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 604,677, dated May 24, 1898.

Application filed November 29, 1897. Serial No. 660,041. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. HUMPHREY, a citizen of the United States, residing at Jamestown, in the county of Stutsman and State of North Dakota, have invented certain new and useful Improvements in Bicycle Attachments; and I 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 letters of reference marked thereon, which form a part of this specification.

15 This invention relates to certain new and useful improvements in bicycle attachments, and especially to a brace or body attachment which, secured to the body of the rider, is provided with means whereby the device may be detachably fastened to a lug carried by a member which is adjusted to the handle-bar post, thus assisting the rider in steering the wheel, as well as serving as a rest for the back of the rider and forming a brace to aid in climbing a grade.

More specifically the invention consists of a harness apparatus which fits about the person of the rider, to which harness is attached a link the end of which is detachably held upon a lug carried by a member clamped to the post of the handle-bar, and means being provided to hold the link on the said lug under normal conditions, but the said link being adapted to be very quickly and conveniently detached by one hand of the rider, after a little slackening of the strap or brace by bending the body slightly forward, when the cyclist desires to alight from the machine.

To these ends and to such others as the invention may pertain the same consists, further, in the novel construction, combination, and adaptation of the parts, as will be hereinafter more fully described, and then specifically defined in the appended claims.

45 My invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings similar letters of reference indicate like parts throughout the several views, in which—

Figure 1 is a perspective view showing the manner of attachment of the straps to the

rider and the machine. Fig. 2 is an enlarged detail sectional view of the member which is attached to the handle-bar post and to which the link carried by the harness apparatus is attached. Fig. 3 is a detail view of the connecting-link, and Fig. 4 is a front elevation of the member secured to the head of the frame.

Reference now being had to the details of the drawings, letter A designates a strap which is designed to encircle the body, or partially so, and carried by said strap in suitable loops *a* is the webbing or long strap B, which is connected to the ring C and has a buckle D, whereby the length of the said webbing or strap may be regulated. The ends of the strap A has loops at its ends, and secured therein connecting the ends is an elastic cord or tape E, which is provided with adjusting buckles, so as to regulate the strap to fit different-sized persons.

A shoulder-strap G is provided with snap-hooks *g*, whereby the shoulder-strap may be connected to eyes carried by the strap A, as shown in the drawings. If desired, however, the shoulder-strap may be dispensed with, as the body-strap will probably be sufficient for the purpose intended, except in case of using the brace high up on the body, when the adjustable shoulder-strap would be useful in keeping the brace in position.

H is a link, which is connected by means of a strap H' to the ring C. This link has an aperture K at its opposite end, which is designed to be caught over a lug M, carried by the member N, which latter is connected to the post of the handle-bar O by means of the clamps P and Q. These clamps are reversible and adjustable on the said post and are held in place by means of thumb-screws *p* and *q*, whereby the said member may be raised or lowered on the post to suit the convenience of the rider. The said member N may be used in the reversible clamps either in front or back of handle-bar post, and when adjusted at the desired height is held in place by a small set-screw in either the upper or lower clamp. The lower end of the said member may be formed into a screw-driver, as shown at N'. It will be noted that the said lug is slightly forwardly inclined and is carried by an enlarged portion of the member N. On the front face of this enlarged por-

tion is a spring R, which extends up a short distance above the top of the said lug and in a plane coincident with the face of the member to which it is attached. This spring is provided for the purpose of normally holding the said link H to the lug M, the end of the said link forcing out the spring slightly as the link is placed over the lug; but after the link has been hooked over the lug and rests against the shoulder of the enlarged part of the member the spring will resume its normal position. In order to guide the end of the link while placing the same over the said lug, the strap-loop S is provided, the ends of which are secured to the opposite sides of the enlarged portion of the member N, and said strap is bent slightly forward, as shown in the drawings. Secured to the enlarged portion of the member and about the said strap is a second strap T, which is provided for the purpose of protecting the rider from coming in contact with the said lug or spring in case of being accidentally thrown forward upon the head part of the bicycle and also as a protection to the small spring R in front of the said lug. If preferred, this loop may be made of aluminium or any other suitable material and may be rigid and formed in the shape of a shell or as may be found best adapted for the purpose for which said member is provided.

In applying the harness apparatus to the body of the rider the straps may be fastened underneath the vest of the rider with only the strap carrying the link being exposed to view, or when it is desired to be applied to a lady rider the strap which encircles the body may be passed around the waist-line and the shoulder-strap be used or dispensed with, as may be desired. The member N is attached to the post of the handle-bar by passing the clamping members about same and tightening the thumb-screws, and then when the rider is seated on the saddle the end of the link is caught over the lug and the rider may lean

back, the straps forming a brace, taking the place of a back to the seat and enabling the rider to securely maintain his position in the saddle and more easily or rapidly propel the machine on a level road or in ascending a hill, and a cyclist when using this attachment and riding over a fairly-good road may guide the machine a considerable part of the time by the use of only one hand on the handle bar or grip and have the other hand free to use when desired for other purposes. When the rider is off the wheel temporarily or a connection to said lug is not desired, the end of link may be tucked in the front of clothing or in the loops at left-hand side of the body-strap.

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

1. In combination with the body-engaging strap, the link connected thereto, the member secured to the post of the machine, the guide member, the spring for retaining the link on the lug, and the protecting strap or shell secured to the member about the guide member, as shown and described.

2. In combination with the body-strap, the webbing or long strap carried thereby, the elastic strap connecting the ends of the said body-strap, the link, and strap connecting same with a link or ring to which the long strap or webbing is connected, the shoulder-strap, combined with the member clamped to the post of the bicycle handle-bar, the lug on said member over which the said link is designed to engage, the guide member and protecting strap or shell and the retaining-spring, all arranged substantially as shown and described.

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

WILLIAM C. HUMPHREY.

Witnesses:

ALFRED STEEL,

ALBERT DE NAULT.