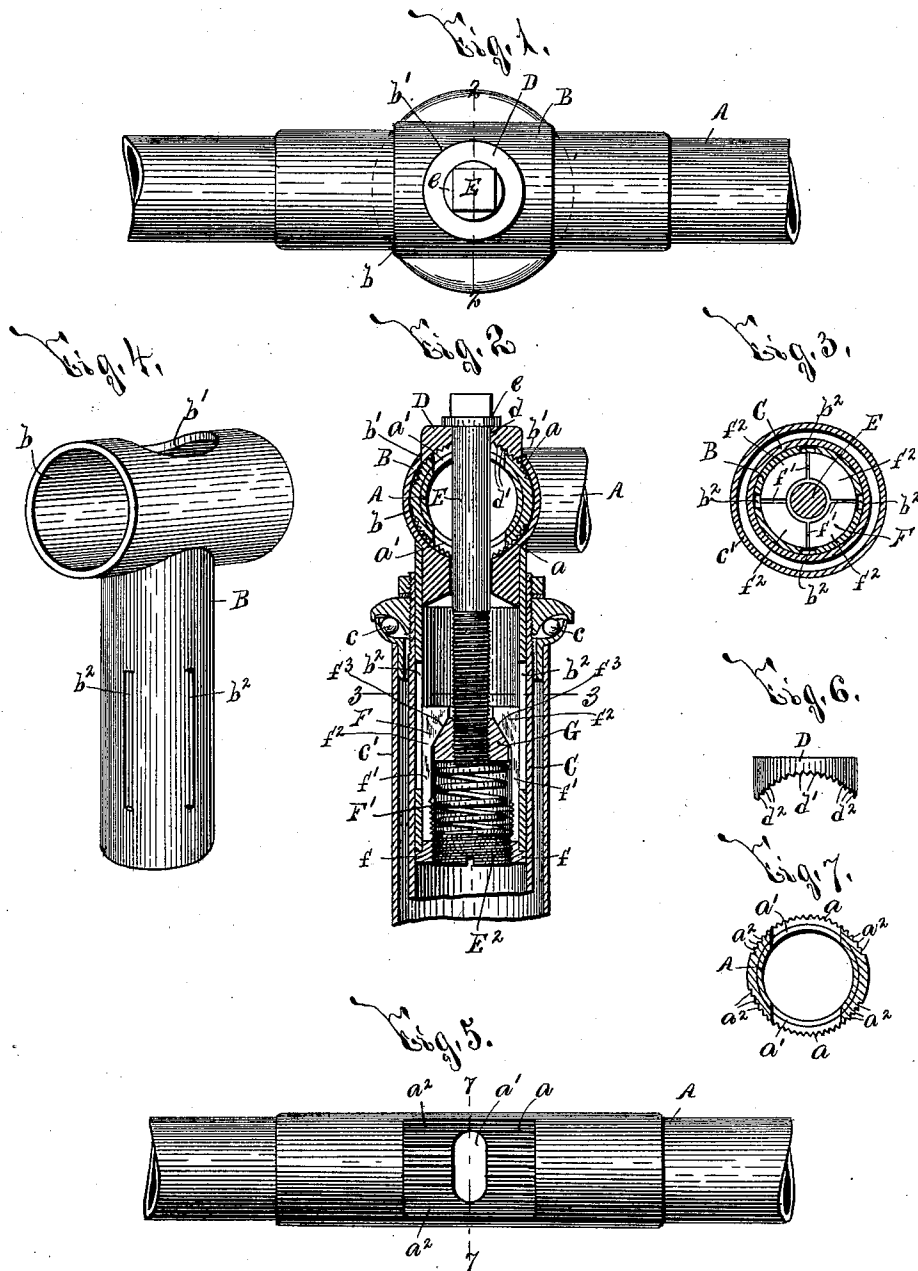


(No Model.)

P. H. BRENNAN.
VELOCIPED.

No. 595,465.

Patented Dec. 14, 1897.



WITNESSES:

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PATRICK H. BRENNAN, OF SYRACUSE, NEW YORK.

VELOCIPEDE.

SPECIFICATION forming part of Letters Patent No. 595,465, dated December 14, 1897.

Application filed May 21, 1896. Serial No. 592,471. (No model.)

To all whom it may concern:

Be it known that I, PATRICK H. BRENNAN, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Velocipedes, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to improvements in velocipedes of the class set forth in my pending application, Serial No. 570,067, and has for its object the production of a practical and simple device which permits ready adjustment of the handle-bar and removal of its standard and firmly secures said handle-bar and standard in operative position; and to this end it consists, essentially, in the general construction and arrangement of the handle-bar, its supporting-standard, and the means for engaging the handle-bar and its standard and holding the same in their adjusted position, all as hereinafter fully described, and pointed out in the claims.

In describing this invention reference is had to the accompanying drawings, forming a part of this specification, in which like letters indicate corresponding parts in all the views.

Figure 1 is a top plan of the central portion of my improved handle-bar, its supporting-standard, and the upper end of the head of the velocipede. Fig. 2 is an enlarged vertical section taken on line 2 2, Fig. 1. Fig. 3 is a transverse section taken on line 3 3, Fig. 2. Figs. 4 and 5 are respectively isometric view and top plan of the detached supporting-standard and the central portion of the handle-bar. Fig. 6 is an edge view of the detached clamping-piece; and Fig. 7 is a vertical section taken on line 7 7, Fig. 5.

A is a suitable handle-bar, having its central portion provided with lengthwise serrations *a* and a substantially upright perforation *a'*, and B is a supporting-standard having its lower end formed hollow and its upper end provided with a transverse eye *b* for receiving the handle-bar and an opening *b'*, which extends upwardly from said eye and is preferably formed circular. The perforation *a'* receives an operating-piece, presently described, and is formed of greater length than width, as best seen at Fig. 5, for permitting a limited adjustment of the handle-bar on

said operating-piece. The lower end of the standard B is provided with suitable slots *b*², which preferably extend lengthwise thereof, and is firmly secured within a hollow upright, as a fork-standard C, connected in any desired manner, as by a ball-bearing *c*, to the head *c'* of the velocipede or other device to which my invention is applied.

D is a suitable clamping-piece, which is usually formed cylindrical, is arranged in the opening *b'*, and is provided with a substantially upright aperture *d*, extending there-through. The upper face of the clamping-piece D is substantially flat, and its lower face is formed concave and is provided with transverse serrations *d'*, which engage the serrations *a* of the handle-bar. The serrations *d'* at the front and rear of the clamping-piece and the adjacent serrations *a* are preferably formed with substantially vertical faces *d*² *a*², as best seen at Figs. 6 and 7, for facilitating vertical adjustment of the clamping-piece. A suitable operating-piece E forces the clamping-piece into operative engagement with the handle-bar, and, as best seen at Fig. 2, the lower end of said operating-piece is screw-threaded and engages with a nut, presently described. The upper end of said operating-piece is passed through the perforation *a'* and the aperture *d* and is provided with a shoulder *e*, engaged with the top substantially flat face of the clamping-piece.

F is an expansion-plug, which is preferably formed hollow and is utilized to secure the standard B in position, and G is the nut, previously mentioned, engaged with the lower end of the operating-piece E for forcing said plug into operative position. The plug F is preferably formed cylindrically, is arranged within the slotted portion of the standard B, and its lower end is preferably provided with an annular shoulder *f*, engaged with the lower edge of the standard B, for limiting upward movement of the plug. The upper end of said plug is formed with slots *f'*, extending downwardly from its top face, and interposed spring portions or arms *f*², movable outwardly against the inner face of the standard A and having inner engaging faces *f*³ inclined upwardly toward each other. The nut G is formed with a conical upper end for engaging the faces *f*³ and forcing outwardly the

portions or arms f^2 as the operating-piece is revolved and elevates said nut. A suitable spring F' is preferably utilized for normally engaging the upper end of the nut G with the faces f^3 and thereby preventing revoluble movement of said nut as the operating-piece E is revolved. The tension of said spring may be varied by a screw-plug E^2 , which is engaged with screw-threads in the inner peripheral face of the expansion-plug F and also forms a support for said spring.

In the operation of my invention the operating-piece E is revolved for loosening the clamping-piece D and depressing the nut G to permit the outwardly-movable portions or arms of the expansion-plug to assume their normal position. The handle-bar may then be raised or lowered by similarly moving its standard, and its ends may be raised or lowered by slightly rocking the handle-bar in the eye b , or the operating-piece may be removed for permitting semirotaion of the handle-bar in said eye. After the desired adjustment of the handle-bar the operating-piece is forced to its normal position, whereupon the handle-bar and its standard are firmly and positively held in their adjusted position.

My invention will now be readily understood upon reference to the foregoing description and the accompanying drawings.

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

1. The combination of a supporting-standard having its lower end formed hollow and its upper end provided with an eye and an opening extending outwardly from the inner face of the eye through the outer peripheral face of said eye, a handle-bar mounted in the eye and provided with a substantially upright perforation extending from front to rear and formed of greater length than width, a clamping-piece provided with an aperture and having one end arranged in said opening and formed with a concave lower face for engaging the handle-bar, and its opposite end formed with a substantially flat upper face, a bolt for operatively engaging the clamping-piece with the handle-bar, said bolt being passed through the aperture in the clamping-piece and the perforation in the handle-bar, and having one end engaged with the upper face of the clamping-piece and its opposite end extended into the hollow portion of the standard, and a nut adjustable lengthwise on the bolt within the hollow portion of the standard, said nut being connected to the standard, substantially as and for the purpose described.

2. The combination of a supporting-standard having an expansible inner end, and an eye at its outer end provided with an opening extending outwardly therefrom, a handle-bar mounted in the eye, a clamping-piece arranged within said opening for engaging the handle-bar, a nut supported within the inner end of the standard and operating to expand

said end, and a revoluble operating-piece for actuating the clamping-piece and the nut, substantially as and for the purpose specified.

3. The combination of a supporting-standard having a portion thereof expansible, a substantially cylindrical expansion-plug arranged within the expansible portion of the standard and provided with outwardly-movable portions or arms having engaging faces, a nut for forcing said portions or arms outwardly, a revoluble operating-piece within the standard engaged with the nut for elevating the same, and a spring for forcing the nut against said engaging faces, substantially as and for the purpose set forth.

4. The combination of a supporting-standard having a portion thereof expansible, a substantially cylindrical expansion-plug arranged within the expansible portion of the standard and provided with outwardly-movable portions or arms having engaging faces, a nut for forcing said portions or arms outwardly, a revoluble operating-piece within the standard engaged with the nut for elevating the same, a spring for forcing the nut against said engaging faces, and a screw-plug movable lengthwise in the expansion-plug for supporting the spring, substantially as and for the purpose specified.

5. The combination of a supporting-standard having a portion thereof expansible, a substantially cylindrical hollow expansion-plug arranged within the expansible portion of the standard, and having its lower end formed with an annular shoulder engaged with the standard for limiting the upward movement of the plug, the upper end of said plug being provided with outwardly-movable portions or arms having engaging faces projecting upwardly and inwardly toward each other, a nut having the outer surface of its upper end inclined upwardly and inwardly for engaging said faces and forcing the movable portions or arms of the plug outwardly, and an operating-piece within the standard engaged with the nut for elevating the same, substantially as and for the purpose described.

6. The combination of a supporting-standard having a portion thereof expansible, a substantially cylindrical expansion-plug arranged within the expansible portion of the standard, and having its lower end formed with an annular shoulder engaged with the standard for limiting the upward movement of the plug, the upper end of said plug being provided with outwardly-movable portions or arms having engaging faces projecting upwardly toward each other, a nut having a tapering upper end for engaging said faces and forcing the movable portions or arms of the plug outwardly, an operating-piece within the standard engaged with the nut for elevating the same, and a spring for normally elevating the nut, substantially as and for the purpose described.

7. The combination of a supporting-stand-

ard having a portion thereof expansible, and
being provided at its upper end with an eye
and an opening extending upwardly there-
from, an expansion-plug arranged within the
5 expansible portion of the standard and pro-
vided with outwardly-movable portions or
arms having engaging faces, a nut having one
end engaged with said faces, a handle-bar
mounted in the eye, a clamping-piece ar-
10 ranged in the opening extending upwardly
from the eye, and formed with an aperture
extending therethrough, said clamping-piece
having its lower face engaged with the han-
dle-bar, and an operating-piece having one

end engaged with the nut and its other end 15
passed through the aperture in the clamping-
piece and engaged therewith, substantially
as and for the purpose set forth.

In testimony whereof I have hereunto
signed my name, in the presence of two at- 20
testing witnesses, at Syracuse, in the county
of Onondaga, in the State of New York, this
19th day of May, 1896.

PATRICK H. BRENNAN.

Witnesses:

E. A. WEISBURG,
K. H. THEOBALD.