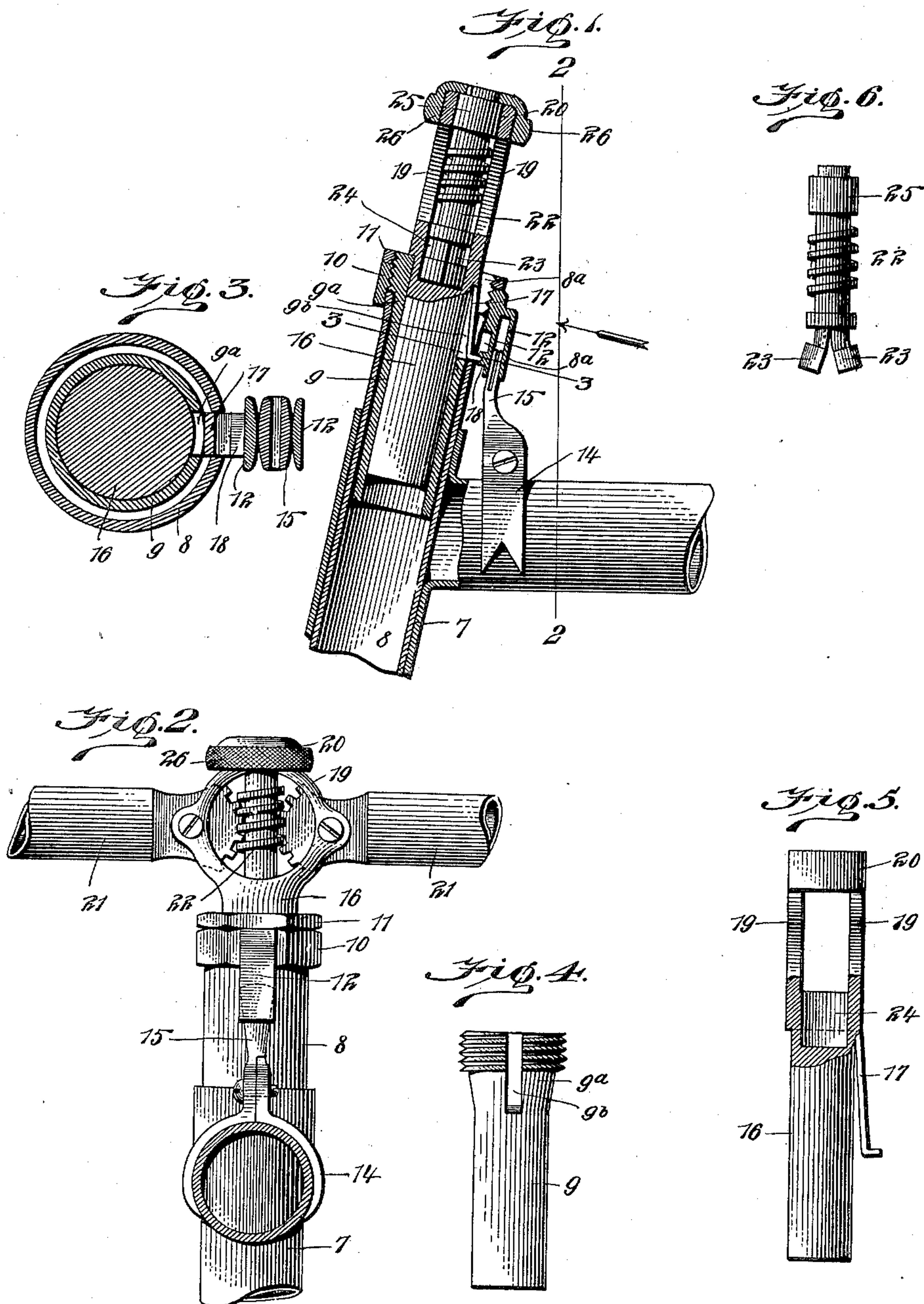


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Patented Nov. 6, 1900.

T. W. GAILLARD.
BICYCLE HANDLE BAR.
(Application filed Apr. 10, 1900.)

(No Model.)



WITNESSES:
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UNITED STATES PATENT OFFICE.

TACITUS WILLIAM GAILLARD, OF NEW YORK, N. Y.

BICYCLE HANDLE-BAR.

SPECIFICATION forming part of Letters Patent No. 661,370, dated November 6, 1900.

Application filed April 10, 1900. Serial No. 12,330. (No model.)

To all whom it may concern:

Be it known that I, TACITUS WILLIAM GAILLARD, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Bicycle Handle-Bar, of which the following is a full, clear, and exact description.

This invention relates to a novel manner of mounting handle-bars on bicycles, the special objects being to facilitate the easy adjustment of the handle-bars to the height desired by the rider and also to so construct the adjacent parts as to render more secure the mountings of the handle-bars and the elements immediately contiguous thereto.

This specification is the disclosure of one form of the invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a vertical section of the invention. Fig. 2 is an end elevation, partly in section, on the line 2 2 of Fig. 1. Fig. 3 is a section on the line 3 3 of Fig. 1. Fig. 4 is a detail view of the handle-bar-plug socket. Fig. 5 is a view of the handle-bar plug, and Fig. 6 is a view of the worm for actuating the handle-bars.

The frame of the machine has the usual tubular steering-head 7, in which the fork-stem 8 is mounted to turn in the usual manner, and within the upper end of the fork-stem 8 is fastened the tubular plug-socket 9. This socket has its upper end enlarged, as indicated at 9^a in Figs. 1 and 4, and a nut 10 screwed upon the upper end of the socket 9 and over the upper end of the fork-stem 8, so as to clamp the fork-stem against the enlarged portion 9^a of the socket 9, and thus render these parts 8 and 9 rigid with each other. A lock-nut 11 may be provided for the nut 10, if desired. The nut is provided at its rear portion with two downwardly-projected and parallel spring-fingers 12, which have convex inner faces, as indicated in Fig. 3. Fastened on the horizontal brace of the frame 7 is a clamp 14, which has an upward extension 15, the extremity of which is bifurcated to form a spring portion that is capable of fitting be-

tween the fingers 12 when the fork-stem 8 is thrown into such position as will hold the front wheel of the bicycle in a position longitudinally with respect to the bicycle. Therefore when the fork-stem is in this position the engagement of the parts 12 and 15 will tend to hold the fork-stem steady and will prevent the fork-stem from moving except upon the application of a positive pressure thereto. It will be seen, however, that by applying to the fork-stem a turning force sufficient to overcome the effect of the spring upper end of the extension 15 the fingers 12 may be disengaged from such extension.

Fitted in the socket 9 is a plug 16, which carries the handle-bars. This plug is provided with a spring-catch 17, which is capable of extending through a slot 9^b in the socket 9 and a corresponding slot 8^a in the fork-stem 8, so as to engage with a stud 18 on the inner finger 12. This holds the plug 16 removably in place, and, if desired, the plug may be drawn out of the socket 9, thus facilitating the removal of the handle-bars from the machine, which is an advantageous arrangement, since it enables the rider to carry the handle-bars with him when he leaves the machine, and thus avoid the possibility of any one using the machine in his absence. The upper end of the plug 16 has two ring-like extensions 19, surmounted at their upper ends by a thimble 20. Between the ring-like extensions 19 of the plug 16 are mounted the inner ends of the handle-bars 21, such inner ends being in the form of toothed segments, with which meshes a worm 22. This worm 22 has its lower end split and the parts sprung outward to form spring-fingers 23. (See Fig. 6.) These fingers are adapted to fit friction-tight in a cavity 24, formed in the upper portion of the plug 16, so that the worm 22 is held friction-tight. By turning the worm the handle-bars 21 may be adjusted as desired. The worm extends loosely through the thimble 20 and has a collar or enlargement 25 near its upper end, which is engaged in the thimble. On the upper extremity of the worm a thumb-cap 26 is fastened, such cap being extended downward and loosely over the thimble 20. By turning this cap the worm may be turned to adjust the handle-bars. In this connection it will be observed that no tool is re-

quired for this purpose. It will thus be seen that I provide means for securely mounting the handle-bars and for permitting their adjustment. The handle-bars may be readily
5 adjusted even while the rider is on the machine, and they may also be taken completely off the machine by a slight exertion, such being sufficient to disengage the catch 17 from the lug 18. The fingers 12 and extension 15
10 of the clamp 14 will be found advantageous, in that they hold the front wheel of the bicycle in straight-ahead position and enable the rider to use the machine in riding straight ahead without operating the handle-bars.
15 This construction will also be of advantage to persons learning to ride, as will be apparent to persons skilled in the art; also, when the handle-bars are removed from the machine the parts 12 and 15 will still act to hold
20 the front wheel steady.

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

1. A velocipede, having a plug carrying the

handle-bars, a member provided with a socket 25 on the velocipede, in which socket the plug is fitted, a nut serving to hold the socket member in place and having an extended portion or finger, and a catch carried by the plug and engaging the said extended portion or
30 finger removably to secure the plug in the socket.

2. In a velocipede, the combination of a worm with a split portion forming spring-fingers, the handle-bar stem on which said worm 35 is supported, and held friction-tight by said spring-fingers, handle-bars having toothed portions engaged with the worm, and means for pivotally mounting the handle-bars on the handle-bar stem. 40

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

TACITUS WILLIAM GAILLARD.

Witnesses:

TACITUS GAILLARD,
ROBERT LEGHORN, Jr.