

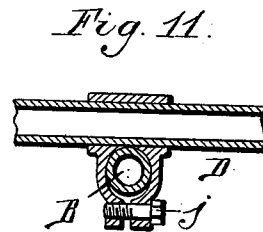
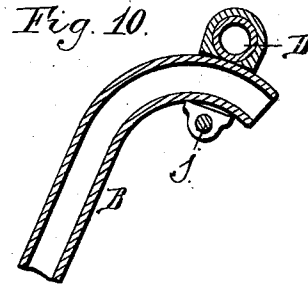
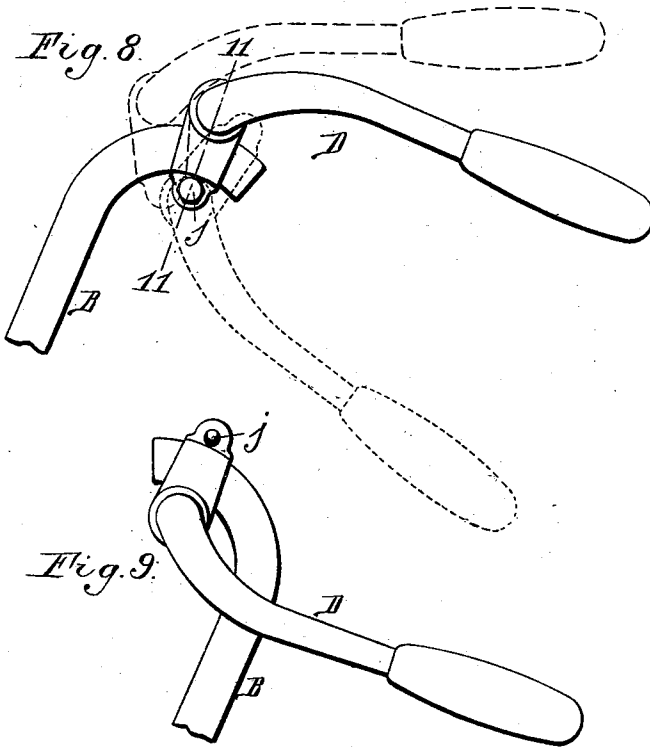
(No Model.)

E. G. LATTA.
VELOCIPED.

2 Sheets—Sheet 2.

No. 555,647.

Patented Mar. 3, 1896.



WITNESSES:

Emil Meuhart.
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UNITED STATES PATENT OFFICE.

EMMIT G. LATTA, OF FRIENDSHIP, NEW YORK, ASSIGNOR TO THE POPE MANUFACTURING COMPANY, OF PORTLAND, MAINE.

VELOCIPEDÉ.

SPECIFICATION forming part of Letters Patent No. 555,647, dated March 3, 1896.

Application filed November 7, 1893. Serial No. 490,259. (No model.)

To all whom it may concern:

Be it known that I, EMMIT G. LATTA, a citizen of the United States, residing at Friendship, in the county of Allegany and State of New York, have invented a new and useful Improvement in Velocipedes, of which the following is a specification.

This invention relates to the handle-bars of velocipedes.

One object of my invention is to produce a handle-bar which may be readily adjusted to either a high rearward position for ordinary riding or a low forward position for racing purposes.

The invention has the further object to provide the handle-bar with a simple adjustment for changing the angle or inclination at which the handles are presented to the rider's hands.

In the accompanying drawings, consisting of two sheets, Figure 1 is a side elevation of the handle-bar, the steering-post, and the upper portion of an ordinary socket steering-head, showing the handle-bar adjusted to its high rearward position, commonly termed the "rational" position. Fig. 2 is a top plan thereof with the parts in the same position. Fig. 3 is a front elevation of the upper portion of the steering-post with the handle-bar detached. Fig. 4 is a side elevation of the same. Fig. 5 is a longitudinal section of the central portion of the handle-bar and the adjacent portion of the steering-post on an enlarged scale. Figs. 6 and 7 are vertical cross-sections in lines 6 6 and 7 7, Fig. 5. Fig. 8 is a side elevation of a modified construction of the steering-post and the handle-bar, showing the latter in its high rearward position. Fig. 9 is a similar view showing the parts reversed for bringing the handle-bar into its low forward position. Fig. 10 is a central cross-section of the construction shown in Fig. 8. Fig. 11 is a longitudinal section in line 11 11, Fig. 8.

Like letters of reference refer to like parts in the several figures.

Referring to Figs. 1 to 7, inclusive, A represents the steering-head; B, the telescopic steering-post, which may be adjustably secured in the head by a clamp *c* and a tightening-screw *c'* in a common manner, and D is the handle-bar. The steering-post is preferably constructed of tubing and its upper

end portion is offset or curved backwardly, as shown at *b* in Figs. 1, 4 and 6. The upper end of the post terminates in a transverse tubular lug *e*, which is preferably formed integrally with the post and is open on one side, preferably its front side, as clearly shown in Fig. 4, for the reception of the central portion of the handle-bar. The latter is preferably formed from a continuous piece of tubing, and its end portions, which receive the handles, are arranged in a different plane from the central portion of the handle-bar, the same being bent or curved outwardly, upwardly, backwardly, and downwardly, whereby the handles are at the same time located in a plane substantially at right angles to the steering center or post.

The central portion of the handle-bar is seated in the open lug of the steering-post and is confined therein by a segmental cap or locking-plate *f*, which closes the open front side of the lug. This locking-plate is held in place and tightly clamped against the handle-bar by screw-nuts *g g*, engaging with external screw-threads *g'* formed on the end portions of the handle-bar lug, and screw-threads *g''* formed on the locking-plate, such screw-threaded portions being preferably tapered, so that the nuts are firmly wedged upon the same. The contiguous edges of the tubular lug and its locking-plate are fitted to form a flush joint. In order to reliably hold the handle-bar from turning in the lug, the portion of the bar within the lug is formed with ribs or serrations *h*, as shown in Fig. 6, and the contiguous surface of the locking-plate is correspondingly serrated, so as to interlock with the ribs of the handle-bar.

The central portion of the handle-bar is preferably reinforced by a short piece of tubing *i*, which is inserted therein before the bar is tapered and bent. After inserting the reinforcing-tube the portion of the bar which rests in the lug is reduced in diameter, so as to offset or shoulder the parts, as shown in Fig. 5. By this construction the handle-bar is stiffened at the point of greatest strain, the reinforcing-tube is held in place without brazing or riveting and without bending the handle-bar, and the screw-threaded ends of the lug may be made of the same size as the

unreduced portion of the handle-bar outside of the lug, thus requiring the clamping-nuts to be made only large enough to pass freely over the handle-bar.

5 In attaching the handle-bar to the lug of the steering-post it is placed into the open lug and turned to adjust the handles at the desired angle, after which the locking-plate *f* is inserted in the opening of the lug and
10 clamped against the handle-bar by screwing the nuts *g* upon the threaded portions of the locking-plate and the lug and tightening them.

In the position of the handle-bar shown by
15 full lines in Figs. 1 and 2 the same is suitable for use by a rider sitting erect, that position of the handle-bar being called the "rational" one.

If the racing form of handle-bar is desired
20 the steering-post is reversed in the steering-head by loosening the clamp *c*, and the handle-bar is reversed by loosening the clamping-nuts *g* sufficiently to allow the serrations of the handle-bar to clear those of the locking-
25 plate, the clamping-screw and the clamping-nuts being again tightened after reversing the parts. The steering-post and its lug will now occupy the position shown by dotted lines in Figs. 1 and 2 and the handle-bar the position
30 indicated by dotted lines in the same figures, the handle being thus located farther forward and lower down than in the first-mentioned position without changing the angle or inclination of the handles. If the rider
35 desires a low racing position of the handles without locating them farther forward it is only necessary to reverse the handle-bar from the position shown in full lines in Fig. 1 to that indicated by broken lines in the same
40 figure without disturbing the rearward position of the handle-bar lug. This is accomplished by detaching the handle-bar from its lug after removing the locking-plate, reversing the bar, and again replacing the locking-
45 plate.

Long-armed riders may prefer the high or rational bar in the forward instead of the rearward position. In that case the handle-bar is detached from the lug of the steering-
50 post, the latter reversed to the forward position, and the handle-bar again attached thereto without reversing it. The handles are thus simply moved forward without lowering them.

The extent to which the upper portion of
55 the steering-post is curved or offset and the upward bend of the end portions of the bar above its central portion may be varied at pleasure in accordance with the desired angle of the handles, and by turning the handle-bar
60 in its lug the inclination of the handles can be changed to suit the fancy or comfort of the rider.

My improved handle-bar has the important advantage of enabling the dealer to fit out the
65 same machine with either the rational or the racing style of handle-bar, as may be desired by the purchaser, while at the same time af-

fording, by its reversible feature, a greater range of vertical adjustment than a handle-bar or steering-post having the ordinary telescopic adjustment only.

A modified construction of my invention, which is less expensive though not so neat as that just described, is shown in Figs. 8 to 11. In this modification the upper portion of the
75 steering-post has a greater degree of curvature, and the handle-bar lug, instead of being formed on the post, is brazed to the handle-bar and adjustably secured to the curved end of the post. The portion of the lug which
80 embraces the post is split and provided with a clamping-screw *j* for securing it in place.

Upon loosening the clamp of the lug the handle-bar may be reversed from the rational position (shown by full lines in Fig. 8) to the
85 rearward racing position, (indicated by dotted lines in the same figure,) or the steering-post and the handle-bar may both be reversed, as shown in Fig. 9, for bringing the bar to the forward racing position, while in any of these
90 positions the handles may be moved up or down at any desired inclination by adjusting the clamp backward or forward on the curved end of the steering-post.

Combinations of these various forms of my
95 invention may obviously be made. For instance, the handle-bar attachment shown in Figs. 1 to 7 might be used in connection with a steering-post having a straight upper end, or the attachments shown in Fig. 12 might
100 be combined with a post having a curved or offset end.

I am aware that handle-bars having offset ends parallel with the body of the bar have been arranged to rotate in their seats, also
105 that handle-bars having backwardly-bent ends located in the same plane as the body of the bar have been reversibly supported in their seats, so that they could be swung forwardly out of the way to facilitate mounting, and also that handle-bars having backwardly-bent ends arranged in a different plane from
110 the body of the bar have been adjustably secured to a fixed lug in such way as to permit the bent ends to be placed at different elevations and at different angles, and I do not therefore desire to claim broadly any of such constructions.

I claim as my invention—

1. The combination with a steering-head,
120 of a post having a backwardly-curved upper portion and capable of being rotated in the steering-head for bringing said curved portion on the front side of the post, a handle-bar lug mounted on the curved portion of the
125 steering-post and a handle-bar rotatably supported in said lug and having its end portions curved in a different plane from its central portion whereby the elevation of the handle-bar is changed by reversing the bar in said
130 lug and the transverse central portion of the bar is supported in front or in rear of the axis of the post by reversing the post in the steering-head, substantially as set forth.

2. The combination with the steering-post
of a velocipede having an open-sided lug pro-
vided with screw-threaded end portions, of a
detachable handle-bar seated in said lug and
5 having its central portion ribbed or serrated,
a locking-plate closing the opening of the lug
and interlocking with the ribbed handle-bar,
and clamping-nuts engaging with the screw-
threaded ends of the lug and overlapping the

ends of said locking-plate, substantially as is
set forth.

Witness my hand this 1st day of Novem-
ber, 1893.

EMMIT G. LATTA.

Witnesses:

B. J. RICE,
H. F. KLEE.