Dec. 10, 1929. T. THOMPSON 1,738,855

HANDLE BAR BRACE

Filed May 31, 1928 2 Sheets-Sheet 1

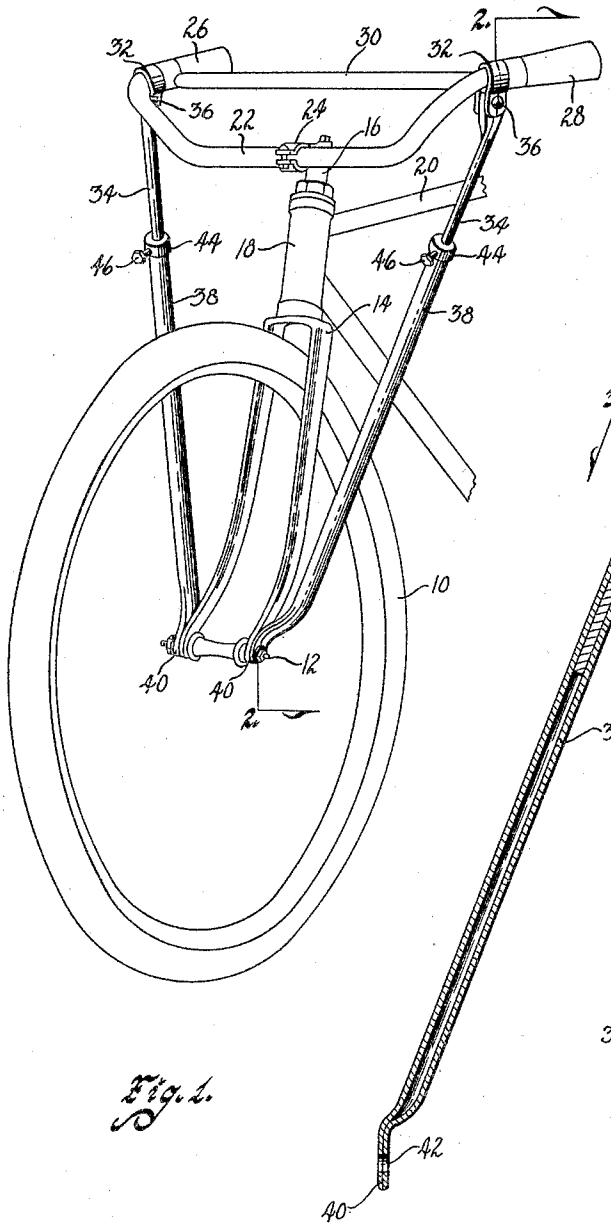

Fig. 1.

Fig. 2.

Fig. 3.

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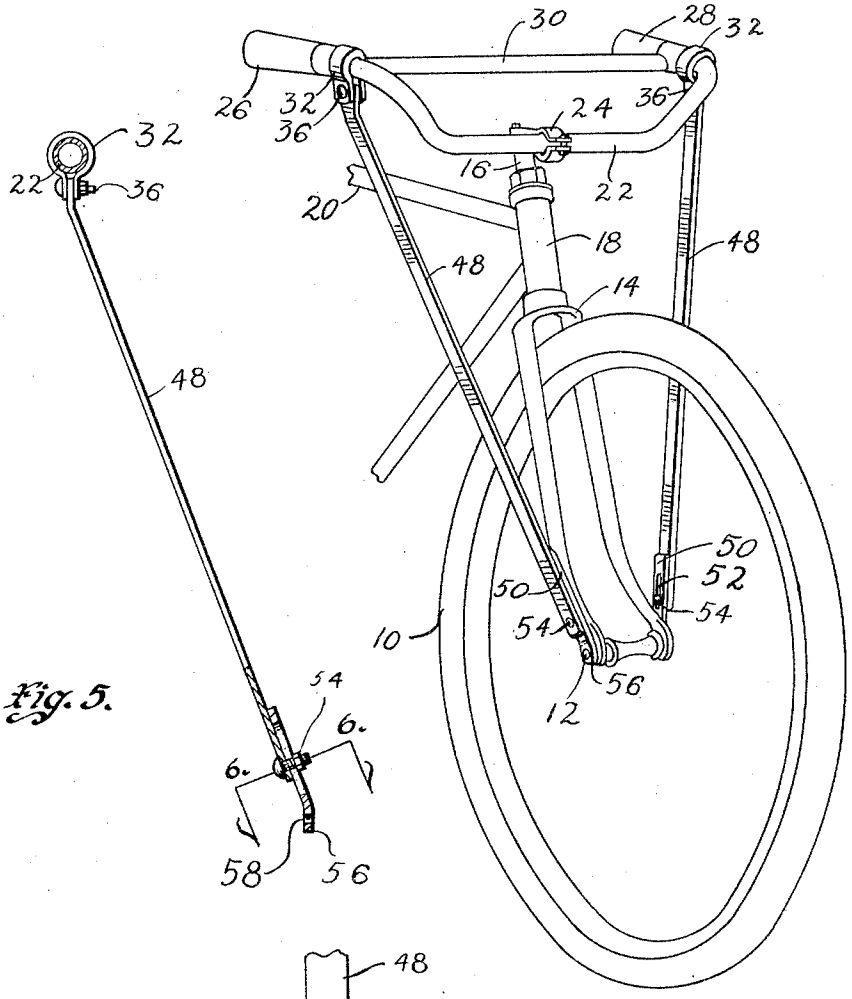

Fig. 5.

Fig. 4.

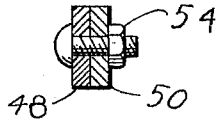

Fig. 6.

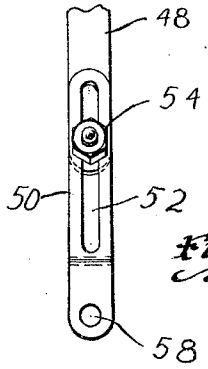

Fig. 7.

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UNITED STATES PATENT OFFICE

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HANDLE-BAR BRACE

Application filed May 31, 1923. Serial No. 281,918.

The object of this invention is to provide improved means for bracing the handle bars of bicycles, motorcycles, and the like.

A further object of this invention is to provide an improved handle bar brace which is economical of manufacture, quickly and easily installed and efficient in use for preventing collapse or bending or undue vibration of handle bars.

With these other objects in view my invention consists in the construction, arrangement and combination of the various parts of my device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which:

Fig. 1 is a perspective view illustrating a portion of a bicycle with a pair of my improved braces mounted thereon in position for practical use.

Fig. 2 is a section longitudinally of one of the braces on the line 2—2 of Fig. 1.

Fig. 3 is a cross-section through one of the braces on the line 3—3 of Fig. 2 on an enlarged scale.

Fig. 4 is a perspective view illustrating a different form of bracing means.

Fig. 5 is a front elevation partly in section, illustrating the brace of Fig. 4.

Fig. 6 is a cross-section on the line 6—6 of Fig. 5.

Fig. 7 is an inner face view of a portion of the brace showing particularly the adjusting means between the two members.

I have illustrated my improved brace in connection with a bicycle including a front wheel 10 rotatably mounted on an axle 12 carried by a fork 14 having its stem 16 swivelly mounted in a bearing 18 of the frame 20. At the upper end of the stem 16 I have shown the usual handle bar 22 adjustably secured in a clamp 24 and extending transversely and rearwardly and terminating in the hand grips 26 and 28. In the present instance, I have shown the side portions of the handle bar 22 connected by a transverse brace member 30 located near the grips in a common manner.

I have shown one of my improved braces mounted on each side of the handle bar and it will be understood that these braces are alike in construction, but are oppositely arranged when in position for use.

My improved brace includes a clip 32 of the nature of a clamp member embracing the handle bar 22, preferably in a position just forwardly of either of the grips 26 or 28. A brace rod 34 has one end flattened to be received between the ends of the clip 32 and apertured to receive a bolt 36 extending through said members. By this means the upper end of the brace rod is secured to the clip and the clip is rigidly secured to the handle bar when the nut of the bolt 36 is drawn up tight.

Coacting with the brace rod 34 is a tubular brace member 38 within the upper end of which the rod 34 is adjustably secured.

The lower end of the tubular brace member 38 is bent at an angle and is flattened to form an attaching ear 40, which ear is formed with an aperture 42 by which the ear is secured to the threaded bolt 12 forming a part of the axle of the front wheel of the bicycle.

The upper end of the tubular brace member 38 is provided with a collar 44 having a set screw 46 threaded therein, whereby any desired adjustment between the rod 34 and tube 38 may be maintained and secured.

When the brace is assembled and mounted as shown and described, the attaching ear 40 lies against the outer face of the lower end of one of the side members of the fork 14 and thence the tubular member 38 extends outwardly, upwardly, and rearwardly; and the brace rod 34 forms an adjustable continuation thereof by which connection is secured to the handle bar. The flattened upper end of the brace rod 34 also is bent at a slight angle to bring it into the proper plane to be received within the end portions of the clip 32.

In the form shown in Figs. 4 to 7 inclusive, the clip 32 is employed on the handle bar 22, but the telescoping relation of the brace members is omitted and an overlapping adjustable connection is employed.

In this connection, I employ a relatively long brace rod 48, which may be of any de-

sired cross-section and which is apertured at its upper end for receiving the bolt 36 of the clip.

An attaching member 50 is employed in connection with the brace rod 48 and these members are mounted in overlapping relation. The attaching member 50 is formed of a flat piece of metal arranged to contact with a flat face of the brace rod 48 and is formed with a longitudinal slot 52 in which is adjustably mounted a bolt 54 which passes through an aperture of the rod 48.

At its lower end the attaching member 50 is bent laterally to form an ear 56, which is provided with a hole 58 to receive the axle member 12 of the cycle.

This form of the invention is distinctly economical as to manufacture and is very easily mounted in place.

This device as embodied in both forms of my invention, provides a convenient and readily attachable bracing means, whereby undue vibration of the handle bars is prevented and whereby considerable weight may be placed upon the handle bars without causing them to bend or become loosened in the adjustable securing means or clamp 24. This bracing means is effective in maintaining the handle bars in proper relation to the axle of the front wheel and it is obvious that each brace member may be adjusted as to length and as to position of engagement with the handle bar to suit any desired adjustment of the latter.

I claim as my invention:

1. A brace of the character described, comprising an attaching member having one end portion flattened and formed with an aperture for engaging a cycle axle, a brace rod having an adjustable engagement with the other end portion of said attaching member, a clip arranged to be mounted rigidly on a cycle handle bar, and a clamping bolt mounted through the ends of said clip, said brace rod having one end flattened and apertured whereby it may be received between the ends of said clip and engaged by said clamping bolt, the flattened ends of said attaching member and brace rod being arranged at angles to the common axis thereof, whereby the main portion of the brace may extend upwardly and outwardly on an oblique line to permit said clip to engage near the outer end portion of the handle bar.

2. A brace of the character described, comprising an attaching member formed with a longitudinal slot, means for connecting one end of said member to a cycle axle, a brace rod, a clip attached to said brace rod and adapted to be mounted rigidly on a cycle handle bar, and a bolt adjustably connecting said brace rod to the slotted portion of said attaching member.

3. A brace of the character described, comprising an attaching member, means for connecting one end of said member to a cycle axle, a brace rod having an adjustable engagement with the other end of said attaching member, a clip arranged to embrace a cycle handle bar and formed with spaced apertured end portions, the adjacent end of said brace rod being flattened for reception between the ends of said clip, said flattened end portion and the ends of said clip being formed with registering apertures, and a clamping bolt mounted through said apertures for securing the clip rigidly on the handle bar and for holding the brace rod relative thereto.

4. A brace of the character described, comprising an attaching member, means for connecting one end of said member to a cycle axle, a brace rod, means for securing the lower end of said brace rod to the attaching member, said brace rod extending upwardly and outwardly on an inclined line and being bent between its ends to bring its upper end portion into a substantially vertical plane, and a clip on the upper end of said brace rod adapted for rigidly engaging a cycle handle bar adjacent the handle grip thereof.

THOMAS THOMPSON.