(No Model.)

J. D. KING.

BICYCLE HANDLE BAR.

No. 596,814. Patented Jan. 4, 1898.

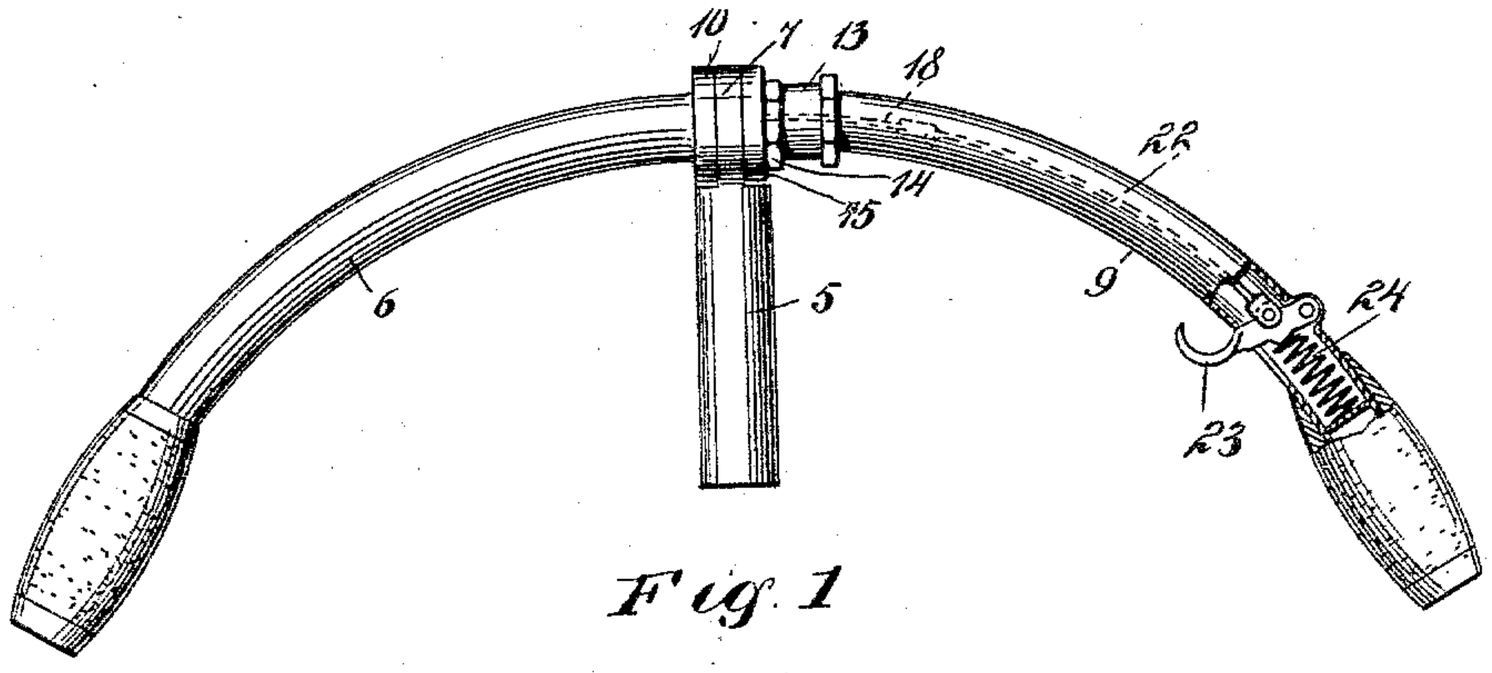


Fig. 1

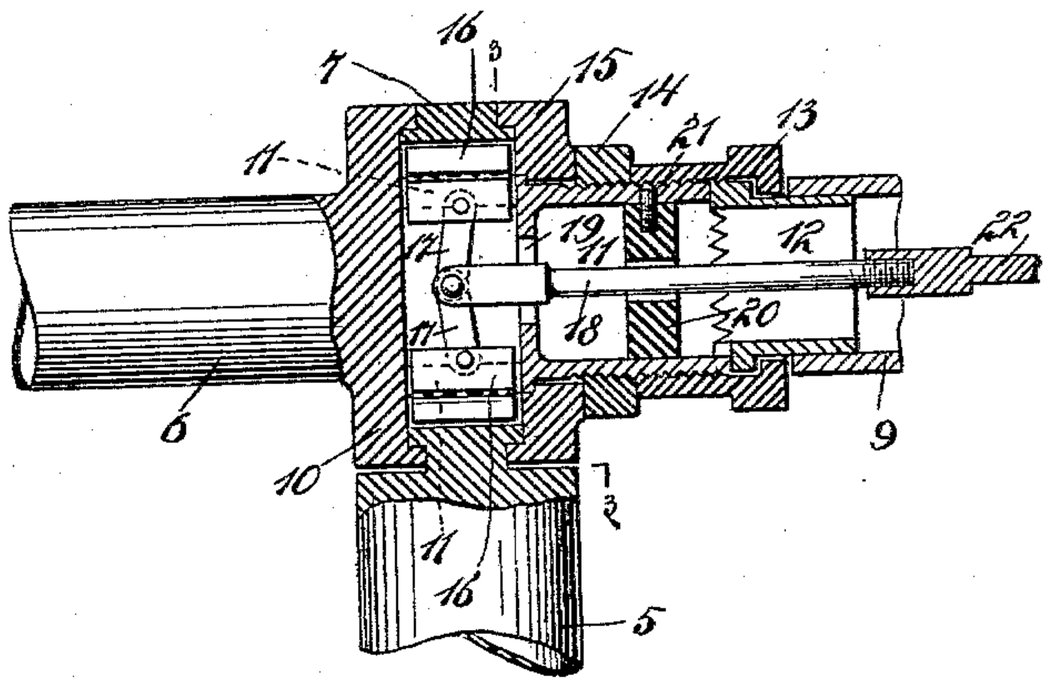


Fig. 2

Fig. 3

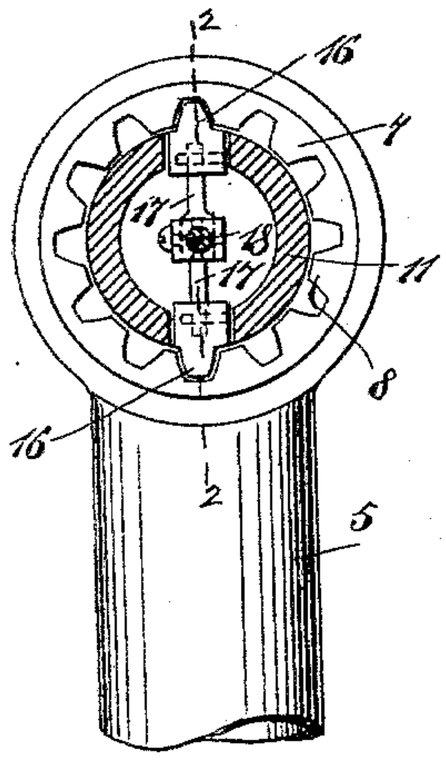
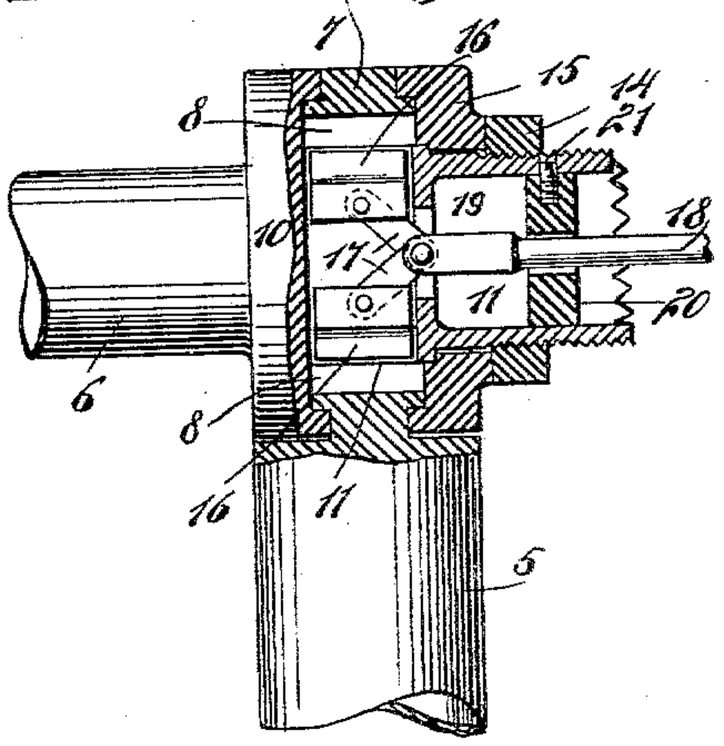


Fig. 4



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JOSEPH D. KING, OF MENOMINEE, MICHIGAN.

BICYCLE HANDLE-BAR.

SPECIFICATION forming part of Letters Patent No. 596,814, dated January 4, 1898.

Application filed April 29, 1897. Serial No. 634,347. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH D. KING, of Menominee, in the county of Menominee and State of Michigan, have invented a new and Improved Bicycle Handle-Bar, of which the following is a full, clear, and exact description.

This invention is an improvement in bicycle handle-bars by which the bars may be adjusted to various positions, so as to suit the positions which the rider desires to assume.

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

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 figures.

Figure 1 is an elevation of the invention with parts in section. Fig. 2 is a section of the invention on the line 2 2 of Fig. 3. Fig. 3 is a section of the invention on the line 3 3 of Fig. 2, and Fig. 4 is a section of the invention also on the line 2 2 of Fig. 3, Fig. 4 showing the parts in a position different from the position shown in Fig. 2.

The stem 5 of the handle-bars 6 and 9 carries at its upper end a rigid annulus 7, the inner periphery of which has teeth 8.

The handle-bar 6 has at its inner end a head 10, with a laterally-flanged periphery projecting into a rabbet groove formed in the left-hand side of the annulus 7. The handle-bar 6 also has a rigidly-attached tube 11 running through the annulus 7 and having a serrated end locking with the serrated end of a thimble 12. The thimble 12 is rigidly attached to the handle-bar 9 and carries a freely-revoluble sleeve 13, threaded on its inner face and screwing over the exteriorly-threaded outer portion of the tube 11. A lock-nut 14 and an annular head 15 are interposed between the sleeve 13 and the right-hand side of the annulus 7. The nut 14 screws on the tube 11. The head 15 has a lateral flange running in a rabbet groove in the right-hand side of the annulus 7. This construction mounts the handle-bars 6 and 9 on the annulus 7 and allows the handle-bars to be turned axially to any desired position.

The means for rigidly holding the handle-bars at the desired adjustment consists in two dogs 16, respectively movable radially through openings in the tube 11 and capable of locking with the teeth 8 of the annulus 7. Attached to the dogs 16 are toggle-links 17, to the joint of which a rod 18 is pivoted. The rod 18 runs rightward through an orificed partition 19, integral with the tube 11, and through an orificed block 20, held in the tube 11 by a set-screw 21. The rod 18 runs through the thimble 12 and is screwed into a curved rod 22, running rightward through the handle-bar 9 and pivoted to a thumb-lever 23, that projects through a slot in the handle-bar and is pressed toward the stem 5 by an expansive spring 24, carried in the handle-bar 9. The manipulation of the thumb-lever 23 reciprocates the rods 18 and 22 and swings the toggle-links 17 in and out of the position shown in Figs. 2 and 4, which has the effect of projecting the dogs 16 to engagement with the teeth 8, as shown in Figs. 2 and 3, or of withdrawing the dogs from such engagement, as shown in Fig. 4. In the former position the handle-bars 6 and 9 will be firmly locked with the annulus 7 and consequently held rigidly. In the latter position the handle-bars will be free to turn to secure that adjustment that it is the object of this invention to attain. In the locked position the toggle-links 17 spring slightly past the center, as shown in Fig. 1. The advantage of this is that a slight accidental tug on the thumb-lever 23 will not release the dogs 16. This setting of the toggle-links 17 may, however, be overcome by an intentional and forcible operation of the thumb-lever 23. The handle-bars can be readily adjusted when the machine is in motion.

Various changes in the form, proportion, and minor details of my invention may be resorted to without departing from the spirit and scope thereof. Hence I do not consider myself limited to the precise construction herein shown, but am entitled to all the variations that come within the scope of my claims.

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

1. The combination of a stem, having an annulus attached thereto, two handle-bars, a tube rigidly attached to one handle-bar and run through the annulus, a thimble attached to the remaining handle-bar, the thimble and

tube having interlocking contiguous edges, a sleeve embracing the thimble and tube and holding said parts engaged with each other, a dog movable through the tube and capable of engaging the annulus, a toggle-link actuating the dog and a rod attached to and operating said toggle-link.

2. The combination of a stem having an annulus, two handle-bars one of which has a rigidly-attached head bearing against one side of the annulus, a tube rigidly attached to the handle-bar, having the head run through the annulus, a thimble rigidly attached to the remaining handle-bar, the tube and thimble having interlocking contiguous ends, an internally-threaded sleeve carried by the thimble and screwing over the tube whereby to hold the tube and thimble in engagement with each other, a second head separable from the tube and embracing the tube and engaging the annulus oppositely to the first-named head, a nut screwing on the tube and holding said second-named head in place and means for locking together the tube and annulus.

3. The combination of a stem having an annulus, two handle-bars, a tube attached to one handle-bar and run through the annulus and capable of turning therein, the tube being engaged with the remaining handle-bar, a sleeve embracing portions of the tube and said remaining handle-bar whereby to hold the said parts in engagement, two dogs oppositely movable through the tube and capable of engaging the annulus, two toggle-links contained in the tube and respectively attached to the dogs, and a rod connected with the toggle-links.

4. The combination of an annulus, a tube mounted to turn within the annulus, a handle-bar, a thimble attached to the handle-bar and engaged by the tube, a sleeve embracing the thimble and tube and having threaded connection with one of said parts whereby to hold the thimble and tube rigidly in connection, and means contained within the tube and capable of engaging the annulus to lock the tube with the annulus.

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Witnesses:
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