(No Model.)

J. F. HEGERTY.

BICYCLE HANDLE BAR.

No. 593,217. Patented Nov. 9, 1897.

Fig. 1.

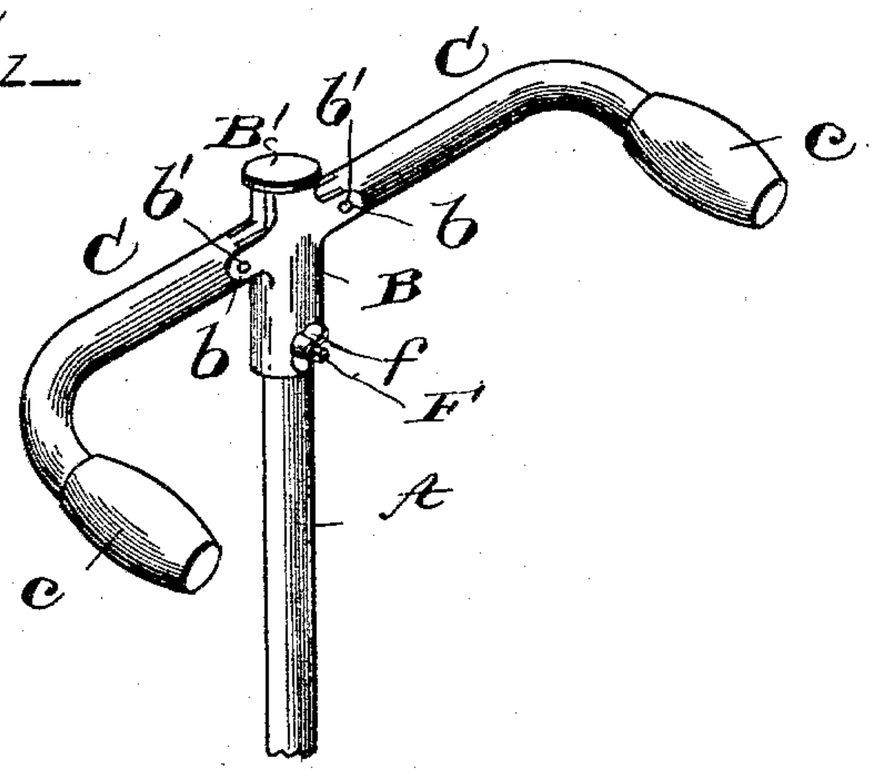


Fig. 2.

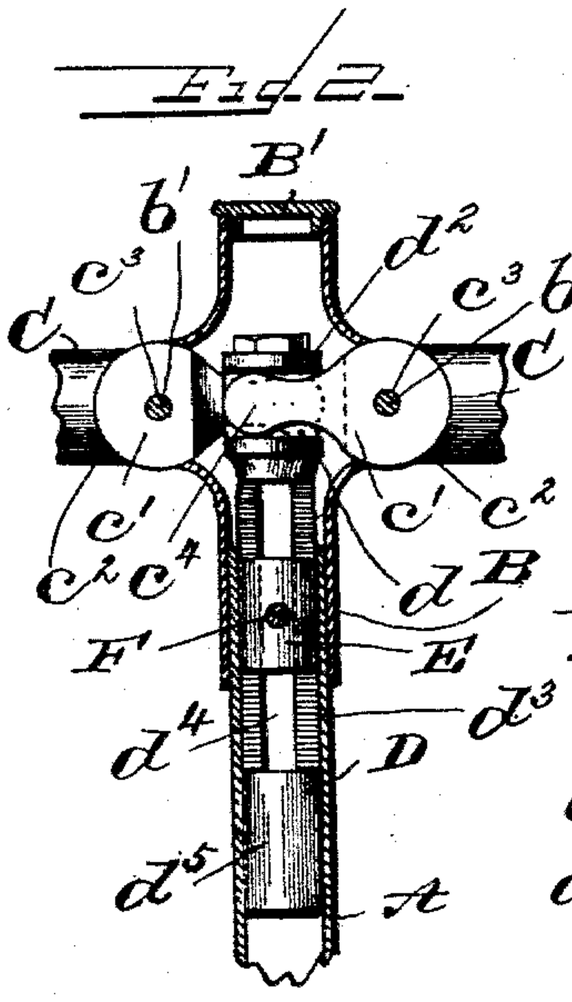


Fig. 3.

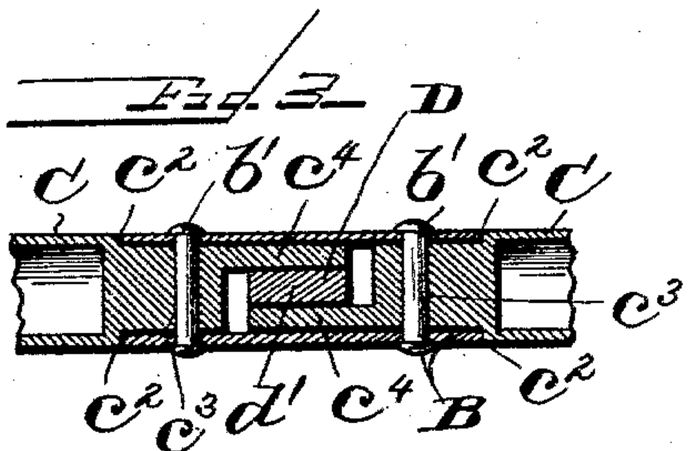


Fig. 4.

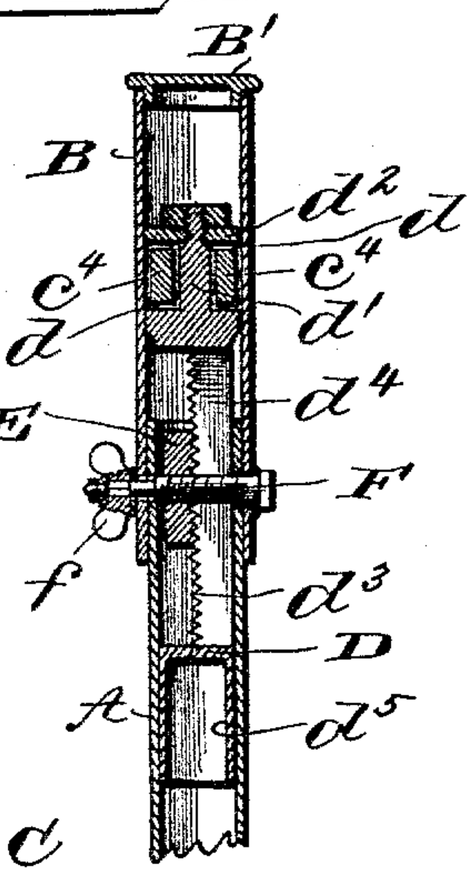


Fig. 5.

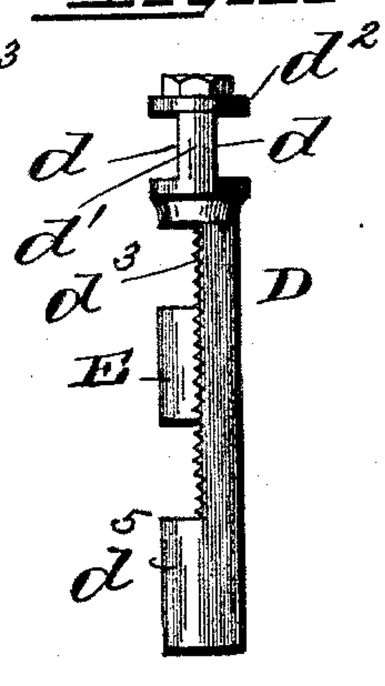


Fig. 6.

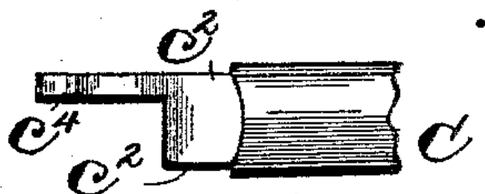


Fig. 7.

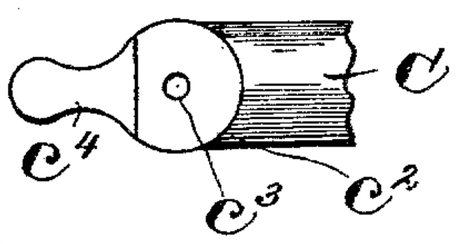
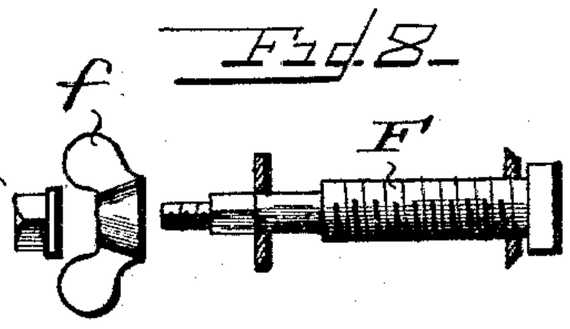


Fig. 8.



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UNITED STATES PATENT OFFICE.

JOHN F. HEGERTY, OF WARREN, PENNSYLVANIA.

BICYCLE HANDLE-BAR.

SPECIFICATION forming part of Letters Patent No. 593,217, dated November 9, 1897.

Application filed November 29, 1895. Serial No. 570,399. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. HEGERTY, a citizen of the United States, residing at Warren, in the county of Warren and State of Pennsylvania, have invented certain new and useful Improvements in Bicycle Handle-Bars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improvement in handle-bars for bicycles; and it consists in the novel features of construction and combination of parts hereinafter described, with reference to the accompanying drawings, which illustrate one form in which I have contemplated embodying my invention, and said invention is fully disclosed in the following description and claims.

Referring to the said drawings, Figure 1 is a perspective view of the steering-head and handle-bars of a bicycle embodying my invention. Fig. 2 is a vertical sectional view of the same, parts being shown in elevation. Fig. 3 is a horizontal section through the upper part of the device. Fig. 4 is a vertical sectional view of the device, taken on a plane at right angles to the plane of section in Fig. 2. Figs. 5, 6, and 7 are detail views of parts of the mechanism. Fig. 8 is an enlarged detail of the securing-bolt.

The object of my invention is to provide a bicycle steering-head with handle-bars which can be adjusted up and down by the rider while riding the machine.

In the drawings, A represents the tubular steering head or bar, and B represents a head-casing which fits over the steering-head and is secured thereto, as hereinafter described. This casing is provided at each side with a pair of perforated ears *b b*, nearly circular in form and parallel to each other, to which the handle-bars are secured.

C C represent the handle-bars, of any desired form, provided at their outer ends with suitable handles *c c* and at their inner ends with coupling-pieces *c'*, which have their vertical surfaces slightly below the plane of adjacent portions of the bars, said adjacent portions being formed with curved shoulders c^2 to engage the curved edges of the ears *b b*. The coupling-pieces *c'* are each provided with a perforation c^3, as shown, and with an inwardly-projecting arm c^4 of less width than the coupling-piece, said arms being so arranged that when the handle-bars are placed in engagement with the casing B and secured thereto by suitable screws, bolts, or rivets *b' b'* the said arms c^4 will extend inwardly past each other and on opposite sides of the center of the bars, as shown in Figs. 3, 4, and 6.

D represents a vertically-movable post having recesses *d d* adjacent to its upper end, which are engaged by the arms c^4 of the handle-bar. In forming these recesses I prefer to cut away the upper part of the post D on both sides, leaving a central web *d'*, provided with a screw-threaded stem. A perforated cap d^2, of the same diameter as the post, is then placed over said stem on the end of said web *d'* and secured in place by a suitable nut, but this construction is not essential. The central part of the post is cut halfway, preferably on the side toward the rider, and said narrowed portion is provided with a series of serrations d^3. The said narrowed portion is also provided with a vertical slot d^4, as shown in Fig. 2. The lower end of the post D is provided with a cylindrical guiding portion d^5, and the post is placed within the casing B, with its lower end in the steering-head A and the upper end in operative relation with the arms c^4 of the handle-bars.

E represents the securing-block, which is of semicylindrical form and has its flat face serrated to engage the serrations of the post D.

F represents the securing-bolt, which extends through the casing B, the head A, the slotted portion of post D, and the securing-block E. This bolt has a screw-threaded portion, as shown, which engages only the passage of the securing-block, which is screw-threaded, and said bolt is provided on the end toward the rider with a squared or polygonal portion on which is placed a winged head *f*, which is secured thereto in any usual or preferred manner, so that the bolt may be turned by means of said winged head.

By reference to Figs. 2 and 3 it will be seen that by turning the bolt F in one direction the securing-block E, which does not fit tightly in the head A, can be drawn away from the serrated portion of the post, thereby disen-

gaging said serrations, which allows the handle-bars to be raised or lowered to any desired extent. The handle-bars are then secured in the adjusted position by turning the screw F in the opposite direction, thereby drawing the securing-block into close contact with the serrated portion of the post D. It will also be seen that the bolt F secures the casing B to the head A. The upper end of the head is closed in any desired manner to give it a neat appearance. I have shown a cap B′, which is screwed into the top of the casing, as shown in Figs. 2 and 3.

It will be seen that by my improved construction the rider can instantly adjust the handle-bars without slacking speed or dismounting from the machine and the handle-bars will be held rigidly in any position to which they are adjusted.

This form of handle-bar will take up and obviate much of the vibration which is experienced in using rigid handle-bars and which is very annoying and fatiguing to riders, particularly in riding long distances.

What I claim, and desire to secure by Letters Patent, is—

1. The combination with the tubular head, of a vertically-adjustable post within the same, and the pivoted handle-bars having inwardly-extending arms engaging said post, substantially as described.

2. The combination with the tubular head, of a vertically-adjustable post within the same, having recesses adjacent to its upper end, and the pivoted handle-bars, having inwardly-extending arms, engaging the recesses in said post, substantially as described.

3. The combination with the tubular head, of a vertically-adjustable post within the same having a slotted portion, the pivoted handle-bars having inwardly-extending arms engaging said post, the securing-block and the securing-bolt for clamping said block and post together, substantially as described.

4. The combination with the tubular head, of a vertically-adjustable post within the same, having a slotted portion, the pivoted handle-bars having inwardly-extending portions operatively engaging said post, the securing-block within said head, the securing-bolt passing through the said head, block and post and having threaded portions engaging said block for moving it into and out of engagement with said post, substantially as described.

5. The combination with the tubular head, of the head-casing, the vertically-adjustable post within said head and casing and having a reduced serrated portion provided with a vertical slot, the handle-bars pivotally connected with said casing, the securing-block having a serrated face for engaging the reduced serrated portion of the post, the securing-bolt passing through said head, casing, block and post, and having threaded portions engaging said block to move it into and out of engagement with said post, and means exterior to said head, for turning said bolt, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN F. HEGERTY.

Witnesses:
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