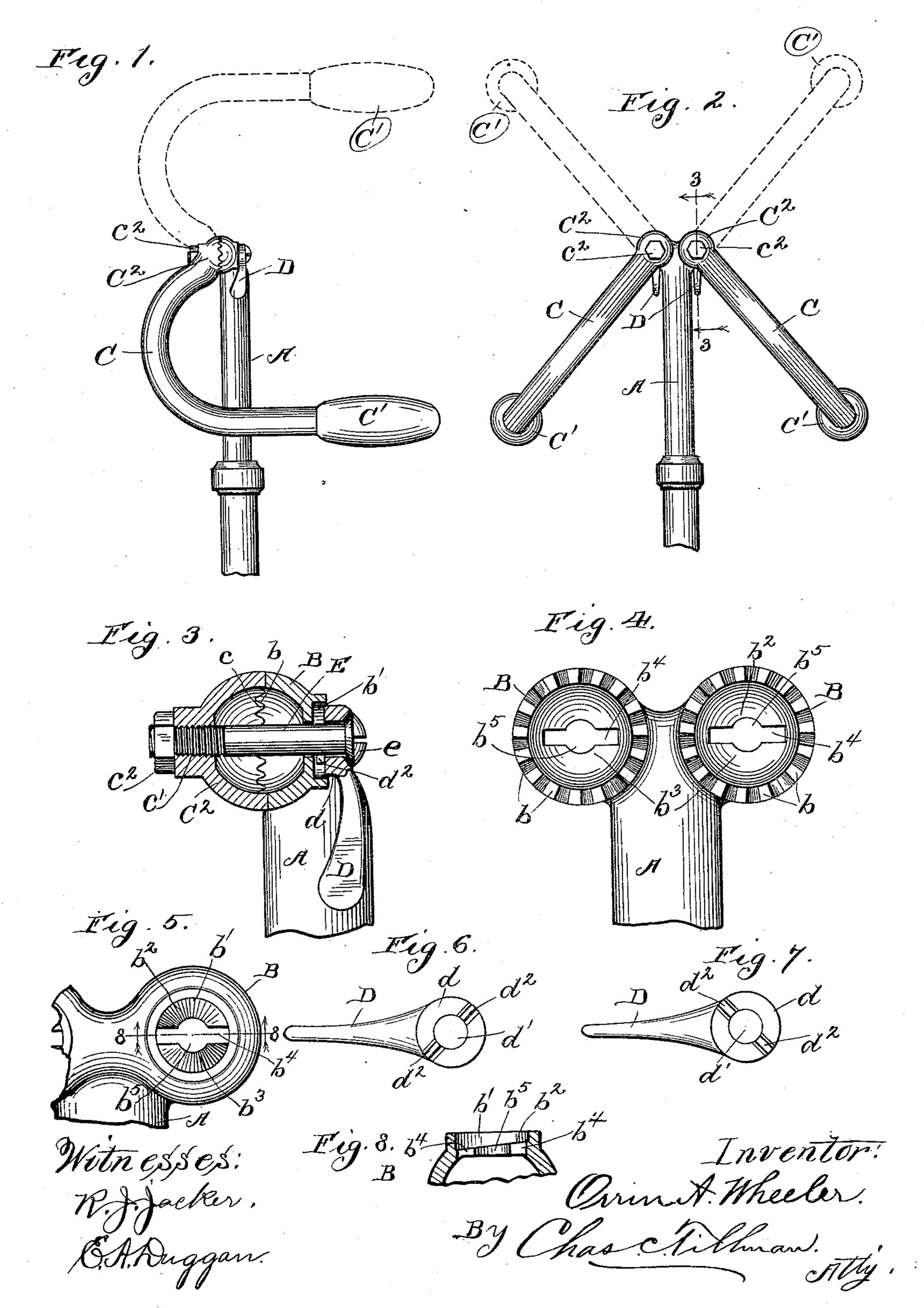
(No Model)

## O. A. WHEELER. ADJUSTABLE HANDLE BAR FOR BICYCLES.

No. 583,105.

Patented May 25, 1897.



## United States Patent Office.

ORRIN A. WHEELER, OF CHICAGO, ILLINOIS.

## ADJUSTABLE HANDLE-BAR FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 583,105, dated May 25, 1897.

Application filed June 15, 1896. Serial No. 595,517. (No model.)

To all whom it may concern:

Be it known that I, ORRIN A. WHEELER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Adjustable Handle-Bars for Bicycles, of which the following is a specification.

This invention relates to improvements in handle-bars for bicycles; and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The objects of my invention are, first, to provide a handle-bar which can be readily adjusted to any desired position by a person while mounted and riding the bicycle or when dismounted, and, second, such an adjustable handle-bar in which the handholds or grasping portions thereof will always remain in the same position relative to the steering-post, or, in other words, said handholds or grasping portions of the bar will lie in a horizontal plane within the arc described by the pivoted portions of the bar.

Another object of my invention is to provide a handle-bar which shall be made in two sections or pieces and so connected to the steering-post that either piece may be raised or lowered independently of the other.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is a view in side elevation of a portion of the steering-post of a bicycle, showing my handle-bar secured thereto and 40 illustrating it by dotted lines in a raised position. Fig. 2 is a front view in elevation of a portion of the steering-post, showing the pieces composing the handle-bar secured thereto and illustrating them in a raised posi-45 tion by broken lines. Fig. 3 is an enlarged view, partly in section and partly in elevation, taken on line 3 3 of Fig. 2, showing the manner of adjustably securing the handlebar to the steering-post. Fig. 4 is a view in 50 elevation of the front upper part of the steering-post, showing the slotted and toothed or serrated seats or extensions to which the

pieces of the handle-bar are secured. Fig. 5 is a rear view in elevation of a portion of the steering-post, showing the recess in one of the 55 seats or extensions in which the adjusting-lever operates. Fig. 6 is a detail view of one of the adjusting-levers detached. Fig. 7 is a like view of the adjusting-lever used on the opposite side of the steering-post; and Fig. 8 60 is a sectional view, taken on line 8 8 of Fig. 5, showing the beveled part of one of the recesses of the extension or seat for one piece or section of the handle-bar.

Similar letters refer to like parts through- 65 out the different views of the drawings.

A represents the steering-post of a bicycle, the upper end of which is provided with lateral extensions or seats B, which are counterparts of one another and are preferably made 70 integral with the steering-post. The seats are usually made cup-shaped, or substantially in the form of a half-sphere, as is clearly shown in Fig. 3, and are provided on their front surface or that farthest from the saddle 75 of the bicycle with teeth or serrations c on the ends of the sections C, composing the handle-bar.

On the inner or rear portion of each of the seats or extensions B is formed a recess b', 80 which is circular, as shown in Fig. 5, to receive the circular head d of the adjusting-levers D, which are pivotally secured on the bolts E, used for securing the sections of the handle-bar to the seats or extensions on the 85 steering-post.

The seats B are formed with segmental partitions  $b^2$  and  $b^3$ , which extend inwardly, as shown, and form the walls of the recesses b'. As seen in Figs. 3 to 5, inclusive, the partitions or walls  $b^2$  and  $b^3$  are separated and form a diametrical slot  $b^4$ , whose central portion is enlarged, as at  $b^5$ , to admit of the screw-bolt E in each of the seats. The rear surfaces of the floors  $b^2$  and  $b^3$  are beveled in 95 opposite directions, as shown in Figs. 5 and 8 of the drawings.

The sections or pieces C, constituting the handle-bar, are provided at their free ends with handholds or grasping portions C', 100 which are made of any suitable material and of the ordinary or any preferred construction, and are formed or provided at their other ends with portions C<sup>2</sup>, which are preferably

substantially in the shape of a half-sphere, and are provided on their surfaces, which meet with the seats B, with teeth or serrations c to engage those b on said seats. Pass-5 ing through suitable openings  $b^5$  in the seats B and through screw-threaded openings c' in each of the portions C<sup>2</sup> of the pieces C is a screw-threaded bolt E, on the front end of which is secured a nut  $c^2$  to regulate the 10 "play" of said seats and portions. The rear ends of the bolts E are formed with grooved heads e, so that they may be turned when it is desired to draw the seats and portions C<sup>2</sup> closer together. On the rear portion of each of the 15 bolts E are located the adjusting-levers D, which are formed with openings d' in their heads for the reception of said bolts. The inner surfaces of each of the adjusting-levers are provided with beveled lugs  $d^2$ , which ex-20 tend diametrically across the circular heads and are adapted to act on the beveled walls  $b^2$ and  $b^3$  of the recesses b' in the seats for the sections of the handle-bar, and also to engage the slots  $b^4$  when they, the levers, are raised to a 25 position to permit of the entire disengagement of the serrations or teeth of the portions C<sup>2</sup> and seats therefor. When the pieces C are held in a fixed position, the adjusting-levers D will depend along the steering-post, as shown in 30 Figs. 1 to 3, inclusive, but when it is desired to change the position of the sections or pieces C of the handle-bar the levers may be turned upward and outwardly from the steering-post until the beveled or rounded lugs  $d^2$  are 35 brought into alinement with the slots  $b^4$ , which operation will permit of the disengagement of the teeth b on the seats B and the teeth con the portions C<sup>2</sup>, thus allowing the pieces C to be placed in any desired position, when 40 by pressing the lever downward and toward the steering-post the lugs  $d^2$  thereof, acting on the beveled walls  $b^2$  and  $b^3$  of the recessed portions of the seats B, will draw, through the medium of the bolts E, the portions C<sup>2</sup> toward 45 the seats and cause the teeth on said portions to engage those of the seats in a firm and rigid manner.

While I have shown and described the seats or extensions B and the portions C<sup>2</sup> of the handle-bar substantially hemispherical, and illustrated them as being hollow, yet I may make them of any desired form and without teeth or serrations, but I prefer to use them with teeth or engaging devices on their meet-

55 ing surfaces.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. The combination with a steering-post, of the seats on its upper part, each having in its rear portion a recess provided with oppositely-beveled vertical walls, the handle-bar made of two pieces, each pivotally secured to one of the seats and an adjusting-lever pivotally secured on the rear portion of each of the

seats on the pivots of the handle-bar, and provided on its inner surface with rounded or

beveled lugs to contact with the beveled surfaces of the walls of the recesses, and connected to one piece of the handle-bar, sub- 70

stantially as described.

2. The combination with a steering-post, of the seats on its upper part, each having in its rear portion a recess provided with oppositely-beveled vertical walls, and on its front surface teeth or serrations, the handle-bar made of two pieces, each pivotally secured to one of the seats, and having teeth or serrations on its surface adjacent to the seat, and an adjusting-lever pivotally secured on the rear so portion of each of the seats on the pivots of the handle-bar, and provided on its inner surface with rounded or beveled lugs to contact with the beveled surfaces of the walls of the recesses, and connected to one piece of the 85 handle-bar, substantially as described.

3. The combination with a steering-post, of the seats on its upper part, each having in its rear portion a recess, provided with oppositely-beveled vertical walls, and an opening 90 through said walls, the handle-bar made of two pieces, each provided at its inner end with an opening for the reception of a securing-bolt, said bolt located in said openings in the pieces of the handle-bar, and in the openings in the walls of the seats, and an adjusting-lever pivotally secured on the rear portion of each of the securing-bolts, and provided on its inner surface with rounded or beveled lugs to contact with the beveled surfaces of the walls of the recesses, substan-

tially as described.

4. The combination with a steering-post, of the seats on its upper part, having in its rear portion a recess provided with oppositelybeveled walls, and an opening and diametrical slot in said walls, the handle-bar made of two pieces, each pivotally secured to one of the seats, and an adjusting-lever pivotally secured on the rear portion of each of the 110 seats on the pivots of the handle-bar, and provided on its inner surface with rounded or beveled lugs to contact with the beveled surfaces of the walls of the recesses, and to engage the slots in said wall, and connected 115 to one piece of the handle-bar, substantially as described.

5. The combination with the seat B, having the circular recess b', and oppositely-beveled walls  $b^2$ , and  $b^3$ , and an opening between said 120 walls, the handle-bar made of two pieces, each provided at its inner end with an opening for the reception of a securing-bolt, a bolt in said opening, a lever on the bolt and provided with rounded and beveled diametrical 125 lugs to contact with the walls of the recess, and adapted to engage the opening between said walls, and to advance and retract the bolt, substantially as described.

ORRIN A. WHEELER.

Witnesses:
CHAS. C. TILLMAN,
E. A. DUGGAN.