

No. 639,765.

Patented Dec. 26, 1899.

E. PHIPPS.
HANDLE BAR FOR BICYCLES.

(Application filed May 3, 1899.)

(No Model.)

Fig. 1.

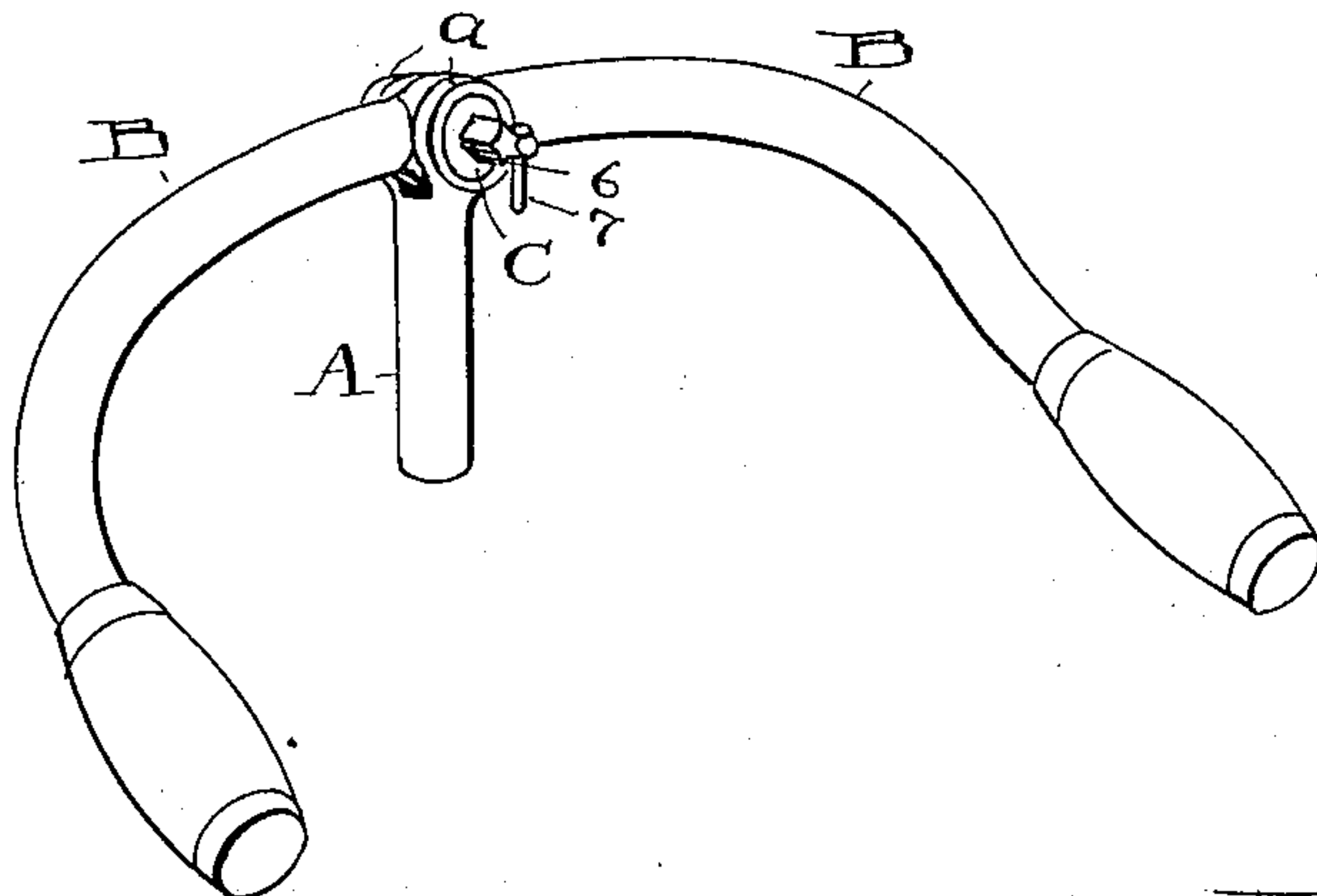


Fig. 2.

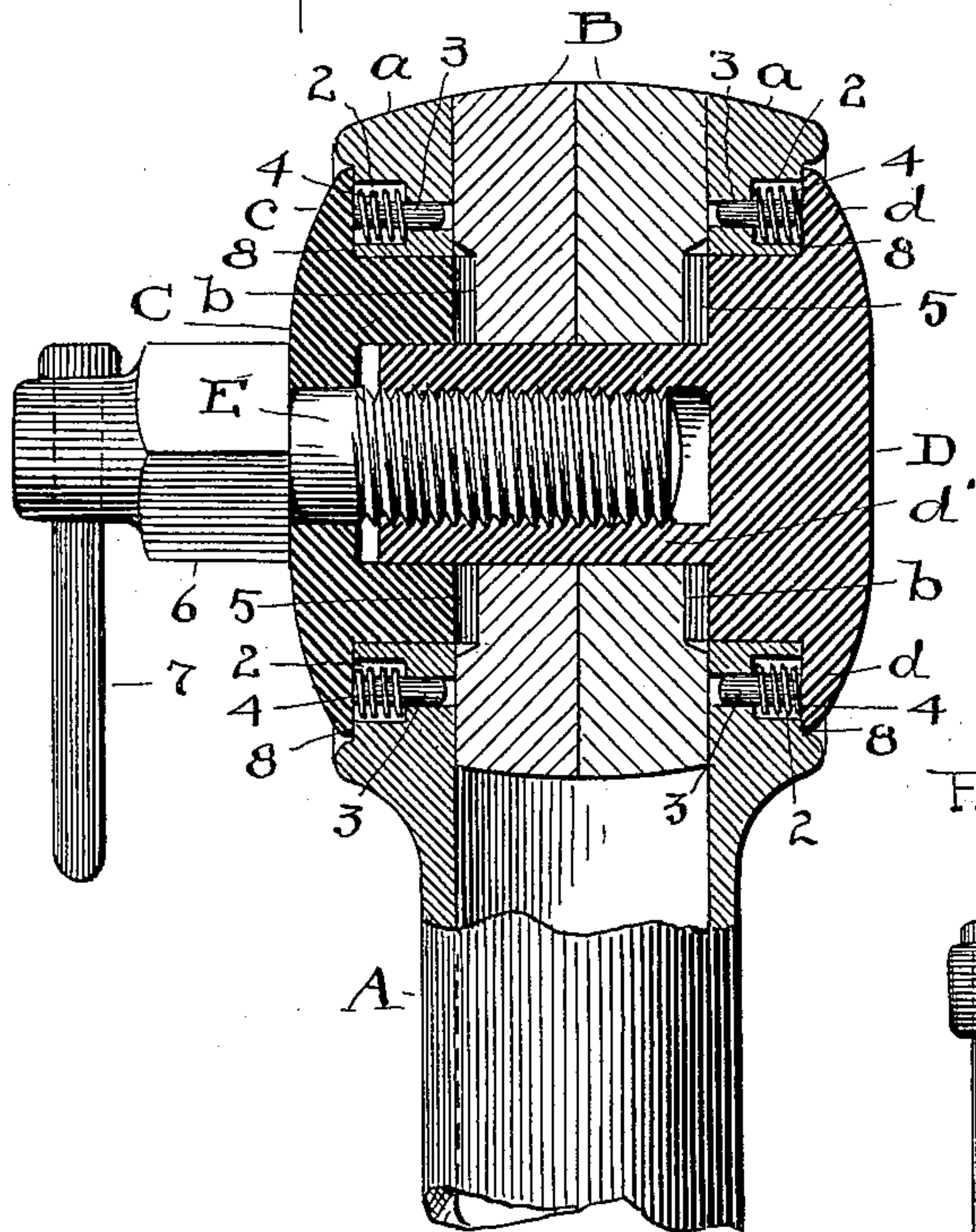


Fig. 3.

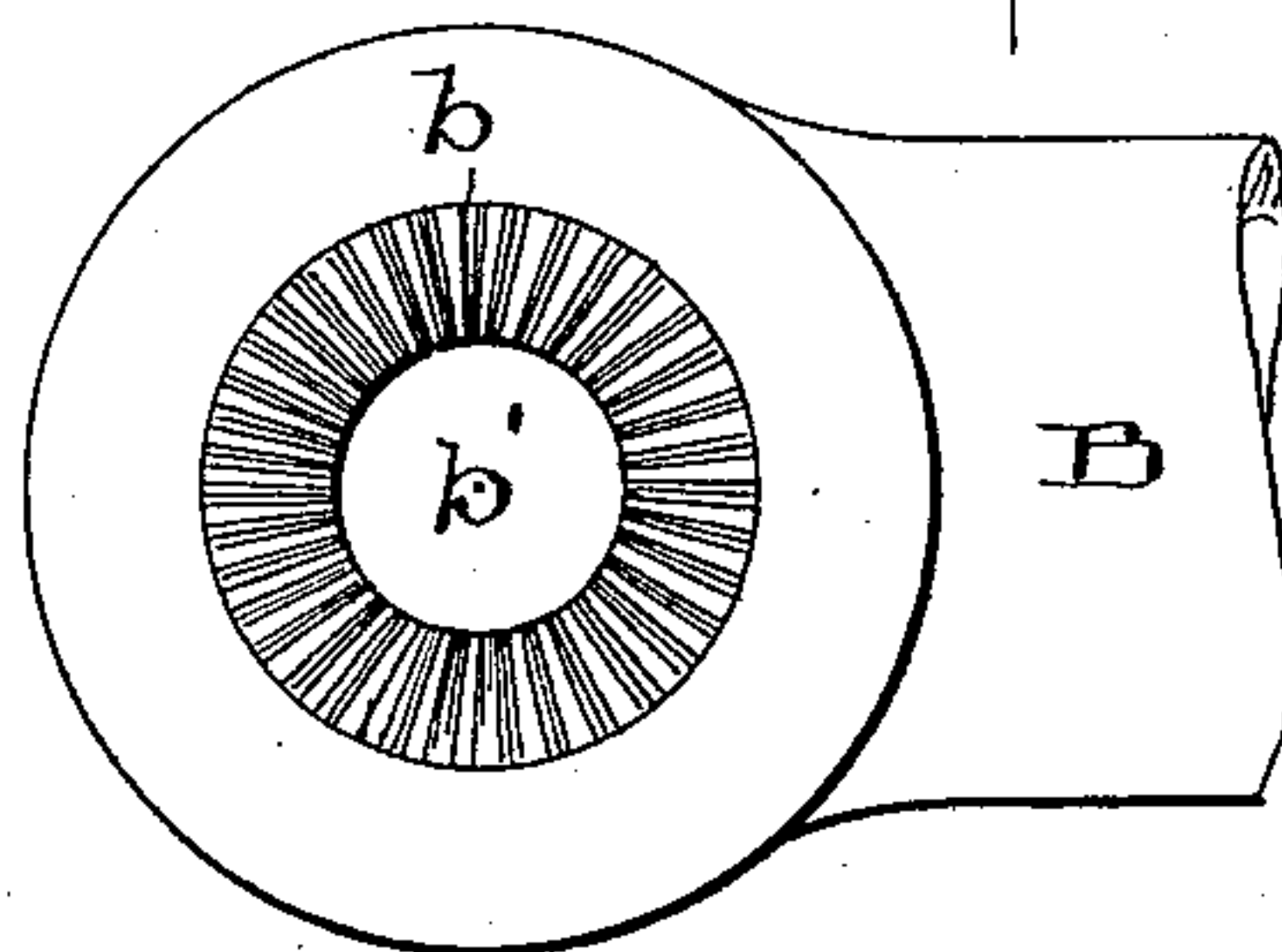


Fig. 4.

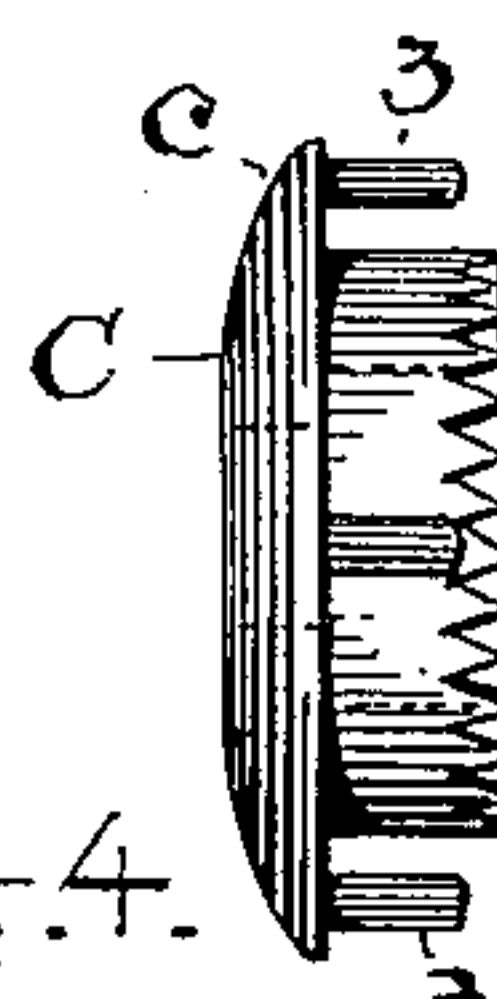


Fig. 5.

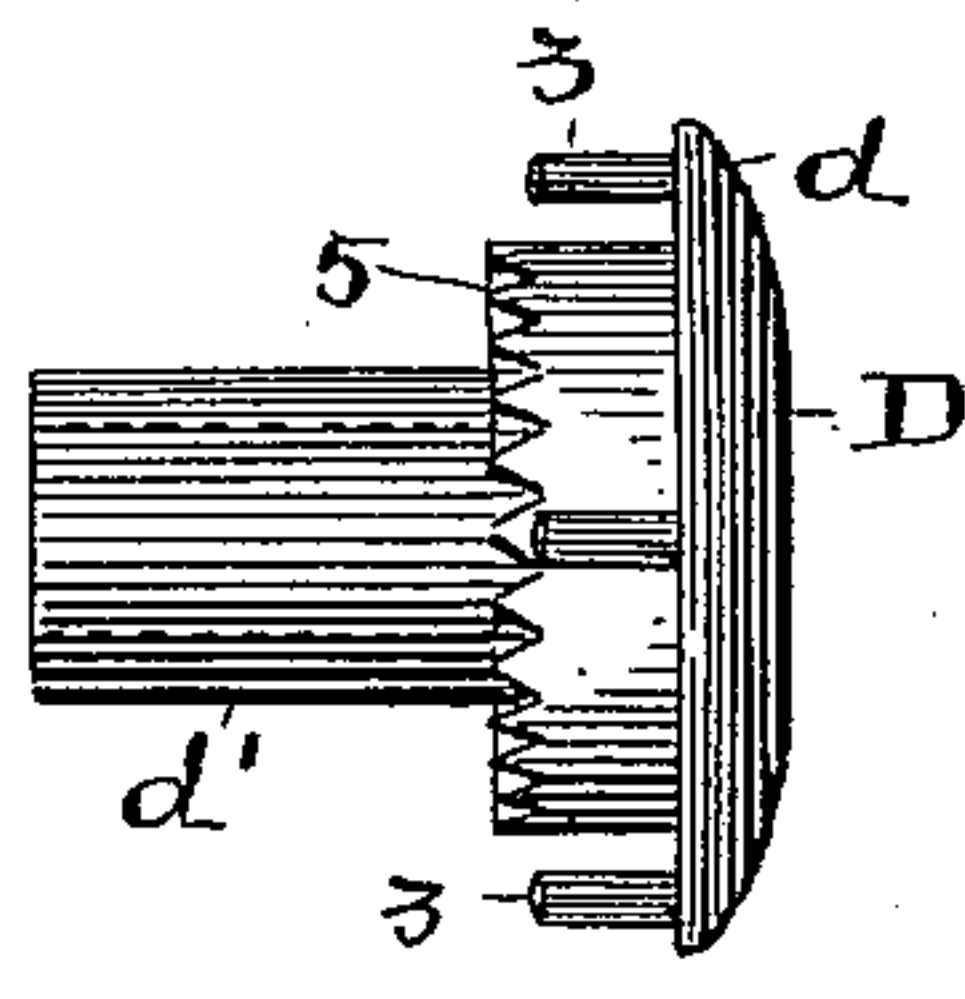
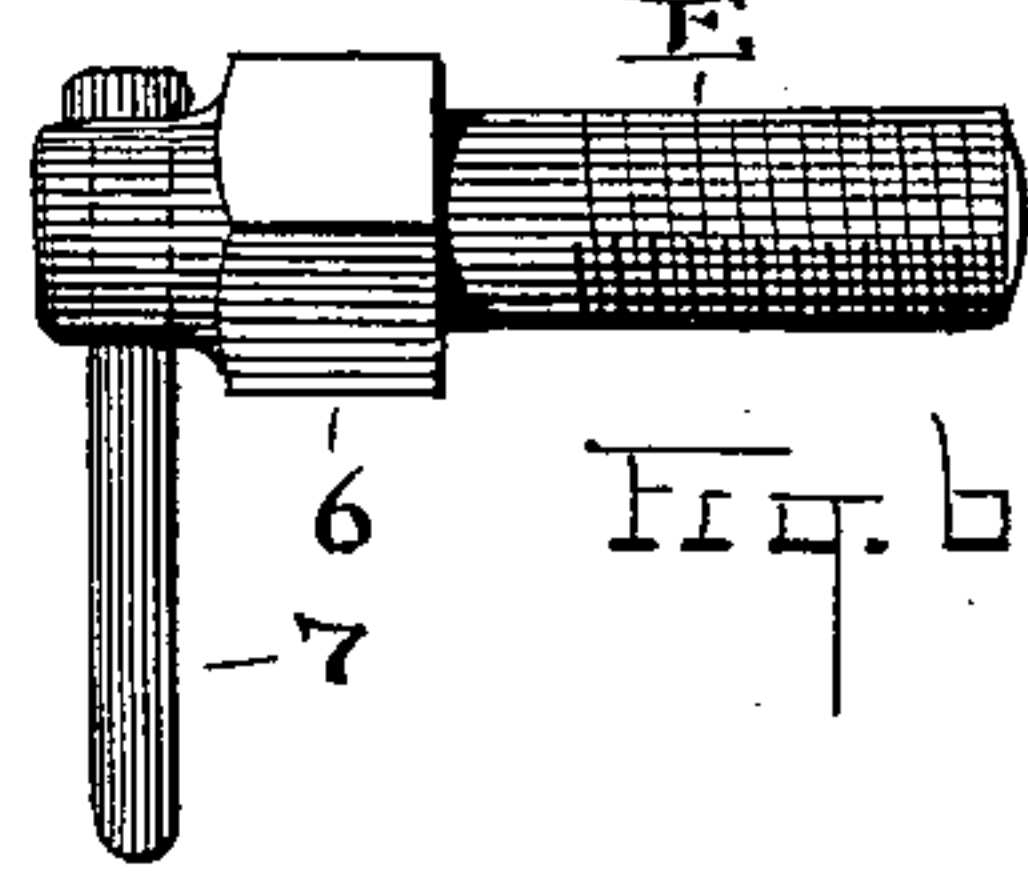


Fig. 6.



ATTEST

T. J. Moser
J. M. Mellin

INVENTOR.

EDWARD PHIPPS.

By *W. J. Fisher*
ATTY

UNITED STATES PATENT OFFICE.

EDWARD PHIPPS, OF GLENVILLE, OHIO.

HANDLE-BAR FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 639,765, dated December 26, 1899.

Application filed May 3, 1899. Serial No. 715,425. (No model.)

To all whom it may concern:

Be it known that I, EDWARD PHIPPS, a citizen of the United States, residing at Glenville, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Handle-Bars for Bicycles; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to handle-bars for bicycles; and the invention consists in the construction and combination of parts substantially as shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a handle-bar containing my improvement. Fig. 2 is an enlarged sectional elevation on the line of the axis of the stem and transverse of the handles on the axis of the screw that binds them together. Fig. 3 is a face view of one of the inner ends of a handle-bar, both being alike. Figs. 4 and 5 show edge elevations of the caps by which the handles are locked, and Fig. 6 is a detail of the screw for drawing and binding all the parts together.

The object of the invention, as thus shown, is to afford facility for easy and rapid adjustment of the handle-bars when change is wanted, as well as means to positively lock said bars in adjusted position, making them as firm as if they were part of a rigid structure.

A represents the tubular stem, adapted to be attached to the usual post of the bicycle and provided with a head *a* of its own having opposite circular openings and other features of construction, as will hereinafter appear.

B and B represent the two handle-bars, provided each with a radially-serrated inner face portion *b*, the serrations being disposed about a central opening *b'*, through which the tightening parts are inserted.

It will be noticed that the head *a* of the stem A is not only provided with transverse openings for the two securing-caps C and D, but it is split at right angles to said openings, so as to form practically a divided or bifurcated head with two opposite jaws or sides, between which the heads of the handle-bars

are clamped and firmly engaged. These jaws or sides for convenience are also designated *a*, constituting, as they do, the head *a* of the stem. Each jaw or side of head *a* is formed with one or more sockets 2, preferably of varying diameters and adapted to receive pins 3 on the caps C and D, and spiral springs 4 about said caps occupying the larger diameters of said sockets 2, the said springs being arranged about the pins 3. These pins are on the flanges *c* and *d*, respectively, of the caps C and D, while the bodies of said caps enter the side openings in the jaws *a* and are provided with radial serrations 5 corresponding to the similar serrations *b* on the handle-bars and adapted to lock therewith. The cap D has an internally-threaded tubular spindle *d'*, and the cap C is partially socketed on its inner side to afford room for the extremity of the spindle to enter therein, thus, in effect, sleeving the cap C in part on said spindle and leaving room for back-and-forth play therein as the parts are tightened up or loosened. The spindle *d'* constitutes a bearing or support for the handle-bars.

E is the tightening-screw, which enters through cap C and engages in spindle *d'* and has a head 6 with an eye for the lever 7 to rotate the screw and draw all the parts together in closely-clamped and operative relation. The lever 7 is after the manner of the ordinary vise and is used so as to always have the means in position for unlocking or locking the parts rather than depend on a wrench, which is so apt to be missing when needed. Of course a wrench may be applied to head 6, if desired.

In operation, with all the parts assembled as in Figs. 1 and 2, the pins 5 prevent the rotation of caps C and D, but leave said caps free to be pressed outward from the heads of the handle-bars by means of springs 4 when the screw E is loosened, thus enabling the handle-bars to be set at any desired elevation. Then as the screw is again tightened up it compresses the springs and throws the serrations or teeth on the handle-bars and caps into locking position and clamps the said bars firmly between the caps and the jaws *a* of the stem A. The said head has shoulders 8 on each side, against which the flanges *c* and *d* bear when they are in full clamping position.

The opposing sides of the heads of the handle-bars are perfectly flat and smooth, so as to rest snugly against each other.

By "serrations" I mean any teeth or projections that interlock and prevent rotation as serrations do.

What I claim is—

1. The handle-bars having outer serrations on their inner ends, the stem having jaws embracing the serrated ends of said bars, caps seated from the outside in and against said jaws and having serrations engaging the handle-bars and flanges locked on the jaws to prevent rotation, one of said caps having a tubular stem forming the support of the handle-bars and a locking-screw entering said

stem from the opposite side and having a head bearing against the jaw, substantially as described.

2. The stem and the handle-bars therein having serrations exposed in the head, in combination with inner serrated caps to engage the handle-bars, pins to lock said caps against rotation, and springs to press the caps outward, and a tightening-screw, substantially as described.

Witness my hand to the foregoing specification this 20th day of April, 1899.

EDWARD PHIPPS.

Witnesses:

H. T. FISHER,
R. B. MOSER.