

No. 627,163.

Patented June 20, 1899.

A. W. WATERS.
HANDLE BAR FOR CYCLES.

(Application filed Nov. 8, 1897.)

(No Model.)

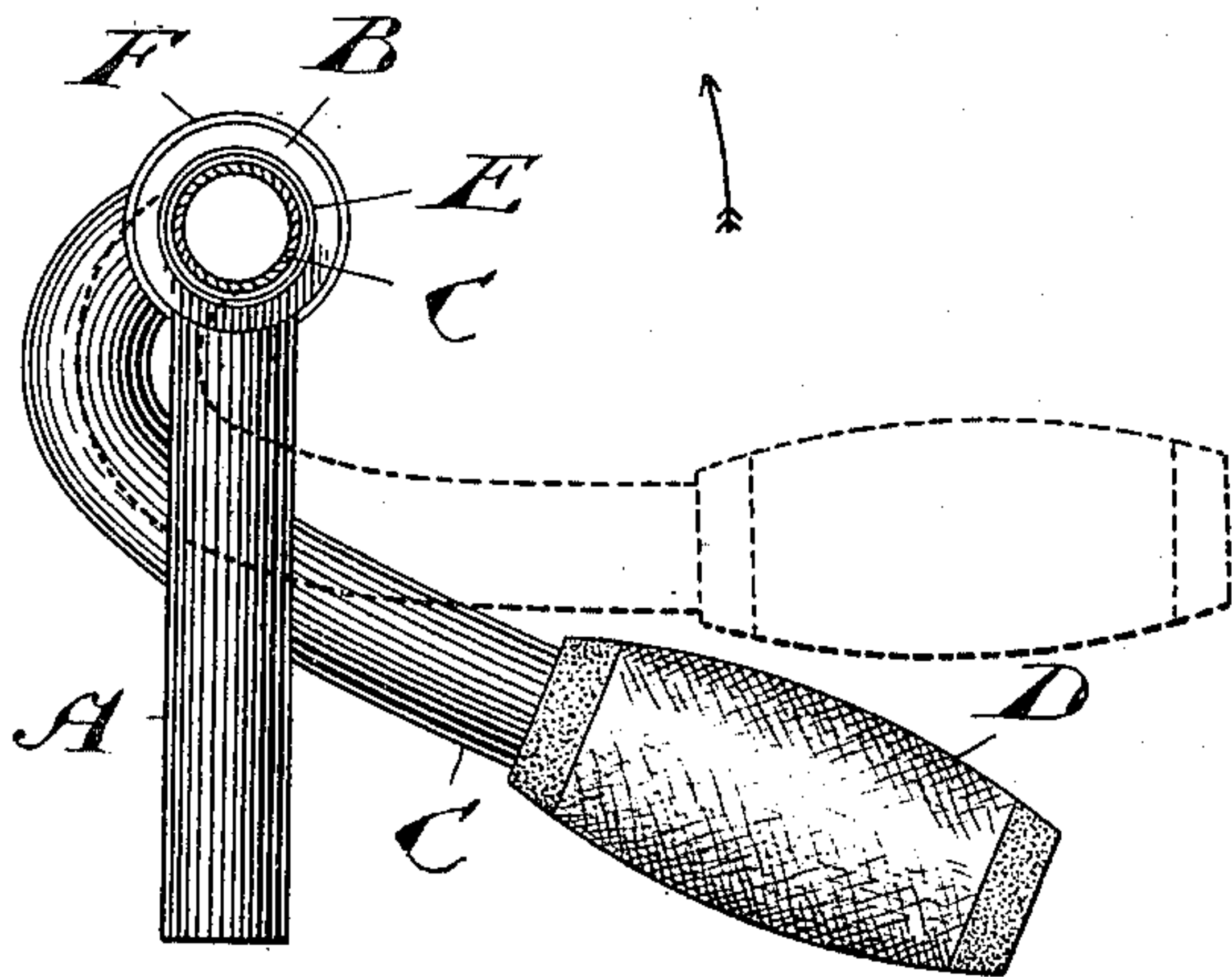
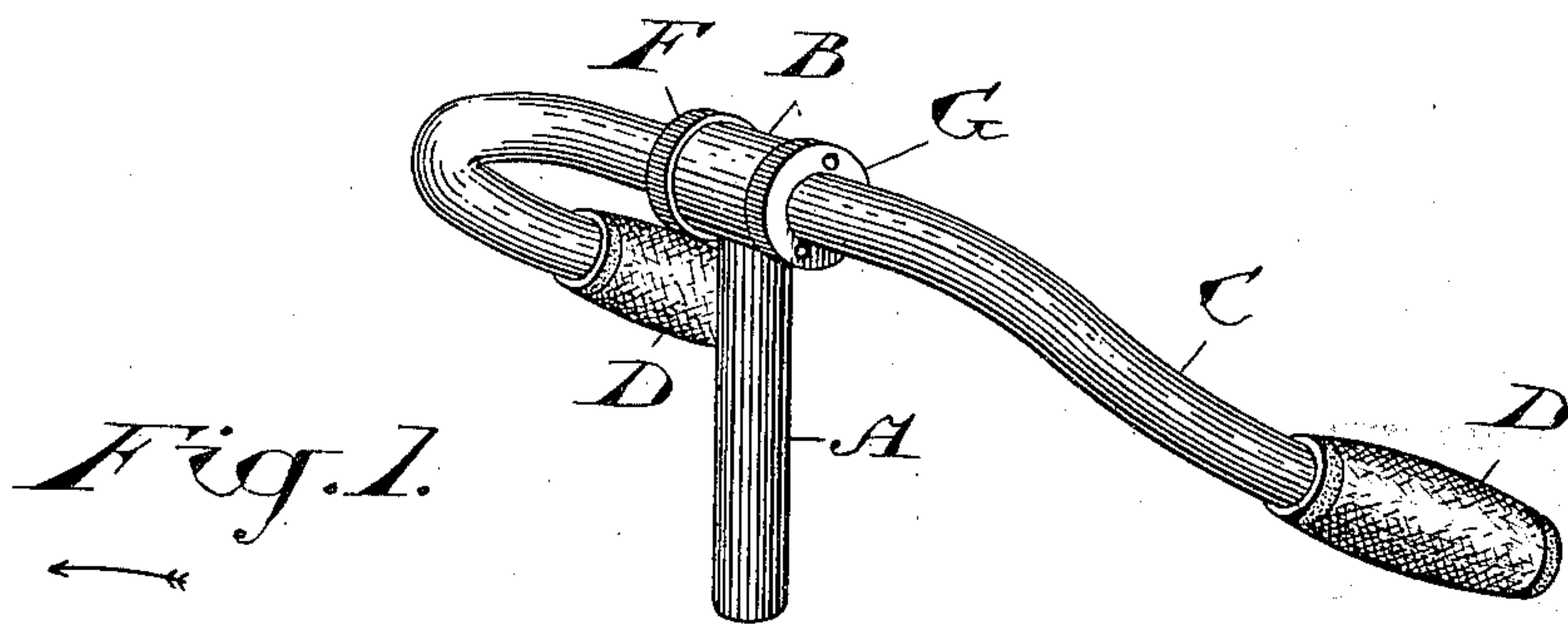


Fig. 2.

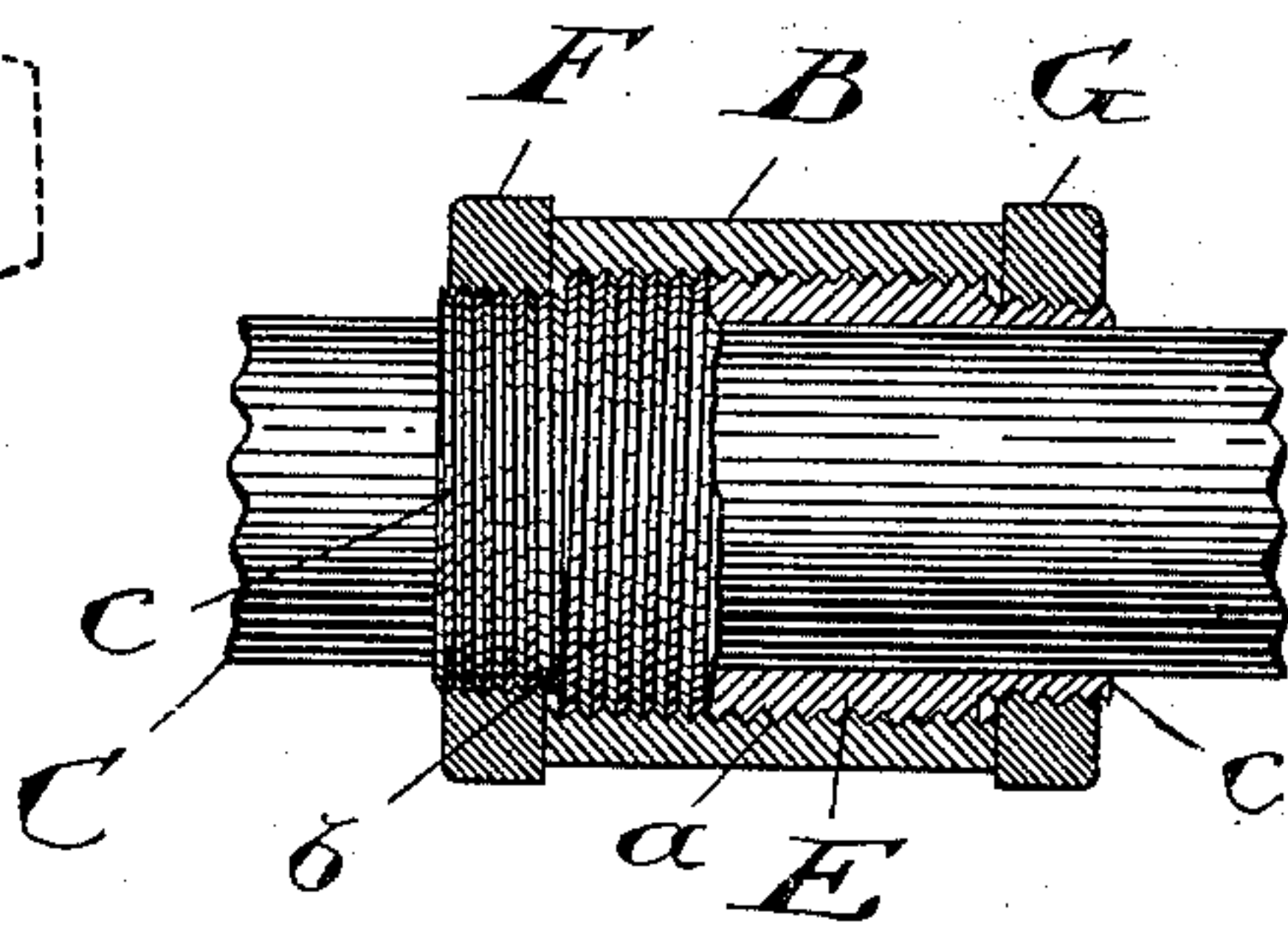


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

ALFRED WILLIAM WATERS, OF TORONTO, CANADA, ASSIGNOR OF ONE-HALF
TO LAMBERT V. DUSSEAU, OF SAME PLACE.

HANDLE-BAR FOR CYCLES.

SPECIFICATION forming part of Letters Patent No. 627,163, dated June 20, 1899.

Application filed November 8, 1897. Serial No. 657,846. (No model.)

To all whom it may concern:

Be it known that I, ALFRED WILLIAM WATERS, superintendent, of the city of Toronto, in the county of York and Province of Ontario, Canada, have invented a certain new and Improved Handle-Bar for Cycles, of which the following is a specification.

The object of my invention is to devise a handle-bar which while very neat in appearance may be easily and quickly adjusted to give the grips any desired position with regard to the handle-bar stem; and it consists, essentially, in forming a threaded sleeve at the upper end of the handle-bar stem and in connecting to the center of the handle-bar a threaded sleeve adapted to be screwed through the sleeve on the handle-bar stem, locking-nuts being screwed upon the ends of the sleeve on the handle-bar, which are of less diameter than the middle portion and differently threaded, substantially as hereinafter more particularly described, and then definitely claimed.

Figure 1 is a perspective view of my improved handle-bar. Fig. 2 is a side elevation of the same, partly in section and on a somewhat larger scale. Fig. 3 is a longitudinal sectional elevation of the clamp of full size.

In the drawings like letters of reference indicate corresponding parts in the different figures.

A is the handle-bar stem, and B a sleeve formed on or secured to its upper end. This sleeve has a screw-thread *a* cut therein.

C is the handle-bar, provided with the grips D. To the center of the handle-bar is connected a sleeve E, comprising the middle portion *b* and the ends *c*, of less diameter than the middle. The middle portion *b* of the sleeve has preferably a left-hand thread cut thereon, and the ends *c* right-hand threads of similar or different pitch. Upon the ends *c* of the sleeve E are screwed locking-nuts F and G, which are provided with milled edges to afford a grip to the fingers or, if desired, with holes for a spanner, as indicated in Fig. 1.

When the handle-bar is in use, the sleeve E is screwed through the sleeve B and the nuts F and G tightened. If it be desired to

set the handle-bar to any desired position, both the nuts F and G are loosened and the handle-bar placed in a position a few inches above that it is desired to occupy when in use, as indicated in Fig. 2. The nut F is then tightened up by hand and the handle-bar firmly pushed down to the position it is to occupy when in use, as shown in full lines in Fig. 2. The nut F and the end of the sleeve E are then so securely jammed together that the handle-bar cannot be raised by any upward pressure put upon it while riding. As an additional precaution, however, the nut G is tightened up by hand after the handle-bar has been adjusted. The handle-bar is so curved that it can be used as a drop-bar, as shown in the drawings, or turned right over in the direction indicated by arrow in Fig. 2. When the handle-bar is so turned, the nut G becomes the locking-nut and the nut F the safety-nut.

I describe the middle of the sleeve as being formed with a left-hand thread and the ends with a right-hand thread; but this of course might be reversed or even two similar threads of different pitch used, provided it be so arranged that the forcing downward of the handle-bar after the nut has been set will jam the two together.

From the above description it will be seen that I have devised a very neat and simple handle-bar adjustment, by means of which the handle-bar may be quickly and securely set with the grips in any desired position in relation to the handle-bar stem.

What I claim as my invention is—

1. A handle-bar for bicycles and like vehicles having a threaded hub at its middle, a stem threaded to engage said hub, inversely-threaded portions next to said hub at each side thereof, and means engaging said inversely-threaded portions and coacting with said stem, substantially as described.

2. In a cycle, a handle-bar stem and a screw-threaded sleeve secured to its upper end, in combination with a handle-bar made in one piece and having a screw-threaded sleeve connected to its center, one end of which is of less diameter than and threaded differently from the middle; and a nut screwed upon the

said end, substantially as and for the purpose specified.

3. In a cycle, the handle-bar stem A, and the sleeve B secured thereto and having a
5 left-hand thread *a* cut therein, in combination with the handle-bar C; the sleeve E, secured thereon comprising the left-hand threaded middle portions *b* and the right-

hand threaded ends *c*; and the nuts F and G screwed upon the said ends, substantially as 10 and for the purpose specified.

Toronto, Canada, October 25, 1897.

ALFRED WILLIAM WATERS.

In presence of—

JOHN G. RIDOUT,

A. M. NEFF.