

(No Model.)

F. L. LYMBURNER.
HANDLE FOR BICYCLES.

No. 466,500.

Patented Jan. 5, 1892.

Fig. 1.

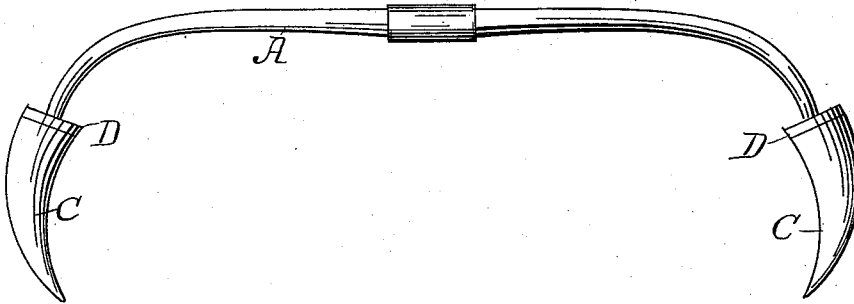
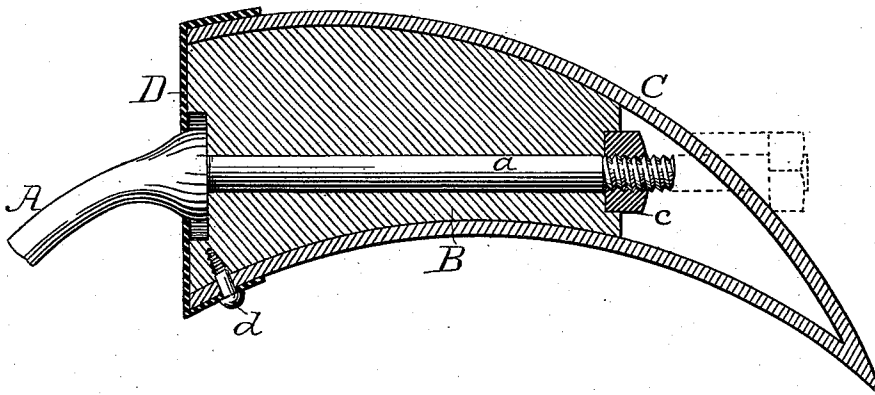


Fig. 2.



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HANDLE FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 466,500, dated January 5, 1892.

Application filed July 14, 1891. Serial No. 399,445. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND L. LYMBURNER, of Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Handles for Bicycles and other Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Heretofore handles for the cranks of machines or the handle-bars of bicycles have been made so as to be greatest in diameter at about their centers of length and gradually become less in circumference as they approach their ends. These handles are suitable for the grasp of persons having hands of given proportions, but for persons whose hands are larger or smaller than that for which the said handle is intended the grasp is neither as strong nor as conformable to the shape of the hand as it should be.

The object of my invention is to provide a handle which is of such shape that a large-handed person can obtain just as good a grasp as a small-handed person, and which can be almost, if not entirely encircled, by the smaller fingers of the hand as well as the larger, substantially as hereinafter fully described, and as illustrated in the drawings, in which—

Figure 1 is a plan view of the handle-bars of a bicycle having my improved handles thereon; and Fig. 2 is a longitudinal central section through my improved handles, showing the preferred manner of securing them in place.

Referring to the drawings, A represents the handle-bars of a bicycle, and *a* represents a spindle of less diameter extending in alignment therewith from the extremity of said handle-bars.

B represents a block, which has a suitable longitudinal opening therethrough, in order that it may be slipped upon the spindle *a* of the handle-bars, and it is secured in place upon this spindle by a suitable nut *c*, screwed onto the screw-threaded end of the spindle. If desired, the end of the handle-bars A may be slightly increased in diameter so as to increase the surface of the shoulder, against which the end of the block B will bear when the nut *c* is suitably tightened. The outer contour of the block B is such as to conform

to the curvature of the inner circumference of the horn-shaped shell handle C fitted over this block. This horn-shaped handle C is greatest in diameter at its inner end and gradually decreases in diameter until it terminates in a more or less sharp point at its outer end. It may be made of natural horn or of any artificial material desired, and may be curved, as shown in the drawings, or of such a shape that a straight line drawn through its center would intersect the center of its ends. I secure this horn handle to the block by means of a ferrule D, which is secured to the inner end of the block B, and has its circumferential edges flanged over the contiguous edges of the horn handle, to which it is secured by means of the lateral screws *d*.

If desired, the horn-shaped handle may be cemented to the block B, or it may be entirely void of any medium for connecting it thereto otherwise than the screw *d*, which passes through the flanges of ferrule D, through the horn of the handle, and into the block B, as shown. If desired, the spindle *a* of the handle-bars may extend clear through a suitable opening in the handle in longitudinal alignment therewith instead of terminating on the inside thereof, and have a nut on the outer end thereof for securing said handle in place. In this latter event, however, I would prefer to put a suitably-shaped washer between the nut and the surface of the horn-shaped handle, as shown in dotted lines in Fig. 2. Of course it will be understood that, instead of the handle-bars A, the crank of the machine might be substituted therefor.

The construction and effect of my improved handles would be substantially the same when applied to machines as when applied to bicycles, although for the latter purpose they are preferable in every way, affording, as they do, a suitable hand-grasp and the most natural one for hands of all sizes, besides being very ornamental.

What I claim as new is—

1. The combination, with the handle-bars of a bicycle, of a horn-shaped handle secured to and forming a continuation of the ends thereof, said handles being greatest in diameter at its inner end and gradually approaching a less diameter at its outer end.

2. The combination, with the handle-bars of

a bicycle, the outer ends of which are curved to the rear, of a horn-shaped handle which is secured to the ends of said handle-bars, is curved so that its center forms a continuation
5 of the curve of the ends of the said handle-bars, and is greatest in diameter at its inner end and gradually approaches a much less diameter at its outer end, as set forth.

3. The combination, with the handle-bars of

a bicycle, having a spindle extending from 10 their ends, of a block B, a horn-shaped handle secured over the same, a nut c, and a ferrule D, as and for the purpose specified.

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