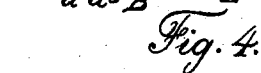
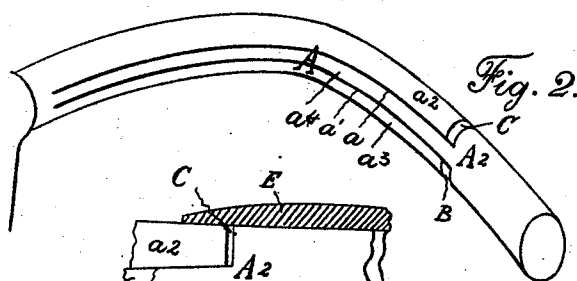
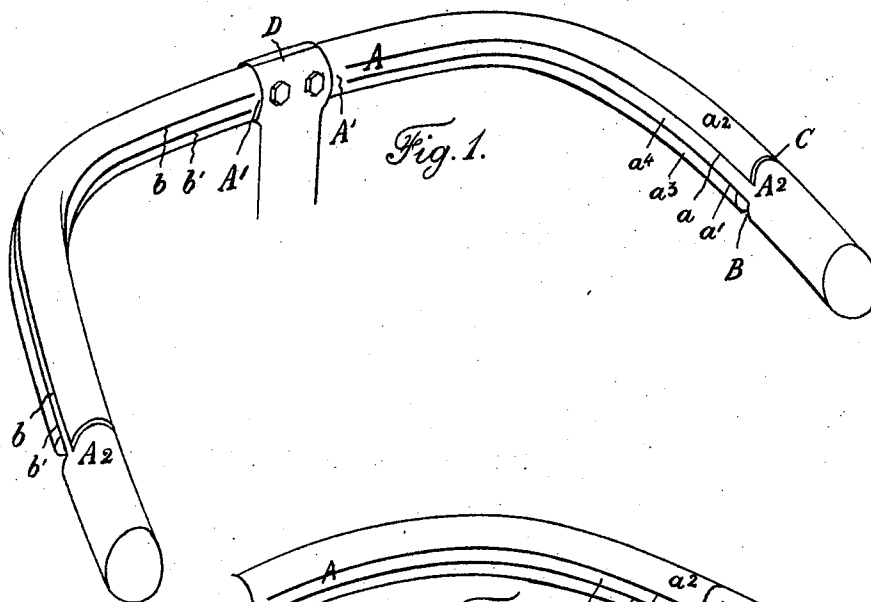


(No Model.)

J. F. O'BRIEN.
BICYCLE HANDLE BAR.

No. 581,301.

Patented Apr. 27, 1897.



Witnesses:
Chas. Bauer.
John B. Bell.

Inventor:
John Francis O'Brien
by Wm. Wilson Thom
Attorney.

UNITED STATES PATENT OFFICE.

JOHN F. O'BRIEN, OF BRIGHTON, ENGLAND.

BICYCLE HANDLE-BAR.

SPECIFICATION forming part of Letters Patent No. 581,301, dated April 27, 1897.

Application filed July 6, 1896. Serial No. 598,489. (No model.)

To all whom it may concern:

Be it known that I, JOHN FRANCIS O'BRIEN, a subject of the Queen of Great Britain and Ireland, residing at 61 Montpelier Road, Brighton, in the county of Sussex, England, have invented certain new and useful Improvements in and Relating to Handle-Bars for Velocipedes, of which the following is a specification.

This invention relates to improvements in and relating to handle-bars for velocipedes; and my invention consists in a handle-bar constructed substantially as hereinafter described.

In order that my invention may be readily understood, reference is made to the accompanying drawings, wherein like letters of reference indicate corresponding parts throughout the several figures, and in which—

Figure 1 shows my improved handle-bar in perspective view, the handle or gripping part being removed to enable the parts of the handle-bar being seen. Figs. 2 and 3 show a portion of my improved handle-bar when pressed down and pulled upward, respectively, as hereinafter referred to.

In carrying my invention into practice I employ a piece of sufficiently elastic material A, such as wood, which I bend or form into a handle-bar of suitable shape—say about as shown. I next slit or cut said handle-bar, as shown at $a' b b'$, said slits extending from within a suitable distance of the middle portion A' to within a short distance of each end A² of said handle-bar. I next cut out portions B and C, whereby a sufficient amount of sliding movement will be permitted between the top and bottom portions $a^2 a^3$, respectively, and the center portions a^4 when my improved handle-bar is bent either upward or downward. By reason of said slits $a' b b'$ my improved handle-bar is rendered more elastic than if it were left solid. Consequently any vibration which is communicated to the handle-bar is prevented from being transmitted to the arms of the person riding, said vibration being taken up by the elasticity of the handle-bar.

I prefer to cut out comparatively large portions B on the under side of my improved handle-bar, so that said handle-bar may be bent

to almost any desired extent in a downward direction, as shown in Fig. 2.

As it is necessary, say in riding uphill, to "pull against" the handle-bar and as the extent to which the handle-bar should be capable of being bent in an upward direction should be limited, I prefer to cut out only comparatively small portions C on the upper side of my improved handle-bar, so that in pulling upward the free end of the part a^2 almost immediately comes in contact with the solid end portion A² of my improved handle-bar, which said end portions act as stops and prevent any further sliding motion of the parts a^2 or the parts a^4 , thereby rendering the two parts a^2 and a^4 together almost as rigid as if they were solid.

I prefer to make the portion a^2 of my improved handle-bar much stronger and stiffer than the portion a^3 , as the greater amount of elasticity is required in a downward direction, and I prefer to provide the ends of my improved handle-bar with suitable handles, preferably covering or surrounding the portions C B.

I wish it to be understood that I do not confine myself to any particular shape, sectional or otherwise, of my improved handle-bar, and that said handle-bar may be fixed or held in position by means of a clip or equivalent D, or any other well-known means may be employed, and the material of which my improved handle-bar is made may be any which is found in practice to be most suitable.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. A handle-bar for velocipedes consisting of a suitably-bent bar having a solid middle portion A' and solid end portions A² the parts between said middle and end portions being slit as at $a' b b'$ all for the purposes and substantially as described and illustrated.

2. A handle-bar for velocipedes consisting of a suitably-bent bar having a solid middle portion A' and solid end portions A² the parts between the middle and end portions being slit as at a, a', b, b' comparatively large portions B and comparatively small portions C

being respectively cut from the lower and
upper parts of said handle-bar the end por-
tions A^2 being thereby formed with shoulders
to be engaged by the ends of the upper and
5 lower portions a^2 and a^3 respectively in limit-
ing the movement of the handle all for the pur-
poses and substantially as set forth.

In witness whereof I have hereunto set my
hand in presence of two witnesses.

J. F. O'BRIEN.

Witnesses:

W. WILSON HORN,
PERCY E. MATTOCKS.