

No. 675,927.

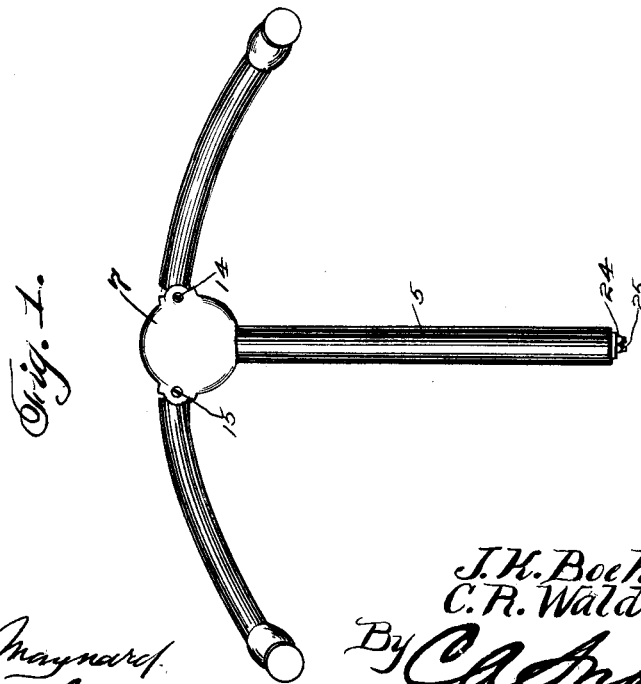
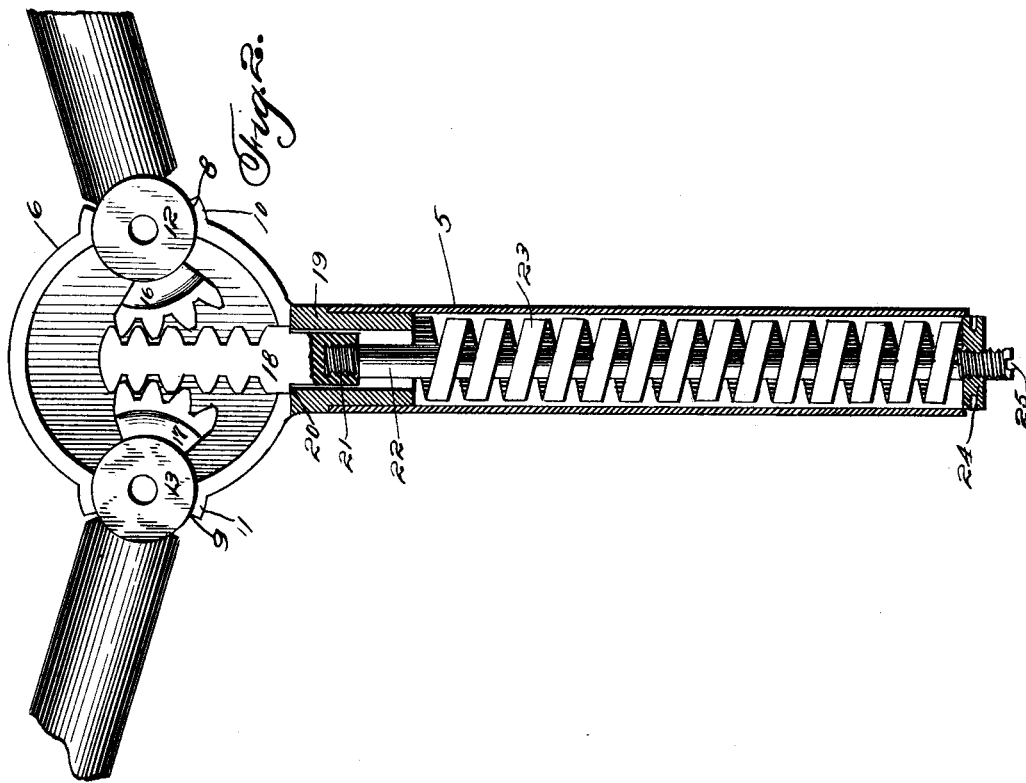
Patented June 11, 1901.

J. K. BOEHM & C. R. WALDRON.

BICYCLE HANDLE.

(Application filed Mar. 6, 1901.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN K. BOEHM AND CHARLES R. WALDRON, OF CEYLON, OHIO.

## BICYCLE-HANDLE.

SPECIFICATION forming part of Letters Patent No. 675,927, dated June 11, 1901.

Application filed March 6, 1901. Serial No. 50,098. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN K. BOEHM and CHARLES R. WALDRON, citizens of the United States, residing at Ceylon, in the county of Erie and State of Ohio, have invented a new and useful Bicycle-Handle, of which the following is a specification.

This invention relates to handle-bars for bicycles; and it has for its object to provide a handle-bar wherein there will be two members pivotally mounted for movement in a vertical plane and means for holding said members against pivotal movement, whereby there will be produced an elastic or yieldable bar and one which will absorb vibrations instead of transmitting them to the arms of the rider, as is the case of a rigid bar.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in both views, Figure 1 is an elevation showing the complete bar. Fig. 2 is a vertical section through the stem of the bar in the plane of pivotal movement of the bar-sections and showing the means for holding the sections yieldably against movement and for adjusting the tension of the holding means.

Referring now to the drawings, the present handle-bar includes a tubular stem 5, having an annular hollow head 6 in the form of a casing and provided with a removable cover-plate 7, and openings 8 and 9 are formed through the side walls of this casing. At the sides of the openings 8 and 9 are arcuate flanges 10 and 11, and between these flanges are seated the annular bearing portions 12 and 13 at the inner ends of the handle-bar sections, these portions 12 and 13 having perforations therein to receive the pivot-screws 14 and 15, upon which the handle-bar sections are mounted. The pivot-screws engage threaded perforations in the end of the casing, and they also serve to hold the cover-plate 7 in place upon the casing.

At the inner ends of the handle-bar sections are segmental gears 16 and 17, and these gears engage a rack-bar 18, the lower end of which is reduced and enters the tubular extension 19 of the head, which is secured within and forms the means for attachment of the head to the tubular stem of the handle-

bar. The reduction of the lower end of the rack-bar results in the formation of a shoulder 20, and this shoulder when it strikes the edge of the tubular extension 19 limits the downward movement of the rack-bar, while the upward movement of said bar is limited by engagement of the upper end thereof with the upper side of the casing.

The lower reduced end of the rack-bar is provided with a threaded socket 21, and in this socket is engaged the threaded end of a rod 22, which projects downwardly and out through the lower end of the stem 5, and on this rod is disposed a helical spring 23, which bears at its upper end against the lower end of the extension 19, while at its lower end it bears against an adjusting-nut 24, having threaded engagement with the rod. When this adjusting-nut is moved in one direction, it compresses the spring and when moved in an opposite direction it releases the spring and reduces the tension thereof, as will be readily understood.

To facilitate application and removal of the rod 22, the lower end thereof is provided with a transverse slot 25 to receive a screw-driver, and in order that the nut may run freely in the stem 5, and for a guide, said nut is annular and has radial recesses in its periphery to receive a spanner.

With this construction it will be seen that as the grips are pressed downwardly by the weight of the rider the inner ends of the handle-bar sections will be raised, and they will in turn raise the rack-bar to increase the tension of the spring, and when the pressure upon the grips is decreased the spring will expand and will raise the grips, the handle-bar being thus yieldable. The adjusting-nut permits of adapting the device to different weights of riders.

What is claimed is—

1. A handle-bar comprising a stem having a head, a rack-bar slidably disposed in the head, handle-bar sections pivoted in the head and having gears engaged with the rack-bar, and means for holding said rack-bar yieldably against movement under the influence of downward movement of the free ends of the handle-bar sections.

2. A handle-bar comprising a tubular stem,

a hollow head having a tubular extension engaged in the stem, a rack-bar slidably disposed in the extension of the head and having a stop-shoulder for engagement with the  
5 edge thereof, a rod engaged with the rack-bar and extending through the stem and provided with an adjusting-nut, a helical spring upon the rod and bearing with its ends against the nut and the end of the extension, respectively, and handle-bar sections pivoted

in the head and having gears at their inner ends engaged with the rack-bar.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

JOHN K. BOEHM.

CHARLES R. WALDRON.

Witnesses:

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