

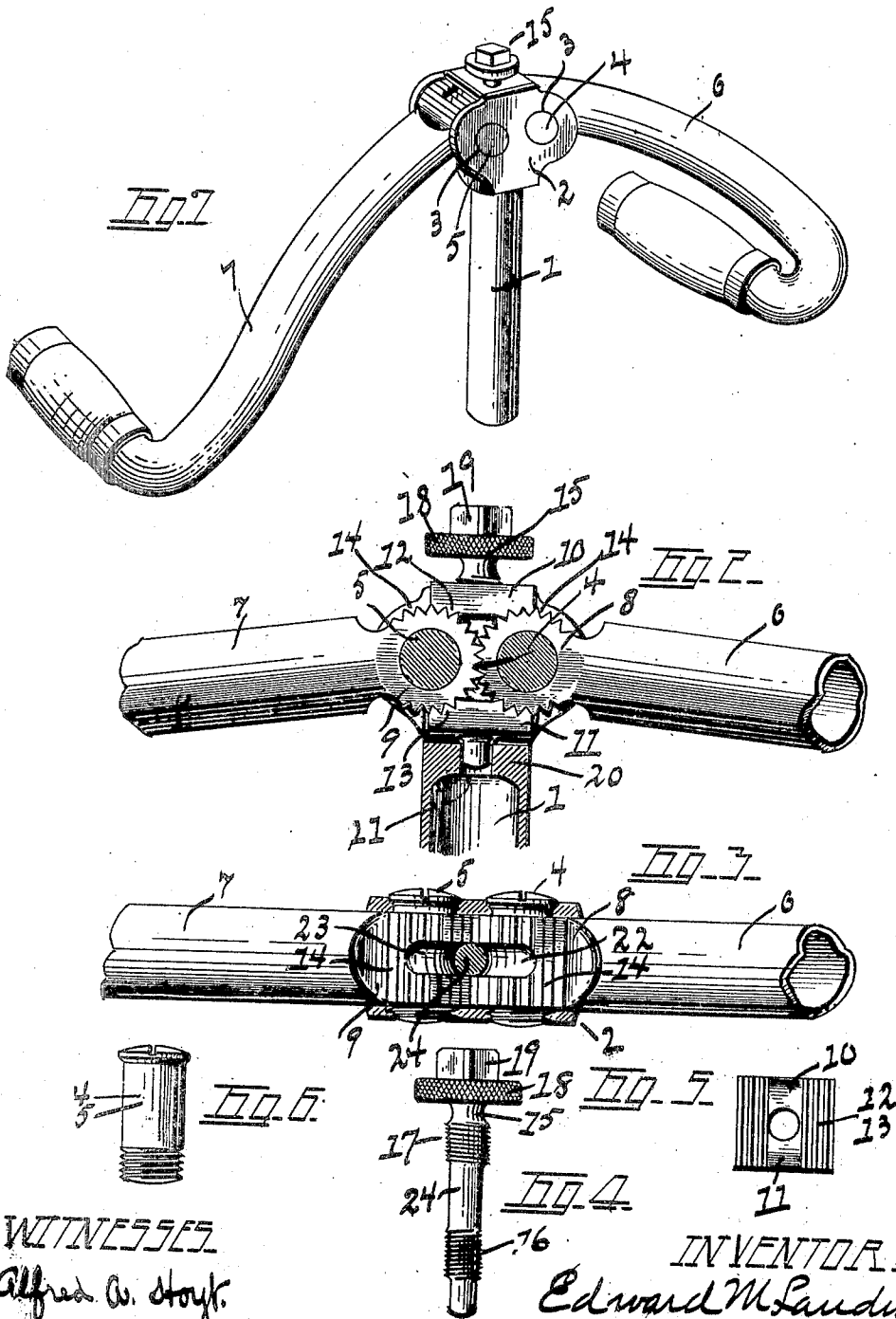
No. 657,290.

Patented Sept. 4, 1900.

E. M. LANDIS.
ADJUSTABLE HANDLE BAR.

(Application filed Mar. 18, 1899.)

(No Model.)



WITNESSES

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UNITED STATES PATENT OFFICE.

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ADJUSTABLE HANDLE-BAR.

SPECIFICATION forming part of Letters Patent No. 657,290, dated September 4, 1900.

Application filed March 18, 1899. Serial No. 709,627. (No model.)

To all whom it may concern:

Be it known that I, EDWARD M. LANDIS, of Toledo, county of Lucas, and State of Ohio, have invented certain new and useful Improvements in Adjustable Handle-Bars; and I do hereby 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form part of this specification.

My invention has reference to an adjustable handle-bar for bicycles or other vehicles, and has for its object to provide an improved and novel construction for locking the bar-sections against rotation.

My invention is designed to be employed in that class of bars in which the ends of the bar-sections are formed with intermeshing teeth where there is a simultaneous movement of both bar-sections, the movement of one bar operating the other.

A further object of my invention is to so dispose the parts thereof that the symmetry of the bar will be maintained, permitting the use of the well-known form of the ordinary drop bar.

With these objects in view I employ the parts and combination of parts hereinafter shown, described, and claimed.

In the drawings, Figure 1 is a perspective view of my bar having therein the improved locking device. Fig. 2 is an enlarged view, a portion of the bar being cut away to disclose the locking device, the ends of the bar-sections, the locking-dogs, and the screw-threaded stem being shown in full lines. Fig. 3 is a plan view to show the relative position of the intermeshing ends of the bar-sections, also showing the bolts upon which the bar-sections hinge and the grooves on the ends of the sections for the reception of the screw-threaded locking-stem. Fig. 4 is an elevation of the locking-stem, showing the right and left hand threads thereon, also showing the knurl and square head on the end thereof. Fig. 5 is a plan view of one of the dogs, showing the parallel sections thereon. Fig. 6 is an elevation of one of the bolts upon which the bar-sections hinge.

1 is a handle-bar post adapted to be inserted in the bicycle-fork stem

2 is a forked member on the end of the stem 1, having apertures 3 for the reception of bolts 4 and 5, respectively, upon which hinge handle-bar sections 6 and 7, the ends of the sections being formed with intermeshing-gear members 8 and 9.

10 and 11, respectively, are dogs having on one of their sides at 12 and 13 teeth or serrations corresponding to the teeth 14 of the gear members 8 and 9.

15 is a screw-threaded locking-stem having thereon a right-hand thread 16 to engage the correspondingly-threaded dog 11 and a left-hand thread 17 to engage the interiorly-threaded dog 10.

18 is a knurl on the end of stem 15, surmounted by a square head 19 for the reception of a wrench. The thread 16 is made of a diameter to permit of its passage through the opening in dog 10. The handle-bar post is formed solid at 20 to serve as a rest for the lower dog 11 and is bored out at 21 to form a guide for the lower end of the screw-threaded locking-stem 15. The gear members 8 and 9 are grooved out at 22 and 23, respectively, so that when assembled a passage-way and guide will be formed for the portion 24 of the screw-stem 15.

In operation the parts are properly assembled, as shown in Fig. 2. The locking-stem is given a left-hand rotation, causing the dogs thereon to recede from the gear members 8 and 9. The handle-bar sections are then adjusted to the desired position, and the locking given a right-hand rotation, causing the dogs to engage the gear members and hold them rigidly in position. It will be seen by observing Fig. 2 that the dogs practically couple the bars together. The sections can even be removed from the forked member 2 by withdrawing bolts 4 and 5 and still be held rigidly together. It will be seen from this description that I have provided an effective means for locking the bars against rotation. The essential feature of invention is that there be a positive movement of the dogs, the one toward the other, to engage the gear members.

It is evident that I may dispense with the screw-threaded locking-stem 15 entirely and

employ instead a locking-stem screw-threaded on the lower end thereof to engage the lower dog and having a cam-lever on the upper end thereof to engage the upper side of dog 10, said dog being formed with an opening to permit the free passage of the stem therethrough.

What I claim is—

1. In an adjustable handle-bar for bicycles or other vehicles, handle-bar sections having intermeshing members on the adjacent ends thereof, bolts passing through said members and serving as hinges therefor, a handle-bar post, having a forked end to receive said intermeshing members and in which are rigidly secured said bolts; dogs engaging said members, a right and left hand threaded screw-stem to bring said dogs in engagement with said members, and grooves on said members, acting as a guide to said screw-threaded stem, substantially as shown and described.
2. In an adjustable bicycle handle-bar, the stem bifurcated at its upper end, a pair of

bolts secured therein in parallel relation, the handle-bar sections pivoted upon said bolts and provided upon their adjacent ends with intermeshing teeth and alined grooves, an upper and a lower locking-dog, provided with serrations adapted to engage the teeth of the handle-bar sections, a locking-stem, provided with a left-hand thread of large diameter and a right-hand thread of smaller diameter adapted to enter interiorly-threaded perforations in the dogs, so as to bring them into locking engagement with the handle-bar sections, said stem being located in the opening formed by the alined grooves, substantially as shown and described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

EDWARD M. LANDIS.

Witnesses:

BERTRAND G. JUDGE,
JACOB B. LANDIS.