No. 608,566. Patented Aug. 9, 1898.

E. ANDERSON.

BICYCLE HANDLE.

(Application filed Dec. 23, 1896.)

(No Model.)

Fig. 1.

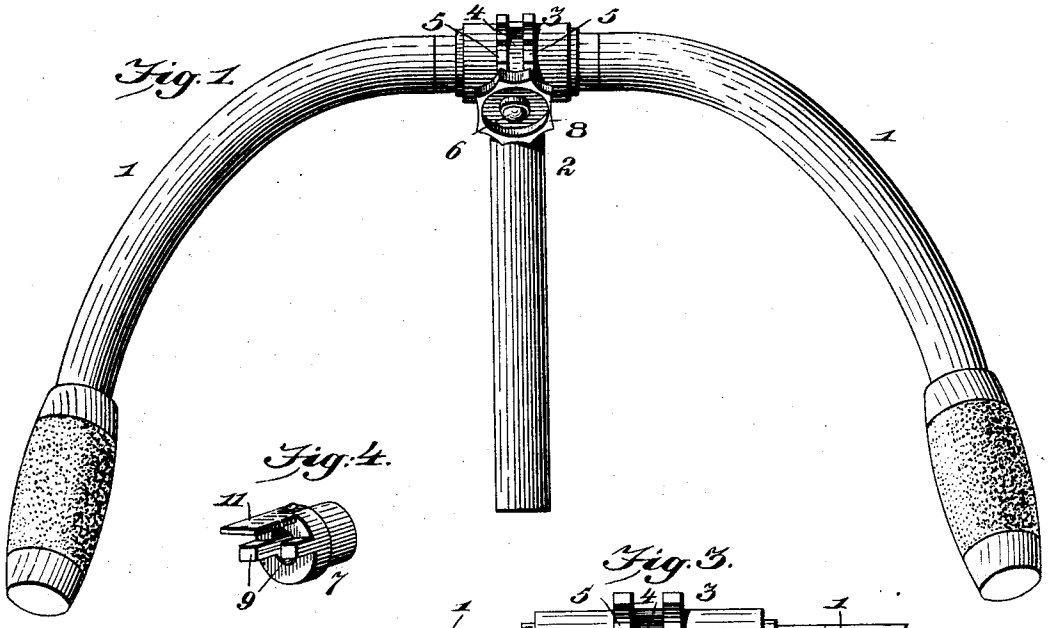


Fig. 4.

Fig. 3.

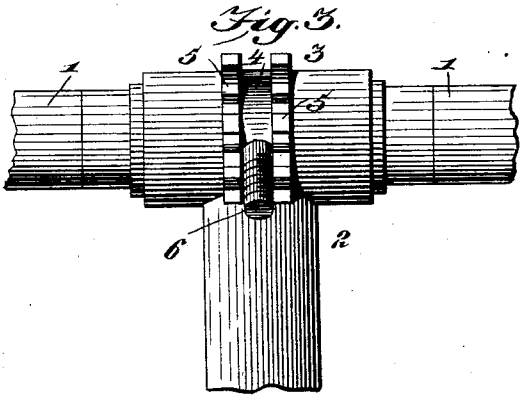


Fig. 2.

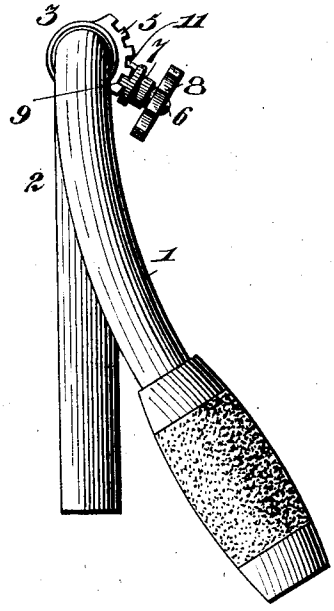


Fig. 5.

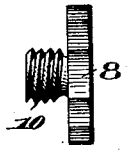
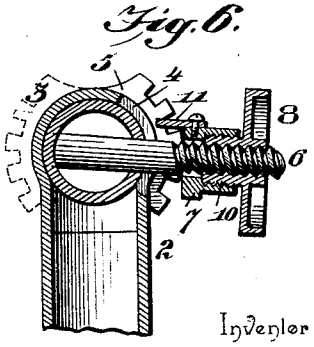


Fig. 6.



Inventor

Edward Anderson

Witnesses

H. G. Dieterich

V. B. Hillyard.

By his Attorneys,

C. A. Snow & Co.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EDWARD ANDERSON, OF ELGIN, ILLINOIS.

BICYCLE-HANDLE.

SPECIFICATION forming part of Letters Patent No. 608,566, dated August 9, 1898.

Application filed December 23, 1896. Serial No. 616,751. (No model.)

To all whom it may concern:

Be it known that I, EDWARD ANDERSON, a citizen of the United States, residing at Elgin, in the county of Kane and State of Illinois, have invented a new and useful Bicycle-Handle, of which the following is a specification.

This invention relates to handle-bars for bicycles, velocipedes, and vehicles that are steered by means of a bar provided with grips; and the object of the improvement is to provide simple and effective means for admitting of the handle-bar being adjusted to any position within certain limits to suit the ease and comfort of the rider or the person guiding the machine or vehicle.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a front view of a handle-bar having the invention applied thereto. Fig. 2 is a side elevation thereof. Fig. 3 is a detail view of the head-lug, showing the middle portion of the handle-bar and the clamp-screw. Fig. 4 is a detail view of the lock-nut and guide. Fig. 5 is a detail view of the thumb or clamp nut. Fig. 6 is a detail section showing the parts assembled and in such relation as to admit of the handle-bar being moved to any required position.

Corresponding and like parts are referred to in the following description and indicated in the several views of the drawings by the same reference characters.

The handle-bar 1, head 2, and head-lug 3 may be of any desired pattern, and the handle-bar is rotatably mounted within the head-lug, so as to be turned to any position to suit the convenience of the user. The head-lug has a transverse slot 4 and toothed flanges 5, bordering upon the sides of the said slot, the teeth of the flanges corresponding and alining longitudinally of the handle-bar. A clamp-screw 6 is secured at its inner end to the handle-bar and operates in the slot 4, and the means for securing the handle-bar in the located position are mounted thereon and consist of a lock-nut 7 and a thumb or clamp nut 8.

The lock-nut 7 has oppositely-disposed cogs 9 at its inner end to engage with the toothed flanges 5 and secure the handle-bar when moved to the required position. The outer end of the bore or opening of the lock-nut is enlarged and internally threaded to receive the externally-threaded projection 10 of the thumb or clamp nut 8, and this lock-nut is loosely mounted upon the clamp-screw, so as to move thereon without interference from its thread. The lock-nut is provided with a guide for holding its cogs 9 in proper position for engaging the teeth of the flanges when the parts are out of engagement, and this guide consists of a tongue 11, detachably secured to the lock-nut, at one side thereof, and projecting into the space between the flanges 5. The tongue, which is of sufficient length to engage the flanges when the cogs are out of engagement with the same, is adapted to operate at either side of the screw, whereby the lock-nut may be readily reversed to bring the tongue in advance or in rear of the screw, so that the latter may be arranged at the extreme ends of the slot. Should the tongue become broken, it may be readily replaced.

The thumb or clamp nut 8 has screw-thread connection with the clamp-screw 6, and is formed with a tubular projection 10 on its inner side, which is externally threaded to match with the internally-threaded portion of the lock-nut. The clamp-screw is formed with a right thread and the projection 10 with a left thread, or the relation of the threads may be reversed without affecting the operation of the invention, so long as one thread is right and the other left. A slight movement of the thumb or clamp nut is increased in effect upon the lock-nut by reason of the opposite disposition of the threads, as is obvious. Upon turning the thumb or clamp nut to the right it will move inward upon the clamp-screw and carry the lock-nut with it, and at the same time the lock-nut will have an independent movement inward by reason of its screw-thread connection with the thumb-nut, because the tendency is to separate the lock

and thumb nuts upon turning the latter to the right. By reason of the inverse screw-thread connection of the thumb or clamp nut with the clamp-screw and lock-nut the latter is moved rapidly into and out of engagement with the toothed flanges, and if the pitch of the right and left threads is the same the movement of the lock-nut is double that of the thumb or clamp nut, as will be readily understood.

To adjust the handle-bar the thumb or clamp nut is moved in the proper direction so as to disengage the lock-nut from the toothed flanges, thereby liberating the handle-bar, so it can be turned to the required position, and upon retightening the thumb-nut the handle-bar has its position fixed.

The head-lug may be supplied with flanges 5 upon opposite sides, as shown in Fig. 6, thereby making provision for reversing the handle-bar, as will be readily understood. In this connection it will be observed that the slot 4 must be extended to admit of the clamp-screw 6 having its position reversed.

Having thus described the invention, what is claimed as new is—

In a device of the class described, the combination of a headed lug having a slot and provided with toothed flanges located at opposite sides of the slot, a handle-bar mounted to turn in said lug, a screw connected with the handle-bar and passing through the slot, a lock-nut slidably mounted upon the clamping-screw and having oppositely-disposed cogs to interlock with the toothed flanges, a tongue detachably mounted on the lock-nut at one side thereof and arranged in the space between the flanges to form a guide, said tongue being adapted to operate in advance or in rear of the screw, whereby the lock-nut may be reversed to permit the screw to be arranged at the extreme ends of the slot, and a clamping-nut engaging the screw and having a threaded connection with the lock-nut, substantially as described.

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

EDWARD ANDERSON.

Witnesses:

CHAS. J. KLEIN,

ARTHUR MOSLEY.